AALBORG UNIVERSITY
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BY
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Amos, Dangbie Dordah, holds a Master of Philosophy Degree in Development Studies from the University for Development Studies (UDS). He obtained a Bachelor's Degree in Integrated Development Studies, from the same university.

In 2009, Amos received a CAPTURED grant Funded by the Ministry of Foreign Affairs, Directorate-General for International Cooperation in the Netherlands, to study an MPhil degree programme in Endogenous Development at the UDS.

Upon completion of his MPhil study programme, he was appointed Assistant Lecturer in the Department of African and General Studies, at the UDS in the year 2013.

In June 2016 Amos obtained a grant from the CGS/FoH of the Aalborg University in Denmark to read a Doctor of Philosophy Degree programme in Interdisciplinary Discourse Studies. In his thesis, he applied nexus analysis methodology and social actor representation analytical framework to analyse how different social actors represent differentially and construe differently how gold mining should affect human well-being at the mine host local community.

ENGLISH SUMMARY

The thesis aims to create a new understanding of existing research on mining and local community development nexus, through the application of critical discourse analysis (CDA) theoretical and nexus analysis methodological perspectives to understanding an existing issue in the social sciences.

Fairclough notion of discourse as social practice constitutes the main theoretical perspective of the study. Fairclough's (2003, 2010) CDA theory is complemented by Systemic Functional Linguistics (SFL) theory and nexus analysis methodological theoretical perspective. Drawing on Fairclough's (2003) notion of discourse as a social practice and also from a middle-ranged theoretical focus on a social issue, 'mining company community struggle', CDA theory is applied in the study as a means to analyse issues of difference, domination, and resistance in discourse and their linkages to big Discourses.

Methodologically, the study extends Scollon and Scollon (2004) nexus analysis methodology from a focus on naturally occurring action to a focus on a discourse analysis of accounts of actions taking place in a situated context.

Analytically, the study deepens the discourse analysis hook of van Leeuwen social actor representation analytical framework as it teases out the discourses, which circulate within social actor representations, and shows the different ways different social actors are represented based on accounts of action.

Data for the study were collected from naturalistic data sources and through an interview tour of local-local places in four communities within the Newmont Ahafo South Project communities in the Ahafo Region in Ghana.

Findings indicate that local-local social actor's construe the mining and community development (CD) nexus based on Newmont's environmental effects on people, places, and other semiotic objects at materially situated places, such as the pollution of water bodies and the emergence of strange diseases.

The study indicates that the indexicalisation of the discourses in the material world of actual social practices provides concrete evidence of social actors' ideas of how mining should contribute to improved outcomes in human well-being.

The study identified a number of possibilities for future research including a specific focus on analysing how decentralised authorities integrate mineral revenue into their development plans, based on analysis of specific receipts and empirical evidence of socio-economic improvement.

DANSK RESUME

Denne ph.d.-afhandling tilstræber at etablere en ny forståelse af forholdet mellem guldmineminedrift og lokal udvikling med afsæt i et casestudie i Ghana. Det sker ved at anvende et kritisk diskursanalytisk og neksusanalytisk perspektiv på et eksisterende samfundsvidenskabeligt emne.

Norman Faircloughs forståelse af diskurs som social praksis udgør undersøgelsens centrale teoretiske perspektiv. Kritisk diskursanalyse (CDA) komplementeres teoretisk af systemisk funktionel lingvistik og metodisk af neksus analyse. Således anvendes CDA til at undersøge diskursive kampe om minedriftens indvirkning på lokal udvikling og til at analysere forskelle, dominans og modstand i konkrete diskursive udtryk og i disses relation til bredere samfundsmæssige diskurser.

Metodisk udvider afhandling neksusanalysen hos Scollon & Scollon fra et fokus på naturligt forekommende handlinger til et fokus på situerede diskursive repræsentationer af handlinger.

Analytisk trækker undersøgelsen på Theo van Leeuwens rammeværk til analyse af sociale aktører og handlinger og udvider dette til også at identificere de bredere diskurser som bl.a. netop er karakteriserede ved bestemte måde, hvorpå handlinger og aktører repræsenteres.

Empirisk inddrages naturligt forekommende data fra regeringskilder og medier samt ikke mindst interviews med borgere i fire lokalsamfund, som er blevet påvirket af minedriften i det såkaldte Newmont Ahafo South Project.

Analyseresultaterne viser, at de lokale beboere har fokus på miljømæssige effekter af minedriften, herunder konsekvenser for mennesker, steder og objekter såsom vandforurening og fremkomst af 'underlige' sygdomme. Samtidig fremstår italesættelsen af de miljømæssige konsekvenser som tæt forbundne med de lokale beboeres egne livsvilkår. Resultaterne peger desuden på, at det har vist sig produktivt at gennemføre interviewene på ture rundt i lokalområdet under ledelse af den interviewede selv.

Undersøgelsen gør sluttelig opmærksom på en række muligheder for fremtidig forskning, herunder undersøgelser af, hvordan decentrale myndigheder kan inddrage indtægter fra minedrift i deres udviklingsplaner.

ACKNOWLEDGEMENTS

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CHAPTER 1. WHAT IS THIS STUDY ABOUT?

The chapter seeks to highlight the main issues of the entire thesis. The chapter motivates the issue of the study including the selection of Newmont Ghana Gold Limited Ahafo Project as a site for the study. The chapter seeks to offer a justification for a critical discourse analysis (CDA) approach to analysing the social issues which the study aims at addressing. The chapter highlights the theoretical, methodological and analytical perspectives of the study[1]. The chapter seeks to describe the historical trajectory of the issue of the study in the Ghanaian scenario. Finally, the chapter concludes with an outline of the entire chapters which constitute the study.

1.0 INTRODUCTION

In the year 2016, Newmont Ghana Gold Limited (NGGL) Ahafo Mine won the mining company of the year 2015. This award was based on the company's performance in fields such as occupational health and safety, sound environmental management, corporate social responsibility investment and local content (https://ghanachamberofmines.org/news-updates/newmont-ghana-gold-ltd-wins-mining-company-of-the-year). However, on 3rd August 2012, the youth of Kenyasi Number One protested over Newmonts failure to employ indigenes of Ahafo. The protest is also about the company's failure to honour its social responsibility obligations to the local communities. Furthermore, on 1st August 2017, the youth of the Five Mine-affected Communities; Gyedu, Wamahinso, Kenyasi Number One and Kenyasi Number Two protested over discrimination in access to permanent jobs. Similar to the 2012 protest, the 2017 protest also concerned the NGGL's failure to fully implement its social development agreement with the Five Mine-affected Communities. This scenario raises a question about how the NGGL's contribution to local community development (CD) is constructed. Previous studies have focused on how mining companies obtain and maintain their social licence to operate (Ofori & Ofori, 2019). Sarpong (2012) focused on the transformation of local community positive expectation at the pre-mining stage into disillusionment at the mine operational stage. The starting point of this thesis is that because mining interferes with the environment and social practices which depend on the environment such as farming, different social actors like affected local farmers, civil society organisations (CSOs), and

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[1] The theoretical, methodological and analytical issues are treated in this chapter as introduction which will be dealt with in greater depth in the coming chapters.

the government can make different meanings out of mining companies effects based on the same or different accounts of actions in materially situated environments. This is because meaning is not a given but is socially produced through mediational means such as language and discourses in place such as farming at materially situated places where mining takes place. Because making a link between mining and human well-being is a social practice there is the possibility of a struggle to legitimise a particular way of construal which may serve a particular interest or another. However, there is an inadequate empirical analysis of how social actors' accounts of actions occurring at materially situated places mediate how social actors actually construe how mining affects human well-being at situated places. This thesis aims to create a new understanding of existing social science research on the social issue of how mining affects human well-being in situated environments through the application of CDA theory and nexus analysis methodology. Previous studies have implicitly defined the mining and local CD nexus based on mining contribution to the supply of and increase numbers and qualities of social services such as health and educational facilities, the connection of local communities to the national electrification grid and access to information communication services (Ofori & Ofori, 2019; Akabzaa, 2009). In this thesis, the mining and development nexus refers to the meanings and interpretations social actors assign to the relationship between corporate mining activities and the human well-being of individuals in the host local communities.

In order to analyse how different social actors actually construe the mining and local CD nexus, the study focuses on the analysis of how social actors' accounts of actions occurring or which occurred in materially situated places are used as mediational tools to construe how mining affects human well-being at materially situated places. An example of an account of action includes accounts of a mine tailings storage facility's (TSFs) leakage and its effects on crops at a materially situated place. The thesis also analyses how the more global discourses which circulate within the accounts of action conjoin with the implications of the accounts of action on available social practices at materially situated places to mediate how different social actors link mining to human well-being. In this thesis, mediation refers to both language and non-language aspects of social actors' accounts of actions. The linguistic and non-linguistic aspect of the accounts of actions constitutes cultural tools which are used to make a linkage between mining and human well-being of individuals in the host communities. Mediation includes how macro Discourses which circulate within the accounts of actions are used within the moment of accounts of actions as mediational means for making sense out of social actors' accounts of actions in materially situated places.

The study seeks to employ Fairclough's (2003, 2010) notion of discourse as social practice as the main theoretical perspective. Scollon and Scollon (2004) nexus analysis methodology constitute the main methodological approach to study.

Fairclough's (2010) CDA approach is relevant to the social issue of how mining affect human well-being at the host communities because the bottom-line of the 'how' of mining contribution to CD is about mitigating mining negative environmental effects on people, places, and objects (Campbell, 2005, 2012; Bebbington et al, 2008). According to Dryzek (2013), environmental discourses are about the different meaning which different people assigned to different aspects of the environment.

There exists some tension between CDA's focus on the description of structures such as language as a site of unequal power relations and nexus analysis focus on action as a nested field of experiences, histories, and structures. But this thesis argues that Fairclough's (2003, 2010) CDA and Scollon and Scollon (2004) nexus analysis can co-exist. For instance, in the context of the neoliberal crisis, Fairclough's CDA changes the focus of analysis from description of structures and mechanism of neoliberal capitalism to the analysis of the strategies of mitigating the neoliberal crisis. Moreover, Fairclough's CDA aims more than an analysis of the strategies of mitigation to an analysis which seeks to transform the crisis. Similarly, Scollon and Scollon (2004) nexus analysis methodology aims to engage in the analysis of action as a contribution towards practically transforming unjust real life social practices. This connects positively with Fairclough's focus on analysing the strategies of mitigating capitalism crisis as a way of improving human well-being. This thesis aims to extend nexus analysis methodology from a focus on an analysis of naturally occurring action to a discourse analysis of accounts of actions occurring or which occurred in routine places.

Analytically, the study aims to innovatively apply van Leeuwen's (2006, 2008, 2018) social actor representation based on accounts of social action to analyse how different social actors link mining to human well-being at materially situated places. The thesis seeks to deepen the discourse analysis hook of van Leeuwen's (2008) social actor representation framework because in van Leeuwen's framework discourse analysis and social actor representations appear to not to be explicitly connected. To be able to deepen the discourse analysis aspect of van Leeuwen's social actor representation, the thesis will inductively identify lexical choices in the different accounts of action as discourses topics which formed the basis to conduct discourse analysis. The thesis aims to push van Leeuwen's social actor representation framework forwards by foregrounding social actor representation on accounts of actions in materially situated environments. Social actor presentation and action representation are two discursive sites which van Leeuwen analysed separately. This thesis seeks to analyse the two discursive sites simultaneously.

The study seeks to selectively apply Systemic Functional Linguistics (SFL) analytical tools of evaluation and language system of modality to analyse how social actors through accounts of actions in materially situated environments make

connections between mining and human well-being. In the thesis, SFL analytical tools and CDA are connected in the sense that the socio-semantic strategies of representation, the lexical choices, the social practice of selecting particular accounts of action and linkage of the accounts of actions to social practices such as farming and memory and sense of a materially situated places constitute different ideological fields for the analysis of dominance, difference, and resistance.

But which voices should the thesis focus on analysing? Stevenson and Dryzek's (2014) theory provide a guide to focus on analysing voices in the private sphere and the public space. According to Stevenson and Dryzek, (2014) a deliberative system contains three main spaces; the private sphere, the public, and the empowered spaces. The private sphere is an arena of everyday talk. There are no formal deliberative features in the private sphere. However, the content of discussions here mediates what people will do and say if offered the opportunity in the public space (Stevenson and Dryzek, 2014). The public space is where there exists the inclusion of affected voices and integration of multiple ways of producing meaning. At the public space, there exist conflicting ways of transmitting meaning into the empowered space. If there is a cross-fertilisation of different ways of making meaning there can be a prioritisation of a 'generalisable' public interest at the public space. The empowered space consists of institutions that take collective decisions and thereby exercise a considerable amount of public authority (Stevenson and Dryzek, 2014). In addition to the transmission of issues from the public space into the empowered space for action to be taken, there is also the expectation of positive feedback. Another element of Stevenson and Dryzek's (2014) democratic system is meta-deliberation. This refers to the ability of a deliberative system to periodically engage in self-introspection. The last but not least is the decisiveness' element of a deliberative system. According to Stevenson and Dryzek's (2014), this refers to the extent to which the rest of the six elements interact to produce desired outcomes.

However, this thesis critical approach departs from recognising the public spaces and private sphere as spaces which contain the meaning production of a particular category of social actors. The reason being that the two spaces as an element of social organisation exist in dialectical relation to the empowered spaces. Also, this thesis critical analytical dialectical approach seeks to depart from recognising the coincidence of Discourses often associated with the state in the private sphere and public space as mere integration and possible prioritisation of generalisation public interest.

The theoretical categorisation of spaces within a democratic system is useful in systematically analysing domination, difference, and resistance to a generalisation of the mining and CD nexus. First, the thesis will analyse how the government which mainly exists in the empowered space construe the mining and CD nexus.

Second, the thesis will analyse how a CSO which exist in the public space construe the mining and CD nexus. Third, the thesis will analyse how local individuals' accounts of NGGL actions occurring or which occurred in materially situated places constitute a site of engagement which the local-local social actors use to mediate the more global construal of the mining and CD nexus. This theorisation of spaces within a democratic system provides a systematic guide to focus on micro accounts of actions and their trajectories into what exists in abstract spaces like previous research on mining and local CD nexus.

Research on mining and development reveal that the relationship between mining and development can be construed depending on which "side of the bulldozer" the construing social actor stands (Whitmore, 2006 p.313). For instance, activists see mining as a social practice which produces environmental cost for the majority and benefits to a privileged few (Bebbington, Hinojosa, Bebbington, Burneo, & Warnaars, 2008). Advocates of the resource curse thesis argue that extractives dependence is bad for economic growth and poverty reduction (Bebbington et al., 2008; Ross Michael, 2002). On the other hand, exponents of the neoliberal order have a belief in mining potential to contribute to poverty reduction. These differences constitute the contention and ambiguity about mining contribution to development (Bebbington et al., 2008; Pegg, 2006).

Since the introduction of the neoliberal reforms such as privatisation and liberalisation, in the 1980s, there is evidence of socio-environmental related struggles between local community-level social actors and more global social actors. The socio-environmental related struggle is also about how the link between mining and human well-being should be construed (Veltmeyer, Henry & Petras, 2014). The struggles which characterised the neoliberal order led to the emergence of social actors different from the mineworkers in the twentieth century. Some notable new social actors include; transnational corporations (TNCs), the imperial states, the World Bank (WB) and the International Monetary Fund (IMF). Others include the local affected individuals and local community mobilisations (Sankey, 2014; Veltmeyer, Henry & Petras, 2014). The new social actors seek to represent differentially and construe differently the mining and CD nexus.

Due to the adverse socio-environmental effects of mining, by the close of the 1990s, neoliberalism elicited resistance and a crisis of legitimation (Veltmeyer, Henry & Petras, 2014). In the post-neoliberal era, mineral-rich countries like Ghana focused on; enhancing the state capacity to regulate the TNCs, to obtain a better deal from the TNCs, to hold TNCs accountable for their socio-environmental cost and to link national development plans to extraction (Sankey, 2014; Veltmeyer, Henry & Petras, 2014). At the industry level, mining companies' legitimacy to operate became contingent on their ability to obtain the social licence to operate (SLO). This is because a lease from the government can no longer be a

guarantee for mining to proceed (Moomen & Dewan, 2017). Despite mining companies, direct contributions to local CD, through corporate social responsibility (CSR), Campbell, (2012) argued that CSR initiatives are inadequate in addressing the underlying causes of mining companies and local community struggles. This thesis takes a position that social actors' accounts of actions in situated places are the tools which can be used just like a carpenter with a hammer in the hand to take action. This implies that local social actors' accounts of Newmont's actions in materially situated places constitute practical mediational means which can be used to practically construe a linkage between mining and local CD nexus in one way or another.

The choice of NGGL Ahafo Project is interesting for a CDA and nexus analysis study because the Ghana Chamber of Mines recognition of Newmont as a best-case scenario and the local-local voices of concern in the private and public space constitute tensions over how different social actors construe the link between mining and human well-being. These tensions constitute interesting discursive sites for further analysis of how discourses in place at materially situated environments mediate how different social actors link mining to human well-being. As a best-case scenario with dissenting voices close to the mine operational area, a focus on a critical analysis of the accounts of action aims to provide empirical insights into the differences between the voices in the different spaces in terms of how to link mining to human well-being.

The next subsection will seek to address the why of a critical analysis of accounts of actions in materially situated places as mediational means to construing the mining and CD nexus.

1.1 PURPOSE OF THE STUDY

The purpose of this study is to use social actor representation based on accounts of social action to fill a knowledge and practice gap which exists in terms of inadequate empirical research on how accounts of actions and the discourses in place mediate how social actors link mining to human well-being at materially situated environments. The analysis of accounts of action aims to produce the different histories and sense-making tools which mediate the linkages between mining and human well-being in situated places. The linkage of the accounts of actions to people, places, and objects aim at bridging a practice gap between company CD conceptual framework and individuals in host communities' realities about mining companies' actions. The attempt to provide an empirical basis on which mining companies CD framework can be connected contributes to understanding how actual sense-making out of specific companies actions articulate the broader socio-political contention and ambiguity over construing the mining and CD nexus. The goal of a focus on sense-making out of accounts of a mining company's action at a particular place is to demonstrate how what is

happening at a particular place and the sense made out of it can contribute to transforming struggles between mining companies and their host communities. The purpose of the study can be summarised as follows; a focus on accounts of doings→linkage of accounts to→people, places, and objects in situated environments→use to mediate how different social actors construe the mine and CD nexus and global construal circulating within accounts of actions help understand local construal's→contribute towards transforming struggles over construing the mining and CD nexus.

The next subsection will aim to justify the need for a CDA approach to studying social actor representation based accounts of action as a means towards analysing how different social actors construe gold mining and CD nexus.

1.2 WHY A CDA APPROACH?

First, Fairclough's notion of CDA as a critical analysis which is aimed at understanding how contemporary capitalism constrains and affords human well-being is consistent with the thesis's goal of analysing social actors accounts of actions and the linkage of accounts of actions to people, places, and objects as sites of engagement for mediating broader discursive struggles over construing mining and local CD nexus.

Second, Fairclough's recognition of the interdependence of different domains of social life is relevant to understanding and analysing the complexity of making sense out of the socio-environmental effects which are the bottom-line of mining companies and local communities' struggles over linking mining to improved human well-being. For instance, capitalists' legitimation practice such as CSR initiative is dialectically related to different domains of the social world such as the sense local individuals make out of capitalist material actions on the environment and local individuals environment-based social practices such as farming. Therefore, to analyse mining companies' CSR initiative without linking it to the effect of a company's material action on the environment and environment-based social practices can be an incomplete analysis.

Third, discourse as a social practice which links discursive and with the non-discursive aspects of the world is useful in the thesis attempt at connecting real life accounts of actions in situated places to the broader discursive construal of the mining and CD nexus. Fairclough's dialectical relational approach (DRA) theory provides a theoretical hook to connect actual accounts of actions to the more global construal's like mining companies as promoters of rural livelihoods.

The impending subsection will aim to specify the object of the thesis, the mediated action.

1.3 OBJECT OF THE STUDY

NA methodology takes the mediated action as the object of the analysis and analyses how people, places, and object serve as tools which enabled or constrain the way in which participating social actors take action. Therefore, the study takes as its mediated action, 'mining contribution to human well-being'. Specifically, the study focuses on how social actor representation based on the accounts of Newmont's actions at particular places and the implications of the actions on people, places, and objects in situated places provides tools which afford or constrain one way of construing the mining and CD nexus. The thesis analyse micro representations and their trajectories in more global discourses. Besides, the study analyses how accounts of Newmont's routine actions and their articulation to people, places, and objects constitute discursive sites of domination, difference, and resistance to the broad construal of the mining and CD nexus.

Scollon and Scollon's (2004) methodological perspective is that every action the analyst study has a history, constitutes and is constituted by its history, into the past and the future (Jones, 2009; Scollon and Scollon, 2004). To study an action outside of its history is to fail to understand social action as it is actually enacted.

Consequently, the next subsection will give an overview of the fiscal, legal and institutional arrangement which shaped and are shaped by concrete actions of TNCs in Ghana's mining sector.

1.4 NEOLIBERAL ORDER IN GHANA'S MINES

The WB, (1992) recommendations for mineral-rich African countries were inserted into an existing situation of economic decline, depreciated mine infrastructure and under-recoveries from the mines (Ayee, Soreide, Shukla, & Le, 2011). The recontextualisation of the WB's neoliberal order into Ghana's mines was done through a three-way system; fiscal, legal and the institutional reforms. These reforms were undertaken by the state in order to create an enabling environment for private capital investment in the mining sector.

In 1983, Ghana implemented the Economic Recovery Programme (ERP) and the Structural Adjustment Programme (SAP). Under the ERP/SAP, the government took several economic measures to attract foreign direct investment (FDI) into the mining sector. For instance, in 1986, the government reduced the income tax rate from 50–55% in 1975, to 45%. Also, in 1975, the government increased the initial capital allowance from 20% in the first year of production to 15% for subsequent annual allowances. Moreover, the royalty rate of 6% of the total value of minerals won in 1975, was reduced to 3% in 1987 (Akabzaa, 2009). Besides, the Government of Ghana (GoG) enacted various laws including the minerals and Mining Law PNDCL 153 and Small-Scale Mining Law 218. These and other laws

were aimed at creating the required investor-friendly environment for FDI in Ghana's mining sector. Because of the focus on creating an enabling environment for capital, these laws gave less or no attention to socio-environmental issues. At the institutional level, the Minerals Commission was established and vested with the mandate to promote FDI in the mining sector. In addition, the Minerals Commission was established to provide expert advice to the government on how to create an investor-friendly environment for FDI in Ghana's mining sector.

The net effect of the fiscal, legal and institutional reforms is that Ghana witnessed a mining boom but its ability to generate the requisite revenue for national economic development and CD was not realised (Akabzaa, 2009). Besides, the increased in FDI in the mining sector did not translate into the anticipated increased levels of mine employment and an increase in the social amenities in mine-affected communities. This is because many international mining companies adopted open-pit mining which employs less labour force relative to deep underground mining. Also, open-cut mining brought about socio-economic injustice on peasants and small-scale miners (Ayelazuno, 2014). Peasants and artisanal miners were displaced from lands and their work stations, and this created livelihoods vulnerabilities.

These vulnerabilities created a wave of resistance against new mining projects and existing mine operations. The resistance to the effects of mining elicited a counter wave of legitimation initiatives from the government and the Ghana Chamber of Mines. The setting up of the Minerals Development Fund, the Inspectorate Division of the Minerals Commission and the setting up of mandatory CD Units within the mining firms' organisational structure are part of legitimation initiatives aimed at ensuring that gold mining benefits both the nation and the host local communities.

Since the second phase of the neoliberal reforms, particularly after the enactment of act 703 (2006), there remains agreement about the potential of mining to trigger development. However, there exist disagreement about the significance of mining contribution to both national economic development and local CD. Particularly there exist an intense debate about mining contribution to poverty reduction in affected communities (Akabzaa, 2009).

The next subsection will seek to offer a description of the physical location of Newmont's Ahafo South project and its mineral potential.

1.5 THE SITE OF INVESTIGATION

The Newmont Ghana Gold Ahafo Project is located in the Ahafo Region of Ghana and operates on a concession of approximately 720 square kilometres. Within the Ahafo Region, the Newmont Ahafo Mine is located in the Asutifi North District.

The District is located between latitudes 6°40' and 7°15' North and longitudes 2°15' and 2°45' West (The District Planning and Coordinating Unit, 2017).

Geologically, the Ahafo District has two main types of rock formations, the Birimain and Dahomeyan rocks formation. The Birimain rock is reported to have a high potential of minerals like gold, manganese, and bauxite. In figure 1, the green colour shows that the geological formation of the Asutifi North District is largely underlain with the Birimain rock formation. Birimain being a high potential mineral-bearing rock presupposes that the Asutifi North District has a high potential of metallic minerals.

In terms of project history, the construction of the Ahafo South Plant started in the year 2004, and gold production commenced in the mid of the year 2006. Newmont acquired the Ahafo South Project through mergers and acquisitions from Normandy Mining Limited. The acquisition and merger processes were started in the year 2002. By December 2003 Newmont had finalised its foreign investment agreement with the GoG (Newmont Ghana Gold Ltd, 2005). Furthermore, the Ahafo Project is a 'greenfield' open-pit operation located in a 'remote' area of Ghana.

The next subsection aims to describe the Newmont Ahafo Project in terms of the mine interaction with existing social practices. The impending subsection will attempt to summarise Newmont shared vision with the people of Ahafo. The next section will offer a justification for the selection of Newmont as a case study.

1.6 THE NEWMONT AHAFO PROJECT

Prior to Newmont's mining activities, 97 percent of the households in the Ahafo area were engaged in agriculture activities, mainly food and cash crops farming (Newmont Ghana Gold Ltd, 2005). The Ahafo Region is largely a primary production-based economy. However, the introduction of Newmont mining practices into the Ahafo Region witnessed dispossession of peasants from their means of production such as farmlands. Also, Newmont mining practices generated environmental and development discourses. For instance, there are concerned voices from the mine-affected communities over the negative socio-environmental effects of Newmont's actions on the local-locals ability to meet their basic human needs. These concerned voices mostly from the local-local [2]youth groups within the mine-affected communities bring a dynamic perspective into the government and Newmont discourses on mining and CD nexus discourse. For instance, farmers who hitherto depended on the 'River Subri' for irrigation

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[2] Local-local in this thesis context refers to people who are indigenous people of Asutifi and who see themselves as people who should have preferential share of the benefits accruing from Newmont's operation.

have had their livelihoods truncated. Besides, fishes from 'River Subri' which used to supplement the protein needs of households within the Appensu South region of Newmont Ahafo have almost become extinct, as fishes die due to alleged pollution of the river. Moreover, the Youth Association is up in arms against Newmont for not living up to its local employment agreement with the people of Ahafo.

Prior to actual production, Newmont had pledged to engage about 750 local residents, as direct and indirect employment from Newmont's workforce and its subcontractors respectively (Newmont Ghana Gold Ltd, 2005).[3] In addition, Newmont committed itself to abide by the environmental regulations of its host country. Besides, at the pre-mining stage, Newmont presented a shared vision with the GoG and the people of Ahafo:

> "…that the people of Ahafo and Tano districts have an enhanced socio-economic well-being, their health is improved, education and training increase and accelerate, that all of these improvements are sustainable, independent of and beyond the life of the mining activity. Overall, the aim is that people will better off for Newmont being there than not being there. The company is committed to develop monitoring methods to track this statement" [4]

> (Newmont Ghana Gold Ltd, 2005,p1)

To add, Newmont discursively demonstrated its sustainable development (SD) commitment beyond local laws by signing onto voluntary standards such as: the Universal Declaration on Human rights; the WB Safeguard Principles, Equador Principles in Business Operations; the UN Global Compact; the Voluntary Principles on Security and Human Rights; the Extractive Industries Transparency Initiatives and the International Council on Mining and Metals Sustainability Principles.

The foregoing indicates that there is a gap between Newmont's pre-mining discourse on local community improvement and local community social actors' discourse about Newmont's contribution to their well-being. The tension generated by Newmont's mining activities necessitated a focus on analysing accounts of actions as a means to understanding the histories and experiences of

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[3] This figure relates to Newmont's local employment for the life cycle of the Ahafo South Project.

[4] This discourse provides a social context for the local-local representation of the Newmont action and local community development nexus at the engaging and navigating stages in chapter 6 & 7.

individuals as sources of understanding larger connections between Newmont's actions and human well-being of individuals in its host communities.

In the study, NGGL is purposely selected because it is the first open-pit mining in the Ahafo Region of Ghana. As a Greenfield mine, the proponents of the project have the benefit of hindsight to correct the adverse negative social and environmental discourses associated with mining in traditional mining districts such as Tarkwa and Obuasi. Besides, the Ahafo mines have been a subject of both negative and positive evaluation by different social actors. In the year 2008, the Commission on Human Rights and Administrative Justice (CHRAJ, 2008) found NGGL culpable of human rights violations. In the years 2012 and 2017, the youth of the Five Mine-affected Communities protested over failure to implement local content in NGGL's recruitment practices. On the contrary, in the year 2006, the United State Department, on its part found NGGL worthy of the Excellence in Rights Awards for the year, 2006. Additionally, in the year 2016, Newmont won the Ghana Chamber of Mines best mining company of the year award for the year 2015.

Despite the awards, there are dissenting voices. For instance, the local-local youth of the Five Mine-affected Communities continue to demand increase contribution to local CD and reduced human rights abuses. On the contrary, a female traditional ruler [5]believes that Newmont is doing very well. She will have the youth group demand accountability from the Asutifi South District Assembly on the utilisation of the Assembly's share of the Newmont's royalty than the youth persistent demand increased direct contribution from Newmont. These different representations are in themselves interesting. The different representations call for critical analysis of social actors' accounts of actions as cultural tools which are used to mediate more global ways of construing mining CD nexus in one way and not another.

In the next section, I will state the gap in the existing body of knowledge which the study seeks to fill.

1.7. PROBLEM STATEMENT

There exists a tension between the dominant discourse regarding mining, the development discourse, from the standpoint of accumulation and the environmental discourse from the perspectives of SD (Egresi, 2011). Despite the tensions, there is inadequate empirical research on how the doings of a specific mining company to people, places, and objects in situated environments mediate the more global construal of the mining and CD nexus. Notwithstanding Fairclough's CDA focus on analysing how the effect of capitalism constrains in

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[5] The voice of this female traditional ruler is not included in this study for obvious reasons.

one breadth and afford in another human well-being, an alternative productive approach is social actors' accounts of capitalist actions and their linkages to people, places, and objects in situated places as sites of engagements which are used to mediate global linkages of mining to human well-being. Regardless of Fairclough's (2010) recognition of capitalism's effects on the environment, local community complaints about socio-environmental effects may be seen as an emblematic for a larger problematic.

As emblems of a larger problem, this study argues that the contentions and ambiguity about construing mining and CD nexus are not just about investment, assets, ecosystem services, surveys, rent capture, and government power to regulate TNCs. But the issue is also about the sociohistorical meaning social actors make out of mining companies doing to the environment relative to human well-being. The focus on the analysis of how accounts of routine actions are used to mediate global linkages of mining to local CD will contribute empirical ideas about how mining companies can contribute to improved human well-being at a situated place.

The next subsection will seek to state the main research question of the study and five sub-research questions which guided the study.

1.7.1 RESEARCH QUESTION

The study seeks to answer the question: How do the different social actors represent differentially and construe differently the gold mining and local CD nexus? This question seeks to understand the different ways social actor representation based on accounts of action seek to construe relationships between the doings of a social actor and the human well-being of individuals in the host community. The main research question has been reduced to six sub-research questions. They include;

1. What is the social action (s) that is/are going on or have happened and how is agency accounted for?
2. How are social actors represented in the mining and development nexus situation?
3. How do the various social actors bring in their individual history or experience in the way they represent differently or similarly the gold mining and development nexus?
4. How do social actors represent the relationship between mining activities and their daily life at a particular place?
5. How do the host communities expect their representatives to act on their behalf?
6. How does the struggle over power to represent manifest in the different social representations?

Sub-research questions numbered one to two focuses on identifying the 'what is going on' and the 'how' of representation, hence, they are ideational metafunction questions. The 'how' of representation implies that the ideational metafunction is not only about what exists, but it is also about the role discourse plays in the 'what is going on' and who exist as either affected or beneficiary. Discourse perform an ideological function because the socio-semantic practices which are used to represent social actors may express values and beliefs from a particular perspective about who benefits from whose action? Thus, at the ideational metafunction level, the study will reveal the ideological effects of the identifiable socio-semantic ways of representation. Since discourse affords and constrains the 'how' of representation, therefore, on the basis of lexical choices used in social actors' representation, the thesis will inductively identify the discourses circulating within the social practice of representation. Also, representation plays a role in understanding how discourse seeks to reduce difference and colonise discourse which affords or constrain the social practice of representation.

In the thesis, Discourse with capital, 'D' as in Fairclough (2003) refers to the structures or global construal such as the WB neoliberal Discourse which set out how mining can trigger national economic development in mineral-rich African countries. At the national level, Discourse can include structures like the minerals and mining policy which set out the possibilities of mining contribution to local CD. In contrast, discourses refer to social practices, such as the practice of redistributing revenue accruing from mining to mine-affected communities. Social practices like signing a mine development agreement mediate the possible linkage between mining and local CD as determined by the minerals and mining act and the actual contribution of specific mining companies to human well-being at the host communities.

Sub-research questions numbers three to five focus on [6]understanding the relationships arising from the representation of social actors in relation to the 'what is going on'? In Scollon and Scollon (2004) terms, questions three to five to seeks to understand how different social actors connect the 'what is going on' and its relationships with specific people, places and objects in the material world. In the study, the different ways of making a connection between the practice of mining and people, places and objects are also sites for identifying differences, domination, and resistance to a particular representation of the mining CD nexus.

In sum, there exists a dialectical relationship between the actual actions of Newmont and the talk about the action which is going as well as the connection of the accounts of actions to people, places, and objects. Consequently, the research questions will be operationalised based on

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[6] Section 3.3 will aim to connect the research questions to the theoretical perspective of the study.

Fairclough's notion of discourse as a social practice which exists in dialectical relation with other elements of society as the main guiding CDA theory.

The next subsection will highlight the guiding discourse, linguistic and social theories which influenced the study.

1.8 THEORETICAL PERSPECTIVES

The theoretical approaches of the study have been categorised into three broad disciplinary fields; CDA, NA, and SFL. Fairclough's CDA constitutes the main theory of the study. Fairclough's DRA to CDA seeks to analyse the dialectical relations between discourse and the other elements of social practice such as visuals. Fairclough's CDA took a middle-range theoretical approach, it 'oscillates' between a focus on structure and action (Wodak, 2013). CDA focuses on revealing unequal power relations in discourse which are often expressed in ways that are not explicitly clear (Wodak, 2013). CDA's aim is to make such ideologically loaded social practices clear in order thereby to transform unequal power relations and injustice in society (Fairclough, Mulderrig, & Wodak, 2011). Furthermore, CDA's goal of clarifying ideologically loaded language in use is connected to its, 'critical', element. CDA's critique seeks to explain and transform an undesirable social situation and to change it, by making its political commitment clear (Fairclough et al., 2011; Wodak & Meyer, 2009). According to Wodak (2013), CDA critique can be understood at three levels. First, being 'critical' in CDA implies making the implicit explicit, that is to make clear the unclear relationship between discourse, power, and ideology. Second, 'critical' in CDA implies self-reflexivity. CDA is not just about criticising social practice but also CDA research practice is about being critical about the self. For instance, the researcher should be self-reflexive about the process of sampling and text analysis in a way which accounts for how the researcher avoided cherry-picking. Additionally, CDA's 'critique' focuses on; distance to data, the embeddedness of the data in the social, explicit political stance and self-reflection by the analyst. Third, CDA is critical because its analysis as a form of social practice can contribute to transforming undesirable social practice(s). Though CDA engages in critical analysis, the phenomenon which CDA study do not necessarily have to be, 'negative or serious'. Instead, CDA's critique means every event must be challenged rather than taken for granted (Wodak, 2013). In this study, critique implies making transparent the ideological effects of representations so as to transform struggles over meaning production.

CDA's goal of unpacking power struggles in discourse connects with Gramsci's theory of hegemony. Gramscian hegemony theory can be understood in terms of the struggles for power by which the values and beliefs of the dominant social groups are represented as commonsensical (Baker and Jane, 2016). Connected to Gramsci's theory of hegemony is Fairclough theory of ideology. Fairclough

defines ideology as the representation of an aspect of the world from a particular perspective in ways that contribute to establishing unequal power relations, domination, and exploitation. Such unequal power relations or unfair social practices are enacted through ways of acting (genres) and their ways of being, identities or style (Wodak, 2013). The thesis focused on the manifestation of hegemony through the instantiation of the struggle for different ways of representations otherwise referred to as struggle in discourse (Wodak, 2013).

Besides, CDA is not a single discipline with a codified body of theories, research methods, and agenda. Rather CDA is an interdisciplinary movement which draws on different research methods and agendas from different disciplines. However, the different models, methods, and agendas are all united under the semiotic dimension of power (Fairclough et al., 2011). Within CDA's approaches to the theory of research methodology, the thesis is Scollon, and Scollon, (2004) NA methodology inspired. Scollon & Scollon (2004) NA methodology, focus on the analysis of real-time irreversible social actions. NA methodology seeks to move away from CDA's focus on the analysis of discourses about broad social issues to a focus on naturally occurring action such as everyday talk at a pub (Jones, 2013). In NA methodology action is a means to understand and analyse the histories and daily experience of the individuals who participate in social action (Scollon & Scollon, 2007; Wodak, 2013). The histories and experience of individual social actors are sites in which the transformation from what is determined by abstract structures and the actual performance can be found. In nexus analysis action constitutes a nested field in which both discourses and Discourses circulate. NA methodology takes the theoretical and analytical position that social action is mediated by mediational means or cultural tools including discourse. In the study, NA methodology is complemented by Clarke's situational maps at the stage of circumferencing the nexus of practice.

The study uses SFL to discover and analyse hegemonic and ideological effects of representations and how social actors connect mining to elements in the situation. The justification for SFL analytical approach is that each society has its own way of producing meaning and these different ways of producing meaning can be realised in the linguistic and semantic categories (Stuart Hall, 1995). SFL is useful to the study because of the 'ideological potency' of a combination of certain grammatical forms, like lexical choices, modality, and evaluation which can construe relations based on values and beliefs. The study deploys SFL analytical tools specifically van Leeuwen's socio-semantic framework for social actor representation, selective aspects of evaluation and language system of modality to analyse social actor representation and how relationships are construed. At the ideational metafunction level, the analysis focused on lexical choices, verbs, nouns, pronouns and discursive strategies of social actor representation such as substitution. Dryzek's framework complements van Leeuwen's social actor representation framework as Dryzek's checklist is used to sum the content of the

dominant discourse circulating within the accounts of actions. At the interpersonal metafunction level, the study selectively used evaluation and language system of modality to analyse how different social actors make a link between the 'what is going on' and other elements of social practice, people, places, and objects.

The study combined the various theoretical fields of the study in a complementary sense. For instance, Fairclough's CDA's oscillation between structure and action connect with Scollon and Scollon (2004) micro-sociological perspective which seeks to avoid structure, through the concept of mediation. Scollon and Scollon (2004) perspective that the minutest of action is the circuit within which both micro and capital 'D' Discourses circulate indexes Fairclough concept of structure such as language. NA avoided a focus on structural through the concept of mediation as the conjoining of different cultural tools as sites of engagement which affords and constrain social action. Therefore, I find NA methodological and theoretical focus on action and Fairclough's middle-range theoretical approach which focuses on specific social conflict, such as the contention and ambiguity over how to construe the mining and CD nexus, complimentary (Fairclough et al., 2011; Wodak, 2013).

In the thesis, Fairclough's DRA provided the dialectical hook which helped NA establish the link between discourse and accounts of action. For instance, the language in use in the minerals and mining law can be described in Fairclough's terms as a capital 'D' Discourse or constitute a structure which determines what is possible, for example, that a holder of a mining lease can divert a river. Therefore, Discourse exists in a dialectical relation to accounts of mining companies material actions in situated environments such as diversion of a particular river. However, both Fairclough and Scollon and Scollon seem to be united in the belief that what is structurally determined is mediated in Fairclough's sense by social practices such as the meetings with communities leading to the diversion of rivers and in Scollon and Scollon sense as cultural tools including language and bulldozers which facilitate action.
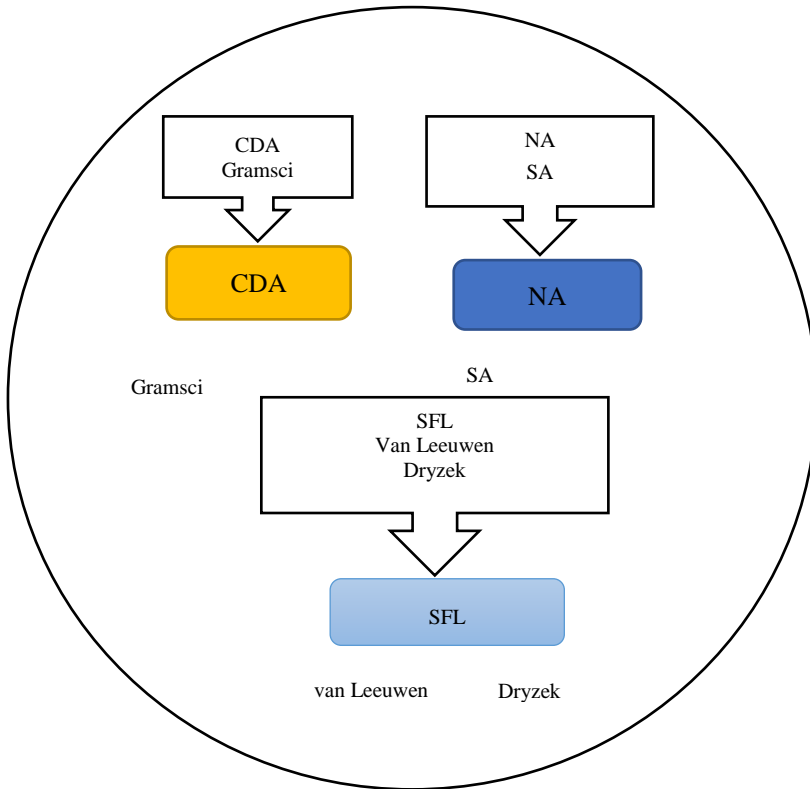
Figure 1 Theoretical map

The next subsection will seek to give an overview of the study's methodological approach. The next subsection will attempt to outline the complementarity between the methodological approaches of the study. The impending subsection will indicate how NA methodology is applied differently in the study.

1.9 METHODOLOGY

The thesis draws on nexus analysis methodology as the main methodological approach but is complemented by Clarke's situational maps. The study is an NA methodology inspired for a number of reasons. First, the thesis departed from Scollon and Scollon (2004) focus on naturally occurring social action to a focus on accounts of actions within their materially situated environments and the linkages of the accounts of actions to people, places, and objects in materially situated places. Second, the study is NA methodology inspired in the sense that, at the initial stages of the study, the study did not intend to conduct all the activities of Scollon and Scollon (2004) NA. The study initially focused on engaging and navigating the nexus of practice. However, the conceptualisation and application

of 'interview as social practice' and the notion of mediation demonstrate that the outcome of the study can be inserted into other social practices related to mine CD as a contribution towards changing the nexus of practice. But in order for the study to remain focus on social action, I used an interview tour of routine places determined by the social actors who are engaged in the mediated action. Also, I complimented the interview tour of places with participant observation to see for myself what social actions are going on at materially situated places.

The thesis applied NA methodology in a different way by using interviews to enable the study participants to give accounts of what is happening, what has happened in the past and the anticipatory actions related to the mining and CD nexus. The use of lexical choices to identify discourse topics in representation deepens the discourse analysis element of nexus analysis. Besides, the use of Clarke's Situational Map to circumference, identify and include elements in the situation but not Scollon and Scollon (2004) participants and scene surveys constitute a different application of nexus analysis. I found Clarke's suggestion that the researcher can rely on field notes, interview questions and the researcher's historical body as data, a productive alternative approach to engaging the nexus of practice. Practically, the use of Clarke's SA maps to circumference, recognise, select and include elements in the situation proved less time-consuming relative to the conduct of scene, participants and mediational means surveys as proposed by Scollon and Scollon (2004). On the other hand, NA complements SA by identifying the semiotic elements in the situation, elements which SA does not include.

The next subsection, will aim to account for how the study applied Clarke's situational maps to practically address the analytical question; how did I preserve the complexity of the situation yet reduce the focus on the most significant elements?

1.9.1 CLARKE'S SITUATIONAL ANALYSIS

The purpose of Clarke's map is to provide an option for me to focus on micro accounts of action and its trajectories as a way of delimiting the situation. I constructed the initial situation at five main sites namely; my historical body, from my readings of the minerals and mining policy, from my reading of what is in the news, my reading of the government's white paper on a petition by the Kenyasi Youth Association and the Newmont Ahafo summary report.

The process of constructing a situational map involved doing messy maps and revising them into an abstract situation. Based on the movement in and out of several messy maps various meaning-making element in the form of human actors, non-human actors, other symbolic or discursive entities and also entities of material existence. However, Scollon and Scollon suggest that in circumferencing

the analyst should not concentrate on capturing all semiotic cycles of every person, discourse or object which exist in a situation but rather should concentrate on mapping the significant meaning-making tools which flow into and out of the mediated action. Guided by this, I recategorised the abstract sites of engagements into figure 2. Figure 2 contains human actor such as the KYA, NGGL and the District Assembly (DA). Figure 2 also includes non-human actors, for example, mining codes and mining industry norms. Besides figure 2 contains symbolic discursive entities like effects, human health, human rights, CSR and three different spaces. Figure 2 shows that there are entities with material existence in situated places such as farms, water bodies, and mine waste.

NGGL   Human rights   CSR practice

Everyday talk

Human health

Farms

Empowered spaces   Sustainable Development

Mine waste   ABSTRACT SITUATION

Public sphere

Education

Effects   Employment   Mining codes

Industry norms   Water bodies

KYA

Livelihoods   DA
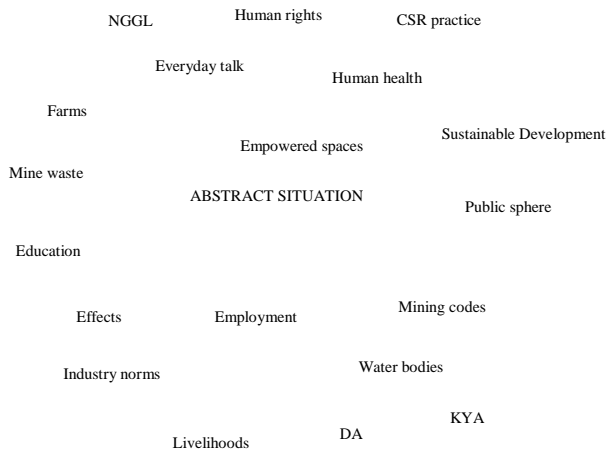
Figure 2 Situational map

The next subsection will give an overview of the analytical procedure as well as an overview of the analytical tools applied in the study.

1.9.2. DATA FOR ANALYSIS

The study generated data from naturalistic materials and interviews. Interviews and naturalist materials are transformed into data through selection processes. The selection process is informed by the nexus methodological stance on generating data from different sources as well as the practical concerns of the researcher in terms of access to potential data. The sample is selected based on typicality and inclusiveness in relation to some categories such as the closeness of the social actors behind the material to the mediated action as either an affected or beneficiaries as a regulator. Within the text, further samples or extracts are generated based on relevance to the researcher questions of the study.

1.10 ANALYTICAL STRATEGY

The thesis adopts a three-step analytical model. First, the study will present and analyse the voices of the government and CSOs in the public space. Second, the study will present and analyse the voices of individuals in private space. Third, the study will identify and analyse discursive sites of domination, difference, and resistance in the voices from the private and public spaces.

The study analytical approaches are based on selectively chosen aspects of SFL's analytical tools; social actor representation, the language system of modality and evaluation. The thesis combine Fairclough (2003) and van Leeuwen (2008) framework for social actors' representation. Fairclough and van Leeuwen frameworks for social actors' representation focus on using grammatical, transitivity and socio-linguistic tools to analyse the patterns of inclusion and exclusion of social actors. Therefore, they are applied at the experiential metafunction level. Moreover, Fairclough (2003) and van Leeuwen (2008) social actor representation are applied in the study with a focus on revealing who is included in accounts of actions, agency and the ideological effects of social actor representation.

Dryzek's, (2013) framework basically consists of a set of questions which address environmental issues pertaining to; the ontology of discourses, taken as given connections between entities, agents and their motives and the key metaphors and rhetorical devices. In the study, I used Dryzek's checklist at the ideational metafunction level to summarise the elements of the dominant discourses which circulates within the accounts of action and to provide the context for understanding the discourses. Therefore, Dryzek's checklist aim at complementing van Leeuwen's socio-semantic and Fairclough social actor representation framework for social actor representation.

At the interpersonal metafunction level, SFL's analytical tools of modality and evaluation are selectively applied in the thesis to analyse how CSO, individuals and the government construe the relationship between mining and CD. For instance, in the study, the language system of modality is used to analyse how different social actors construe the certainty of both a positive or negative relationship between mining and other elements which constitute sites of engagement. The study selectively applied evaluation to analyse how social actor expresses their attitude towards Newmonts action and its connection with other entities in the situation.

In sum, to deal with the 'how' of representation, I use van Leeuwen's socio-semantic framework of social actor representation. To sum and reveal the differences in discourses I deploy Dryzek's checklist. Finally, to analyse the interpersonal relations, I selectively used modality and evaluation.

The next section will describe the ontological and epistemological perspective of the study.

1.11. PHILOSOPHICAL PERSPECTIVES

Guided by the notion of discourse as a social practice, the study is inclined to the constructivist ontological notion that social reality and categories are a social construction (Bryman, 2016; Morehouse, 2012; Jonathan W. Moses and Torbjorn L. Knutsen, 2012). Being a social construction implies that local individuals, government and company all have their possible different ways of making sense out of mining relationship to human well-being. Epistemologically, the study leans towards a constructivist theory of knowledge because discourse as social practice constitutes and is constituted by other elements of social practice such as language.

Social constructivist theory of knowledge counters the positivist assumption of a direct relationship between 'knowledge' and 'reality' and the possibility of obtaining an objective and unbiased knowledge of reality. Social constructivists argued that because the categories used to classify, describe and interpret reality are 'socially, culturally and historically contingent' (Burr, 1995) humans cannot have direct and unbiased access to objective reality. Since knowledge is socially constructed, it implies a historical and cultural embodiment of what really constitutes a knowledge. Therefore, knowledge does not exist out there waiting to be unearthed but knowledge is generated through the process of filtration of the practice of generating knowledge. The study adopts constructivist perspectives and seeks to build on others (such as Alvesson and Karreman, 2001; Philip and Hardy, 2002; Munir and Philip, 2011), who see discourse analysis as a critical tool in evaluating how agents discursively mainstream one ideology or practice over another. Also, guided by social constructivist perspective the study analyses how different social actors at various scales use social action as a mediational means or cultural tool to construe the mining and CD nexus similarly or differently.

CDA differ from constructivist who see different constructions as a functional process of meaning-making. CDA problematise the discourse as a struggle of different ways of representing for legitimacy which implies downgrading and delegitimising other ways of making meaning in order for a particular social practice to hold sway.

But if reality is socially and culturally produced, and is about struggle why then is there the need for discourse analysis of actions? On the relationship between discourse and reality, first, I agree with the critical realist such as Fairclough (2003) on the point that discourse is an element of social practice. Second, I agree with new realist/critical realist (such as Fairclough, 2003, 2010) perspective that, real causes of social problems exist which calls for critical analysis. According to

Fairclough (2003), causal powers of social events include social structures, social practices, and social agents or actors. But meaning-making is not about how things are or defined by structures but a matter of social practice. Meaning is dependent on society rather than on nature implies that different social actors can make different meanings out of the same event (Stuart Hall, 1995). Furthermore, the social practice of making a sense of how mining should affect human well-being is more than a functional social practice but also a struggle in discourse for dominance, difference, and resistance. CDA seeks to make explicit otherwise implicit ways of making a particular representation appear universal through the use of social theories such as Gramsci' hegemony and Althusser's ideology as the context for understanding discourse.

The next subsection aims to give an outline of the contribution of the study to the CDA methodological approach.

1.12 CONTRIBUTION OF THE STUDY

This thesis makes a methodological contribution to Scollon and Scollon (2004) NA through a change from a focus on analysing natural occurring action to discourse analysis of accounts of action. To ensure that the study departs from previous studies which aim to study action but end up analysing discourse (Jones, 2012), I applied an interview tour of routine places where social action occurred or are occurring. Through this interview tour of routine places, the study makes a methodological contribution to NA methodology, as it focuses on accounts of actions in their situated context and the interview linked the accounts of action to both the past and future. This constitutes an extension of Scollon and Scollon (2004) focus on real-time action and tracing its trajectories into the past and future.

The focus on the role discourse analysis plays in understanding how different social actors represent differentially and construe differently the mining and development nexus constitute 'an innovative approach' to studying how mining affects human well-being at situated places.

The study contributes to van Leeuwen's theory of social actor representation by applying nouns, pronouns, lexicalisation, transitivity, deictic and socio-semantic strategies of representation to analyse social actors based on concrete accounts of actions occurring at local-local places over time.

The study seeks to deepen the discourse analysis aspects of van Leeuwen's social actor representation by using the lexical choices in the representation to inductively identify the discourses circulating within the social practice of social actor representation based on accounts of actions in situated places.

The study contributes to research on how mining contributes to human well-being by revealing how social actors represent relations involve a struggle over meaning rather than a functional reproductive social practice. The study discovered that the difference in representation over what should be included as important and what should be excluded as non-important constitute semiotic hegemony.

The next subsection will present an outline of the chapters which constitutes the entire study.

1.13 OUTLINE

The thesis comprises ten chapters including this introductory chapter, which offers an overview of what the study is about and an outline of the entire thesis report.

Chapter 2 situates the study within its intertextual context by describing the state-of-the-art in the topic. Chapter 2 also contain the researchers' intrusion into previous social science and discourse analysis studies on mining contribution to CD. Chapter 2 describes the niche for this study, on which basis this Ph.D. aims to make an innovative contribution.

In chapter 3, the theories which guided the study are categorised into; CDA as main theory, and complementing theories such as SFL theory and social theory like hegemony, and ideology. Besides, chapter 3 describes some key theoretical concepts in Scollon and Scollon (2004) NA methodology. In chapter 3, the study links the research questions to the theories of the study. Chapter 3 concludes with a summary and proposed analytical strategy for the study.

Chapter 4 describe the ontological and epistemological perspectives of the study. In chapter 4, the study account for the issue of researchers' involvement and bias. Moreover, chapter 4 makes a case for CDA approaches in analysing the mining and CD nexus. Besides, chapter 4 describes the sources and methods of data collection of the study.

Chapter 5 contains a detailed account of the analytical strategy of the study, which was proposed in chapter 3. In chapter 5, the study will operationalise both the analytical and methodological theories of the study. Chapter 5 also accounts for the divergence and convergence of the analytical theories of the study. Moreover, chapter 5 describes the thesis' contribution to the analytical theories of this study. Chapter 5 concludes with a summary of the study's analytical framework.

Chapter 6 set out to discover the social action which requires analysis and the social actors, places, and object which constitute and are constituted by the mediated action. Chapter 6 can be described as one of recognition, selection, and

inclusion. Theoretically, chapter 6 will combine Scollon and Scollon NA procedures on engaging the nexus of practice with Clarke's SA.

Chapter 7 deals with navigating the nexus of practice. Chapter 7 contain analyses of government policy and a CSO text. Chapter 7 contain visualisation of the linkages government and CSO discourse make between mining and other entities. Chapter 7 concludes with findings of the CSO representation.

Chapter 8 answers the analytical questions; what happened when I attempted changing the nexus of practice, by introducing interviews? Chapter 8 contain an analysis of voices of concerned from four of Newmont's fence-line communities. In chapter 8, the study outline findings from the concerned voices. The chapter concludes with visualisation of how concerned voices make linkages between Newmonts action and other elements.

Chapter 9 links the findings from the analysis to the main findings of the literature review. The chapter also contains a methodological reflection and a factual linkage of the findings of the study to the research questions. Finally, chapter 9 contains a conceptual discussion of the findings of the study.

Chapter 10 describes the activities recommended for changing the nexus of practice. It focuses on describing how the findings of the study can be connected to other social practices as a way of changing the nexus of practice.

The next chapter will seek to situate the thesis in the context of previous social science and discourse studies related to mining and development. The impending chapter will also attempt to bring the researcher into previous studies as a way to establish a research niche for this study.

CHAPTER 2. BACKGROUND OF THE STUDY

The chapter focuses on three main thematic areas within its intertextual context: social science studies on mining and poverty reduction; studies on the environmental question in mining and CD; mining CSR and CD, discursive approach to the study of mining and development issues. Finally, the chapter outlined gaps in these bodies of research of which this work have come to add or to contribute to.

2.1. SOCIAL SCIENCE STUDIES ON MINING-LED DEVELOPMENT

Studies on the relationship between mining and development are dominated by social science studies on the politics, economics, and governance of gold extraction and development. Ross (2002) revealed that both econometric and quantitative studies have emphatically shown that extractives dependence tend to harm economic performance and also that mining does little to reduce poverty and even has the potential to worsen poverty (Ross, 2002).

Similar to Ross finding on mining and poverty reduction nexus, Pegg (2006,p.377) evaluated the track record of mining's contribution to reducing poverty based on the WB's 2000/2001 conceptual framework for poverty reduction: material deprivation; 2) low level of education and health; 3) vulnerability and exposure to risk; and 4) voiceless and powerlessness. Based on this framework, Pegg (2006) found that mining performed poorly in terms of equity in income distribution and the creation of employment for the poor. Moreover, the study revealed that extractive dependency has a link with low government spending on education. Besides, Pegg (2006) indicates that mining is a notable source of public health problems. To add, Pegg, (2006) showed that the environmental effects of mining are sources of weakening the capacity of the poor to adjust to situations.

Despite the negative relations between mining and poverty reduction which have been recognised by the WB, there WB persistently supported extractive-led poverty reduction. Thus, Pegg sought to identify and evaluate the conceptual basis of the WB continuous faith in extractive-led poverty reduction. Pegg (2006) found out seven theoretical reasoning which explains the WB's continuous support for extraction-based poverty reduction: comparing mining in developing countries to mining role in the development of the now developed countries, the generation of employment from mining, fiscal receipts from mining, mining as a source of economic growth, transfer of technology and mining as source of infrastructure development.

First, Pegg's work shows that though mining within a particular historical moment played a significant role in the development of the core capitalist countries, the Bank's argument turned a factual statement into causality without providing factual or theoretical data to demonstrate the causality. Second, Pegg revealed that the Bank's rationale for extractive-led poverty reduction rests on the logic; the expansion of the mining sector → job creation→ increased income → poverty reduction. [7]Besides, Pegg, (2006) revealed that expansion in infrastructure does not necessarily translate into poverty reduction, because the quality and purpose of the infrastructure can play a significant role in terms of how much the poor can benefit. Also, Pegg (2006) revealed that the link between mining and technology transfer have been severed since multinational companies now control the technological knowledge.

Frame, (2016) analysed two abstract social practices, at the international level, which accounted for the weak nexus between mining and development in Africa; 'multilateral and bilateral investment treaties and tax regimes governing extractives'. Frame, (2016) revealed that trade-related investment measures (TRIMS) reduced the ability of mineral-rich countries put in structures which ensures that the extractive sector creates backward and forward linkages in the national and local economy. Also, Frame indicates that bilateral investment treaties (BITS) require governments in the global South to remove restrictions and grant many concessions to TNCs in order to have access to the US and other markets and these restrictions constrain the national development strategies of developing countries (Frame, 2016). Frame (2016) collaborated the view that the reforms favoured capital to the extent the norms which govern socio-environmental and development field of practice were undermined (Campbell, Bonnie & Akabzaa, Campbell, & Campbell, Bonnie, Akabzaa, 2003).

Similarly, Akabzaa (2009) revealed that the practices of creating enabling fiscal regimes for FDI have reduced the amount of revenue accruing from mining to the GoG. Akabzaa's finding is collaborated by several other social science studies (Agnew and Corbridge, 1995; Harvey, 2003; Sparke, 2008; Campbell, 2003; Humphreys, Sachs, and Stiglitz, 2007; Taabazuing et al. 2012). Akabzaa, (2009) revealed that despite the government and the industry persuasion of a significant contribution of mining to local communities, evidence of the positive economic impact of mining is not available. Additionally, studies have revealed that the WB Structural Adjustment policy of creating enabling environment has favoured international capital but have undermined the norms and standards which hitherto influenced field like social, environmental and economic development (Campbell, 2004; Campbell, Hatcher, Lafortune, Akabzaa, & Butler, 2005). Finally, the Akabzaa, (2009) showed notwithstanding the rhetoric mining contribution to

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[7] Arrows show the sequence of events as they are recreated in discourse rather in their order of occurrence in the actual practice.

development there is the absence of visible positive socio-economic economic impact on the local communities in which mining take place.

One of the ways in which the mining industry manage its crisis is through mining CSR and local CD. In the next section, I will focus on pointing out the key findings of studies on mining CSR and local CD. Key issues covered in the literature include the purpose of mining CSR, the gap between the rhetoric and the actual performance, the impact of CSR and whether or not CSR is a genuine development approach or it is basically legitimising the practice.

2.2. CSR IN MINING

CSR is a practice through which mining companies operationalise their CD, hence the two concepts are closely related. There are concerns about whether or not CSR is a material way by which mining companies act to benefit its stakeholders or it is a legitimising practice (Chipperr and Cuza, 2012). For instance, Garvin et al. (2009), revealed that though CSR is often seen as a panacea to meeting local communities expectation, in actual practice, however, CSR is nothing but community relation strategy. Additionally, Garvin et al., (2009) revealed that usually company representatives made so many promises during the initial meetings with local community stakeholders but these promises were never fulfilled.

Connected to the unfulfilled promises, is Sarpong's (2012) finding that mining companies have various reasons for embarking on CSR activities; social, economic and environmental. Sarpong, (2012) shows there is a gap between the discourse and the actual performance of mining companies CSR. Similarly, Hilson found out that mining companies do not engage in extraction in Ghana as charities but exist for commercial interest. Besides, Hilson (2007) shows that despite industry and media representation of mining companies as empowering their host communities through CSR, large-scale mining companies have engaged in the destruction of livelihoods (Hilson, 2007). Furthermore, the study revealed that though there are unambiguous laws and regulations on compensation payment mining companies sometimes used state security intimidate and eject farmers from their lands (Hilson, 2007). Furthermore, Hilson, (2007) revealed that regardless of the spoken commitment to empowering the local communities mining companies have not developed the practice of listening to communities, and as such, they implement activities as they choose.

Studies have also revealed that mining companies CSR initiatives have failed to materially change the negative social, economic and environmental conditions attributed to a neoliberal system of mining (Banerjee, 2003; Lin, 2010; Amazeen, 2011cited in Taryn, 2018). Governance and development-oriented studies have linked mining CD challenges to the retrenchment of the state from mining (Campbell, 2005, 2009), and the WB blamed the mining CD challenges on internal governance

challenges, a perspective opposed by Campbell et al (2005). Campbell revealed that most CSR practices in Africa fail to address the fundamental problems of legitimacy and risk, mining failure to positively contribute to social, economic and environmental conditions of the host communities (Campbell, 2012). Studies have shown that there are voices of concern that mining CSR development should be social justice-oriented (Newell, 2005, Manteaw, 2007, Viser, 2008). Additionally, both the mining industry and WB recognised the need for companies to build good community relations and take up their responsibilities, studies show that there is a lack of clarity over companies CD responsibility (Kemp, 2009, Campbell, 2005, 2012).

In the section which follows, I will identify the key findings on the environmental question and mining CD and most of the studies included focus the environmental question mining negative effects on local community livelihoods.

2.3. ENVIRONMENTAL ISSUES AND CONTESTATIONS

Mensah and Okeyre, (2014) pointed out, that whereas companies often tout companies efforts at providing essential social services local communities use mining companies negative environmental effects as the of basis their agitation for the abrogation of mining projects. Moreover, Mensah, & Okeyre, (2014) revealed that the environmental question in the context of large-scale mining companies and communities relation is not necessarily a question about sustaining nature but also a question of resolving mining's negative effects on environment-based livelihoods.

Similarly, Lawson and Bentil, (2014) found that local communities in the Asutifi District were highly welcoming of NGGL during the exploration stage but later became 'resentful' due to the negative effects of mining on their livelihoods. Closely related to the effect on livelihoods is the finding that mining brings about a geographic transformation of livelihoods due to the displacement of people from lands, which have become 'contested economic spaces' (Taabazuing, Luginaah, Djietror, & Otiso, 2012).

Related to the environmental question is the practice of relocation and compensation payment. Wan, (2014) reveals that though legislation and institutions responsible for compensation and resettlement are just, but structural barriers prevent government agencies from implementing the regulations. Also, Wan (2014) revealed that though laws and regulations guaranteed local community groups and individuals rights to participate in negotiation for resettlement these groups lacked the technical expertise, knowledge of the options available to them under the regulations. Also, they lacked the financial capital needed to access legal services. Moreover, there is a finding small-holder farmer are a disadvantage because the political economy favours extraction (Wan, 2014). A study has revealed that mining companies wasting dumping practices have resulted in pollution of women sources of water, shortage of

food, dispossession of their farmlands and experience of skin rashes (Ayelazuno, 2014).

To wind up this section, it is clear that studies on the environmental question in mining focus on the effect of mining on local livelihoods due to mining activities effects on subsistence.

The next section will bring the researcher into the findings of the studies which have been identified in the previous section. The aim is to identify the gaps in previous studies and to establish the niche of this thesis within the context of what already exists and future anticipation.

2.4. COMMENTS ON SOCIAL SCIENCE PERSPECTIVES

I find Pegg's, (2006) 'critical' evaluation of the WB's logic on extractive-based poverty reduction against the actual performance based on the Bank's own core indicators of poverty quite useful. But, Pegg's, (2006) analysis could be improved by applying a social theory which explains the ideological reasons behind the WB's continues faith in extractive-led poverty reduction.

Akabzaa, (2009) have clearly accounted for the developmental state inability to exact adequate revenue from mining for national development and poverty reduction and mining companies inability to deal with the poverty they create. Another approach which could improve the understanding and analysis of how the government and the mining company's legitimate mining existence is through a focus on the discursive strategies of social actor representation since socio-semantic categories of representation can express who has the agency to define what and also express the value and norms of the actor doing the representation.

Studies on corporate social responsibility in mining have revealed that there are diverse perspectives on the intents of CSR initiatives and actual effects on the ground.

There is the observation that CSR in the mining industry amounts to an attempt to realign the industry with the SD principle as a discursive strategy improve the industry's reputation. However, Hilson (2007) and Sarpong (2012) which examined CSR leave a gap in terms of a close analysis of the discursive practices of representation which seeks to soar mining company's reputation in ways that appear unclear. Although Sarpong, (2012) identified some metaphors which have been used to describe the scepticism about CSR contribution to local CD the identification of the metaphors could be more productive if the metaphors were analysed within a particular social context.

Studies which focuses on local communities perspectives of mining and development (such as Lawson & Bentil, 2014; Mensah, & Okeyre, 2014), especially in relation to

the environmental question, examined the subject from the outcomes and logic approach of the social science and how these outcomes have become the source of an uneasy relationship between large-scale mining companies and local communities. Though these studies sought to elicit the perspectives of their respondents one critical question which is left unanswered is; what roles do the discourses in place play in how social actors construe the mining and CD nexus in one way and not the other?

Similarly, though Taabazuing et al., (2012) analysed the impact of mining on 'everyday lives', however, this study leaves a relevant question; what actions are taking place at local-local places and how do the local-local people explain effect based on the 'what is going'? This is because the actions taking place in routine places may serve to establish, maintain or resist capitalist social relations with society (Fairclough, & Mulderrig, 2011).

Wan, (2014) articulates a view that the mining legislation in Ghana favoured large-scale mining over the interests of peasants and artisanal and small-scale miners. Wan's finding is interesting for two reasons; first, it recognises the agency of discursive structures like Act 703 and LI 2175 in influencing social action and second, it recognises a cultural element, which provided the author with an analytical tool to analyse misrecognition. However, an aspect which received less attention in Wan's (2014) border on the question: how do these 2 discursive events shape the other elements and are shaped by the other elements in the situation?

Frame, (2016) revealed that the account of the literature on mining and development have focused the political, social, environmental, issues of inequality and the economics of mining as if they were separate. Yet Frame (2016) leaves a void by way of less attention a close analysis of how these structures constitute and are constituted by micro-level practices. Therefore, an alternative way could be to analyse how these global economic and political structures are connected to actions occurring at one place, particularly at the 'periphery'.

The social science theoretically-based studies here have pointed out that due to the negative effects and unequal distribution caused by the neoliberal order, communities and social movements have challenged the hegemonic neoliberal order, thus forcing the neoliberal era to move into legitimation practices. As a result government's ability to contract mining companies and company ability to extract for profit depends largely on the 'face', they present to the local communities close to the mines. As Fairclough notes the increasing use of language to achieve economic goals in ways which appear unclear, it is useful to analyse micro accounts of actions occurring or which occurred in situated environments and the histories of their conjoining trajectories, in order thereby to make transparent otherwise unclear ways of construing the mining and development nexus from a particular perspective as though it was universal.

Aside from the social science approaches, there are discourse-related studies on mining and development nexus from contexts other than Ghana. In the next section, I will focus on revealing the gaps in existing discourse analysis literature on the extractives sector and social practices related to development.

2.5. DISCOURSE APPROACH TO EXTRACTIVISM

Due to the social science scholars criticism of mining companies, CSR initiatives as not adequately addressing social, economic and environmental effects caused by mining companies, applied linguistics studies have christened mining companies CSR as corporate legitimation practices (Breeze, 2012; Taryn, 2018). Most of the discourse studies on mining and development relationships issues are studies by scholars from the global North and on companies in the global North. A notable exception is Taryn, (2018) which analysed how two mining companies Implats and Gold Fields constructs social actors in their CSR and Integrated Annual Reports. The study revealed that the CSR text draws on a fixed set of socio-linguistic devices in representing higher-wage and lower-wage employees of the two companies. Additionally, the study revealed that the CSR uses metaphors, for example, to attribute human qualities to the companies. Taryn's study revealed that ideologies over mining companies' role in the triple-bottom-line indicators are shared. Furthermore, Taryn's study shows ideologies are reproduced and maintained through,' particular representations in the text', and that these particular representations served a social function by including and excluding some versions of reality.

Taryn (2018) finding collaborates Parson (2008) which revealed that mining companies use of concepts like CSR, SD and community engagement are often seen as corporate to obliterate their 'historical misdemeanours' and thereby serve a social function of closing opposition to the continuous negative effects of mining(Parsons, 2008).

In Equador, van Teijlingen & Hogenboom, (2014) analysed the different discourses of the main actors in the debate and conflict over Ecuador's largest gold mining project, the El Miraldor. van Teijlingen and Hogenboom, (2014) study indicates that the conflict over the El Mirador mine is about the effect on the environment well as a struggle over meaning. Additionally, the study shows that stakeholders use a different set of discourses leading to conflicting propositions regarding the mining and development nexus (van Teijlingen and Hogenboom, 2014).

Moreover, the study revealed two metaphors, 'mining as a door to socio-economic development', and mining as, 'destruction and death' discursive devices which frame the different discourses about mining and local CD (van Teijlingen and Hogenboom, 2014). Furthermore, the study shows that the meanings of the mining as 'door to living well and' 'mining as destruction and death' are related to the value different

stakeholders place on 'territory, history, culture, and livelihoods'. Also, van Teijlingen and Hogenboom, (2014) discovered that the conflict over mining and development is over meaning and concrete material transformations, taking place within a territory. The findings show that the government linked buen vivir to natural resource (NR) extraction in a way that makes their relationship natural, thereby blur the possibility of an alternative way of construing the mining and development nexus (van Teijlingen and Hogenboom, 2014).

Moreover, the findings revealed that there is a strategic use of the principle of buen vivir to background the past and to foreground a new consensus (van Teijlingen and Hogenboom, 2014). To add, the study shows that the government linked, 'buen vivir', to NR extraction in a way which naturalises the mining and 'living well' relationship, thereby blurred the possibility of an alternative. van Teijlingen & Hogenboom, (2014) concluded that the transformative potential of, 'Buen Vivir', has been overestimated. Moreover, the strategic framing and normalisation by the government and social movement, presented, 'Buen Vivir', as an absolute phenomenon which exists out there and can be attained, and those obscure power relations. Besides, the study revealed the challenge of transforming 'Buen vivir' from concept to practice within the context of a search for post-neoliberal development.

Davalos and Albuja, (2014) unpacked the PAIS Alliance's government's extractives nationalisation and development discourse in Equador by analysing the social, economic and political structures which mediate the translation of the discourse into actual actions in the social world. Davalos & Albuja (2014) identified the government's orders of discourse to include: a dominant nationalisation discourse underpinned by the practice of 'vivir bien'. Within this hegemonic nationalist extractive discourse, Davalos & Albjua, (2014) identified discourses such as nature-human relationship, economic growth, and development, public investment financing, particularly in education and health, extraction as a transition to Ecuadorian industrialisation and income redistribution.

Davalos and Albjua, (2014) concluded that there is a gap between PAIS Alliance nationalisation discourse and the actual practices in the society. Contrary to government rhetoric, the study revealed that extraction resource does not translate into financing: public infrastructure, conditional cash transfers, social investments, and income distribution. Besides, the study revealed that effective social resistance is unlikely. This is because the government has broken the ranks of the people, whereas the rural poor lived the negative effects of mining, the urban middle class is fenced by the 'commodity consensus', this creates different interests between the urban people and the rural people whose territory and material needs are destroyed.

Chipper and Cuza, (2012) analysed the discursive construction of legitimation in three companies: Rosia Montana Gold Corporation; Gabriel Resources; and AngloGold Ashanti. They focused their study on a genre called the 'Chief Executive

Officer Letter to the shareholders'. Chipper and Cuza, (2012) revealed that through 'Chief Executive Letter to the shareholders', company discourse achieves the ideological purpose of legitimising company operations in the face of negative social and environmental effects in non-transparent ways. According to Chipper and Cuza, (2012) the semantic fields around which the three companies studied focus their discursive engineering are community, host, values, fulfilment, responsibility, citizen, and unique to AngloGold Ashanti, human rights. The choice of words within the semantic field of CD and corporate responsibility portray an image of the companies as a benefactor who is around to improve the lives of the people. However, the study revealed that the business of companies, 'to make a profit,' are often suppressed through the use of lexical choices which assign the companies the identities of care for the local community stakeholders.

Moreover, Chipper and Cuza, (2012) revealed the mining companies orders of discourse as follows; dominant profit motive, care for the environment, risk management, local CD, and patrimony. Furthermore, the study shows that companies express their commitment to these discourse in present certainties, 'brings', and, 'invests', and predictable future facts, 'will stop, 'is due to develop' and of certain future facts, 'will stop', 'is due to develop' (Chipper & Cuza, 2012,p.444) and the study revealed that the ideological effect is that though the project is yet to start the company discourse grants the project a present ontology. Based on the CSR discourse of three companies, the study concluded that mining companies CSR discourse performs functions such as: persuade, legitimate, advertise and construct a good corporate identity (Chipper and Cuza, 2012). The study concluded that companies discourse portrays of mining's companies as benefactors should be taken 'with a pinch of salt', what the discourse excludes should be taken not what is included (Chipper and Cuza, 2012).

According to Breeze, (2012) regardless of the increasing interest corporate language in use practices, linguists have paid less attention to legitimation practices of institutions or corporations in the event of wrongdoing or perceived wrongdoing. Breeze's, (2012) observed that the companies studies used discursive strategies to move the companies away from discursive positioning as guilty ones to a new positioning as those who have survived and have learnt lessons from the event. Breeze, (2012) concluded that since the letters are not about politics or social control their ideological effects can be disputed. However, Breeze, (2012) argued that if 'move structure' of the genre is analysed as being organised to perform a social function, to show identity and respond to social criticism then the letters can be said to have ideological effects. Breeze, (2012) recommended for future studies to analyse how corporations respond to negative events so as to ascertain whether the patterns observed in their study context are universal tendencies or otherwise.

2.5.1 COMMENTS ON DISCOURSE APPROACH EXTRACTIVISM

Though van Teijlingen and Hogenboom, (2014) focus on analysing the discursive connections different social actors make between mining and development nexus, the study relied on Foucault post-structuralists discourse analysis and this theoretical approach is unhelpful for two reasons: though Foucault's view that there exists a relationship between power and language, this relationship is described in a unidirectional way, power shapes language and language reflects power and this contradicts the recursive approach which the study appropriates 'social construction of nature', and 'natural construction of the social'(Hastings, 1998). Moreover, theoretically, Foucault did not ground his analysis in real text, Foucauldian analysis does not provide a framework for analysing the detailed linguistic discursive practices with broader social practices and finally (Hastings, 1998). An alternative approach which this study used is linguistic theoretical analysis, as a tool to show the patterns of connections between and among different actors across the scale. For instance, the use of SFL tools will provide useful answers to a critical question like; what are the socio-semantic strategies used to represent social actors in relation to social action?

Thus, both van Teijlingen and Hogenboom, (2014) and Davalos and Albjua, (2014) leave a lacuna by way of lack of attention to legitimation as a discursive practice which exists in a dialectical relation to the government practices of extractives-led development. Besides, these studies focused on how structures influence action, top-down approach, thereby leaving aside how actions occurring at the grassroots are shaping discourses on the mining and development relations.

Empirically, the studies included in the literature section such as Breeze (2012), Davalos and Albuja, (2014) and Taryn (2018) have focused their analysis on company routine practices and government discourses. In terms of sources of data for analysis, the discourse literature included in the analysis section has relied on naturalist data for their analysis. Therefore, there exists an empirical gap in terms of analysis of ethnographic data. Also, gaps exist in terms of how micro discourses which circulate within micro-events like interview accounts of actions connected with the macro Discourses which circulate within the analysis of company and government texts.

2.5.2 THE NICHE OF MY STUDY

There are inadequate or 'no' CDA empirical studies on how social actors accounts of mining companies situated actions and their implications on people, places, and

objects in materially situated places come together as sites of engagement [8]which are used to mediate [9] broader construal of the mining and local CD nexus.

Previous studies on mining CD focus the analysis on abstract social practices like the CEO Letter to the Stakeholders with 'no' or little focus on analysing accounts of actions occurring or which occurred in situated context and the linkage of the accounts of actions to people, places and other semiotic objects in situated places. Neither is there an empirical analysis of how accounts of micro-level actions provide a way of understanding and analysing the more abstract discourses such as contention and ambiguity about mining and CD nexus.

This thesis brings in a methodological perspective different from the focus on an analysis of abstract social practices, as it seeks to understand and analyse the mining and local CD nexus, based on accounts of actions going on or which occurred in materially, situated places. Inspired by Scollon and Scollon (2004) the position of this study is that the histories and daily experiences of the social actors are sources of insights to transforming the broader socio-political contention and ambiguity over the mining and CD nexus.

Due to my focus on discourse analysis of accounts of actions I also bring along a novel perspective, at least in the field of mining and local CD nexus. The novelty is about the role of semiosis, in the form of pictures of places and individuals as tools which drive forward individuals' accounts of the relationship between mining and local CD. Practically, a methodological and theoretical focus on a discourse analysis of accounts of action is useful in reducing the complexity of what to focus on. Besides, the analysis of different actors and their representation is productive in finding a solution to the real life challenge in terms of mining companies and local communities' struggles. This is because through analysis of accounts of actions the individuals' evaluation and evidential basis of their evaluations will be made transparent.

Analytically, the study seeks to expand van Leeuwen's social actor representation. This will be done through analysing social actor representation based on accounts of actions going on or which have occurred in materially situated places. Van Leeuwen (2008) have analysed social action and social actors separately. However, van Leeuwen's goal is to expand his analysis to include other elements of social practices

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[8] Site of engagement refers to the conjoining of different actors, cultural tools and different types of relationships in a particular historical moment and place to make certain ways of construing mining and CD nexus possible.

[9] Mediation in the thesis context refers to both language and non-language aspects of social actors accounts of actions which constitute cultural tools which are used to take actions and how those actions are used to mediate construal of the mining and CD nexus.

such as locations, tools, dress, time and other elements added by discourse such as evaluation, legitimation, and purpose. This study pushes van Leeuwen's project forward through an interview tour of places where actions occurred or are occurring.

Theoretically, the study applies CDA theory to analyse difference, dominance, and resistance over how different social actors link gold mining to human well-being.

The next chapter will describe into detail the CDA, SFL and social science theories which influenced this study's 'innovative' focus on a discourse analysis based on accounts of actions.

CHAPTER 3. THEORETICAL PERSPECTIVES

This chapter focuses on the description of three main categories of theories which influenced the study. The theories include CDA, SFL; and social theory. Moreover, the chapter will answer the following questions in relation to each one of the theories listed above: What is the theory about? How does the theory relate to the study's research question? How will the theory be applied in the study's context? Finally, the chapter will conclude with a summary and highlight of the study's analytical strategy.

3.1 INTRODUCTION

For the sake of emphasis, the theories discussed in this chapter have been categorised into the main theories and supplementary theories. The main theoretical perspective is Fairclough's CDA. Within CDA my study is NA methodology inspired. The complementing theories are SFL and social science theories.

In the next section, the description of CDA as the main theory will be focused elements of CDA such as the notion of discourse as a social practice, the relations between language and power, CDA position that discourse is historical and CDA a research approach but not a discipline.

3.2 MAIN THEORETICAL APPROACH: CRITICAL DISCOURSE ANALYSIS

CDA concerns itself with semiosis and power relations in discourse which often manifest in ways that are often non-transparent. CDA aims to uncover such opaqueness' of unequal power relations expressed in discourse, as a way of contributing towards building a freer society.

CDA takes the position 'that discourse constitutes and is constitutive of social practice' (Fairclough, 2003; Fairclough et al., 2011; Jones, 2013; Wodak & Meyer, 2009). Additionally, CDA takes the context of language in used to be critical, since the ideological import of language in use cannot be read out of their context (Bartlett, 2014). CDA conceptualise a complex relation between context and discourse because of the insight that discourse is:

structured by dominance; discourse is historically produced and interpreted, and that dominant structures are legitimated by the ideologies of the powerful groups, and this insight provides an avenue for the analyst to analyse pressures of ideological imposition by the powerful groups and resistance from below, to ideological impositions which are stabilised and naturalised (Fairclough et al., 2011).

Moreover, CDA is not a single theory or a method based discipline but rather CDA is an interdisciplinary movement. It is interdisciplinary in the sense that CDA is a problem-oriented interdisciplinary approach which draws different epistemological assumptions and theoretical models to solve issues of social concern. Also, CDA's interdisciplinary approach to the study of unequal power relations in discourse is tied to its aim to produce results which are practically relevant to society. Theoretically, CDA's interdisciplinary orientation can be traced to Max Horkheimer view that the theorist role is to 'articulate and help to develop a latent class consciousness' (Wodak, 2013).

CDA notion of 'critical', make CDA stand out from other social sciences or linguistic oriented studies. Though this critical notion is a unifying point of CDA 'critical' has been explained differently without and within CDA. Within CDA the different approaches draw their critical impetus from; the Frankfurt school, literary criticism and Marxist notion of criticality. According to Wodak, (2013) the critical notion of CDA can be understood at three levels: making the implicit explicit, being self-reflective and CDA analysis that seeks to transform unjust social practices. First, to make implicit meanings explicit implies making clearer the relationship between discourse, power, and ideology. Second, CDA critique as self-reflective and self-critical, implies, for example, examining how power inequality between the researcher and research participants influence the interaction in an interview or avoiding cherry-picking in the selection of text for analysis. Third, CDA critique as working for social change consist of three subtypes of critique; text immanent critique, socio-diagnostic critique and prospective critique. Text immanent critique is about the systematic and transparent analysis of text. Socio-diagnostic critique connects the analysis of text to the socio-political and structural context. The aim is to reveal multiple interests of text producers and contradictions. Finally prospective critique ladder on the first two subtypes to insert the outcome of the analysis in the actual social practice of practitioners and other social actors who are concerned about the social issue.

In the study, critique implies making transparent the ideological effects of representations. Moreover, the thesis achieves self-reflection because data is presented and analysed in a transparent way such that another analyst can make an independent meaning out of the analysis. In terms of connecting the analysis to socio-political and structural context, NA methodology avoids the notion of structure nexus through a focus on action as a circuit which produces the histories and routine experiences of the social actors. Scollon and Scollon (2004) analysed the linkage

between micro and macro through six conceptual elements: mediation action; site of engagement; mediational means; practices; the nexus of practice and the community of practice (Wodak, 2013). Specifically, the notions of mediation and mediational means which influence actual events provided a conceptual strategy for NA to avoid structure. In this thesis, the micro-macro context is accounted for through accounting for the Discourses which are drawn by the discourses which afford and constrain social actor representation. In terms of prospective critique, this thesis detailed strategies of recontextualising the outcome of the study into actual social practices of construing mining and CD nexus.

Moreover, CDA's perspective is that a text is usually not produced by one person, that is to say, a text is a site where discursive differences are negotiated (Wodak, 2013). The negotiation of discursive difference is governed by unequal power relations hence a text or the meaning of a text becomes a site of struggle between different elements of discourse and ideology. Because these different elements seek to attain dominance, CDA's goal is to make these struggles explicit, as a contribution towards building a fair society.

According to Wodak, (2013), CDA is different from other social science and linguistic approaches due to: the nature of the problem which CDA approaches to research deal with; CDA approaches declaration of political commitment, for example, CDA approaches to advocate for the disadvantaged groups in society. Another element which makes CDA unique is the assumption that all discourses are historical, hence can be understood within their context. Moreover, CDA is unique because it takes the position that the relationship between language and society is mediated. Because there exists a mediated relationship between language and society, CDA applies the concepts of intertextuality and interdiscursivity to analyse the text or the meaning of a text in its prior and anticipatory textual context. Furthermore, CDA is unique because it integrates linguistics categories into its analysis. For instance, Fairclough's DRA applies SFL to uncover linguistic manifestation of social conflict, particularly the aspects of dominance, difference, and resistance (Wodak, 2013). Finally, CDA is different from other linguistic approaches because CDA is interdisciplinary, in the sense that it defines its object of study from different theoretical perspectives, as a means towards solving a social issue.

In the next section, I will describe the theoretical foundation of the study's methodological approach, NA. The next section will focus on issues including what people do with discourse in situated contexts. Also, the next section will describe NA focus on real-time actions which mediate social practice as well as NA focus on identifying the source of source problems in mundane practices.

3.2.1 NEXUS ANALYSIS

NA aims to make clear the link between real-time social action and broad socio-political problems by focusing on the analysis of natural occurring action rather than discourse of social issues (Jones, 2013; Wodak, 2013; Jones, 2009). NA emerged as a response to CDA's over-concentration on the analysis of discourse without paying attention to what people in situated contexts use discourse to do.

Moreover, NA shifts the focus on analysing unequal and discriminatory social practices away from a focus on ethnography of, 'bound' people, cultures, languages, and groups to a focus on ethnography of action (Scollon & Scollon, 2007). This is because there are several mundane and routine actions which individuals engage in which do not involve discourse or they involve discourse in a peripheral way, for example, football (Jones, 2013; Scollon & Scollon, 2007). NA is less interested in understanding discourse as action but more interested in understanding the role of discourse in doing things. In NA the main concern is not about what discourse means, what it does, but what people do with discourse and how these doings construct individual identities and community of practice (Jones, 2013). For example, NA is interested in understanding how language is used to portray an identity of a caring company and how such action is linked to broad socio-political problems of corporations and society relations (Jones, 2012, 2013).

NA defined as, 'language use in doing things', has its roots in Vygotsky theory of mediation. But the concept of discourse as a cultural tool which mediates action is not explicit. This concern of NA takes the conceptualisation of discourse as language in use (Fairclough et al., 2011; Jones, 2012; Wodak & Meyer, 2009) much further to include, 'language used in doing something', and that thing which discourse is used to carry out, for example, to construe mining and CD nexus, not discourse itself, become the starting point for NA.

Though other CDA scholars (Fairclough, 2003; Fairclough et al., 2011) have recognised that meaning is mediated by other elements of social practice, these scholars conceptualised social practice in a vague and abstract way. Such studies see social action or event as determined by existing structures, thereby gloss over how social actors are actually acting in the real social world. In contrast, NA moves its focus away from large structures and vague or even categorical types of practices to a focus on real-time, unique and irreversible actions, which mediate social practices and structures (Scollon and Scollon, 2004).

Though discourse as social practice mediates action, the relationship between discourse and action are not straight forward. According to Jones, "discourse does not cause actions and actions do not cause discourse" (Jones, 2013). There is a relationship of tension between the mediational means which exist within the socio-cultural context and the contextual use of these mediational means to take an action.

Where then is the source of agency in NA? In NA agency or call it power, is dispersed, created and recreated through human actions and the relationships that are created out of human action (Jones, 2009). Therefore, an understanding of individual social action and their effects constitute an understanding of the agency or power of the individual.

Furthermore, NA takes the position that the analyst must be an engaged analyst and also a social activist. An engaged activist in the sense that, NA take the epistemological position that objectivity is neither possible nor desirable. Despite this, the analyst must account for where his/her interest and the interests of the participants converged and how this mediates the mediated action in focus. In terms of social activism, NA activism differs from CDA social activism in the sense that NA is not much interested in uncovering unequal power relations, identifying victims and assigning blames, however, it aims at understanding and assisting others to locate the sources of social problems and their solutions in mundane, situated actions in which particular individuals participate within a particular time and place (Jones, 2013; Scollon and Scollon, 2007).

The next section will give an account of how selective elements of SFL theory will guide this study.

3.2.2 LINGUISTIC THEORY

In section 1.9 I broached the subject of a linguistic theory which influenced this study, and in this section, I expanded the description of SFL theory through an expanded description of Halliday's metafunction and described how relevant SFL is to the object of my research.

The functional approach to grammar focuses on the communicative functions of language use within a particular context (Bartlett, 2014; Thompson, 2014), 'because language is what it is' due to its function within the social structure (Bhatia, Flowerdew, & Jones, 2008). This approach is adopted by CDA approaches like mediated discourse analysis (MDA) and multimodal analysis (Bhatia et al., 2008). For example, a leading CDA scholar like Fairclough draws on Halliday's SFL to analyse the social function language use serve in his analysis of dominance, difference, and resistance as a manifestation of social conflict in the text or meaning of a text (Wodak, 2013). With Halliday's SFL approach language can be analysed at two levels; the macro-sociological level where language use serves the purpose of transmitting the larger social structure, values, knowledge systems and patterns of culture; the micro-sociological level where meaning is situated in a particular context and situations (Bhatia et al., 2008).

SFL theory sees language in use as a, 'meaning potential', rather than a meaning realised in a 'subconscious structure of grammar', (Thompson, 2014). Language

being, 'a meaning potential', means that a language is a social act, it is constituted by the social context, lexicogrammar, graphology/phonology and the social function it served (Bartlett, 2014). Suffice to say that the functional approach to language use recognises the importance of the syntactic structure of language as a tool in facilitating how meaning is actually expressed in communicative events.

But what does this metafunction of language entail? First, the use of language to express what exist like people, discourses and places is what Halliday referred to as the ideational or experiential metafunction, in other words, the ontology of language use (Bartlett, 2014; Jones, 2012; Thompson, 2014). Second, language use to interact, to create, maintain, restore impaired relationships and to create an identity for the self and others is termed as the interpersonal metafunction of language (Thompson, 2014). Third, the structuring of language to serve its communicative functions within a particular context refers to the textual function of language (Thompson, 2014).

In this thesis, the ideational metafunction served as a bridge to discourse analysis. It guided the study to answer the critical question: what is going on, who are the actors, places and the mediational means of what is going on at situated places? Moreover, in this thesis, Halliday's interpersonal metafunction influenced the study analysis of how different social actors make connections between Newmont's action and people, places and semiotic objects.

In the next section, I will seek to link the theories to the research questions in an abstract way.

3.3. THEORIES AND RESEARCH QUESTIONS NEXUS

Table 1 gives an account of how the theoretical perspectives of this study related to each of the research questions. However, due to space constraints, I will link only the main research question to the selected theoretical perspectives in this study. Representation, as a social practice, often include or exclude elements of the recontextualised social practice in a way which may or may not service ideological purpose. This relates to CDA theory in terms of CDA focus analysing social practice in order there to discover discursive ways in which representation may either consciously or unconsciously serve the interest of the dominant social group over the underprivileged group. Given the crisis of capitalist extractives-led development, social actor representation as a social practice may seek to achieve the organisational objective of representing mining companies as good angels but in ways that are implicit. Therefore, this question relates to CDA aim of analysing and understanding ideological ways of representation as a means of uncovering and transforming domination, difference, and exploitation.

The main research question focus on the 'how' of representation based on social action and its linkage to the mediated action, 'construing mining and CD nexus'

realises NA methodological perspective of connecting the micro, 'how' of representation to the macro talk about mining contribution to CD.

In relation to SFL theory, since representation involves the power to define in a particular or another and to serve a particular political purpose SFL is a theory influenced how the study paid close attention to ideological functions within a text, through the identification of lexical choices as discourse markers. Discourse analysis based on the lexical choices exposes the discursive struggles within different representations. In sum, SFL is practically relevant to the two elements contain in my research question: what exists and relationship between speakers and other social actors as well as their attitude towards what they are talking about, thus SFL is materially relevant in the ideational and interpersonal meanings and also relevant theory to connect immediate and displaced fields of activity.

Research question	CDA	SFL	Nexus analysis	Social theory
How do the different social actors represent differentially and construe differently the gold mining and local CD nexus?	Hegemony plays a role in understanding how representation from a particular perspective achieve universalisation, analyse the ideological effects of representation.	Here SFL theory analytical tool of evaluation is relevant to analysing the values in terms of the positive or negative of relationships based on concrete accounts of actions. Linguistic micro choices used in construing can influence readers to understand what construes is in a particular way, hence ideological.	NA focus on action provided a semiotic element of the mining CD relation in an actual sense, which connect with the linguistic element; realises the dialectics of relations.	'How to construe' entail power and potential to construe in one way but not the silent other can perform an ideological function.
1. **What is the social action (s) that is/are going on or have happened and how is agency accounted for?**	Fairclough's CDA seeks to analyse strategies of mitigating capitalism effects and action as nexus of close and distant practices is a relevant way to understand responses to effects.	SFL theory provided analytical tools to identify the action, to analyse the certainty about what is going and how the social actors therein express feeling 'the is going on'.	Fairclough critique acknowledged a gap between talk about the good and the actual, NA extends this by taking the position that understanding the histories and habitus of social actors in terms of action and agency of actors is a source of change.	What action is accounted for, and how is agency accounted for serve the ideological purpose of showing a negative relationship between mining and CD nexus.
2. **How are social actors represented in the mining and development nexus situation?**	Fairclough's notion of discourse as a social representation of social actor representation the practice of mining contribution to CD.	SFL theory provides a means for analysing the 'how' and the linkages of the representation to lexical choices which realise discourses.	Actions being the sites where the potential and actual context exist constitute a relevant resource in using socio-semantic strategies to analyse how social actors are linked to broader notions of mining and CD nexus.	Hegemony and ideology are relevant to understanding who is included as a dynamic social force behind positive social practices and who is included as affected expresses possibilities of who should contribute to whose benefit?
3.How do the various social actors bring in their individual experience in how they represent gold mining and CD nexus?	Dialectical relations guide the study to connect individuals experience as an element of social practice to the social practice of making a connection between mining and CD nexus.	SFL tool of evaluation guided the study to analyse expression of good or bad relationships based on prior experience.	This question relates to NA because NA analyses the conjoining of different trajectories include life trajectories of individual participants experience of Newmont actions overtime.	Ideology is useful in this question because to discover the ideological effects of using a particular experience to take action.
4. **How do social actors represent the relationship between mining activities and their daily life at a particular place?**	Fairclough CDA guided to connect the 'how' of representation to material daily experiences made out at a place.	First, this question indexes van Leeuwen theoretical perspective that representation no matter its high degree of abstractness recontextualised a concrete practice in the social world.	Discourses and actions are materially situated in the material and this connects to the research question in the sense that the discourse of mining and CD linkage is situated in the material world.	Past experiences mediate how sense-make out of actions at a place, which potential experience is contextualised.
5. **How do the host communities expect their representatives to act on their behalf?**	Concept of dialectical relations connects the actual performance of representatives as one element of social practice to another how individuals make sense of the social practice of mining.	SFL is an analytical tool of evaluation is relevant to analyse the represented evaluation of expectation and actual performance of their representatives.	NA featured in this question through cueing relations between representatives and the represented as sites for insights works together for social change.	Society reproduces itself for example in terms of people and their representatives.
6. **How does the struggle over power to represent manifest in the different social representations?**	Fairclough's CDA is interested in analysing the presence of social conflict in terms of dominance, difference, and resistance in discourse.	SFL guides the analysing of dominance, difference, and resistance through a focus on the social function lexical choices, which realises dominance, difference, and resistance served with their text environments.	NA theoretical perspective of power as ubiquitous guided this thesis to detect elements of dominance, resistance, and a difference in texts not in a particular text.	The view that individuals are connected to ideology at various levels of society connects with NA perspective that power is dispersed.

Table 1 Theories and research questions nexus

3.4 SUMMARY AND HIGHLIGHT ON METHODOLOGY

For the sake of emphasis, there exists no single theory or groups of theories from which CDA studies necessarily draw from. CDA studies draw from several theoretical perspectives, including perspectives outside of language. This study draws from a combination of the complementary theoretical perspective of CDA, linguistic theory, and micro-sociological inspired NA theory. The purpose to incorporate all that is productive to answer a research question which aims to understand and analyse a complex social phenomenon. This study sees CDA theory is a means to analyse discursive strategies of social actor representation to mining contribution to local community development nexus as a means of resolving real life social conflict.

Scollon's NA theory provided a theoretical guide to focus on social actors accounts of action which are either ongoing on which have occurred in the past. Finally, SFL theory provided the theoretical guide to analyse naturalist data and empirical data from the find and to identify, analyse and explain differences in representation, dominance, and tensions.

Just as with theory, there is no universally agreed CDA methods of data collection and analysis. CDA studies draw from various methods of data collection and analysis. However, Siegfried Jäger suggested that CDA studies rely on media text. Teun van Dijk and Fairclough are silent about the source of data for CDA study. But their use of media text could suggest a preference of media text (Meyer, 2001). Wodak suggests that CDA research should include fieldwork and ethnography as a basis for further analysis and theorising (Wodak, 2013).

Beyond using ethnography as a method of data collection NA perceives ethnography as both a method and theoretical position. This theoretical position enjoins the analyst to enlist into the daily actions of the participants. Also, the analyst is enjoined to elicit participants active involvement in a collaborative analysis of the social action (Scollon & Scollon, 2004).

In the next chapter, I will present the research methodology which I described as NA methodology inspired. The next chapter will cover aspects including an introduction to CDA methodology and description of the research process. Also, the next chapter will include a description of theoretical issues in NA methodology. Additionally, the next chapter will outline the activities involved in conducting NA as well as give a description of this study's contribution to NA. Finally, the next chapter will conclude with a summary of key issues described therein.

CHAPTER 4. METHODOLOGY

In this chapter, I will refer to the main issue of contention between positivist and constructivist approaches to research. Besides, the chapter will describe the ontological and epistemological perspectives of the study. This chapter will describe how the epistemological perspectives influenced the collection and analysis of data. The chapter will describe how the study dealt with the issue of researchers' involvement and the possibility of bias analysis. Moreover, this chapter will make a case for discourse methodological and analytical approaches in analysing the gold mining and development nexus. The chapter will describe the sources and methods of data collection and the unit of analysis.

In the next section, I will outline the fundamental issues of debate between positivist and constructivist research paradigms.

4.1. INTRODUCTION

The fundamental controversy over positivist and constructivist research paradigm debate centred on the question of access to an objective reality devoid of the influence of a researcher's bias and limitation. Positivists like John Stuart Mills take the position that there exists a real world which is knowable through sense perception, empirical observation. In contrast, constructivist take a position that even if a real world exists out there and can be known through sense perception, human sense perception is mediated by other factors. This position is associated with Kant (Moses & Knutsen, 2012).

Epistemologically, positivists believe that knowledge can be obtained through systematic observation. The scientist role is to observe its regularity and to restate them as laws of nature. Therefore, positivist seeks to systematically discover and report the regularity of nature by collecting empirical evidence and analyse data in order to confirm or reject the regularity of knowledge.

In contrast, constructivist epistemology is based on the claim that the nature of knowledge and human access to or understanding of knowledge is socially, culturally and historically mediated (Gergen, 2004; Irwin, 2011; Moses & Knutsen, 2012). Similarly, Collingwood (1962) argued that facts do not just exist to be observed. Rather facts are a historical phenomenon and are socially constructed. Being socially constructed, facts are observed and classified according to an existing criterion. This implies that an observer always has an idea of what to see, the existence of social context (Moses & Knutsen, 2012). In sum, constructivist take an epistemological position that knowledge of a particular phenomenon cannot be taken as an objective

representation of an exact empirical object which exists but rather representation is often situated in a social context.

In this study, even though Newmont's environmental effects and their implications on people, places, and objects within a situated context exist this thesis takes the position that individuals' accounts of Newmont's doings are mediated by the discourses in place. Therefore the study takes a constructivist epistemological position.

4.2. RESEARCH PARADIGMS DEBATE IN CDA CONTEXT

Similar to the paradigm debate in the social sciences there exists a debate about the nature of reality and how the discourse analyst can access it. In this debate, realist (such as Fairclough) take a position that reality exists independent of discourse. On the other hand, Foucauldian scholars argue that reality is socially and historically constructed. Besides, there are discourse researchers such as Edwards who argue that there is no point in the theory of knowledge where the constitutive power of discourse ends and the natural science view of reality proceed (cited Wetherell, Taylor, & Yates, 2001). This is because a researcher's description of reality is a reflection of the classification frames imposed on him or her via discourse.

Other issues of debate in CDA research include; whether or not the discourse analyst should explicitly state their ideological commitment? What constitutes a relevant context of a discourse research object? What is the relationship between discursive practices and other social practices involving bodies and objects? What is the relationship between discourse and the real world? What is the value of the analyst's findings? According to Wetherell et al., (2001) critical social research aims to analyse the sources, causes, and resistance to 'social wrongs' such as injustice, inequality, limited democratic freedom, and marginalisation. Thus, the CDA analyst must be politically engaged, and the political engagement of the discourse analyst has been one of the controversies in CDA.

The debate on CDA political engagement is between Fairclough and Widdowson. Due to the socially mediated nature of knowledge, van Dijk and Fairclough argue that the discourse analyst should be politically engaged (Fairclough et al., 2011). Their argument for political engagement is derived from Marxism and the Frankfurt School critical theory (Wetherell et al., 2001). According to Wetherell et al., (2001) Marxism as a social theory perceives science as either a revolutionary science dedicated to the emancipation of the oppressed or science in the service of the bourgeois. Being a revolutionary science, the social scientist, discourse analyst, and experts act as, 'front persons', for the interests of dominant groups, institution, and individuals in society. But van Dijk and Fairclough reject this view of the scientist acting in the service of the bourgeois. Inspired by Marxism, van Dijk, and Fairclough argue that the scientists

or intellectuals are always on one side of the divide but not necessarily always on the side of the bourgeois.

CDA takes a position that the analyst should be on the side of the dominated (Bhatia et al., 2008; Fairclough et al., 2011; Meyer, 2001), and that CDA researchers must make this commitment known. It is CDA's explicit statement of its political commitment which is a subject of criticism by scholars like Widdowson and Schegloff. They argue that CDA is a coloured interpretation rather than a critical interpretation (Bhatia, K et al., 2008; Wodak, 2013). Despite accusation of being a bias analysis, CDA includes measures to ensure that its results meet the test of scientific transparency. These measures included representation, reliability, validity, completeness, accessibility, and triangulation.

Context is one of the issues in CDA on which different scholars from the different disciplinary fields diverge (Bhatia et al., 2008). According to de Saint-Georges, (2013) context remains a central issue in CDA, because of CDA position that all discourses are historical and should be explained within their historical context. Context within CDA can refer to non-linguistic elements such as culture, ideology, and society (Meyer, 2011).

Conversation Analyst (CA) views context as that which is created moment-by-moment through turn-taking in a conversation. According to CA analyst, any element which is not brought into the conversation by the conversation parties should not be included as context (Bhatia et al., 2008; de Saint-Georges, 2013; Wetherell et al., 2001). This does not mean that CA does not believe in the influence of social structure and practice on language use. However, CA analysts differ in the way this should be studied. For CA analysts' issues of power should be studied based on close analysis of the mechanics of a particular interaction.

In the field of SFL, Hassan, (1999) make an interesting differentiation between environment and context. These two distinctions are the environment of the talk and the construed context. According to Hasan, a text environment refers to the human and non-human entities, their qualities and relationships. On the other hand, Hassan (1999) conceptualise context as the meaning potential, which social actors derive from the semiotic matter. SFL argues that the meaning derived from a situation and language are interconnected; semantic→context→words +grammar→semantic or meaning. This implies that every place constitutes a meaning potential, but the actual meaning, which is construed, is based on the social actor's prior experience with objects in place, semiotic history, social practices, and relations. Thus, context becomes part of a whole. Though SFL recognises that the social actor selects from the avalanche of meaning potential within the environment, SFL is not interested in why some meaning potentials are silenced and others activated, a point, which holds sway in CDA. CDA seeks to expose the ideological effects of discourse, therefore, seeks to account for the ideological purpose the activation of a particular meaning potential and silencing another option may serve in a particular context.

Similarly, Cloran (1999) differentiated between 'actively construed context' and 'materially situated setting'. The materially situated settings imply the actual physical space and its elements. Nevertheless, the material situational setting (MSS) is regarded by Cloran as a potential interactional frame that set the possibilities of what meaning can be made from the materially situated context. The 'actively construed context' is a theoretical and abstract element that is derived from the MSS. Based on the distinction of MSS and actively construed context, Cloran and Hasan makes three inference. First, that there is no context because context is prior to language, context is derived from MSS. Second, if there is no context then meaning can be made from the surface of the text. Third, new meaning can be made either from the existing meaning or from the MSS.

However, a weakness, which Bartlett, (2013) identified, based on inferences made by Hasan and Cloran (1999) is that their inferences suggest that context can be read of the text. In Bartlett's view, although MSS may leave traces of meaning potential context cannot be read of the text. Therefore, Bartlett (2013), makes a distinction between features of language construed as the context through language; and those which leave traces but are not actively brought into the talk.

Ethnographic oriented CDA and Discourse-Historical Approach, and Fairclough DRA regard the context of discourse beyond the immediate language or text internal cotext and co-discourse to include: intertextuality of text, genres, and talk as well as the interdiscursivity of discourses (Bhatia et al., 2008; Fairclough et al., 2011; Meyer, 2001).

According to Filliettaz, (2005), MDA does not consider, 'context', as useful in understanding the relation between discourse and society. This is because social actions are accomplished through both linguistic mediational means and non-linguistic means. Non-linguistic mediational means include a reference to and use of material objects in situated contexts. However, the point is not that MDA rejects context, but MDA does not regard context as enabling a better understanding of the text but rather as a mediational means which exist in relations of tension with discourse (Norris & Jones, 2005).

Typical of critical discourse studies, CDA does not consider any of the argument over context as either wrong or correct but rather base the choice of what and how of context on the focus of the research project (Wetherell et al., 2001). For instance, according to Wetherell et al., (2001), the choice of a proximate context becomes relevant, first, when conversational or interactional activities are the focus of the study. Second, context becomes germane when such conversational activities are clearly and narrowly defined. Third, context become important, if the focus of analysis moves from patterns and organisation to an analysis of why or how of a particular narration or construction restricting context to the patterns and organisation of talk may be inadequate (Wetherell et al., 2001). Related to the notion of context is

the relationship between language and social practice. However, CDA takes the position that there is a mediational relationship between language and social practice (Meyer, 2011).

There are different views on what the relationship between discursive practices such as talking, writing, and social practices such as farming. According to Wetherell et al., (2001) the difference in views implies a sort of uncertainty over whether practices which involves physical bodies and objects should be regarded as material practices and those involving linguistic elements *such as lexicogrammar and semantic*s cultural practices? [10]Theoretically, the discursive/cultural and materiality debate appears to be between Foucauldian discourse scholars and critical discourse analysts. Generally, poststructuralist takes a broader view of discourse as a human meaning-making process. In a poststructuralist sense, discourse and the material world are enmeshed and society regarded as an argumentative texture (Wetherell, et al., 2001).

Whereas the complexity of culture and materiality remains a vexed issue, some critical discourse analyst argues for a distinction between culture and other elements of social practices. For instance, Hodges and Kress (reported in Wetherell et al., 2001) and Van Dijk (cited in Wetherell et al., 2001) regard language in use as an element of social practice which produced unequal power relations and dominance. They call for both theoretical and analytical distinction between discursive and other elements of social practice. On the other hand, Fairclough emphasised that every social practice has discursive elements and social identities, and cultural values, forms of consciousness involved and semiosis/meaning-making. However, Fairclough, (2003) view is that discourse, discursive practice, and social events are dialectically related, both constituted one another (Fairclough, 2003; Fairclough et al., 2011).

Similarly, MDA takes the position that society and culture are made up of both the material products and discursive practices but not primarily in discourse or language in use (Bhatia, K et al., 2008; Scollon, 2008). However, MDA does not emphasise a distinction between discourse/cultural tools and any other element of social practice, but rather consider all cultural tools are mediational means.

There is an issue of concern over whether or not the output of discourse analysis should be taken seriously because it based on analysis of another discourse. The question is; if CDA analysis is tantamount to a discursive construction of another discursive construction, how then can discourse analysis contribute to changing perceived ills of the society? The justification may be that, the conditions of possibility of constructing and theorising the object of discourse research include; the canon of research procedures and practices within a particular discourse strands, the analyst may be guided by past research findings, accepting, modifying prior

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[10] Emphasis added

assumptions and conclusion and also bring into the discourse analysis expertise from other specialised fields of study. Guided by these conditions of possibility, the discourse analyst may bring new insights into the analysis of perceived social ills and ways of resolving them (Wetherell, 2001). Such new insights may thus justify the interpretation of the discourse analyst.

The next section of the study aims to sum the key issues of controversy in CDA research approaches. Additionally, the next section will indicate the thesis' stance on the issue outlined in the previous section.

4.2.1. SUMMARY

As this paradigm debate continues, I asked myself, where do my study belong to? Certainly, out of the many strands of discourse analysis, my study is located within the CDA approach, particularly Fairclough's theory of discourse as a social practice. This theorisation provided an opportunity to consider the relationship between social structure and social action. It also served as a springboard to undertake NA which begins with action and connect it to the macro-level, social structure, even though in MDA structure and action are conflated. Furthermore, my study is located within the CDA research approaches such as van Leeuwen (2006,2008) which emphasise the application of results of discourse analytical than a contribution to theoretical development.

Within CDA, my work aims to add to previous works which argue for a politically engaged critical analysis, as a way of contributing to the transformation of unequal power relations and social injustice. This is influenced by prior constructivists theoretical positions position that all human beings are socially positioned and for this reason, Kant's pure cognition is, 'unattainable', (Meyer, 2011; Moses & Knutsen, 2012). Moreover, I side with Meyer's epistemological perspective is that CDA's open declaration of political commitment does not make CDA less a social science. This is because by openly declaring its ideological commitment, CDA makes its processes transparent and accountable. To add, CDA is reflexive in its processes and this reflexivity cures the possibility of bias. Besides, CDA is transparent in the data presentation and analysis, such that readers can judge the scientificity of the analyst's work.

On the subject of context, I have to re-emphasise that NA methodology is the historical aspect of MDA. Therefore, this study takes cognisance of the sociohistorical and ethnographic context of actions enabled by discourse. This study is also inspired by the view that the material environment 'leave traces' of meaning in addition to what is explicitly construed in discourse. In this study, context refers to both the ethnographic and semiotic element within the immediate environment of text and talk and also the discourses which mediate the accounts of actions occurring at local-local places or text.

Regards, discourse and society relationship, while I recognise a distinction between the discursive and the material, I take the view that the two are in a dialectical relationship. This is because a discursive event like an interview constitutes the social practice and is also influenced by discourses in place within the here and now of the interview. Moreover, I am in company with critical realist that real causes of social problems exist and language becomes one out of several ways of construing the problems and their causal agents.

The next section will describe the research process as a cyclical one, it is like a snake which turns to bite itself. The research began with the formulation of a research question informed by constructive theory to research and also CDA's theory.

4.3. THE RESEARCH PROCESS

Influenced by the view that the discourse research process is a circular and iterative relationship between theory, discourse, and action, throughout the research process I sought to emphasise the interrelationship between the research question; theory, data generation, and analysis. Figure 3 shows that the study began with a research question. Once the research question is formulated the researcher is guided by a constructivist research paradigm within a CDA theoretical perspective. Furthermore, both the question and theory influence what type of data can be generated to answer the researcher question. Moreover, the theoretical perspective of the study influenced how the data generated should be analysed. Besides, the data generated, the findings plus the conclusions feedback into answering the research question and refining the specific research questions. Practically, in this study, the practice of connecting findings emerging from the study back into the research question helped generate specific research question 6.[11] The navigation of the nexus of practice influenced theories of the study, for instance, NA focus on action in a way that places less emphasis on text and social analysis but in this study text and the social context influenced the navigation of the nexus of practice.

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[11] How does the struggle over power to represent manifest in the different social representations?
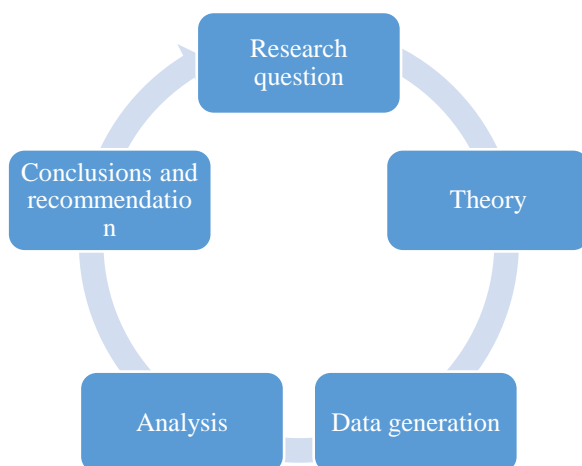
Figure 3 The research process at a glance

In the next section, I will give a justification for the choice of NA as a methodological approach. The next section will also describe the key theoretical issues in NA. Furthermore, the next section will explain the key concepts in NA and describe the three stages of NA activities.

4.4. WHY NEXUS ANALYSIS METHODOLOGY?

In one of my intuitive reflections over 'the why' of NA methodology I asked questions like; what kinds of answers to which type of questions am I searching for? The central research question and the specific research questions elicit answers to, 'how', and, 'what', questions as a way to explicate the link between structure and actions in people lived experience at local-local places where Newmont's environmental effects occur.

According to Potter, (2004) approaches to discourse analysis which focuses on explicating actions in lived experience asked, 'how is this done questions'? Specifically, Scollon and Scollon (2004) ethnography not just focuses on action but also it asks; how do people take action and what are the affordances and constraints in the mediational means through which they act? This focus connects to my main research question which sought to understand and analyse how different social actors take action, representation of the gold mining and local CD relationship. Representation as a social practice requires mediational means and social actors. In this thesis, mediational means is linked to a specific question on the aspect of the place and other semiotic tools such as experiences which afford and constrain the mediated action, 'how social actors construe the mining and local CD nexus'.

In the next section, I will seek to describe the historical theoretical roots of NA from previous works such as MDA, Wittgenstein concept of language as games and Hymes ethnography of communication.

4.4.1. THEORETICAL ISSUES IN NEXUS ANALYSIS

NA has its theoretical foundations, a focus on action, in early works such as MDA (Scollon, 1997, 1998, Wertsch et al sociohistorical approach to the concept of mediation, Wittgenstein concept of language as, 'games', Austin (1962) and Seale (1969) approach known as speech act theory, Hymes (1986) and Saville-Troike (1989) ethnography of communication and also Hallidayan analysis. Scollon (1997, 1998) developed MDA as an alternative to discourse analysis which focuses on text, and social analysis which place less importance on discourse (Norris & Jones, 2005; Scollon and Scollon, 2007). MDA's focus on action can also be traced to Wertsch et al. (1995) perspective that all social actions are mediated through cultural tools, chief among which they refer to as, 'voice'[12]. The cultural tools which mediate social actions have histories which afford and constraint the social action. According to Wittgenstein language is a form of games through which people construct, 'forms of life', interpersonal relationships. Language is seen as a creative practice which is determined by the rules of a particular language and the skills of the user. For Austin, 'utterances', can be analysed by looking at the social purpose they served (Norris & Jones, 2005). Similarly, MDA focus on action is also derived from Halliday's SFL which analyse language use according to its social functions.

According to Scollon and Scollon, (2007) NA is a response to Hymes call for the invention of anthropology which advances human knowledge and welfare. Also, Norris and Jones attribute NA focuses on action to Hymes ethnography of communication (Norris and Jones, 2005). Whereas Scollon and Scollon, (2007) attribute the roots of their NA to various theoretical perspectives such as those outlined in the foregoing, the starting point and method of NA are different. NA starts with real life actions and moments of inequality or discrimination. Also, NA ethnography is based on action, not cultures or people. Moreover, NA focuses on the intersection of social practices including discourse which affords or constraint action.

Despite NA theoretical and methodological focus on real-time actions Scollon and Scollon (2004) admonition to; "Start where you are", in this study, I expanded this beyond where inequality is perceived to include where the researcher is in terms of access to actions, place peoples, cultural tools and experience. Faced with a distributed action in both time and place, and coupled with the fact that institutional social actors refused to offer me access to real-time social practices related to my

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[12] However, sociohistorical approach differed from MDA because it did not outline clear connected ways to undertake discourses analysis which involve several semiotic cycles.

research question, I started from where I am. This implies that I proceeded with engaging the nexus of practice and navigating the nexus of practice through reliance on individual networking and text and images which are available within the networks I have access to.

Having outlined the theoretical roots of nexus analysis, I will in the next section explain some key theoretical concepts in NA methodology. Key concepts of NA methodology to be clarified in the next subsection will include; discourse, mediational means, mediated action, sites of engagement, historical body, interaction order, and discourses in place. In addition, I will explain other concepts like local-local in contrast with others like locals which concepts I discovered in the process of engaging and navigating the nexus of practice.

4.4.2. KEY CONCEPTS IN NEXUS ANALYSIS

According to Scollon and Scollon (2004), discourse may refer to face-to-face interaction or macro notion of discourse such as neoliberal Discourse. Scollon, (2005), defined discourse as a language in use but mediated by cultural tools. This concept of discourse beyond abstract language use to include mediational means is influenced by Vygotsky (1978) and Wertsch (1994). Mediational means such as bluish colour in a pool of water are relevant in NA because of their affordances and constraints on a potential action and what actually happens (Filliettaz, 2005; Jones, 2012, 2013). Though Scollon & Scollon, (2004) conceptualised discourse at two levels it is emphasised that there is a unity between micro and macro-level discourse. Scollon and Scollon (2004) methodological position is that 'the minute of action is the nexus through the largest cycles of social organisation circulate'.

A mediated social action refers to any action taken by a social actor and is recognised by others as action. Also, a mediated action is facilitated by material or symbolic mediational means, for which reason the action is referred to as a mediated action (Lane, 2014). However, mediated action as used in NA studies is distinct from other uses which perceive social action as a collective action by a group, to achieve a collective goal. NA analysis of social action is taken from a sociohistorical psychology perspective, that every action is mediated by cultural tools and is recognised by others as action (Scollon and Scollon, 2004).

A site of engagement refers to a unique historical moment in a particular place and time where different practices intersect to form action. For example, the practices of the meeting, surveying houses and valuing to form a real action of compensating landed property owners.

The concept of the historical body refers to the knowledge, competencies, historical experience of the individual social actors which they bring into a moment of social action. Historical body place individual social actors to act in a particular way or

another within a moment of action (Jones, 2013; Scollon, 2008; Scollon and Scollon, 2004). It enacts different identities and relations for the social actor and others s/he recognises in the action.

Erving Goffman's originated the term interaction orders to explore socially acceptable roles and relations among people in singles, pairs, or crowds. However, interaction orders refer to "…any of the many possible social arrangements by which we form relationships in social interactions" (Scollon and Scollon, 2004, p.14).

Scollon and Scollon (2004) assert that social action is conducted 'at some real, material place in the world'. NA asserts that all places in the world are nexuses through which various discourses circulate. Some of the discourses which circulate within a moment of action maybe far distant and less relevant to the action occurring in a particular place. There may be some discourses which are close to the moment of action and relevant to some social action within a certain place. In NA the term, 'discourses in place' is used to emphasise the need for the nexus analyst to pay attention to discourse within the immediate environment as well as those which exist in the displaced context of the mediated social action. It refers to the analytical act of widening the angle of observation to include the broader discourses influence and are themselves shaped by the action (Scollon & Scollon, 2004).

In the process of engaging the nexus of practice, I observed some categorisation or concepts used by the social activists who are engaged in the construing the gold mining and local CD nexus. First, the category of local-local refers to the indigenous people who suffer the direct effects of Newmont activities but are 'side-lined' in the sharing of the benefits accruing from mining. In contrast, are the locals, and these are Ghanaians who do not hail from any of the five Affected Mining Communities but who are perceived by the Coalition as favoured for employment within the mine. These locals are referred to by company people as 'old hands'. What it implies is to have gained experience and training from their previous work engagement with mining companies in the Western Region of Ghana. Additionally, there is another term, 'people within the Newmont system', and this refers to Newmont Management and local community elites who collaborate to 'take away what belongs to the local-locals' and the unborn generation.

The description of the key concepts-connects to the next section as an understanding of these concepts is essential for understanding the activities which constitute NA.

4.4.3. ANALYSING DISCOURSE THROUGH SOCIAL ACTION

According to Scollon and Scollon, (2004, 2007), NA involves an empirical analysis of social action and also a historical analysis of the trajectories of social action. Thus NA involves a systematic inventory of semiotic cycles of people, discourses, places, and mediational means. NA is both a theory and method which allow both the analyst and the participants to jointly explore semiotic cycles of people, discourses, places,

and mediational means and trace their historical trajectories towards actions, in order to anticipate their outcomes. NA takes the theoretical perspective that it is in moments of action that both Discourses and discourses are instantiated (Norris & Jones, 2005; Scollon & Scollon, 2004, 2007). However, there is a problematic relationship between discourse and action. In nexus, analysis discourse does not necessarily result in action and action do not cause discourse in any straightforward. Rather discourse and action exist in a relation of tension between the mediational means within a site of engagement (Jones, 2013).

Despite this complexity Scollon and Scollon, (2004, 2007; Scollon, 2005) have developed three main activities which the nexus analyst have to undertake in order to study a social action in the entirety of its complexity: engaging the nexus of practice, navigating the nexus of practice and changing the nexus of practice. Though these activities are presented as stages, NA does not necessarily have to follow all these stages. Additionally, throughout these activities, the nexus analyst must take an engaged stance (Lane, 2014; Scollon and Scollon, 2004). This includes stating how the interest of the analyst and those who participate in the social action coincide.

In the next subsection, I will describe the task of engaging the nexus of practice, the discovery of social action, people, discourses, semiotic resources, and places. In addition, I will outline the different ways I conducted an NA in this study. This outline will be followed by an overview of the study's analytical approach.

4.4.4. ENGAGING THE NEXUS OF PRACTICE

The first stage in NA is described as engaging the nexus of practice. This is a preliminary process which aims at establishing the issue of concern, observe the crucial social actors, identify the interaction orders, the most significant cycles of discourses, the mediated action and finally to establish the zone of identification (Lassen, 2008; Scollon & Scollon, 2004; Scollon & de Saint-Georges, 2015).

According to Scollon & Scollon, (2004, 2007), a methodological challenge of MDA concerns the researcher's difficulty in establishing the issue of concern, which requires analysis, change. Moreover, if an issue is established, the analyst still faces the task of narrowing the focus on the action without wrecking the mediated action out of its complex intersection with semiotic cycles of people, places discourses and their mediational means. This process of following up the semiotic cycles of people, places, and mediational means backward and forward on their various moments of historical occurrence is referred to in NA as circumferencing.

In order for the analyst and the social actors participating in the mediated action to be able to jointly establish the significance of a particular mediated action and site of engagement, three methodological principles are proposed: triangulation; participants' definition; and issue-based analysis.

Triangulation is a process to construct four types of data: member's generalisations; neutral (objective) observation; individual experience; and the researcher's interaction with the actors. Members' generalisations refer to those statements and claims which the social actors who are engaged in a real-time social action within a historical moment make concerning their actions. One way of accessing members' generalisations is through the conduct of opinion surveys. Though members generalisation help to establish the significance of an action, Scollon (2001) concluded that members generalisation are often stereotypical and ideological. For which reason, members generalisation should not be considered as 'true' (re)presentation of the social action by the social actors involved. Triangulation also entails a process of 'neutral or objective' observation. Neutral or objective observation refers to those observations made by the researcher of which multiple observation of the same actions will produce the same facts (Scollon, 2001). Besides, NA takes the position that there is much to analyse from the contradiction in individuals experience because individuals experience contains rich concrete details and such richness is lost in over generalisation of members' generalisation.

According to Scollon and Scollon (2004), participants' definition of the issue is another technique of establishing the significant issue of social concern. Participants' definition of the issue can be conducted through an independent set of studies which addresses different aspects of the situation: how do participants define the key action of significance and, what scenes do these actions occur through what mediational means? In order to address these aspects of the situation four types of studies could be conducted: participants and mediational means surveys; scene surveys; event/action surveys; and focus groups. First, participants and mediational means surveys seek to identify the main social actors and also to identify their mediational means (Scollon, 2001; Scollon & Scollon, 2004). Second, scene surveys are conducted to establish the scene within which the social actors engage in action (Scollon, 2001).

But Scollon observed that it is practically impossible to map out all the scenes within which the social actors engage in action. For this reason, the discourse analyst, need to narrow down the scope of where the action of interest occurs to a few salient scenes. Furthermore, upon discovery of the scenes where the social action occurs, observation can then be used to identify the specific issues which flow within scenes. In addition, observation can be used to ascertain which of those issues are salient to the mediated action and are recognised by the social actors engaged in the action. The process of identifying the actions flowing through salient scenes leads the analyst into the third stage of participant definition of the issue, event or action surveys. Event or action surveys seek to ascertain how the participants themselves define the mediated action, within identified scenes. Though a continuation of the scene surveys, action/event surveys differs from scene surveys, in the sense that action surveys focus on the main actions occurring within the scene and not just the relevant scenes.

In summary, the process of engaging the nexus consists of mapping the semiotic cycles of people, discourses, objects, and concepts. However, the analyst be must be recognised as a legitimate social actor by actors within the nexus of practice. This recognition and acceptance are prerequisites for detailed data collection and analysis at the stage of navigating the nexus of practice.

In the next section, I will outline Scollon & Scollon (2004) proposed data collection and analysis in NA methodology. The outline of NA data collection and analysis will make intelligible the thesis analytical procedure which will be described in chapter 5. This is because the impending chapter will detail the task of data collection and analysis in an NA methodology.

4.4.5. NAVIGATING THE NEXUS OF PRACTICE

The purpose of navigating the nexus of practice is to map the cycles of discourses, interaction orders, historical body of individual actors and the mediational means which flows into and out of a moment of social action and also to map out their linkages. Unlike the stage of engaging the nexus, here the analyst undertakes both data collection and analysis. Navigating the nexus of practice is beyond mere recognition within a zone of identification to searching for anticipations and emanations, linkages and transformations, inherent time-scales and to delimit the nexus of practice (Lane, 2014; Scollon & Scollon, 2004).

Scollon and Scollon (2004) acknowledged that NA is challenging in 'that the totality of our knowledge can circulate through a particular moment of action'. For this reason, it is always difficult for the analyst to focus on the most relevant element without affecting the complexity of the relations between the elements. Yet, Scollon and Scollon encourage the ethnographer to preserve the complexity of the situation. But Scollon and Scollon (2004) recognised that the complexity of the cycles of discourse, people and places can be unmanageable. Due to the complexity, the nexus analyst should not map the discourse cycles of every person, interaction order, mediational means, and the discourses in place. Rather the analyst should focus on the significant aspects. In order for the ethnographer to be able to focus on the most significant cycles of Scollon and Scollon (2004) perceived social action to occur at the intersection of; the discourses in place, the interaction orders and the historical body.

NA methodology has the goal of changing society and its object of analysis, mediated social action. Due to the goal to change society and the mediated action in a positive way the final stage of NA is about how the nexus analyst can play the role of an activist for change.

In the next section, I will give an overview of how NA in the form of discourse analysis of action can contribute to changing unequal power relations in society.

4.4.6. CHANGING THE NEXUS OF PRACTICE

After analysis, the nexus analyst re-engages with the social actors, the discourses in places, the historical body, and the mediational means. This re-engagement is one of the ways in which Scollon and Scollon (2004, 2007) ethnography differ from the ethnography of the Boars and Malinowski. The focus of this final stage of NA is not on how change occurs in society as a whole. But it is specifically about how discourse analysis in the form of NA 'is relevant in bringing about change' in social practices where there is a perceived or concrete form of discrimination in moment-by-moment action.

The question is: how can discourse analysis in the form of NA bring about concrete predictable change in actions and practices in which social injustice is perceived or proven? Based on Scollon & Scollon (2004) recommendations on the State of Alaska Judicial Council one can infer that NA can bring about change through concrete and specific recommendations about how to change negative practices in society. Besides, it can be deduced from Scollon & Scollon (2004) work, linking the outcome of discourse analysis of action to social practices such as lectures/conferences and workshops involving social actors who participate in the actions analysed can be a means of bringing about change. For instance, in the Alaska Judicial Council, Ron Scollon's lecture at the Judicial Council Conference led to changes in the way a judge handles cases involving native Alaska people, the judge hears the case from the native Alaska people's perspective. Additionally, Sletten-Paasch, (2016) asserted that if the interpretation or analysis of the researcher is brought into the interaction between the participants and the researcher, elements of the situation which may have to remain unrecognised by the participants may become part of the issues and this has implication for social change.

Aside from the, 'how', of bringing about change in the mediated social action, there are also some challenges in changing the nexus of practice. For instance, the change which the analyst work can bring about may not always be explicit to the analyst. Moreover, even if the potential change is manifest the change may not be generally accepted by all social actors within the institution in which the analyst work. These actors can even including individuals who are negatively affected by the actions which the analyst studied (Scollon & Scollon, 2004). This challenge is, even more, pressing in the mining sector where industry players perceive the social scientist, and by extension the discourse analyst, as social actors who make their host communities unmanageable (Solomon, Katz, & Lovel, 2008).

Initially, the thesis did not intend to engage in changing the nexus of practice. To the extent that this study does not set out to complete this final stage of NA constitute a part of the reasons why the study can be described as NA inspired study. However, there is an opportunity to use the outcome of this thesis to change the nexus of practice through conference participation, media activities, workshops, and journal article

publications. These social practices will serve as a means to share the analysis with a larger audience who are interested in changing mining companies' and local communities struggle over how the practice of mining should contribute to the local CD. Chapter 10 of this thesis will outline how the outcome of discourse analysis of action can be inserted into Newmont CD practice as a way to contribute to changing the nexus of practice in a positive way.

In the next subsection, I will set out what this thesis leaves with NA methodology as originally proposed by Scollon & Scollon (2004).

4.4.7. CONTRIBUTION TO NEXUS ANALYSIS METHODOLOGY

First, due to the complexity of the social sources of inequality, Scollon and Scollon (2004) admonished the nexus analyst to start from where inequality is observed. This study expanded this notion of where to start to include beginning the analysis of a mediated action from where the social actor is, recognised and offered access. This expansion enabled this study, to begin with, local-local social actor and trace the trajectories of social actors to spaces which the researcher did not have access to.

Fundamentally, this thesis differs from Scollon and Scollon (2004) based on its methodological focus on a discourse analysis of action rather than a focus on a real occurring social action. This implies that instead of participating in natural occurring action this study focuses on accounts of actions which either occurred or are occurring in situated environments. The choice of accounts of action is legitimate because NA constitutes the historical aspect of MDA. Therefore, a focus on accounts of action constitutes an alternative methodological option which offers social actors the opportunity to account for both present and past actions and their trajectories.

But the choice of a focus on accounts of actions is partly mediated by the denial of access to participate in social practices where actions occur. This denial came with it an affordance to focus on accounts of actions occurring or which occurred at situated places. The affordance of actions in their physical situation could have been lost if, for instance, I had instead participated in Newmont and local community meetings. My choice of an ethnographic interview tour of places provided a methodological option for the study participants to select scenes and also within those scenes select the action salient to the participants. Language is then used as a mediational means to link the discourses in place within the here and now of the interview to macro Discourses.

Moreover, this thesis approach to engaging the nexus of practice departed from Scollon and Scollon (2004) notion of a neutral observation to a theoretical and methodological position of seeing the process of engaging the nexus of practice as a journey. In this journey, the kinds of people I came across and the quality of our interaction influence how we, jointly identify the mediated action, people, places and

mediational means. This methodological did not just come out of the blue but emerged out of the 'promised and fail' by Ghana's EPA regarding my request for the supply of a video transcript of Newmont Environmental Impact Statement (EIS) Public Hearing. My initial plan was to use the video to identify the issue, the key actors, and the places of interest where the proposed action will take place. Also, I had planned to connect the micro issues, people, places, and objects occurring at the public hearing into their contemporary trajectories into the actual Newmont mining practices in the material and social world.

Besides, this thesis departed from conducting participants and actions surveys to a focus on discovering semiotic objects like pictures which circulate within the public space and ascertaining how the participants link these pictures and other semiotic objects to particular social action occurring at particular places. Through the use of Clarke's SA to identify the social actors and issues, this study makes a contribution to Scollon and Scollon definition of social action as occurring within the intersection of; discourses in place, interaction orders, and the historical body to include discourses and also specifies the details of these elements.

In the next section, I will give an account of the two main sources of data for this study, naturalistic and ethnographic sources of data.

4.5. DATA SOURCES

Discourse analysis can be conducted based on materials which border on 'text' and 'talk'. However, the common sources of materials include naturalistic data, interviews, and focus group discussions (Potter, 2004). Table 1, shows that the sources of data for this study can be group into naturalistic and ethnographic data. According to Potter naturalistic data refers to data which records human doings, 'elicited' or uninfluenced by the doings of the researcher (Potter, 2008). Four examples of the advantage of using naturalistic data are: it reduces the researcher imposing his categories and judgements in the process of constructing the data. Also, readers and reviewers of naturalistic data have the opportunity to obtain naturalistic data directly and to independently engage the data. Moreover, reliance on naturalistic data opens the researcher to new issues and ideas which were initially not part of the research question. Lastly, naturalistic data constitute a rich dossier of people in their routine activities without. The participants who produce naturalistic data acted or reacting on their own will without responding to the request of a researcher (Potter, 2004, 2008). However, a potential challenge which naturalistic data present is that actions which occur over time and in places cannot be captured without losing the richness of the affordances and constraints of the material context. In this study, this potential challenge presented by naturalistic data is mitigated by the use of an interview tour of places.

The study generated empirical ethnographic data through interview tour of local-local places. These places are selected by local-local interview participants. The challenges of generating data through interviews and analysing the data are discussed in section 6.8.1. Based on Potter's categorisation, in table1 data sources, numbered 1 to 5 can be categorised as naturalistic data. On the other hand, data sources numbered 6 and 7 are ethnographic data.

In the thesis, the choice of sources of data is guided by the empirical techniques of engaging the nexus of practice in an NA methodology. For instance, from table 1, data sources which were discovered in the process of engaging the nexus of practice include the "Social and CD of the Ahafo Region: Collaboration to Promote Project Benefits Vision and Commitments" (NGGL, 2005). Data sources also include a petition by the Coalition of the Five Affected Communities of Newmont Ahafo Mine. Additionally, I discovered text from a WhatsApp platform of the local activist and I became part of the WhatsApp platform through the activities of engaging the nexus and being recognised within the nexus of practice.

S/N	Document	Author	Data	Sections of relevance	The aspect of the study	Why inclusion?
1	Social and CD of the Ahafo Region…	Newmont Ghana Gold Ltd	Entities included and evaluations	Introduction	Navigating the nexus of practice	Voice can be attributable to an actor
2	Petition by affected communities of NGGL	A Coalition of five Affected Mining Communities	Actor representation & evaluation	Introduction & conclusion	Navigating the nexus of practice	Document closeness to the situated action
3	Chapter of Ghana's mining policy	MC-Ghana	To analyse entities representation and evaluations	Section 10.0 to 10.8	Navigating the nexus of practice	Government as a dominant social actor
4	News portals		What is in the news	Issues about Newmont Ahafo	Engaging the nexus of practice	Understand the issues in the public space
5	Pictures	Gatekeeper	Pictures of places and people	Entire picture	Engaging the nexus of practice	Interesting and drive local-local evaluation forward
6	A political group WhatsApp media	Concerned individual	People, places, and Discourses	Text and talk about Newmont's action	Engaging the nexus of practice	Virtual space local-local routine spaces
7	Local-local people voices	Interview participant	Discourses Evaluation	Extracts related to research questions	Navigating the nexus of practice	Situatedness of voices

Table 2 Sources of data

Chapter 10 of Ghana's Minerals and Mining Policy is included as data due to the chapter's focus on rural transformation and CD. Also included for analysis is community mobilisation text, a petition by the Concerned Youth of the five Affected Mining Communities. The justification for inclusion is because this group's voice is close to the situated action, constitute it and affect all other elements in the situation.

In the next section, I will outline the keys issue which has been discussed in this chapter and also present an outline of the study's analytical approach.

4.6. SUMMARY OF CHAPTER

To sum it up, the foregoing chapter clarified the methodological and theoretical position that social action occurs at the interaction of the discourses in place, such as company CD practices of cadastral inventory and the social arrangements by which people come together, for example, Newmont and the Youth Association meetings. It also includes the conjoining of the historical body or the life experiences of individuals such as experience about an increase in heart palpitation and water quality contamination. However, in the process of engaging the nexus of practice, this study found that place plays a crucial role in how local-local social actors take action, construe the mining and CD nexus. The concepts of the action going on, the discourses in place and the place will guide the analysis of the findings in the study. These concepts will form the part of the basis for conceptual conclusions in chapter 9 of the study.

The next chapter to will give a detail description of the study's analytical approach. The next chapter will begin with an outline of the analytical model in a visual representation. Also, the impending chapter will translate the guiding theories into an analytical strategy. Finally, the next chapter will be summarised based on a visual representation.

CHAPTER 5. ANALYTICAL APPROACH

The chapter contains a detailed description of the study's analytical framework. It begins with a description of the steps involved in the analytical process. This is followed by an operationalisation of the theoretical issues in the analytical framework. The analytical framework is a combination of Fairclough (2003) and van Leeuwen (2008) social actor representation framework. The combined framework is complemented with selected aspects of SFL evaluation and language system of modality. van Leeuwen, (2008, 2016) constitute the core analytical theoretical perspectives of this study. The analytical framework deploys Dryzek's checklist for mapping environmental discourse to map out the discourses inductively identified based on the lexical choices in the representation.

In the next section, I will visualise the study's three-step analytical model.

5.1. INTRODUCTION

The analytical processes of this study can be categorised into three phases. Figure 4 describes the three steps of the study's analytical process.
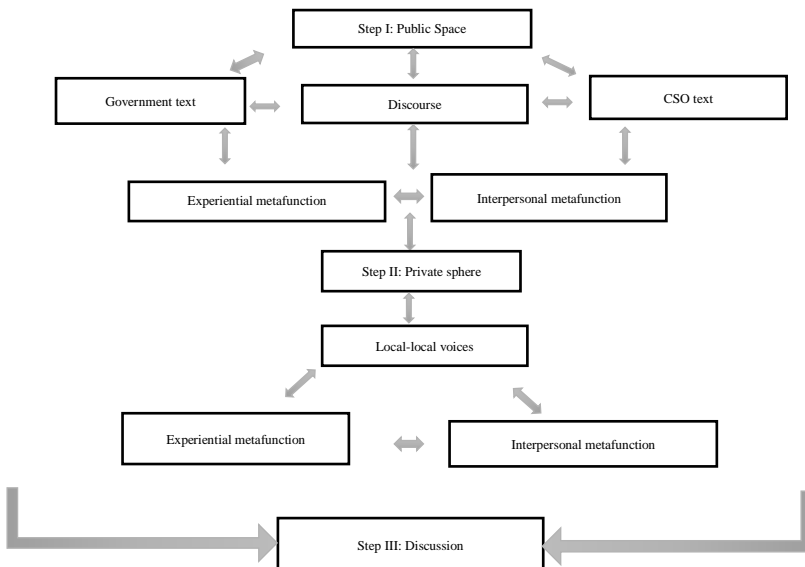
Figure 4 A three step analytical model

Though figure 4 presents the public and private sphere separately the two are not discrete, since as elements of society they exist in a dialectical relation. Figure 4 shows that the analysis will begin with the analysis of the text in the public space; government and civil society text. Next, figure 4 indicates that the analysis of the text in the public space will lead to the analysis of voices in the private sphere. These voices are based on local-local individuals' accounts of Newmont's action in relation to places, peoples, and objects. Finally, figure 4 indicates that the third stage of the analysis will involve the discovery of domination, differences, and tensions in the different social actor's representations.

The next section will give an account of how the CDA and SFL theories are translated from theories into an analytical strategy for the analysis of accounts of social action.

5.2. TRANSLATING THEORIES INTO ANALYTICAL STRATEGY

Theoretically, this study combines CDA and SFL theories and connects both to social theories like hegemony and ideology only in a normative sense. This combination is inspired by Fairclough, (2003) and Van Leeuwen, (2008, 2016) believe in an interdisciplinary approach to the study of the social effects of texts. Particularly, this thesis is guided by Fairclough's notion of discourse as a social practice and texts or meaning of texts as sites for expressing domination, difference, and resistance as a manifestation of social conflict. Within CDA interdisciplinary approach, my study focuses on two social themes, the contemporary attempts to universalise the neoliberal order and the social effects of its representation. Basically, the social themes are difference, domination, and resistance.

I combined Fairclough, (2003) social actor representation and van Leeuwen's, (2008) socio-semantic inventory as the major analytical approaches. Van Leeuwen (2008) socio-semantic inventory is the main analytical approach because Fairclough (2003) has recognised van Leeuwen socio-semantic analysis as an elaborated version of social actor representation. Moreover, the reliance on van Leeuwen's approach is due to the distinction it makes between the 'doing it', and a, 'talk about it'. That is a differentiation between action which is occurring and talk about action. This distinction clarifies the uniqueness of my approach to NA, relative to Scollon and Scollon (2004, 2007).

In the next subsection, I will give an account of how Fairclough (2003) and van Leeuwen (2008, 2016) social actor representation will be applied to analyse the ontological aspect of social actor representation based on account of actions. The theoretical approaches which will be accounted for in the subsequent section seek to answer the question; who are the social actors here?

5.2.1. IDEATIONAL META FUNCTION ANALYTICAL CATEGORIES

In Fairclough's (2003) approach to CDA discourse constitutes and is constitutive of social life at three levels; social structures, social practices, and social events. Social structures refer to high-level abstract entities such as a mine development agreement. Social structures set the limits for what can and cannot happen. For example, mine development agreement sets the limits for how much mining companies can get involved in CD initiatives or how much royalties to pay to the state. Social practices refer to the connection of different elements of social life which are known to be part of an aspect of social life. Therefore, social practices 'filter' or mediate between what is determined by the social structure and what actually happens. An example of social practice in ethnographic research is interviewing, and in the case of mining CD, an example of social practice is local employment agreement making. Social practice function as mediational means between social structure and social events. For example, language mediates between the meaning relations construed in an interview guide and the actual text of an interview. Also, a mining company and local employment agreement filter what the mine development agreement set as possible and what are potential doings at the project level.

Discourse appear in social practice in three ways: discourse may appear as part of the social activity; as a way of representation and as ways of being or identification. According to Fairclough, (2003), these three levels of texturing meaning exist in a dialectical relation, each element contains the other. For instance, the neoliberal competitive way of representing mining companies internalises the way of (inter)acting as through the genre of policy and also the way of being, as promoter and regulator of capital.

Based on Fairclough notion of discourse as social practice, two things deserve emphasis; social practice as filters and the internalisation among the three levels of social life. Social practice mediational role between what is determined by social structures and social event connect with Scollon and Scollon (2004) position that discourse does not cause action neither does action cause discourse, they exist in tension. Moreover, a movement from the analysis of; structures→social practice→concrete social event, language tend to be overdetermined by other elements of the social world. The influence of non-linguistic elements on language shows that understanding actions can be a fruitful way to understand structures which create social injustice.

Social events and social practices represent the world: processes, relations, structures in the material world, the mental world of thoughts and ideas and the social world (Fairclough, 2003). However, text and discourses differ in how much of the world they include or exclude in their representation of an aspect of the world. A social event may include elements such; as forms of activity, persons with beliefs, desires, values, etc.; social relations; institutional forms, objects, means, time, place, and

language including semiosis (Fairclough, 2003). But which elements of the recontextualising social practice are included in a text may consciously or unconsciously serve an ideological purpose.

In terms of the, 'how', of inclusion, Fairclough identified five different ways in which social actors can be represented: pronoun/noun such as 'I, he, we, you, our, they, etc' and also through the passive voice. Moreover, social actors can be represented in one grammatical role or another, 'Actor' or 'Affected'. Furthermore, social actors can be represented as the one who does things or makes things happen, 'Actor' in a material process (Fairclough, 2003), or the 'Affected' or 'Beneficiary', the one who is affected by the process.

Similar to the notion of discourse as a social practice is van Leeuwen's notion that discourse 'is a recontextualisation of social practice' (van Leeuwen, 2008). In van Leeuwen representation approach, social practice refers to a socially, 'regulated'[13], way of doing things. An actual social practice consists of; what people do, 'what is going on', the evaluation of the 'what is going', the 'what for' of the 'what is going on'; - purpose and the 'why of what is going on'.

Van Leeuwen's position is that all social practices require social actors who performed one role or another, an "instigator, agent, affected or beneficiary" (van Leeuwen, 2016). Moreover, social practices involve either stable or transient actions. Also, social practices have performance mode, the mode of doing or the dos and don'ts of the social practice. These are otherwise referred to by van Leeuwen as the 'stage directions' (van Leeuwen, 2008, 2016). Besides, the participants in a social practice must have cultural capital (cf. Bartlett, 2014) or practice-oriented 'qualifications', which affords or constrain participation. To add, participation in actual social practice entail dress code and 'body grooming' (van Leeuwen, 2008, 2016). Moreover, the enactment of social practice requires resources (van Leeuwen, 2008, 2016). Another element of van Leeuwen's social practice is location, an element closely related to the element of resources. In addition to location, actual social practices involve different levels of time constraints, but some social practices may not have encumbrances of time (van Leeuwen, 2008, 2016).

Van Leeuwen (2008) conceptualised discourses as transformations or recontextualisation of actual social practice because it is only an actual social practice which can contain all the elements. This implies that, in recontextualising an actual social practice, discourse can draw on all or some of the elements of the recontextualised social practice. Van Leeuwen pointed out three important types of recontextualisation : deletion, substitution, and addition (van Leeuwen, 2016). Who is included or excluded in a representation, deletion, is of interest in CDA. This is

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[13] By 'socially regulated' van Leeuwen implies socially coordinated ways of doing things, for example, as determine by canons of research in a particular field.

because inclusion and exclusion may consciously or unconsciously serve certain interest and purpose relative to the readers of the text (Davari & Branch, 2016; Taryn, 2018; van Leeuwen, 2008, 2016).

According to van Leeuwen 'substitution', is the 'most important' form of recontextualisation of actual social practice. This is because it is through substitution that an actual social practice becomes recontextualised into a discourse element (van Leeuwen, 2008, 2016). Additionally, recontextualising a social practice involves a process of addition, of reactions and motives. Reactions according to van Leeuwen includes expression of feeling and interpretation, whereas motives refer to the 'what for', i.e. the purpose and the 'why', legitimation (van Leeuwen, 2008, 2016). In this thesis context, 'reaction' can be seen as an expression of desirability and undesirability of actions and relationships emanating from actions. On the other hand, what for appropriate what is referred to in this thesis as the ideological effects of a particular way of representing.

In the next subsection, I will give an account of the convergence and divergence between Fairclough and van Leeuwen CDA approaches. I will also outline the usefulness of bringing the two approaches together.

5.2.2. THE CONVERGENCE AND DIVERGENCE OF THEORIES

Fairclough and van Leeuwen converged in terms of CDA's goal of transforming unequal social relations. Moreover, both analytical approaches converge on the important role of semiosis in the interpretation of the ideological effects of the meaning of a text. However, van Leeuwen has deepened the role of semiosis in discourse than Fairclough (2003). In terms of the analytical question, Fairclough (2003) and van Leeuwen (2006, 2008, 2016) approaches converge on a, 'how question'. For instance, the, 'how' of social actors' representation in discourse? Moreover, Fairclough and van Leeuwen converged on one of the concerns of CDA; why are texts the way they are and why do they change the way they do? Furthermore, Fairclough (2003) and van Leeuwen (2006, 2008, 2016) CDA approaches based their analysis on naturalistic materials. On 'deletion', Fairclough, (2003) and van Leeuwen, (2008) all agree that the inclusion and exclusion of social actors in a text may serve a particular political interest in relation to target readers of the text.

Despite the above points of convergence, Fairclough (2003) and van Leeuwen (2006, 2008, and 2016) diverge in terms of the search for the social functions of language in use. For instance, van Leeuwen (2006) recognises that CDA analyst has increasingly recognised the role of social theory in CDA analysis yet van Leeuwen's analytical approach focuses on uncovering social practices that produce, maintain and legitimate social power abuse without explicitly accounting for the social theory which guides his analysis. On the other hand, Fairclough is quite explicit about the role of the social in understanding the ideological effects of text. Additionally, van

Leeuwen and Fairclough diverge on the relationship between discourse and other elements of society. Van Leeuwen assumption is that discourses are recontextualisation of social practice. Therefore, knowledge emanates from social practice, regardless of how 'slender' the link may be. This assumption presumes a unidirectional relationship between knowledge and discourse. On the other hand, Fairclough assumed a dialectical relationship between discourse and non-linguistic elements of social practice.

Though both Fairclough (2003) and van Leeuwen, (2008) recognised two main types of deletion, van Leeuwen, (2008) have elaborated on these ways of representation than (Fairclough, 2003). For instance, beyond transitivity and grammar, van Leeuwen developed socio-semantic strategies through which social actors and their agency may be deleted in a way which serve a certain ideological interest. Furthermore, van Leeuwen recognised that these other forms of representing social actors and their agency have significantly influenced critical linguistics inspired discourse analysis (van Leeuwen, 2008).

What has Fairclough's approach left out for which van Leeuwen's approach seeks to complement? Although Fairclough (2003) recognises semiosis as an element of social practice, Fairclough's approach can be enhanced by van Leeuwen's multimodal approach to CDA analysis. Specifically, van Leeuwen focuses on images, plus a recent emphasis on the use of image colours in representing different social actors. Furthermore, Fairclough's representation analytical approach focuses on grammatical and transitivity structures, and this can be complemented by van Leeuwen's socio-semantic approach. For instance, transformation can rearrange the agency of social actors beyond what is permitted by the rules of grammar. Therefore, bringing van Leeuwen's socio-semantic analytical categories into Fairclough's analytical approach deepens the understanding of the ideological effects of the meaning of text.

Moreover, bringing van Leeuwen's socio-semantic analytical categories into Fairclough's analytical notion of discourse as an element of social practice contributes towards achieving Fairclough's goal of making discourse analysis accessible to non-linguistics scholars. This is because van Leeuwen's socio-semantic framework is less linguistically complex relative to transitivity analysis. Additionally, Fairclough's notion of discourse as an element of social practice which exists in a dialectical relationship with other elements of society provided a theoretically integrated social dimension to representation. That is the notion of discourse as a social practice guided this study to analyse representations as an element of social practice which is related to the contention and ambiguity which characterised the mining and CD nexus in activist and academic discourse.

Fairclough's model of discourse analysis, the integration of social theories into discourse analysis, deepened the discourse hook of van Leeuwen's socio-semantic

representation of actors, as social context element is not always well articulated in van Leeuwen social actor representation. For instance, according to van Leeuwen (2008), referring to immigrants as, 'floods', may seek to achieve a particular purpose or interest, yet the contextual means [14]to foreground the ideological effects of such a representation is not well accounted for in van Leeuwen's socio-semantic categories. Fairclough social theoretical approach to CDA provides the social context through Fairclough's notion that language, discourse, and ideology are inseparable. Social events have causal effects, however, this causality does not exist in a mechanical way (Fairclough, 2003). That is to say, ideologies exist in texts but ideological effects of text cannot just be read off by pointing to linguistic or socio-semantic instantiation alone. Rather this can be done through analysing the context, in other words engaging in CDA. Discourse analysis thus aims to uncover the implicit ideologies in the text through understanding, explanation, and interpretation (Fairclough, 2003).

Additionally, the inclusion of van Leeuwen representation in this analytical framework foregrounds my methodological focus on action. This is because van Leeuwen's representation rests on the belief that 'every representation no matter how abstract it may be, constitutes a recontextualisation of social practice' (van Leeuwen, 2008, 2016). Besides, representation of social actors in Fairclough's (2003) and van Leeuwen (2008) is enhanced in this analysis with the selective application of modality and evaluation from SFL theory to analyse how social actors evaluate social action and construe interpersonal relationships.

What do I add to these approaches? I add to Fairclough and van Leeuwen's analytical approaches in three main ways; incorporating empirical ethnographic data; my use of Dryzek's checklist (also Clarke's Situational Map in navigating the nexus of practice) contribute to answering a question at the heart of Fairclough and van Leeuwen's presentation.[15] Beyond discovering the agents Dryzek's checklist is also about the motives of agents, hence it enhances the analysis of the social functions which representation may serve. Moreover, I add to these analytical perspectives by focusing on the evaluation of the relationship in representation. For instance; how is causality accounted for in representation is catered for in this thesis through the inclusion of modality and appraisal. Even though both Fairclough and van Leeuwen have dealt with evaluation both have not deployed them in analysing interpersonal metafunction of a specific text.

Both Fairclough and van Leeuwen have analysed the ideological effects of text through macrostructures (media text as in van Leeuwen, 1996, 2006, 2008, 2016) and

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[14] Wodak (2013) pointed out that in CDA context to understand ideological effects could be found in either social theory or empirical data or both

[15] Both Dryzek and Clarke SA maps are used in this thesis to answer the question: who are the key agents here?

political text, naturalistic data (Fairclough in his analysis of the New Labour text). In this thesis, I broadened the discourse analysis of New Capitalism by including an analysis of empirical ethnographic data. Also, this thesis extends the discourse analysis of action by focusing my analysis on real life talk about the actual doings of a specific capitalist, NGGL. Moreover, I added to both Fairclough and van Leeuwen frameworks, Dryzek's framework for analysing environmental discourse, which vividly answers the main question inherent in the representation of social events. Fairclough and van Leeuwen answer the question: Who are the key agents here? Though Dryzek's checklist contained a question about agents and their motives this analytical approach feeds into and expand Dryzek's checklist by analysing 'how' the agents referred to in text and talk are represented and Dryzek's checklist help answers the key questions on representation in a concise way.

Dryzek analytical framework seeks to answer the following questions: what are the basic entities whose existence is recognised or constructed? What are the relationships which are taken as given? Who are the crucial social actors and their motives? What are the common metaphors and other rhetorical devices used in the representation? First, concerning the ontology of discourses, different discourses construe different entities in the world and this is referred to as the ontology of discourse (Dryzek, 2013). Some discourses may represent the world as composed of the rational and collective human beings, the ecosystem, and the earth as self-correcting systems. Second, in terms of assumptions about natural relationships all discourses, at least, environmental discourses contain taken for granted ideas and beliefs about the relationship between different entities (Dryzek's, 2013). According to Dryzek, (2013) some discourses may represent or construe competition, conflict, the survival of the fitters and hierarchical relations between entities as normal. Third, according to Dryzek, (2013) discourse contains a storyline about the causes of environmental problems and the social agents of the storyline. Agents of storylines can be human actors such as administrators, engineers, and attorneys and they could equally be actants such as agreements, commitments, and laws (Dryzek, 2013). According to Dryzek, one discourse may position these agents as benign, while another discourse may construe the same agents as avaricious. Moreover, a discourse may recognise an actor or actors, yet another discourse may fail to recognise them. Finally, metaphors refer to persuasive devices which are used to convince readers or audience by putting a situation in a certain light (Dryzek, 2013). Metaphors are sometimes used for the general good of society and but their use can also achieve political interest.

In this study, questions posed in Dryzek's framework will be used to bundle the, 'how' and 'why' four general types of discourse, problem-solving; sustainability; limits and survival and green radicalism. Thus, beyond summarising different discourses at the ideational level, Dryzek four categories of Discourses provided a context for understanding the different representations, discourses and how these

echoes Discourses. The choice of these is based on the fact that discourses about mining and local CD nexus are basically about environmental issues.

In the next section, I will describe my analytical approach by focusing on selected aspects of the language system of modality and evaluation to analyse how representation texture meaning relations between action and entities in the situation.

5.2.3. INTERPERSONAL META FUNCTION ANALYTICAL TOOLS

Here my focus will be on how the speaker talks about the desirability or undesirability of issues or the relevance of what is going on to him and other social actors. Under this, my focus will be on two main aspects: talking about 'us' instead of things, and what happens to people as a result of Newmont's environmental effects. In this thesis, two main analytical tools are selectively deployed to analyse the interpersonal metafunction of language in use: modality and evaluation. The combination of which is referred to as evaluation (Hunston & Thompson, 2003).

It should be pointed out here that evaluation is a complex SFL analytical tool[16]. For instance, the complexity of evaluation manifest at the level of; attribution and averral and also at the planes of discourse. For instance, reader of an evaluative piece may seek to find out whether statements are attributed to a third party or they are presented as facts which exist in the world. Another element of the complexity relates to the planes of discourse; interactive and autonomous planes. This element of the complexity put the basic objects of evaluation into entities (the autonomous plane of discourse) and the propositions (the interactive plane of discourse). But due to the dialectical relations between language and semiotic elements this thesis applies evaluation to analyse talk about world entities which are within the here and now of the talk. For this reason, though in structural terms evaluation is analysed under the interactive plane of discourse or the interpersonal metafunction, the empirical analysis will oscillate between evaluating entities, actions as well as statements about actions.

There is also the indissolubility of modality and evaluation. According to Hunston & Thompson, (2003), Halliday separates modality from evaluation, and expand modality into deontic (obligation) and epistemic modalities (knowledge claims).

However, Hunston & Thompson,(2003), and Fairclough (2003) distinguished between modality and evaluation. Authors' commitment to the degree of certainty of

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[16] As a non-linguist I do intend to engage this complexity of evaluation but selectively apply evaluation to analyse texturing of meaning relations.

proposition (s) in a text is referred to as modality. On the other hand, authors' expressions about the desirability or undesirability of things, behaviour, and ideas are referred to as evaluation. Martin separates modality from evaluation through appraisal; engagement, attitude, and graduation. Unlike modality which is realised mostly in a grammatical form, much of appraisal is realised through lexical choices (Hunston & Thompson, 2003; Thompson, 2014). Engagement deals with linguistic tools like modality, attribution, and projections which writers and speakers use to build solidarity. Graduation refers to linguistics means which writers or speakers use to 'intensify or weaken' their evaluation, and central to this aspect is 'affect'.

There exists a close relationship between modality, attribution, and evidentiallity. Evidentiallity, like modality, refers to the indicators of the source of attribution or averral or the 'nature of the evidence' an author or a speaker deployed in support of a proposition. With attribution, a proposition is attributed to others and this affects the interpersonal relations between social actors involved in the proposition.

Despite the confusion over the term evaluation within linguistics, Hunston and Thompson (2003) used evaluation, for example, due to its focus on the user evaluation of events, things, and proposition. Also, Hunston and Thompson (2003) apply evaluation as an analytical option provides the opportunity for the analyst to talk about the value that the writer or speaker assigned to the events, entities, and propositions.

What is my analytical approach and how do I use this analytical approach? As a new entrant into CDA with no prior training in linguistics and grammar, I applied evaluation selectively. In this thesis, the application of evaluation focuses on how social actor representation realises the evaluation of things, and also about the evaluation of the value of doing and its effects. Furthermore, I selectively bring into the evaluation of events with a focus on affect, attribution, and evidentiallity. In this thesis, social actors' commitment to their representation is accounted for through modality. Specifically, I used two types of modality markers, deontic and epistemic modalities. Deontic modalities deal with statements about the obligation or necessity of action or issues while epistemic modality is about the factuality or otherwise of a statement or an action (Bartlett, 2014; Fairclough, 2003). In whole text analysis, I categorised modalities into the high, medium and low, and this provided a way of categorising modality use within the text as the basis for comparison of how different social actors make construe relationships.

In the next section, I will sum up the description of this study's analytical framework based on a visual representation of the account given in this section represented in figure 5.

Notion of discourse

Fairclough

Representation

van Leeuwen

Differentiate and sum discourses

Dryzek

Connecting actions to entities

Evaluation + modality
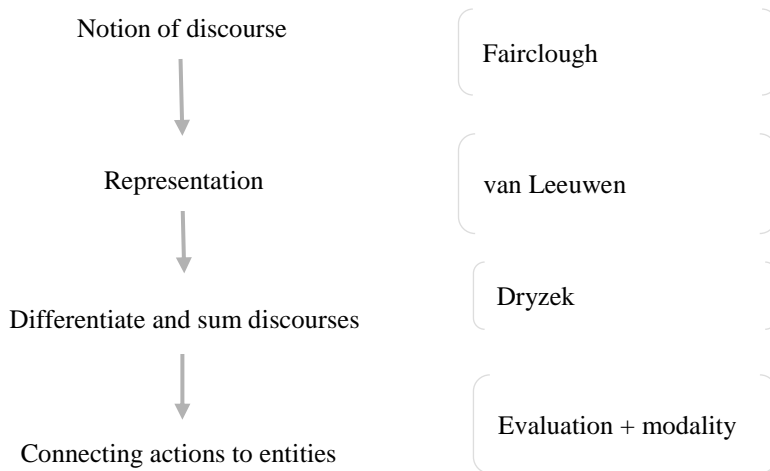
Figure 5 Visualisation of analytical framework

5.3. SUMMARY

Figure 5 visually illustrates the study's analytical framework. Figure 5 shows that the analysis of representations in this thesis will be guided by the notion of discourse as a social practice. Furthermore, figure 5 visualises that the 'how' of social actor representation will be based on van Leeuwen (2008) socio-semantic representation of social actors. Moreover, Dryzek's checklist for analysing discourses will be used to summarise discourses and presents the elements of discourses in an intelligible way. Besides, figure 5 illustrates that the analysis of relationships will be based on selectively applied aspects of SFL analytical tools of evaluation and modality.

The next chapter will constitute the empirical activities which this study undertook to engage the nexus of practice. The theoretical details of the activities which constitute engaging the nexus of practice have been set out in section 4.4.5. The chapter to come, will address the question; who are the key social actors and what identities are they creating through their actions? The chapter will deploy Clarke's Situational Map as a tool to enter into the nexus of practice. The activities of engaging the nexus of practice described in the next chapter will feed into chapter 7, the stage of navigating the nexus of practice.

CHAPTER 6. ENGAGING THE NEXUS OF PRACTICE

The purpose of the chapter is to describe how I set out and actually mapped out the semiotic cycles of people, discourses, objects, and concepts. Additionally, this chapter will account for how I came to be recognised as a legitimate social actor by actors within the nexus of practice. Specific questions which will be answered in this chapter include: How did I come to be recognised by some of the social actors who are involved in social action as a legitimate social actor? What is the social issue which the analyst is interested in studying? Who are the social actors who engaged in this action, their identities, roles, and experiences? What are the interaction orders used by these social actors? What are the scenes that the action of interest take place? What techniques did I use to obtain answers to these question?

In the next section, I will account for how I came into the text and talk about mining and CD issues at a personal level and how this personal involvement influenced my interest in studying the mining and CD nexus. The next section will also give an account of the challenges encountered in the process of engaging the nexus of practice.

6.1. RECOGNITION WITHIN THE NEXUS OF PRACTICE

According to Scollon and Scollon (2004), the starting point of NA is in the values of the people and the position of the researcher. At a personal level, I hold the view that individuals who live close to mining sites assume socio-environment cost disproportional to the benefits accruing to local individuals. I value is that benefits accruing from mining activities to the local individuals who live and work close to the mine operational area should be proportional to the socio-environmental cost.

Additionally, I have had an engagement with gold mining and CD issues in the Upper West Region. This prior engagement engendered my interest to move deeper into the analysis of an operational mine and CD issues. I became more interested in mining and CD nexus after I volunteered my expertise as a Development Specialist, to a group, 'The Upper West Civil Society Coalition on Mining, Food, Water, and Sacred Sites'. The goal of the Coalition was to advocate against planned mining exploration activities by an Australian mining company, AZUMAH RESOURCES.

The Coalition's position was that the ecological conditions of the Upper West Region (UW/R) are too fragile for open-cut mining. Particularly, the Coalition was against AZUMAH RESOURCES plan to draw water from the Black Volta River because such an action was detrimental to the potable water needs of the people of UW/R.

Though the potential effects of the proposed action on ecological resources such as the Black Volta River were of significant interest to me, the government's action was equally interesting. It was interesting that a sovereign nation will borrow an amount of US$55.50 million from the Korean Exim Bank, to undertake the Wa water project at Jambusie, only for the government plan to cede off such a critical social investment in the naming of gold mining. This is even quite interesting if it is analysed within the context of a new extractivism thesis, extractive-based growth, and development. To my mind, the government subtle endorsement of the proposed mining activity by way of grant of lease makes for a critical analysis of actors perspectives on mining and local CD. Due to the Coalition advocacy action, the UW/R Regional House of Chiefs through the Office of the Regional Coordinating Council got AZUMAH RESOURCE back to the stakeholder engagement process. These events served as a motivation for analysing how different social actor perceive differently the gold mining and CD nexus, so as to expose possible differences in perspectives, domination and tensions and possible discursive negotiation of differences.

My engagement with the NGGL and CD nexus begun when I attended a National Stakeholders Forum on Irresponsible Mining in Accra. This forum brought together CSOs, the EPA and the Minerals Commission (MC). My attendance at the National Forum on Irresponsible Mining brought me into contact with two actors who played significant roles; a Principal Officer at the EPA in Charge of Mines and the Executive Director of a non-governmental organisation (NGO), Wassa Association of Communities Affected by Mining (WACAM). The EPA official became a focal person who led me to the Ag Executive Director of the Agency. Upon a brief interaction with the Ag Executive Director and discussion on the video recording on the Newmont EIS public hearing, for which I have applied for, the Ag Executive Director directed the Head of Mining Department to release the video to me for the purpose of my research.

After waiting for some time, at the Principal Officer's office, the Head of the Mines Department called me into his office and something like this ensued:

```
Head of Mines Department (HMD): […], you are welcome.
R: Thank you, Sir.
Yes, Executive Directed minuted that we should provide you with the
video recordings of the Newmont Ahafo South Project.
R: okay
HMD: This thing, we have it, they are there, but we do not usually give
them out. But emm I will have to go back and meet Executive Director,
so give us 2 weeks and leave your email address with […] so that we can
send it to you.
```

From the text, one can observe that the `R` co-construed the situation together with the `HMD`. This can be realised through the `R` acknowledging, 'okay', that the Executive Director had given his approval for the document to be released. However, the `HMD` response to the situation, 'they are there', confirms my source that the

videos truly exist. But the evaluation by the HMD, 'but we do not usually give them out', also points to the tension between the discourses in place and what the public official actually do. The video exists, and they are public documents because the public hearing was conducted in public and the Ag Executive had based on my request instructed the HMD to release the document. But the discourse internalised in the historical body of the HMD, as can be realised in the adverb, 'usually', constitutes the basis for the refusal to supply the video.

It can also be seen from the parting words of the HMD, particularly the request, 'leave your email address with […] so that we can send it to you', strategically serve an interest of preventing from going back to the Ag Executive Director, because the request by the Ag Executive Director closes the discourse of following up at the Ag Executive Director's Office. That was the end of it, the HMD never got back, neither did he ever answer my phone calls nor return my emails. Upon persistence from me, the Administrator of the EPA called to inform me, and wording of the message can be recollected like this; […], we are sorry our record department could not trace the video.

One can infer from this that though the EPA recognised me as a researcher they refused to accept me as a legitimate social actor. The social context for the EPA's action could be understood in terms of the political actions which were taking place within the mining sector at the time of this study. In the year 2017, the newly elected President of Ghana, H.E. Nana Addo-Dankwa Akufo-Addo had commissioned an inter-ministerial task force to nip in the bud the social practice of irresponsible and illegal mining activities which were destroying the environment and water bodies in Ghana. As part of the task force work, some public officers who were found to have compromised their office by abetting illegal mining were interdicted. During this period there appeared to be tension, suspicion, and mistrust among public sector agencies in the mining sector hence the HMD may have read a 'political motive', into my request.

Moreover, as part of engaging the nexus of practice, I personally presented introduction letters to the MC. The MC called me on the phone to acknowledge receipt of my introductory letter. Also, the MC pledged to add an introductory letter to that of that Aalborg University as a way of linking me to NGGL. However, the MC of Ghana declined to return follow-up emails from me on the subject matter. In addition, NGGL also refused to recognise me as a legitimate social actor. This is regardless of the fact that the NGGL External Relations Officer had acknowledged receipt of my introductory letter and an application for appointment to meet him and discuss my research with him. The acknowledgement came through a phone call by the security details at the Newmont Ahafo Plant located at Kenyasi. I followed up to the Newmont Plant but the External Relations Officer insisted that not until the company lawyers give the company the green lights, no official from the company can talk to me about my research. Besides the challenge of recognition and acceptance by the Newmont Company, I suffered another challenged of not being recognised by

the NADeF Fund Committee. I had applied to the Committee through the Committee Chairperson permission to attend any of their field interactions, but the Committee never acknowledged receipt of my letter.

In contrast, the youth activists who are at the forefront of the struggles to change the existing NGGL contribution to CD recognised and accepted me as a legitimate social actor. The refusal of institutional actors to recognise and accept me as a legitimate social actor cuts through like a double edge sword. It simultaneously presented both limitations and strength. Limitation in the sense that I did not have the opportunity to interview institutional actors and thereby bring lay individual discourse into the institutional discourse. On the other hand, the recognition and acceptance by the youth activist became an advantage to me. The youth activists' recognition and acceptance provided an opportunity for me to gain access to other groups which institutional actors could not have led me into.

For instance, I can recall that in a talk with my gatekeeper at the in Kenyasi Number 2, my gatekeepers told me that Newmont will not want to open up to me because they do not like independent researchers. Also, I observed that, after I had disclosed to my gatekeeper about my inability to enter into Newmont CD practice through a face-to-face talk, the gatekeeper and his group opened up to me than before. They promised and actually volunteered to lead me to people's places, and actions going on within situated places. Besides, being recognised and accepted by the youth activists also came with positive results in terms of access to existing data sources. The youth activists supplied me with documentation from the company which the institutional actors may not have given out.

However, the recognition and acceptance of the youth activist presented a challenge in terms of gaining access to institutional actors. This is because institutional social actors who exist in a polemic relation with the youth groups upon seeing me at places where the youth activists who are at the forefront of construing the mining and CD meet, may have perceived me as an anti-mining advocate who is working with the youth group to expose Newmont's negative actions. Of course, as a CDA and nexus analyst I took an engaged stance that the local community individuals deserve a better deal from Newmont that it is the case, however, this was not publicly disclosed.

The actual journey of my engaging nexus of practice began when I conducted a preliminary visit to the study area, on 6th November 2017. This visit was aimed at familiarisation myself with the research site. Specifically, the goal of the initial visit was to identify gatekeepers and to begin a conversation with interested individuals and groups who are participating in the action of construing the mining and CD nexus. On arrival at Kenyasi Number 2, I was picked up by someone whom I referred to as my first gatekeeper. While my first gatekeeper was driving me to a guesthouse I asked him a question, and I reproduce verbatim the talk which followed the question:

```
R: em so what kind of footprints do you think Newmont is leaving behind
for the people of Kenyasi now and into the future?
G1: eem for some such as the paramount chief Newmont is seen as doing
very well. But for some like the youth, eem most of whom emm you know
who do not like to go to school, eem yet want the company to employ
them, they see the company as not doing well.
R: okay interesting, isn't it?
G1: Emm yeah that aside I think the company is doing very well. Emm so
that is the situation over here.
```

First, the R use of a metaphor of a footprint is a strategy to avoid imposing the researcher's categories on the talk. From this brief talk with my first gatekeepers who is a non-local-local, there is exist a polemic in terms of perspectives on Newmont's contribution to CD, and the social actors involved in the polemic are the chief and the youth. In this talk, G1 represented the discourse from an objective perspective. For instance, the juxtaposition, 'for some such as…', but for some like the youth', demonstrates that G1 presented a balanced view. Also, G1 included in the talk a subjective perspective, 'I think'. Therefore, a polemic perspective exists between the local elite, 'paramount chief' and G1 on the one hand, and the youth on the other hand. Through G1's aggregation, 'most', and also categorisation of the local-local youth as lazy even though indirectly, 'eem most of whom emm you know who do not like to go to school', G1 externalises the cause of the discourse. As Scollon and Scollon (2004) asserted such contradictions in perspectives becomes sites for further investigation and discourse analysis. But at this stage of engaging the nexus of practice, the talk not only points to the relevance of my topic but also points to the key actors in the situation. Therefore, this talk between the R and G1 feeds into the stage of identifying the social action which needs change and the social actors involved.

In the section to come, I will outline how I came to establish the issue and the social actors participating in the issue, differently from Scollon and Scollon (2004) proposed activities like conducting; discourse, scene, and social actors' surveys.

6.2. ESTABLISHING THE ISSUE AND THE SOCIAL ACTORS

NA position is that the issue of concern must emanate from the values of the analyst, what is it that the analyst will like someone to change? First, my value position is that Newmont activities should benefit the local communities proportional to the socio-environmental costs. Second, my value position is that the struggles between Newmont and the local community should be changed. I take the position that to change the local community and company struggle require the inclusion of the perspectives of the affected local communities in decision-making and implementation. The question arises: Who are the social actors who are involved in the struggle?

At this stage of NA, the activities of conducting social actors, scenes and discourse surveys are about identifying their identities and their roles in relation to the action which requires change. However, I approached the identification of the participants and discourses differently. Because the mine-affected communities are located in the interior of Kenyasi and also because my focus is on actors who are involved in a struggle with Newmont, I opted for a 'snowball technique'. Through this technique, I identified the first gatekeeper, `G1` and `G1,` in turn, introduced me to another gatekeeper. The second gatekeeper turn introduced me to the secretary of the Ananekrom Community. Through snowball sampling technique I identified four individuals from specific mine-affected communities. From the initial interaction with these gatekeepers, I observed that the social actors who are engaged in the struggle with Newmont over how the mining and CD nexus should be construed usually meet in groups for decision taking on Newmont issues. Moreover, my practice of frequent briefing of one of my gatekeepers through informal talk over a bottle of beer further opened me up to the scene, places, and discourses which circulate within these scenes and the historical body of the people within the scenes.

Furthermore, through the reading of a Stakeholders Report on the Proposed Subika Underground Mine and my interaction with local-local youth activist, I observed that the interaction orders include meetings in groups, street protest, petitions and chatting in virtual spaces like WhatsApp.

In the next, I will describe how I identified the relevant scenes and discourses flowing through the scenes, without conducting scene and discourse surveys as suggested by Scollon & Scollon (2004).

6.3. RELEVANT SCENES AND DISCOURSES

I employed a number of different techniques in identifying the scenes and the actions which occur within those scenes. The main strategy is an interview tour of places decided by the individual participants from the mine-affected communities. Secondly, I used my interaction with my gatekeeper to have him recreated the scenes in which actions occur through language. Through my routine visit to a routine place of the activists who are engaged in construing the Newmont and CD nexus, and participating in routine practices like drinking a bottle of beer, [17]my gatekeeper, and while I will usually recreate actions and places where Newmont's actions take place. On one such occasion, my gatekeeper informed me that he would have preferred that I go to where he referred to as the 'interior'. According to my gatekeeper the 'interior', is where Newmont's action takes place. But in my gatekeepers' view, because I do not have a car to travel to such remote places, it will be a challenge. This

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[17] I engage in the practice to show that I a member of the nexus of practice because that drinking at that particular spot which is the congregation point for the youth who are in a struggle with Newmont seems an everyday practice of the youth.

interaction revealed beyond where Newmont's actions take place to include my gatekeeper's recognition of a resource limitation to the smooth conduct of my field activities. The actual activities of Newmont which are covered in this study occur in remote satellite communities covered by cocoa trees and wilderness, therefore, in the estimation of my gatekeeper, I needed a car to be able to traverse these remote communities. Of course, I managed this challenge by engaging the services of a commercial motor rider, who took me to and from the field.

Additionally, someone unknown to me added me unto a political party group's WhatsApp platform. On this platform issues of Newmont are presented by local-local community members, which issues I will take up in the next section. Moreover, one of my gatekeepers shared with me discourses about the mining CD nexus in the form of pictures and also this gatekeeper told me the places where individuals who are in the picture are located.

Aside from these, documents discovered during my engaging the nexus of practice in themselves constituted spaces within which discourses and social action take place. For instance, the handwritten comments on portions of a document included in section 6.7 demonstrate that discursive elements equally constitute sites for local-local action. Also, the discursive actions of my gatekeeper in the text discovered in the process of engaging the nexus of practice reveal that discursive events like the company document mediate the actions which local-local social actors take in the material world.

The next section will describe the empirical activities which led to the identification of the key issues and recognition of the analyst by the social participants in the issue.

6.4. ESTABLISHING THE ZONE OF IDENTIFICATION

A zone of identification entails; where is the analyst, with whom and what are the key issues, from what people say? It also involves recognition by others within the nexus of practice. I presented myself as an independent researcher who shares the value together with the social actors that the Newmont should create benefits if not greater than but proportional to the socio-environmental costs assumed by the local-locals. Also, I share with the local-locals the value that local community and Newmont struggles should give way to a beneficial relationship between the company and the local community.

After several months of interacting with the youth leaders in their communities, with a segment of the local people in taxis, the pub and at virtual places such as their individual WhatsApp platforms they came to recognise me as a legitimate participant in the nexus of practice, local community, and Newmont's struggles. The first recognition came when my gatekeeper sent to me a copy of the Brong Ahafo Regional Coordinating Council's Whitepaper on a petition by the five Affected Mining

Communities. After sending me the Government's Whitepaper, my gatekeeper followed up with a notice to the Ghana Police, Kenyasi. The notice to the police was for the purpose of police protection, during an impending demonstration by the youth over actions of the NGGL. From time to time, my gatekeeper briefs me on phone about talks with some traditional leaders within Kenyasi on issues related to Newmont's and local CD.

Moreover, as part of being recognised and accepted as a legitimate participant, I was informed by one of my gatekeepers that one of the local elites whom some people alleged benefitted from NADeF to the disadvantage of the generality of the mine-affected communities had filed a defamation suit against one of the leading members of the youth. When I contacted the youth group activist on phone, something like the reproduced conversation below is what transpired between:

```
R: Good evening […]
Y: Good evening, Sir. I hope you are fine?
R: yes I am fine, and you?
Y: By His grace oooh I am fine but […] has taken me to court but do not
   worry at all, I will kick him down.
R: oh, why?
Y: He says I have said he spent NADeF Fund when he was the Committee
   Chairman.
R: Oh, I hope you will get a lawyer to represent you in court?
Y: Yeah, like I said I will meet him in court, I shall kick him down.
```

Circulating within the unrecorded mobile phone conversation between an activist and the researcher is the discourse of misappropriation of NADeF Fund by a former Chairman of NADeF Fund. The former chairman had contested for the position of the Brong Ahafo Regional Chairman of the ruling New Patriotic Party in 2018 and lost. After his defeat, he filled a lawsuit against one of the youth activists, according to my source, for defaming him before the delegates of the New Patriotic Party Regional Congress.

One of the spaces I participated in and observed the discourses circulating within the nexus of practice is the taxis transport service. I patronised taxi transport services on a daily basis to and from Kenyasi to Hwidiem. In one of my usual trips a taxi driver had this to say:

```
TD [taxi driver]: they came to us to say if 'we bring about change' they
will do our road for us. Just look at how this road is (road linking
Kenyasi and Hwidiem) and yet they say Newmont is here. For Kenyasi
people who do not have someone who will speak for us. […He mentioned
the name of the Member of Parliament for the Constituency] he does not
care about us. Immediately we voted for him again he is gone.
```

One can infer from the taxi driver's representation that the mining and local CD discourse is connected to political practices, election campaign promises, and the issue of representation. The discourse of inadequate political representation is linked

to the existence of deplorable roads in the presence of Newmont activities. So, as I was with the people within the space of taxi transport service one of the issues circulating within that space was the unmotorable nature of the roads linking Kenyasi to Hwidiem and also linking Kenyasi to Ntrotroso.

I was also together with a cross-section of the local-locals on a virtual space, a WhatsApp platform entitled, `and […] I am for […] as Chairman for Asutifi North Constituency`. Issues relevant to this thesis circulating within the WhatsApp space include a call to resist the domination of a few people who appropriate for their personal gain what belonged to Asutifi.

In figure 6, one of the youth activist on the WhatsApp platform sets criteria for who qualifies to be elected as the Regional Chairman of a particular political party through the discursive strategy of categorisations. The use of categorisation and defining who is legitimate to be the party chairman can be realised in lexical choices such as, `'uneducated', 'money conscious' and 'autocratic'`. The discursive strategy of categorisation assigned the speaker-in-text an identity different from that assigned to person-addressed-in-text.

However, the representation got caught up in negations of negations, `'not/not/un….'` These negations of negations has implication for the meaning of the youth activist's representation of the identity of his ideal political party chairman. For instance, due to the negations of negations, the representation on its face value could mean the activist is advocating for an uneducated, money conscious, and an autocratic chairman. But if read in the context of the discourse of someone standing in for others/representation and also in the context of the principle that language users do not always mean what they say and say what they mean, then the representation will have meaning of advocating for an educated, not money conscious and a non-autocratic leader.

In about 19 hours after the message in figure 6 was delivered there came an indirect interlocutor, to the representation in figure 6. The interlocution is represented here as figure 7. The interlocutor in his complementary representation, as in figure 7 genericised and/or personalised members of the platform through relational identification, as a `'family'`. Thereby establishing a close social and kinship relationship between the speaker and his addressees-in-text rather than create a difference in terms of, for example, educated and non-educated.

Though this representation complements that in figure 6 it also contains a lot which can be made clearer by looking at the representation in terms of the situation, the response, and the evaluation. In the first sentence, the social actor represents the situation as a time to resist the dominance of a few individual appropriating what belongs to the current and future generations. The post as the site of resistance can be realised in, `'it is time ooo,' '[…] let's wake up'`. The call to `'wake up'`,

presupposes that the domination by a few local elites has long gone unchallenged. The construal of enduring domination over time can be realised in the Twi proverb, which literally translates; "`You cannot step on the penis of a fool twice`"[18], meaning the `family` have been fooled for a long time, hence they will not allow it to happen again.

Based on the lexical choices within the cotext of figure 7, one can infer a number of discourses circulating within the text. For instance, `'to ask'`, `'to monitor'`, `'to demand'`, `'to fight'`, `'belongs to us' and 'generations'`. For example, `'to ask'` suggests a discourse of access to information or even accountability, `'to monitor'` also can point to an accountability discourse, `'to demand'`, suggests a discourse of a right to something or an advocacy discourse and, `'to fight'`, for the things which belong to the speaker and his readers-in-text. Additionally, `'belongs to us'`, and `'generations'`, points to a discourse of ownership and inclusion of both the present and the absent future. Moreover, `'to fight'`, also presupposes that what belonged to the current and future generations have already been captured by a few. To reverse the elite capture, the speaker calls on the `'family'`, to resist the discourse of local elite capture of the benefits from Newmont.

In about 15 minutes after the message in figure 7 was delivered there came an acknowledgement from another participant on the platform, '`I am in line with you`', figure 8 refers. Being in line with the speaker's positions can be compared with a sort of military discipline whereby soldiers conduct must be in line with their commanding officer's instruction. For this reason, the representation suggests a sort of command and control relations between the speaker and the interlocutor.

Within a time interval of about 11 minutes after the text in figure 7 was delivered to the platform, there came a reproduction of a media reportage attributed to a particular local-local contractor. According to media reports, this contractor explained his action as one which arose from his care and concern about the number of road accidents which occur on the Ahafo roads. [19] However, part of the local-local contractor's explanation sought to ensure a discourse closure through an evaluation, `'not for political favour'`. Aside from being a local-local contractor, the social actor, as at the time of fieldwork in this study was also a candidate in a particular political party's regional election. The youth group on this WhatsApp platform have campaigned vigorously against him, the contractor eventually lost the election.

From the foregoing, the meanings construed by the immediate environment, the contractors' explanation could as well pass for a legitimation for his alleged

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[18] "kwasia dua yentiaso mmprenu"

[19] As fate would have it, later on, this same contractor died through a motor accident on one of the Ahafo road.

appropriation of what belongs to all rather than being an example of a dialogic context.
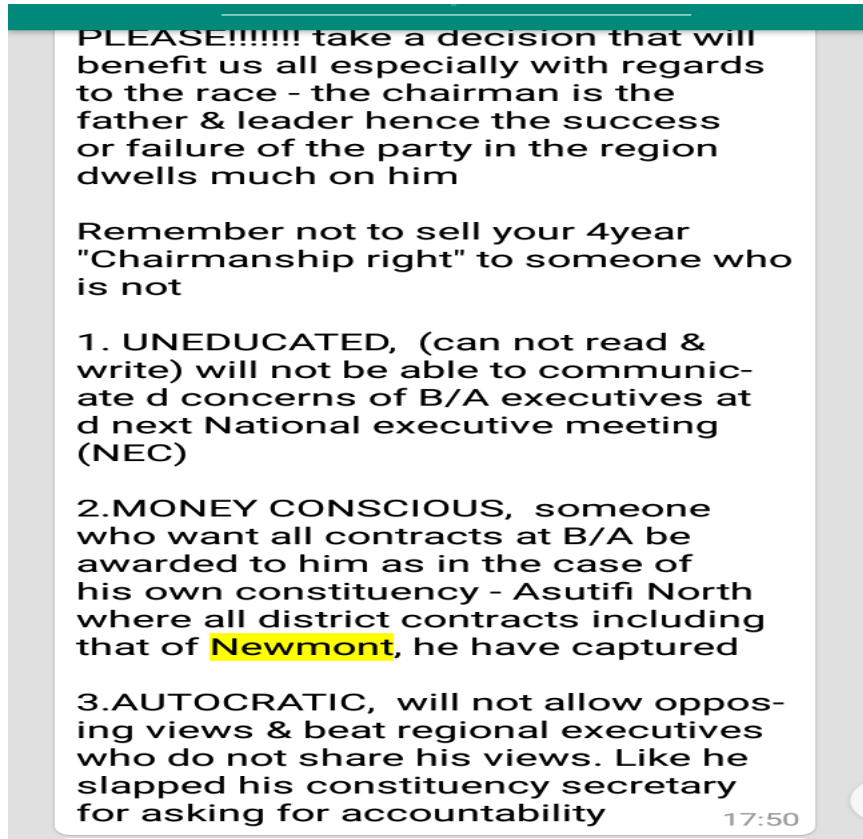
Figure 6 A call to elect competent and selfless party leaders

This implies that you activists have recognised that corporate social practices like the one by the contractor are not ideologically neutral. Therefore, the text points to the issue of technologisation of corporate discourse. On the other hand, the text reveals the opportunity provided by social media for voiceless or powerless individuals like the local-local people in this WhatsApp group to resist a particular use of traditional media to achieve corporate ideological objectives in an opaque way.

Another issue circulating within the WhatsApp platform is about the safety of Newmont subcontractors employees. On the 08.08.2018 a fatality which occurred at Newmont Plant is transformed into figure 10. The representation in figure 10 shows that the speaker is close to the physical place where the fatality took place, 'This was a place…' and also close in terms of the time of the event, 'yesterday'. Interestingly, the media report on the same incident represented the victims as 'contractor

employees of Consar Limited'. In contrast, the local-local representation of the event at their local-local place linked Newmont to the incident, 'Newmont contractor'. The possessive pronoun, 'Newmont contractor', can be interpreted to mean that Newmont owns the contractor, therefore, Newmont has a responsibility in the occurrence of the event.

Additionally, there is an aggregation of the people who were within the site. For instance, three pples [people] from Gyedu. Moreover, the representation questioned Newmont's Safety operations. Another interesting element is the categorisation of the victims as, '6 local employees', perhaps to appeal to the emotions and solidarity of the members of the platform. The appeal to readers emotion and solidarity become clearer within the cotext of, '1 one other', 'all r local employees hmmmmm it is very pathetic n painful y Newmont!' So the discourses in place here become a tool with which a social actor takes and action, 'appeal to emotions' of a particular group as victims of another's doing. Furthermore, the representation uses the discourses in place as the basis to question the safety measures of the contractors, Newmont, Consar, and DRA. This can be realised in the question; 'Are they putting proper safety measures into place…'
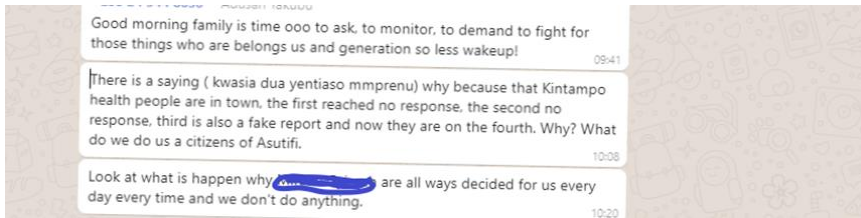
Figure 7 A call to resist local elite domination
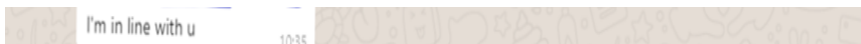
Figure 8 Acknowledgement of the call to stand up what is due them

Figure 9 A representation of local-local contractor's CD initiative

Figure 10 A representation of Newmont's fatality

Figure 11 A representation of victims and places

Besides, my stay together with the group on the social media platform provided an opportunity for me to confirm a categorisation of the people who were engaged in construing the gold mining and CD nexus. Figure 12 shows there is a self-categorisation, 'local-local employees'. In the process of engaging the nexus, this concept of 'local-local' has been frequently used by one of my gatekeepers. Its use in

the WhatsApp platform confirms to me that the concept is generally used among the youth group. Additionally, figure 12 shows the interaction orders of the 'local-local employees', meetings, places they meet, 'the Durbar ground' at Kenyasi Number. Moreover, figure 12 shows the kind of interaction the organisers of local-local employee meetings expect, from the 'local-local employees', 'presence and contributions', modalised as, 'highly anticipated'.

Good evening Hon members on this noble platform!!

Quick reminder to Local Local employees of all contractors at Newmont Ahafo Mine.
Our scheduled meeting per the Last meeting held at Kenyasi number 2 Durbar grounds is coming off tomorrow Sunday at exactly 2:00 prompt.
Kindly be part all Local Local employees. Your presence and contributions are highly anticipated.

17:51

Venue still remain at the Durbar grounds, Kenyasi number 2

17:52

Figure 12 Representation of people, places and interaction orders

Aside from the WhatsApp space, I also participated in their routine activities at a drinking bar known as *Obodanso Drinking Spot*. Mostly, I participated in their routine practices by taking a drink while I chat with people who come around including one of the youth activists. One afternoon, while I was taking a drink at the *Obodanso Drinking Spot*, a local-local guy nicknamed, 'Tigger', walked into the spot and requested for a tot of some hard liquor. After sipping his drink he engaged in a monologue which I attempted to reproduce below:

```
Yeah, officer, as for you we are aware you are here doing your work,
for you, go ahead with your work and no one can do anything to you. No
fears 'kroaa' go ahead with your work I Tigger I am telling you no one
no one can do anything to you. [As he spoke he threw onto the floor
three cartridges of pump-action gun]. Next time the soldiers come we
will not run we will meet them…
```

Later, my checks with my gatekeeper revealed that 'Tigger', is one of the galamsey operators who work at a galamsey site close to a particular Guesthouse in Kenyasi. I could deduce from, `Tigger's` own monologue that, `Tigger` may have recognised me as a legitimate participant within the nexus of practice. However, `Tigger's` reference to the soldiers could also be interpreted to mean that `Tiger` may have initially suspected me as an undercover security operative. This because at the time of generating data for this research the GoG had launched a military operation known as, 'Operation Calm Life'. The goal of the operation was to get rid of the negative activities and effects of illegal small-scale mining in Ghana. Also, 'Tigger's' action, displaying cartridges, suggests to me that the place in which we were was patronised by armed galamsey operators. Moreover, 'Tigger's' action shows that the place we were together is also patronised by others whose interest do not include constructing Newmont's action and local CD nexus.

To sum up, in this study, I established the zone of identification by embedding myself in the local-local places like taxis, a drinking bar, and virtual space. Within these places and space, I was together with local-local youth, passengers, employees of Newmont subcontractors, agents of a local-local contractor and galamsey operators.

In the section to come, I will bundle the significant discourses circulating within the nexus of practice. At this stage of engaging the nexus of practice, the significant discourses which will be sum up in the next section include elite capture, safety, inadequate representation, employment, local community infrastructure development, unequal distribution of costs and benefits from mining and worker safety and human health.

6.5. CYCLE OF DISCOURSES

The discourse of elite capture has to do with the perception among the youth groups that a few local-local elites have been co-opted into 'the Newmont's system'. The youth activists alleged that local elites are co-opted into 'the Newmont System' through the awards of contract. Through the award of contracts, a few local-local elites are included by the youth activists as individuals who unduly benefit from what belongs to the present and future generations of Ahafo. Besides, the process of engaging the nexus of practice also revealed a discourse on worker safety and human health at the Newmont Ahafo Plant. This discourse can be realised in the accounts of the accident which occurred at Newmont's Plant. Moreover, my interaction with one of my gatekeepers revealed that there is a discourse of Newmont activities polluting the existing water bodies in Ahafo. The places where pollution is going on include;

Kantinka, Ananekrom, Dokyikrom, and Yarogrumah. Also, Newmont's blasting activities are represented as negatively affecting human lives in the aforementioned communities.

There is also a discourse of who stands in for the affected local communities. The youth claim that traditional authorities and local community representatives at the NADeF Committee are not working for the interest of the larger community of experience. Besides, there is the discourse of discrimination in terms of local-local access to employment within the Newmont Mines. The youth groups, who are behind this discourse, accused Newmont of not keeping to its local-local employment clauses in the social agreement with the people of Ahafo.

Moreover, there is a discourse of failure of Newmont mining activities to transform public infrastructure such as roads in the Ahafo area. There are some people in taxis and drinking bars who say Newmont's extraction of gold from their land has not translated into improving community infrastructures like roads, hospital infrastructure, and potable water service delivery. Finally, another significant discourse circulating within the nexus of practice is that Newmont and a few local elites enjoy the benefits of gold extraction while the cost such as water pollution, displacement from livelihood sources and increased pressure on existing social services like water and health facilities are left to be pick up by the poor and voiceless people who live close to the mines.

In the next section, I will represent the semiotic materials I discovered while engaging the nexus of practice. Also, I will describe how these semiotic materials prompt and mediate the aforementioned discourses circulating within the nexus of practice. The semiotic materials which will be represented in the next section include pictures of people and places. From the representations of the local-local activists these pictures of people and places perform the social function of constituting attributions and evidence of Newmont actual practice in the material world, hence need to be integrated into the local-local representation.

6.5.1. SEMIOTIC CYCLES WITHIN THE NEXUS OF PRACTICE

That the pictures of places and people constitute evidence of negative effects and attribution of the negative effects of Newmont. The use of pictures as evidence of Newmont's doings demonstrates the relevance of Scollon and Scollon (2004) inclusion of images as one out of the six discourses which should be considered in engaging the nexus of practice. Also, the images represent an evaluation of relationships between action and entities in the situation. Besides, their evaluation and evidential value, the images in themselves are meaningful as they express what exists in a place where Newmont's activities take place. The social context of the images can be located in the discourses identified in the previous section.

As I deepen my interaction with people within their routine places and activities in one of such interactions with a gatekeeper at the, he showed me some semiotic objects. These objects which exist in the form of coloured pictures mediates how he and his group, the Kenyasi Number 2 Youth Association, construe Newmont's actions and CD nexus. According to my gatekeeper, these images were taken during a local-local people and media tour of places and homes of people where Newmont's negative effects on human lives exist.

Figure 13, constitutes a representation of NGGL actual practice of waste rocks disposal. According to my gatekeeper, the waste rocks in figure 13 formed a part of the embankment of Newmont's environmental control dams. But the practice of offloading these waste rocks produces both noise and air pollution. Besides, the gatekeeper's view is that the waste rocks contained poisonous chemicals which are often carried by rainwater into the local community sources of potable water. This image is linked to the discourse of polluting water bodies as revealed in section 6.5.

Moreover, figure 14 relates to figure 13 but differ in the sense that it constitutes evidence of NGGL actual transformation of its environmental crisis. The pipeline which can be seen as part of the image in figure 14 shows that there is a flow of some water outside of the embankment of the environmental control dam back into the environmental control dam. These provide an evidential basis that the discourse of polluting water bodies is taking place in local-local communities like the Ananekrom.

Finally, my gatekeeper used the colour background in figure 15 to explain how a specific place where water from the embankment was collected and later drained. According to my gatekeeper, the gold-like colour of the grass shows the water contained chemicals. My gatekeeper linked this colourful site to human life through a claimed that if a human step into this colourful place the individual will develop sores like the images in figure 17 & 18. This is because of the spilled water contained chemicals which are harmful to human life. Discourses in place such as this enabled the activist in section 6.5 to rally support for the researchers from the Kintampo Health Research Institute to conduct scientific research to validate the local-local perceptions.

Figure 13 Representation of Newmont's waste dumping practices

Figure 14 Newmont's environmental management practice @ Ananekrom

Figure 15 Debris of drains from an embankment

Figure 16 Woman with body rashes

Figure 17 Woman with rashes and sores on her legs

Based on these representations I argue that the significant cycles of discourses include: environmental management, health and safety discourse, redistribution of benefits discourse, mining relation to social and public infrastructure discourse and local-local employment discourse. However, a question which could be asked is: what is the social context in which the people I interacted with during the process of engaging the nexus of practice construe the mining and local CD relationship?

Even though the purpose of engaging the nexus of practice is to discover, recognise and identify issues, actors, places, and discourses in place at an abstract sense, I will in the next section provide a social context for the discourses in place within the nexus of practice. I will provide a social context at this stage to enhance understanding of the discourses circulating within the engaging stage, not as an end in itself but a means. The social context which will be provided in the next section together with the discourses already discovered will enhance understanding of local-local discourses captured in chapter 8 of this study.

6.6. SOCIAL CONTEXT OF SEMIOTIC CYCLES

At this stage of engaging the nexus of practice the social context for understanding the representations circulating within the nexus of practice can be found within the social practice of Newmont Ahafo Social Commitment Agreement. This agreement seeks to achieve enhanced well-being for the people of Ahafo in fields like education, health, and training. Besides, the inclusion of the Newmont Ahafo Social Agreement text is relevant because many of the local-local participants I met as part of the activities aimed at engaging the nexus of practice made reference what Newmont initially promise to offer. The local-local actors whom I interacted with compare what Newmont had promised in the social agreement with the actual situation in their lives

and places. For this reason, actions conducted on the text of the agreement is useful in providing the social context. Based on my reading of a text I discovered as part of activities aimed at engaging the nexus of practice, I observed some actions carried 'on the text'. These actions on the text suggest that the Newmont prior commitments are tools which mediate how one of my gatekeepers construe the Newmont and CD nexus. I reproduce these text as ethnographic observations within a text supplied by a local-local activist:

Figure 18 Text I

Education

Newmont is committed to increase the level of education in the project affected area via both infrastructure and capacity building. The company will construct or rehabilitate schools to increase access to quality education, skills training and recreation. A new school has been completed at the Ola, or Kenyase 2, resettlement village. Additional classrooms and staff facilities have also been added to the new school built at Ntotoroso resettlement site.

Capacity Building

Figure 19 Text II

is intended that national staff replace expatriate supervisors and ccession plans are being developed as operational recruitment

t Community Scholarship to support select students in further committed to improve local schools with infrastructure and

es will improve during the project life due to health education h care capacity improvements and optimization.

missioned the Colorado University School of Medicine to onditions of community health and health facilities. The findings at a multi-stakeholder roundtable, facilitated by NGGL, at the

Figure 20 Text III

I do not intend to comment on all the text listed here, but to use text I to demonstrate that Newmont's initial agreement or promises mediate local-local actions in the social world. Text I is relevant as providing a context for understanding the issues of local-

local participation in the mines. It can be observed from the text I, that Newmont had committed itself to the inclusion of the youth in the resettlement and Negotiation Committee. The inclusion of the youth forms a part of Newmont's commitment to ensuring that all groups have improved conditions than before Newmont's presence in Ahafo. My reading of the annotations revealed that there is a gap between the discourse and the actual performance. For instance; `No youth rg in the Resettlement Negotiation Committee (RNC)', shows the difference between Newmont talk and what the actual performance is.

In summary, these actions taken 'on the text' by my gatekeeper are evidence that Newmont's pre-mining discursive events afford local-local individual actions towards construing the gold mining and local CD nexus.

In the section which follows I will outline my ethnographic approach by revisiting how Scollon and Scollon (2004, 2007) ethnography differed from traditional ethnography in sociology and anthropology. Additionally, the next section will constitute an account of my planned ethnographic approach and the actual ethnographic approach. Besides, the next section will justify how the data sources included in this study constitute ethnography in Scollon and Scollon (2004, 2007) ethnography.

6.7. ETHNOGRAPHIC STRATEGY

Ethnography as it pertains to disciplines such as sociology and anthropology concerned itself with; 'a study of bounded cultures and languages; extended field stay; and the diversity of observational techniques'. In contrast, Scollon & Scollon (2004; 2007) ethnography refers to the study of social action through the routine activities of people. In order for the ethnographer to study social action in the daily lives of people, the nexus analyst must participate in routine activities of the people, and get involved in the action of which he/she is interested in analysing. Therefore, Scollon and Scollon (2004, 2007) perceived ethnography beyond a methodology for obtaining rich data for objective analysis to a theoretical position which enjoins the analyst to be embedded in the activities of the individuals under study.

Guided by NA's reliance on the ethnography of communication, I wanted to enter into the face-to-face interaction between the proponents of the Newmont Ahafo Mine, Regulators and Concerned Individuals and Groups who were co-present at the public hearing, organised by the EPA, but I was denied access to the transcript. Failing that, I wanted to enter into the interaction among Members of the NADeF Committee by sitting in during the Committee's public meetings, but my application for permission to sit in any of the Committee's public meetings was not responded to. Another option available to me was to enter into the interaction between Newmont Staff and the Representatives of the Youth at a Meeting Organised by Newmont. This meeting

coincided with my stay in the field. But my gatekeeper told me it could not be possible because attendance was by invitation from the Newmont only.

Due to my inability to enter into these interactions, I assumed there is a 'black box', for which I do not know the content. Following Scollon and Scollon (2007) I opted to rely on other primary sources which I believe contained data which may be close to what exists in the 'black box'. The reliance on these other primary sources is for me to be able to make intelligible guesses about the content of the 'black box'. I refer to this as a 'black box' in the sense that I cannot infer with a high-level of certainty that those other documents I relied on will contain the same ways of representing actors, actions and interpersonal relations as would have been the case in natural occurring actions. This is based on the view that text as recontextualisation of actual social practice can and do undergo a transformation.

Consequently, this thesis drew heavily on the ethnographies of communication using the following primary data sources: a policy document, civil society petition, embedding in a WhatsApp platform where I focused on noting down and exporting chats which are relevant to my research question. Also, I relied on interpersonal communication with people who are deeply involved in the local community counter actions against Newmont's action.

I categorised these sources of data as ethnography because Scollon & Scollon (2004, 2007) ethnography involves an 'an extended study of the actions of individuals' in their everyday places. Similarly, WhatsApp chats, policy document, and civil society petition formed a part of the social actors' actions in their routine places. Moreover, sources of data such as civil society petition, WhatsApp group text, pictures, and the annotated documents were all discovered in the course of ethnographic activities of engaging the nexus of practice.

But how did my study epistemologically focuses on action as it engages the nexus of practice? Fundamentally, this study ensured that it focuses on action as it engages the nexus of practice from the perspectives of social actors, through ethnographic research interviews. The ethnographic encounters and the discourses circulating within the nexus of practice influenced my choice of ethnographic interviews as a journey approach. Through ethnographic interviews, I followed my study participants to places of their choices where they believe Newmont's action is ongoing. In these places, we focused the interview on the actions or aspects of actions identified by the study participants.

In the next subsection, I will address how I introduced the ethnographic research interview. Moreover, in the section to come, the interview will be conceptualised as a social practice through which data is jointly produced and also the interview as an action is linked other elements of mining and CD social practice. The conceptual questions will be answered in the next subsection are: what is an ethnographic

interview, why, and how? What are the challenges of ethnographic interviews and how do I navigate these challenges in this study?

6.7.1. INTRODUCING INTERVIEWS INTO THE SITUATION

There is evidence of inconsistency in how the interview has been theorised and applied in fields related to CDA such as applied linguistics (Hepburn & Potter, 2012; Prior, 2018; Talmy, 2010). Moreover, most studies, which use interviews do not account for how they conceptualise and represent their interviews and interview data (Talmy, 2010). Due to the inconsistency in theorising interview across different ontological and theoretical perspectives, there exist argument for reflexivity about interview methods (Prior, 2018; Talmy, 2010). The goal of reflexivity about the social practice of interviews is to ensure that the ideologies of interviews are examined (Talmy, 2010).

At the conceptual level interviews can be categorised into 2: interviews as instruments for data collection; and interviews as social practice (Heyl, 2001; Prior, 2018; Talmy, 2010). Studies which take interviews as instruments of data collection do not problematise interviews. For example, they see interviews as a means to get into both the 'inner', and, 'outer' worlds of the respondent. Moreover, language is seen as a transparent medium of eliciting information. Additionally, studies which regard interviews as instruments of data collection are concerned with the, 'what,' of interviews rather the, 'how', that is the process within the interview. To add, interviews as an instrument of data collection use the metaphor of interview as a mine, (Heyl, 2001). In contrast, interview as social practice aligns with the 'active interview' perspective of Holstein and Gubrium, (1991 cited in Talmy, 2010). This perspective is interested in investigating the: 'what' and 'how', of the interview. That is, researchers operating within the active interview perspective investigates both the content and the interactional procedures in the interview. Within this perspective, the interviewer becomes a 'traveller' (Heyl, 2001).

Related to the dichotomy of the interview as either a research instrument or as a social practice is a controversy, regarding the 'interview', as either "naturalistic", or a "socially contrived occasion" (Prior, 2018). Interview as "naturalistic" perspective regard interview as a naturally occurring exchange. In contrast, interviewing as an artificial or socially contrived perspective take the interview as an exchange induced by the researcher (Prior, 2018). But CA and other interaction researchers often reject interview, in preference for data which passes the dead social scientist test (Potter, 2004; Prior, 2018). However, there is a perspective close to constructivist epistemology, that all data can either be 'naturalised' or 'socially contrived' (Hepburn & Potter, 2012; Prior, 2018; Talmy, 2010).

At the practical level, interviews can be categorised into two types; survey interview and the (auto)biographical interviews (Prior, 2018). Basically, survey interviews are

based on an investigation of a phenomenon among a population through a representative selection of a cross-section of the study population. It aims to reduce the error by standardising its procedure (Prior, 2018). In contrast, (auto)biographic interviews are concerned with eliciting first-person narratives, experiences, personal histories, description of events and meanings (Prior, 2018). Often (auto) biographic interview goal is to understand an issue from an insider's perspective through immersion into activities of the people and developing an empathetic relationship with the host community (Prior, 2018).

Despite the different types of interviews, in this thesis, the ethnographic interview is conceptualised as a social practice. Ethnographic interviews refer to research interviews based on a respectful and emerging relationship between the researcher and the interviewee. This relationship potentially leads to a genuine exchange of views and a joint exploration of the meanings of the interviewees' place on actions and events (Heyl, 2001). According to Heyl, many researchers in the 1990s turn to ethnographic interviewing due to the limitations of quantitative interviews. Also, many researchers in the 1990s use ethnographic interviews due to: the recognition of the complexity of social phenomenon; the interest to hear directly from people how themselves interpret their own experience; and also due researchers interest in making research results relevant to the people studied (Heyl, 2001).

However, there are challenges of ethnographic interviewing, and these include the relationship between the interviewer and the interviewee. There is also the epistemological debate of what can actually be known (Heyl, 2001). Moreover, accounting for how the interviewer and participant relationship influence how meaning is constructed in the interview interaction, generation of data, presentation, and analysis constitute a major challenge (Talmy, 2010). To deal with the challenges of ethnographic interviewing Heyl suggests that the researcher : develops an ethical relationship with the participants throughout the research journey; be reflexive about the his or her positionality in the research; recognise the influence of the interviewer and interviewee relationship in the interview situation; recognise the influence of displaced context on the interview process; and finally, a recognition that conversation is 'wandering about', and that those people the researcher comes across and how the researcher interacts with them will influence what the researcher can know from his or her 'wandering about'.

The ethnographic interviews as a social practice which will be introduced in the next section grew out of the challenges of obtaining access, discourses, and semiotic cycles within the stage of engaging the nexus of practice.

6.7.2. ETHNOGRAPHIC INTERVIEW AS A SOCIAL PRACTICE

In this thesis, ethnographic interviewing as a methodological option is influenced by NA methodological focus on analysing action from the experience of social actors

who are participating in the action. Additionally, CDA's theory aims to clarify unclear ideological workings of language in use. The theoretical and methodological positions of CDA and NA connect with Talmy, (2010) position that ethnographic interviews seek to expose the ideologies of interviewing.

Moreover, ethnographic interviewing recognises that the interview process and outcome are mediated by larger social structures. This recognition of the influence of structures on micro action is in sync with the conceptualisation of discourse as social practice, of which interview forms an element of social practice. Additionally, ethnographic interview aims to empower at a number of levels, (see Heyl, 2001, 2011 for details). For instance, the advocacy role of ethnographic interviews is congruent with Scollon and Scollon (2004) ethnography whereby the nexus analyst takes a political commitment as an advocate for the dominated.

If a social practice is what people do, what are the things interviewer and participants do in this interview? Perhaps, interviewers and interviewees could be engaged in actions like observing, describing, evaluating, creating relationships and identities. So, in this thesis, the 'interview', as a social practice is connected to other social practices like inclusion and exclusion, enacting identities and evaluating relationships. But in order to ensure that this study's focus remains on a discourse analysis of accounts of actions, three strategies were used. These strategies include an interview tour of the local-local places where the action is going on at a particular place; a memory and sense account of Newmont's activities by local-local individuals in relation to a place; and local-local individuals reference to concrete action of NGGL as the basis for beginning the interview talk.

In this thesis, conceptualising and applying interview as a social practice, helped in reducing the power relations between the interviewer and the local-local participants. For instance, my interview tour of local-local places determined by the local-local individual participants is a method departure from the traditional interviewing practice of inviting interviewees to a place decided by the researcher. This strategy provided an epistemological option for the participants to, decide by themselves, and take me to local-local places of their choice. Also, at the places toured, the local-local individuals point to and decide what is or are of interest to them in relation to mining and CD practice. This approach ensured that the researcher does not impose pre-conceived categories on the choice of what should constitute the basis for the interview talk, but also build rapport in a joint construal of Newmont and CD relationship.

Moreover, this study's interview differed from other ethnographic interviews. In this study, the interview situation itself constitutes an action, and within this action are distant spaces and actions recreated through language in use. The affordance and constraints within the interview situation thus become the site of analysis. Though scholars like Talmy and Heyl have emphasised that the interview situation should be

analysed, these scholars are not explicit about a focus on the affordances and constraints of the mediational means in the interview (Heyl, 2001; Talmy, 2010). For instance, in figure 21, people, discourses in place within the here and now of the interview, historical body of both the researcher and the participant, the mediated social action together with displaced fields of discourse affords and constraints the interview. For example, in the process of the interview, the researcher brings in Newmont's CSR discourse which exists within the immediate and displaced environment of the interview. This affords the local-local participants the opportunity to respond to company voices at a material place Newmont concrete exists.

Furthermore, figure 21 represents ethnographic interviews in this study as a journey which involve the researcher and the participants. In this journey, bother the researcher and the research participants are jointly 'wandering about'. The discourses in place and the people the researcher and the participant meet in their wandering about affords and constraints the interview. However, figure 21 shows that the interviewer and interview participants in their 'wandering about' focus their talk on a mediated action.
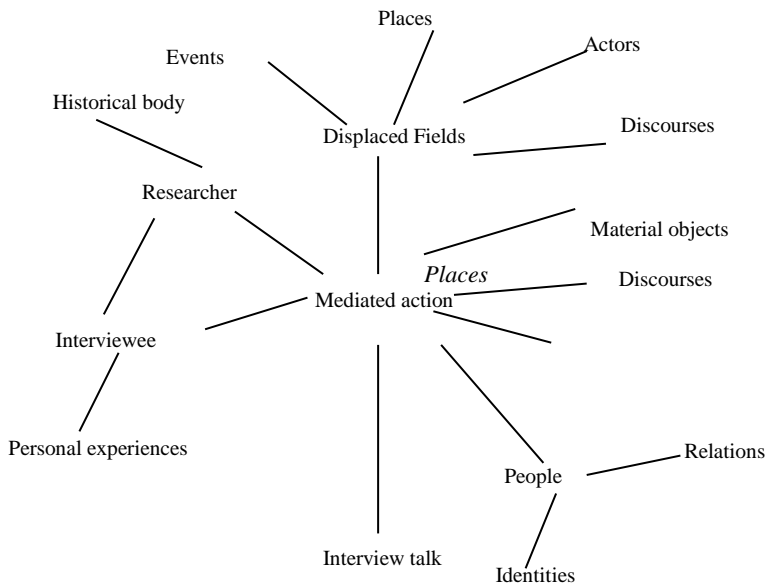
Figure 21 Diagrammatic representation of interview as social practice

6.8. SUMMARY

In order to summarise this chapter, I revisited the question at the heart of the task of engaging the nexus of practice: who are the key social actors and what identities are they creating through their actions? To answer this question I applied Clarke's Situational Map to visually summarise the elements in the situation. Based on figure 22, the key social actors within the nexus of practice are the youth associations, local-local employees of Newmont contractors, people with individual experience with Newmont's action and local-local elites who have business relations with the Newmont Ahafo Project. Through my engaging activities, I observed that youth groups enact an identity of advocates and also assign the local elites and TAs an identity of people who appropriate what belongs to Ahafo for their personal gains.

Moreover, figure 22 captured some of the places where action is going on or occurred as farms, schools and water bodies. Besides, figure 22 highlights some of the experiences of social actors in terms of the experience of what is being lost and their memory and sense of the good old days. Figure 22 shows that some of the interaction orders include people meeting in 'together with' and also through petitions. Finally, figure 22 reveals that some of the discourses circulating within the nexus of practice include engagement, representation as in someone standing in for others, affect discourse and also environmental management discourse.
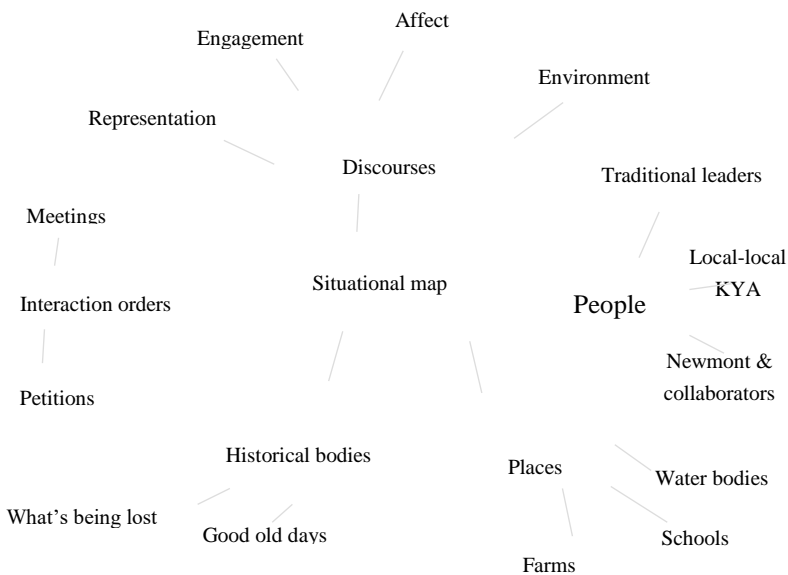
Figure 22 Ordered Situational Map

The next chapter will constitute the activities involved in navigating the nexus of practice. The purpose of the activity of navigating the nexus of practice is to deepen the mapping of the semiotic cycles of people, places, discourses and cultural object which circulate within a moment of action. Two different types of text will be analysed in chapter 7. First, in the next chapter, I will analyse a selected portion of the government's policy on minerals and mining. Second, I will analyse selected aspects of a local community mobilisation petition to the General Manager of Newmont Ahafo Project.

CHAPTER 7. NAVIGATING THE NEXUS OF PRACTICE

This chapter is a continuation of the discovery of people, actions, places and their mediational means which have been accounted for in chapter 6. However, this chapter moves beyond discovery into generating, analysing data, and tracing the linkages of action to actors and their mediational means. Therefore, this chapter deepens the analysis of elements captured in figure 22. In this chapter, I will at the end of the analysis of each voice, return to situational maps as a tool of summing up how the representations construe relationships between elements in the situation.

7.1. INTRODUCTION TO TEXT ANALYSIS

In the next section, the analysis will be based on selected portions of Ghana's Mineral and Mining Policy. The policy was formulated in the year 2014 to govern, regulate and develop the mining sector. Thus, the aspects of chapter 10 of the policy which are selected for analysis in this study, are chosen based their relevance to the social practice of mining and local CD.

At the experiential metafunction, the analysis will cover three aspects of van Leeuwen (2006, 2008, 2016) social actor representation; deletion, rearrangement, and substitution. At the interpersonal metafunction level, the analysis will be based on a selective application of evaluation and modality.

7.2. SOCIO-SEMANTIC REPRESENTATION OF SOCIAL ACTORS

According to van Leeuwen (2008), social actors and social action go together. Therefore, to analyse the inclusion and exclusion of social actors I will identify the specific fields of discourse within which the social actors and the actions they participate in circulate. To begin with, the discourse construes a field of discourse in the future. This is instantiated in line 1 of extract 1:

```
Government wishes to foster the development of a thriving mining
industry that will contribute to sustainable economic development,
economic empowerment of Ghanaians, the alleviation of poverty,
improvements to the standard and quality of life in Ghana [Line 1
of extract 1].
```

The construal of a field of discourse in the future is lexical realised in the transitivity, 'Government wishes to foster'. Additionally, the discourse construes the abstract immediate environment of the discourse within the mining industry. The discourse

creates another field of discourse known as backward and forward linkages of the mining industry. This field of discourse can be ascertained in line 1 of extract 1 future certain transitivity, 'will contribute to sustainable economic development…'

Because this thesis is NA methodology inspired the question which heralds' analysis of social actor representation within these fields of discourse is: what action (s) is/are going on here, who are the social actors in relation to the action and what are their mediational means? From extract 1, the main actions going on within the representation include; promotion of private capital and legitimation of capital's participation in mineral extraction in Ghana. For instance, in line 1 of extract 1, the social practice of creating an enabling environment for FDI in the mining sector can be realised in the future action, 'to foster the development of a thriving mining industry...'[20]

Moreover, in line 1 of extract 1, the representation legitimates the need for the government to create an enabling environment for FDI in the mining sector. This can be realised in how the discourse portrays mining companies as the agentive forces behind desirable processes such as; 'sustainable economic development and alleviation of poverty'. Not only does the discourse position mining companies as agents of positive processes but also the discourse position Ghanaians as the beneficiaries of these processes. In sum, the action going on in the representation is government promoting and legitimising creating enabling environment for FDI in the mining sector.

In the next subsection, I will identify and analyse the social actors who are included or excluded in the representation and also analyse the ideological effect of their inclusion.

(A) Inclusion and exclusion

The representation in extract 1 includes the following social actors; government, the MC, local authorities, traditional authorities (TAs), mining industry, mining companies, Ghanaian stakeholders, Ghanaian personnel, Ghanaian Geoscientists, local communities, landowners. Aside, from the MC whose inclusion in the representation occurs through nomination, the inclusion of social actors such as mining companies and landowners are realised through abstract nouns.

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[20] Here the event is in the future, 'to foster', but the obligation is realised in the immediate text context.

There are also patterns of social actor exclusion through abstraction of micro activities which the social actors engage in. An instance of exclusion through abstraction is instantiated in line 8 extract 1.

```
Mining companies shall be encouraged to actively participate
in, and support the achievement of community initiatives,
especially in the area of health care, education, water and
sanitation [Line 8 in extract 1].
```

In line 8 of extract 1, the discourse imposes an obligation on the mining companies, 'to, `actively participate in'`. Also, the mining companies are required to, `'support the achievement of community initiatives'`. Though these are desirable processes, what constitutes active participation can vary from one context to another. This is particularly so in the field of mining where the effects of mining vary according to location and individual company practices. Therefore, by referring to active participation without benchmarks of what constitutes, `'active participation'`, the representation leaves, `'active participation'`, to a wide range of interpretations. Similarly, the obligation imposed on mining companies to support local community initiatives seems laudable, however, the extent and scale of mining companies 'active participation' in local communities initiatives remains unclear.

In the subsection which follows, I will analyse who is included as a dynamic force or who is included in the representation as a passive bystander or a beneficiary.

(B) Rearrangement or role allocation;

Based on a critical reading of extract 1, I observed that there are two agentive social actors who are construed in the discourse. First, there is a pattern of representation in which the 'government', is included as the dominant actor who makes things happen to both the industry and Ghanaian stakeholders. For instance, in line 10 of extract 1, the agency of the government can be realised through future actions such as, `'will introduce improvements to the existing administratively operated fund'`. Here this, the action to be taken in the future is intended to benefit Ghanaians. This is because the Minerals Development Fund (MDF) is a mechanism through which the government decentralises revenue accruing from mining decentralised agencies for CD activities.

Second, there is a pattern whereby the representation includes the government as imposing mandatory obligations on the mining companies to undertake future actions beneficial to Ghanaians. For instance, this way of representation is instantiated in line 5 of extract 1:

```
To promote this, the companies will be required:
```

a.   to submit a programme for the recruitment of qualified
               Ghanaians to be approved from time to time by the
               Government; and,
               to submit from time to time a programme for the training
               of Ghanaian personnel for the approval by the Minerals
               Commission.

The verb, `will be required`, constitutes lexical realisation of the imposition of a mandatory obligation on mining companies to undertake future actions which will benefit Ghanaian. Such a representation becomes interesting if compared to a voice from the Dokyikrom community which expresses a different perspective that Newmont sees itself as not answerable to any social actor including the GoG. What this suggests is that though discourse may position mining companies as subservient to the government, local-local actors who experience company actions see the companies differently.

A critical reading of extract 1 reveals that the discourse rearranged the triple role of the government as an owner, manager, and regulator of mines into a regulator and promoter of mining companies. Since the role of government in creating an enabling environment for capital has been explained, I focused on how the discourse position the government as a regulator. The regulatory role of the government over the mining sector can be observed in line 2 of extract 1 where the government recognises its important role in ensuring that mining benefit the Ghanaian people. Specifically, this can be realised in, `Government has an important role to play in ensuring that all Ghanaian stakeholders secure the maximum direct and indirect benefits from mining`. Lexically, `has an important role to play` and `in ensuring` expresses the regulatory role of the government in ensuring that Ghanaians benefit from mining. Moreover, in line 4 of extract 1, the discourse instantiates the regulatory role of the government and this can be realised in `the mining legislation requires mining companies to give preference to the employment of Ghanaians`. Here the verb, `required` echoes a social relation of a regulator dishing out regulatory instructions to the companies.

Related to the restructured role of the government is the allocation of CD role to mining companies. For instance, in line 1 of extract 1 the agency of mining companies in relation to CD can be realised in, the irrealis but certain future action, `will contribute to […] improvements to the standard and quality of life in Ghana`. Since political independence from colonial rule in 1957 various governments has used mining as broader national development and poverty reduction tool. However, this role of connecting mining to national development and poverty reduction has been assigned to the mining companies.

In the material world of mining and the social practice of improving livelihoods, local community activists perceive mining companies are as play negative roles in livelihoods of farmers and artisanal miners in particular. But the discourse

transformed the conflictual relations between mining and local communities into a desirable future relation of partnership. For instance, in line 7 of extract 1, the verb, 'should be partners' expresses a desirable future situation:

```
To improve their livelihood, mining communities and mining
companies should be partners in development and must tap
into the unique expertise that mining companies bring
along to that end [line 7 in extract 1].

The rights and interests of landowners and local
communities regarding benefits accruing from the use of
land shall be guaranteed during the entire process [line
13 extract 1].
```

This sort of representation potentially elides the existing conflict relation between mining companies and local communities' livelihoods, thereby reduce differences in perspectives about mining role in improving or destroying local community livelihoods. But this attempt at reducing difference contrast with the tensions between mining activities and the local community's livelihoods, as are instantiated in the accounts of P1 and P4. Therefore, the government discourse can also be seen as setting up a polemical relation between government public discourse on mining and local community and academic representations about the destructive effects of mining on local community livelihoods practices.

Moreover, the discourse transformed the uncertainties about the rights of affected individuals whose land or interest in land have been negatively affected into mandatorily guaranteed rights and interest, 'shall be guaranteed'. For instance, this representation contrast with the uncertainties of individuals from the Kantinka community over whether or not NGGL will resettle or relocate them from their local community. Also, the fact that an NGO has to file a suit at the human rights court before the voices of concerned are heeded to contradict guaranteed rights construed by the government discourse.

In the next section, I will focus on analysing how social actors are represented through the use of socio-semantic categories other than transitivity system, active and passive voice and through the grammatical role of the doer of things.

(C) Substitution

In this subsection, I will focus on genericisation, lexical choices, the inclusion of Ghanaians as human capital, and the representation of employment as a necessary requirement for living a decent life.

The representation discursively portrays mining as essential for economic development, employment and livelihoods improvement. For instance, in line 6 of extract 1 mining is included as an essential approach to the development of rural Ghana. This can be realised through the metaphor, 'an important pillar'. Here

mining is compared to something different, 'a pillar', which carries the weight of a building.

Moreover, in line 7 of extract 1, the discourse essentialises mining in relation to improving local community livelihood. Specifically, the necessity of mining to the social practice of improving local community livelihoods can be realised in `must tap into the unique expertise that mining companies bring along to that end'. Here, the deontic modal verb, `must tap into', presupposes that there is almost a unimodal way in which rural livelihoods can be improved. Through mining and the expertise are brought along purposely for livelihoods improvement.

The discursive justification of mining on the basis of necessity for improving the livelihoods of local communities can have an ideological effect on targeted readers like the local communities. Such a legitimation can result in the situation whereby local communities can endorse unsound socio-environmental practices by mining companies on the basis that mining is the one and only means to improve their livelihoods. Also, legitimising mining on the basis of mining ability to generate employment preferably for Ghanaian could cloud local communities' vision of demanding accountability from mining companies. According to Taryn, (2018) such representation may perform an ideological function of legitimising company unethical employment practices, for instance, wage differentials between local-local employees and national employees. The ideological effect of this macro talk is linked can be realised the Yarogrumah representation. In the Yarogrumah representation, P4 asserts that there exist wage and other remunerations differential between local-local employees and local employees of Newmont subcontractors.

Besides, the government discourse employs a discursive strategy of genericisation of social actors included in the representation. Through the lexical choices such as, 'empowerment of Ghanaians', 'Ghanaian stakeholders', and, 'the employment of Ghanaians', the representations includes the different social actors as if they possess the same qualities and levels of agency. For example, through the abstract noun 'Ghanaian stakeholders' the discourse elevates some Ghanaians to the high place of stakeholders who have the right to benefits accruing from mining. The question then is: who constitute Ghanaian 'stakeholders'? Are the people of Dokyikrom who eked a living from the land which belonged to the chiefs of Kenyasi South part of the, 'Ghanaian stakeholders'? It can be observed that TAs and local elites who reside in the towns are often fenced by mining activities whereas farmers and artisanal miners whose farms and work stations are taken over by mining companies suffer the adverse effects of mining activities. Therefore, including differently positioned social actors as, 'stakeholders', potentially close the differences between them. Genericising the social actors have the potential to manipulate targeted readers into believing that mining will benefit all segment of the society equally. By this, the government purpose of promoting capital can be achieved through consent rather than coercion.

Related to the above, is the way in which the representation includes social actors through the use of lexical choices which characterised the social actors as equals. This sort of representation can be realised through lexical choices such as; 'should be partners', 'rights and interests', 'liaison and consultation', 'full engagement', and, 'relevant stakeholders'. For instance, a partnership suggests that there are equal and competent social actors who come into agreement for a mutual benefit. But in the social world of mining and CD practice, there are differences among social actors. For example, there are differences in levels of economic power, technical expertise and government preference for capital over local communities. There is also a disproportionate share of the economic and socio-environmental cost between companies and local communities. Due to reasons such as these representing communities and mining companies as partners could be an unclear way of transforming capitalist crisis.

In the next section, I will deduce and analyse the discourses circulating within the representation which affords or constrain how social actors are represented. I will make deductions based on the lexical choices circulating with the policy extract.

7.2.1. DISCOURSE ANALYSIS OF POLICY EXTRACT

Based on the lexical choices, there can be observed a dominant neoliberal Discourse of mining based national economic growth. The sense behind the government's neoliberal Discourse can be summarised as; a thriving industry→wealth creation → good economic conditions for citizens. This way of justifying mining contribution to development in Ghana is similar to the WB logic behind extractive-led poverty reduction strategy. Furthermore, this discourse affords the government's representation of the practice of mining as, 'an important pillar to rural development'. However, the unsaid possible logic could be that; a thriving mining industry→increased negative environmental effects→poor economic conditions for mine-affected individuals.

There is also a sub-discourse of the national economic development discourse, which embeds related discourses such as the environmental management discourse. In the post-neoliberal era, most mineral-rich countries sought to maximise rent captured for implementation of national development plans as well as to minimise the environmental cost of mining. This discourse can be realised through lexical choices such as, 'maximise accruing benefits and minimise the negative impacts'. First, these lexical choices index the neoliberal assumption that both socio-environmental and economic goals can be achieved simultaneously; and second, that the accruing benefits and negative social and environmental effects can be mitigated through discursive action, policy intervention. Moreover, these lexical choices suggest that the representation takes an oracular-agentive position that mining produces negative effects but these effects can be minimised through discursive action like policy action. It also implies that mining produces benefits which can be

maximised. This sounds good, but to maximise the benefits for who? It is the discourse of adequate rent capture from mining which affords the government's inclusion of mining as a practice which will contribute to sustainable economic development.

Related to the environmental management discourse but different is the engagement discourse. This discourse is related to environmental management in the sense that mining companies have recognised the relevance of including local community actors in environmental monitoring practice. Based on extract 1, engagement discourse can be inferred from lexical choices such as, 'stakeholders', 'engagement', and 'actively participate'. However, rather than empowering local individuals, these lexical choices articulate the government intended practice of opening up spaces for both companies and local community actors to play various roles which will create an enabling environment for mining companies to operate.

Besides, the representation draws on a discourse of social justice, equity, and accountability. The lexical realisation of this discourse includes, 'a transparent framework, and wider and more consistent publicity'. But within their cotext these policy intentions are expressed in irrealis future in terms, 'will be'. Therefore, the question could be asked; pretty good, but how? This is because whereas the representation in line 11 of extract 1 declares that legislation will be formulated to back the Mineral Development Fund, in line 12 of extract 1 the representation is unclear as to how to achieve transparency and also ensure wider publicity in distributing mineral revenue to the District Assemblies and TAs.

Another persistent discourse which circulates within the representation is mining employment. For instance, in line 4 of extract 1, the lexical choices, 'generation of employment in mining, and preference to the employment of Ghanaians' instantiate the discourse of mining based employment. Perhaps due to awareness of the weak link between mining and employment the discourse includes measures to ensure that mining employment benefit Ghanaians. For instance, line 5 of extract 1 sets out the measures the government intends to take to ensure that mining employment benefit Ghanaians. These measures can be seen in the form of obligations imposed on the mining companies; 'will be required', 'to submit a programme for the recruitment of qualified Ghanaians to be approved from time to time by the Government'. However, the critical question could be; who will mine employment benefit, is it the local-local who live close to the mines or citizens who have networks within the state institutions and mining companies Human Resource (HR) departments? This question is relevant in the context CSO discourse revelations of nepotism and corruption by Newmont's HR Department.

Based on the foregoing, the persistent discourses circulating within the government discourse include; a dominant national economic development discourse, and sub-discourses like environmental management, engagement, social justice, and accountability as well as employment discourse.

In order to bundle the elements of the dominant discourse circulating within the representation, I will apply Dryzek's (2013) checklist for classifying environmental discourse to analyse the dominant discourse. By summing up the constitutive elements of the dominant discourse, create an opportunity for delineating the discourses in different representations. The content of the dominant national economic development discourse is summarised below:

i.   **Basic entities whose existence is recognised or constructed?**
- Government
- MC
- Companies
- Mining communities
- Local authorities
- Objects as mediational means
- Forms of activities, e.g. policy making
- Social relations: government as regulator and promoter of capital
- Desires or values**:** social justice, participation & equitable distribution

ii. **Assumptions about natural relationships**
- Technological fixes
- Mining compatible with livelihoods
- The thriving mining industry will create linkage effect
- Hierarchy of relations: State as a higher authority
- Mining creates jobs
- Differentiated needs based on differentiated bills

iii. **Key agents and their motive**
- Companies have the expertise to improve livelihoods
- Government motive is to attract FDI
- To achieve generalisable public interest
- To maximise employment
- Material political interest

iv. **Key metaphors and other rhetorical devices**
- Rural transformation

v.   **Openness to difference or homogenisation?**
- Excludes alternative view on mining livelihoods nexus
- Excludes alternative views about human right violations
- The partnership makes unclear existence of unequal power relation

In the section which follows I will seek to answer the question; which Discourse is the mining and national economic development discourse drawing from? This question is congruent with NA theoretical and methodological position that 'discursive event' like the government policy representation is the nexus through which multiple systems circulate (Scollon and Scollon, 2004; Jones, 2009).

7.2.2. TRAJECTORY OF DISCOURSE

Based on the similarity of the logic of the GoG promotion and legitimation of FDI in the mining sector to that identified by Pegg (2006), [21]it can be inferred with some degree of certainty that the representation draws on a neoliberal Discourse. The storyline of the neoliberal Discourse is that in order for mineral-rich countries like Ghana to maximise its NR potential it 'must be competitive'. Furthermore, in order the mining sector of mineral-rich countries 'to survive and prosper' in a competitive world they must realign with 'the conditions developed by mining companies and the rest of the world' (WB, 1992). The conditions include restructuring the national governments' relations with mining projects. Particularly, restructuring requires the withdrawal of the government as an owner, manager, and regulator to a new role of a promoter and regulator (Campbell et al., 2005). In the case of Ghana, restructuring presupposes that the government takes a detour from the resource nationalist policies which were pursued from 1975 through the 1970s. Moreover, the conditions developed by the WB and the mining industry require that mineral-rich countries revise their fiscal, legislative and institutional practices in a way which enable foreign capital participation.

Due to the relatively stronger power relation between the WB and Ghana, the government realigned to the conditions dictated to it by the mining industry and the WB. This was done through the adoption of the ERP together with the SAP. As the neoliberal Discourse of liberalisation rationalised bad management of the mines by the government as a source of under-recovery from the mines, and also represented the mining sector as an engine of growth, the ERP and Structural Adjustment became a one-size-fits-all broad technology of influencing how the Ghanaian mines are managed. Under the structural adjustment technology, the WB prescribed deregulation and privatisation to the GoG, with the attraction of FDI as the preferred engine of economic growth and development. In order to attract FDI, the discourse requires the GoG to deregulate, privatise and to provide the prescribed fiscal, legal and institutional incentive for mining companies to make a profit. Through the neoliberal Discourse structuring of relations, the GoG lost both the much-needed revenue and the authority to enforce environmental and socio-economic norms and standards which once governed the mining sector.

As local communities and CSO advocate for the mining industry to mitigate its socio-environmental cost, the neoliberal Discourse of creating enabling an environment for capital embraced the environmental discourse as an element of mining CD practice. Within the environmental management practices is the related element of mining companies' stakeholder engagement. This is a social practice through which mining companies seek to have collaborative learning and making sense of the political and

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[21] According to Pegg (2006) the WB logic is that; FDI→increase in job creation→increase incomes→will contribute to poverty reduction.

antagonistic issues like environmental effects of mine (Walton & Rivers, 2011). But stakeholder engagement in the mining context is more an integrated business planning rather than offering a voice to the voiceless. In Ghana, stakeholder engagement discourse is a reactionary discourse to the increasing protest from mining communities over the negative effects of mining on their livelihoods and territory. Local community protest threatened the peaceful atmosphere required for gold extraction to be profitable, hence both governments and industry move into legitimation practices to deal with extraction crisis. For instance, in line 9 of extract 1 the recognition of the need to distribute revenue from mining proportional, 'to the needs of local communities most directly affected', and shows the government's reaction to the concerns of affected local communities.

Despite the stakeholder's engagement rhetoric, structural practices governing mining like the 1992 Constitution of Ghana, the minerals and mining act, act 703, the bilateral trade agreements and the practices of negotiating mining development agreement which mediate to what extent mining can benefit the rural poor exclude local actors from mining decision-making processes (Akabzaa, 2009). For instance, national level structures such as the constitution and the minerals act centralised decision-making in the mining sector in an executive President. Beyond being centralised, these social practices, for example, the social practice of government and investors signing mine development agreement, and the element of stabilisation clauses, are all executed in secret and placed under lock and key, due to binding non-disclosure clauses. Therefore, whereas the discourse embraces a governance perspective, a network of various actors, negotiation and feedback, the actual practices are different. For instance, in the Ananekrom representation, the local-local affected individuals do not receive feedback from Ghana's EPA on complaints of irresponsible environmental practices by Newmont. Also, in the civil society representation, Newmont is not honouring its agreement to include the local-local individuals in its Environmental Monitoring Committee.

In the next section, I will analyse how the representation textures relationship between social action and other elements of mining and CD practices. The analysis will be focused on the desirability or undesirability of mining companies' doings and the degree of commitment to relations construed in discourse.

7.2.3. INTERPERSONAL META FUNCTION

Based on my critical reading of section 10.8 of the policy I have identified the common modal auxiliaries in the subsection to include deontic modality markers like, should, shall, will, and must. Basically, these modal auxiliaries are used in the discourse to make demands and also to make undertakings. Through these demands and undertakings, the representation creates one relationship or another between the government and a reader-in-text. Also, the representation expresses the desirability or undesirability of relationships. Aside from the language system of modality the

discourse makes connections between mining and other elements of social practice through an expression of either the desirability or non-desirability of the linkage.

Based on a critical reading of extract 1 it can be observed that there is a pattern of representation whereby the policy takes an oracular-agentive position, albeit mostly on a low modality, to create a possible desirable relationship between mining and the environment. For instance in line 14 of extract 1:

```
Additional measures will be taken to maximise the accruing
benefits and minimise the negative impacts of mining on local
communities by requiring that […]
```

This presents a possible reading position that there is certainty of knowledge about an existing undesirable relationship between mining and the environment. However, the representation takes an oracular-agentive position that this undesirable relationship can be transformed through policy action. For instance, in line 14 of extract 1, 'to maximise the accruing benefit', and, 'minimising the negative'. Through the transitive, 'minimising the negative effects', the representations includes a high degree of knowledge about the undesirable relationship between mining and the social practice of protecting the environment. This is because the present continues verb, 'minimising', is a clear indicator of knowledge of the negative effects of mining on the environment which can only be minimised. Scollon (2008) asserts that modality is often the anticipation of future action or anticipatory discourses and that modality can be analysed along two axes; the knowledge axis and the agency axis. Thus, the government takes an oracular-agentive position that the undesirable outcomes can be mitigated by economic fixes with the backing of policy action.

Perhaps due to the oracular-agentive position, the representation is equally certain that mining companies will carry out some future actions, 'Additional measures will be taken to […]'. Though the transitive, 'will be taken', construe the action in future terms what is to be done in the unknown future is construed as a present ontology. Expressing future actions as if they already exist can be realised through transitive such as, 'plans developed by' 'companies make proposal' and 'establish policies and procedures'. For instance, the existing ontology, 'plans developed by' could be expressed in conditional future modality like *'plans will be developed by'*.

Besides, the discourse construes a high degree of a negative relation between mining and local communities, but in an unclear manner. The high modality used in expressing a negative relation between mining and local community can be observed in line 9 of extract 1, 'most directly affected by mining'. Even though 'directly affected' expresses a neutral feeling one can reasonably infer that it is

the negative effects of mining on the local communities which led to a recognition of 'to ensure an equitable sharing of benefits'.

Furthermore, based on the lexical choices which expressed governments' responses, it can be observed that the representation took away evaluation from the practice of mining but rather implicitly evaluate the social practices which mediate mining contribution to a CD. This is instantiated in line 10 of extract 1, […] Government will introduce improvements to the existing administratively operated fund […]. Other lexical which points to an evaluation of social practices of revenue distribution include; Legislation will be introduced, [Line 11 of extract 1] and transparent framework, plus consistent publicity [Line 12 of extract 1]. By introducing an improvement to the MDF, the representation implicitly evaluates the social practices which mediate how government's share of mining revenue is distributed to decentralised agencies rather than the practice of mining which negatively affects the host local communities. The ideological effect of this representation is that the actual practice of mining remains unexamined.

Furthermore, the representation construes a high degree of certainty about mining companies' expertise at improving local community livelihoods:

> To improve their livelihood, mining communities and mining companies should be partners in development and must tap into the unique expertise that mining companies bring along to that end [Line 7 extract 1].

Here the transitive, 'to improve', which precedes a pronoun indicates the necessary condition and therefore could imply that mining is essential for local community livelihoods. Mining is legitimised as essential because mining companies are represented as having, 'the unique expertise' to improve local community livelihoods. Because mining companies have peculiar expertise at local communities' livelihoods improvement the representation imposes an obligation on local communities to utilise mining companies 'the unique expertise'. The obligation imposed can be realised in the deontic modality, 'must tap into'. However, the CSO representation and later in chapter 8 of this study, the voices of P1, P2, P3, and P4 will show that mining companies rather than improve local communities' livelihoods, mining companies activities are inimical to livelihoods activities such as farming and charcoal burning.

In contrast with the certainty over mining companies' possession of expertise in local community livelihoods improvement, the representation expresses a non-obligatory relation between mining companies' and their participation in rural development and also in local CD practices. However, the discourse construes mining companies' participation in local community initiatives as desirable. For instance, in line 6 of extract 1, the modal auxiliary, 'should', expresses a medium commitment to the relationship between 'mining' and 'rural development'. However, in line 8 of extract

1 the deontic modality, 'shall be encouraged', 'to actively participate' and 'support' expresses the government positive feelings about the role of mining companies' participation in local community initiatives. Applying Scollon (2008) knowledge and agency axis, a possible construal of mining companies' participation in CD could be that 'the government knows that mining companies are not obliged to engage in CD'. The ideological effect of this sort of representation could be to portray the identity of a government who intends to go beyond the limits of contractual agreement to get the best for local companies. But this construal of non-obligatory relations between mining companies and local communities could potentially weaken local communities demand from the mining companies' adequate contribution to CD. This is because the government itself which is the regulator of mining companies recognises that mining companies are not obliged to support local community initiatives.

Aside from expressing degrees of certainty, modal auxiliaries are also used in the representation to perform an evaluative function. Modal auxiliaries are used to express feelings about the desirability and undesirability of recontextualised social practices. For example, in line 6 of extract 1, the modal auxiliary, 'should be' plus the transitive, 'to support the development of rural Ghana', evaluates and legitimates mining by expressing the social actor behind the representation's value about the desired relationship between mining and rural development of Ghana. This sort of evaluation seeks to create a new identity for mining which has been seen as leaving mining communities poorer even in the midst of decreasing level of poverty in Ghana.

Similar but different is the use of modal auxiliary to express an evaluation of a recontextualised social practice, distribution of mineral revenue by the government. For instance, in line 9 of extract 1, the modal auxiliary, 'must be', can be interpreted as an evaluation of the relevance of the process, 'equitable sharing'. Within its cotext, the modal auxiliary, 'must be used', rather than expressing an obligation imposed, shows the importance which the discourse assigns to the social practice of equity in redistributing revenue accruing from mining to District Assemblies and TAs. This evaluation can be quite significant in the Ghanaian context given the criticism that the redistribution of minerals revenue to the District Assemblies and TAs are faced with challenges such as lack of accountability and also the absence of objective for distribution of the funds. Therefore, a potential ideological effects of the representation could be to position a particular social actor as committed to social justice.

Another way in which the discourse uses modalities to achieve evaluative purpose is through communicating something about the relevance of what is going on to the government. For instance in line 13 of extract 1:

```
The rights and interests of landowners and local communities
regarding benefits accruing from the use, of land shall be
guaranteed during the entire mining process.
```

The modal verb, 'shall', refers to the condition of a writer granting certain or an emphatic assurance and by implication showing how relevant or important the rights and interests of landowners and local communities are to the government. In other words, the issue will be prioritised.

Besides, the discourse employs the use of modal auxiliaries to create unequal relations between the social actors included in the representation. For instance, in line 7 of extract 1, the modal auxiliary, `must tap into` plus the adjective `the unique expertise` realises an unequal relationship between the 'haves' and 'have nots'. Here two social actors are included in relation to the social practice of improving rural livelihoods but as unequal partners. That is, mining companies are represented as having, `the unique expertise`. On the other hand, the local communities whose livelihoods are to be improved are represented as having no expertise. Therefore, the 'have nots' are obliged to rely on the 'haves' if only they want to improve their livelihoods. Also, the use of a definite article, `the`, before the adjective, `the unique expertise`, presupposes that mining companies have a particular expertise relevant to the process of improving rural livelihoods. But the representation of the mining companies as the 'messiah's' of livelihoods improvement on the basis of, `the unique expertise`, could seek to legitimate the activities of mining companies. This is because local activist and NGOs have often criticised mining negative effects on rural livelihoods. Thus, portraying mining as a practice which improves rural livelihoods, can be seen as setting up a polemical relation between government public discourse on mining and the negative discourses on mining and local community livelihoods. To add, the representation through the notion of, `partnership`, legitimated by the desire to improve livelihoods, brackets alternative representations. For instance, there is the discourse that mining companies destroy the livelihoods of their host communities. The ideological effect of representing the social relationship as one which ought to be based on partnership could be to close difference, in order thereby to legitimate mining companies control over resources.

Though similar to the use of modality to create unequal power relations in terms who have the expertise and who do not have, is the use of deontic modalities to construe unequal relations between the government and the mining companies. But the use of the language system of modality to create unequal power relations between the government and companies is different in terms of its focus on who has the power to impose a regulatory obligation on the other. For instance, in line 14 of extract 1 the deontic modality, `by requiring`, within its cotext construe an unequal relationship between the government and mining companies. It realises unequal relations because meaning can be construed that there is a higher-order authority which imposes mandatory obligation to be carried out by the mining companies. Additionally, in line 5 of extract 1, mining companies are represented in an unequal relation to the

government and the MC. This unequal relation can be realised in the modal auxiliaries, 'will be required', 'to be approved', and, 'approval by'. These modal auxiliaries within their cotext portray the speaker-in-text as higher-order authority or regulator who issues regulatory policy statements to be obeyed by a lower order social actors, the mining companies. Therefore, through the use of the language system of modality the government discourse construe an identity for the government as a regulator who will supervise and monitor mining companies' practices.

In the next section, I will use relational maps to summarise how the representation construe relationships between social actors, entities and social practices included in the representation.

7.2.4. SUMMARY OF GOVERNMENT'S REPRESENTATIONS

Figure 23 visualises the findings on relations made between mining and other entities in the situation. First, the analysis shows that the government is strongly committed to promoting the mining industry as a means to desirable processes such as rural development. Due to this construal of a positive relationship, I used a darkened-line to connect the government to the mining industry.

Moreover, the analysis shows that social action (s) that is/are going on is an attempt to promote and legitimise FDI on the basis of mining positive contribution to local CD.

Besides, the analysis indicates that social actors are included in the discourse through discursive strategies like genericisation, lexical choices, and construal of necessity. Furthermore, the analysis demonstrates the government and the mining companies are represented in discourse as dynamic forces responsible for the doings in the social practice of mining and CD. On the other hand, the local communities are construed as beneficiaries of the doings of both the government and the mining companies.

Furthermore, the analysis reveals that agency for doings is realised through transitive and verbs which express irrealis action. To add, the analysis indicates that the representation takes an oracular-agentive position that mining produces abstract negative environmental effects which are solvable within the existing structures.

Figure 23 visualises a strong negative connection between mining and the environment. The negative connection is demonstrated by using a red line to visualise how the government connects mining to the environment.

The analysis shows that though the representation recognises the role of mining companies in CD initiatives, no is imposed. Figure 23 visualises this absence of prescription through the use of a darkened but broken lines to demonstrate the absence of commitment. Finally, the analysis reveals that the representation is influenced by historical experiences of construing the mining and CD nexus, such experience inequity in distributing mining revenue.
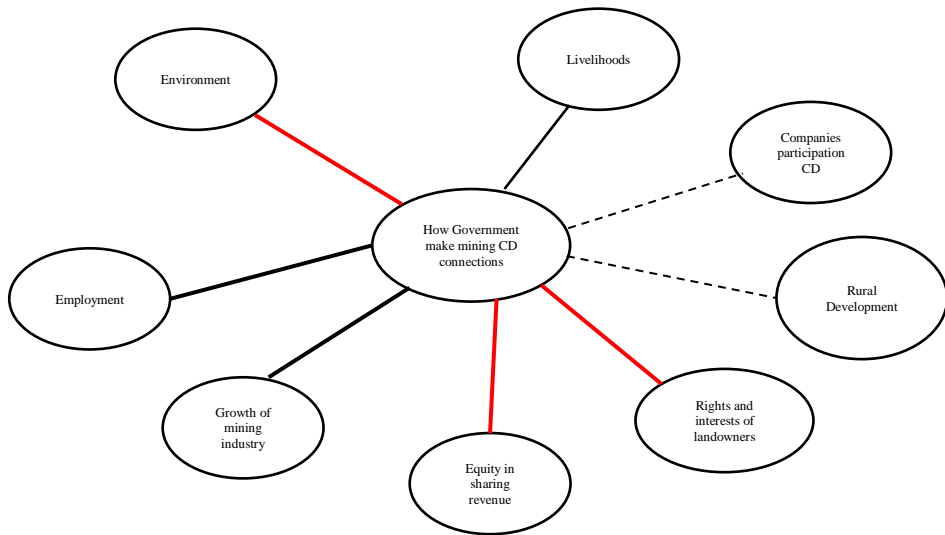
Figure 23 How the government representation make linkages between mining and other entities

Key:

————————	: Desirable but medium modality
———————— (red)	: Certainty of knowledge but solvable
- - - - - - - - - - - -	: Low modality

In the next section, I will analyse the voice of a CSO through a text analysis of a petition presented to the General Manager of Newmont Ahafo. This CSO is made up of mostly the Kenyasi Youth Associations of the Five Mine-affected Communities.

7.3. CIVIL SOCIETY REPRESENTATION OF SOCIAL ACTORS

In this representation, the field of discourse is constitutive of discourse. That is, the entities and actions which constitute the genre of a petition are displaced from the immediate environment of the text of the petition. For instance, the opening wording of the petition, 'Based on past experiences' suggests that not only are the kinds of events the speaker is going to talk about happened in the past, but also that the nature of evidence the speaker will marshal in the petition are in the form of discourses internalised in the historical body of people. Thus, the actions accounted for in the petition are relevant to the subject matter in the text of the petition yet the actions are displaced in time and space. The events, actors, and places referenced in the petition are all recreated through language.

The fields of discourse in the representation include; environmental effects, evaluation of Newmont CSR contribution to Ahafo South Development, corrupt practices in relation to Newmont's External Relations and HR Department, and together with the field of discourse construed by the recontextualisation of these practices.

Though the representation recontextualises actual social practices, one can identify actions going on in the recontextualisation of social practices. For instance, the petition contains accusation that `some key Newmont managers` are engaged in corrupt and nepotic acts. There is also action going on in terms of evaluation of Newmont's CSR practices. To add, the representation contains an action in the ongoing discourse, `giving NGGL a maximum of one week to address the issue raised above`. Through the present continuous verb, `giving` the representation issues an ultimatum.

In the next section, I will analyse the representation of social actors based on accounts of action. The analysis of social actor representation will be based on three elements of van Leeuwen's (2006, 2008) social actor representation; deletion, rearrangement, and substitution.

7.3.1. SOCIO-SEMANTIC REPRESENTATION OF SOCIAL ACTORS

In this section, I will analyse the inclusion and exclusion of the social actors in the petition.

(A) Inclusion and exclusion

The representation construes three categories of social actors, the local-locals, the non-locals, and Newmont and its staff. Within the cotext of the CSO representation, the local-locals are the indigenous people who suffer the direct effects of Newmont activities. They are also included in this presentation as the social actors who are either 'side-lined' or discriminated against in the sharing of benefits accruing from Newmont's activities, by, `some`, key management staff of the Newmont Ahafo Project. To further unpack the 'affected indigenous communities or local-locals', the key social actors behind the actions are the Kenyasi Number 2 Youth Association and their collaborators, the employees of Newmont subcontractors. On the other hand, the locals refer to Ghanaians who do not hail from any of the Five Mine-affected Communities but who are perceived by the Coalition as favoured for employment within the mine. Newmont and 'some' corrupt management level staff refers to employees of the Newmont Ahafo Project who included as those are working against the interest of both Newmont and the local-locals.

Besides, the discourse include semiotic tools which mediate how the local-local construe the NGGL and their development nexus. These elements include; historical body, employment agreement, environmental effects, land, ecosystems, buildings, wells, and plants. For instance, in line 20 of extract 2, semiotic objects which mediate how the local-locals take action include; social actions of the local-locals like cocoa trees, vegetable, wells, and their buildings. Other semiotic tools which afford how the local-local construe the Newmont Ahafo Mine and CD nexus include; livelihoods, very means of existence, ecosystem, environmental effects, and air pollution.

Though the representation includes Newmont CSR and royalty payment, the representation excludes details such as actual CSR activities undertaken at specific places. It also excludes specific amounts of royalty paid to the DA and TAs. The absence of these details made it difficult for readers to evaluate the claim that CSR and royalty payments are inadequate relative to Newmont's negative environmental effects.

In sum, the social actors included are; the local-locals, key Newmont Ahafo Mine management, communities, and youth. Also, the place included in the representation include Newmont Ghana Gold Ahafo catchment areas. Within these places, the actions accounted for include environmental pollution, CSR, payment of royalty, nepotism, corruption, greed and 'other malfeasance'.

In the next subsection, I will focus on analysing who is included in discourse as agentive force and who is included as a passive social actor.

(B)   Rearrangement

The discourse includes the local-locals from the Five Mine-affected Communities as the social actors who are making sense out of Newmont's doings to their collective ability to meet the basic requirements of human existence. For instance, in line 6 of extract 2, the discourse includes the local-locals individuals' social actors who have the agency to make sense out of Newmont's doing to the environment. This sense-making can be realised in conceptualising the environment as, `our only means of existence' and also in making sense of Newmont doings attribution of negative action, `is threatened and under serious destruction'. What these suggest is that Newmont's doing to the environment constitute a threat to individuals ability to meet the basic requirement for human survival such as potable water, safe foodstuffs, clean air, and safe acoustic environment.

Furthermore, the representation includes some high ranking officials of Newmont as agentive forces whose practices are detrimental to the welfare of the local-local individuals. For instance, in line 1 of extract 2, the representation included, `some key Newmont Ahafo Mine management' as agentive forces behind the existing high youth unemployment and a possible worse future situation. Specifically, high ranking officials of Newmont are categorised cliché of social actors within Newmont who engaged in negative social practices such as corruption and nepotism in Newmont HR recruitment processes. Also, 'some key Newmont managers' are categorised as corrupt managers who indulge in corrupt practices in the award of contracts to subcontractors. The linkage of high ranking officials of Newmont to corrupt practices can be realised through a conjunct, `by'. The conjunct, 'by' connect an uncountable number of official, `some key Newmont Ahafo Mine management' to corrupt and nepotic practices.

Moreover, there is a pattern of representation, whereby the 'local-local people' are included as sufferers of the doings of Newmont. Instances of the inclusion of the local-locals as individuals who assumed Newmont's negative environmental effects include:

> The mine-affected communities face numerous problems as a
> result of Newmont's operations in Ahafo mines [Line 8
> extract 2].
> The negative environmental effects because of NGGL's
> operations are catastrophic since these affect
> people's livelihoods as well as ecosystem [Line 11
> of extract 2].

Line 8 of extract 2, includes 2 nouns, 'mine-affected communities' and 'Newmont's operation'. However, 'Newmont's operations' appears in the representation as a social agent of the 'numerous problems'. The agency attributed to Newmont's operation in discourse is realised through the conjunctive phrase, 'as a result of'. The ideological effect of the aggregation, 'numerous' is to paint a picture that Newmont's environmental effects are widespread throughout the mine-affected communities.

However, in line 11 of extract 2, the representation differs from line 8 of extract 2 because line 11 of extract identifies a specific a semiotic entity, 'the environment' plus the context, 'The negative environmental effects'. However, rather the environment being used to make meaning/construe a context, the environment affords the CSO to take an action, to qualify Newmont's environmental effects as 'catastrophic'. Also, in line 11 of extract 2, the agent behind the negative environmental effects can be realised the conjunctive phrase, 'because of NGGL operation'. Whereas line 8 of extract 2, the representation of negative effect is abstract, as in, 'numerous problems as a result of, the problem is aggregated.' Another way in which the representation in line 11 of extract 2 differs from that of line 8 of extract 2, is that, in line 11 of extract 2, the 'environmental effects', of the NGGL are included as 'social agents' which affect both livelihoods and the ecosystem. Despite attributing the environmental effects as being a part of Newmont's actions, 'The negative environmental effects' is reified as the effects become agentive. That is people[22] and livelihoods become the object of the verb, '*affect*'. By this representation, one process, 'The negative environmental effects' is attributed to another process, 'NGGL's operations', and these chain of processes are represented as producing another process, negative environmental effects on people's, livelihoods and

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[22] The abstract noun 'people' in this particular context refers to the local-locals or the indigenous and affected people and their livelihoods which are specified in line 20 of extract 2.

ecosystems. However, Newmont becomes the agent which causes 'affect' because a preposition, 'from', linked the negative effects to Newmont's activities.

By reifying `Newmont's operations` and `'The negative environmental effects'` as the social agents behind the negative effect the representation excludes the actual activities which cause negative consequences to the mine-affected communities. The ideological of this form of exclusion can be to portray an allegation as an established fact, since the exclusion of actual activities leaves no traces for further investigation.

However, a critical reading of the petition revealed that the local-local social actors are not agentless. The discourse includes the local-local actors as a collective, 'we', who are able to make sense out of Newmont's doing to the environment. Figure 24 visualises how the CSO's voice makes sense out of Newmont's doings onto the environment. [23] In figure 24 Newmont is including as a source of doings, whereas local community social actors are included as making sense out of Newmont's doing.

But, the practices of engaging in transactive social actions and the social practice of semiotising the actions are not discrete actions. Also, figure 24 indicates that discourses in place such as livelihoods and ecosystems are included as mediational means which afford the CSO's discursive construal of the negative environmental effects as `'catastrophic'`.

The construal of a negative relation between Newmont's action and livelihood practices of the local-local individuals contrast with the government's representation of mining as an essential way of improving the livelihoods of mining communities. Thus comparing the CSO representation with that of the government points to a gap between the discourse of mining contribution to livelihoods improvement and actual practice. That is, though the government discourse textures a positive relationship between mining and local community livelihoods improvement, local-local actions of particular situations reveals a negative nexus. Therefore, what the difference between the CSO and the government discourse suggests is that the social practice of using government policy to 'filter' mining and CD nexus is not always effective.

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[23] The colour gold symbolises what Newmont aim to achieve from mining, green symbolises the people, places and things are a Greenfield and red indicates the negative evaluation of the doings.
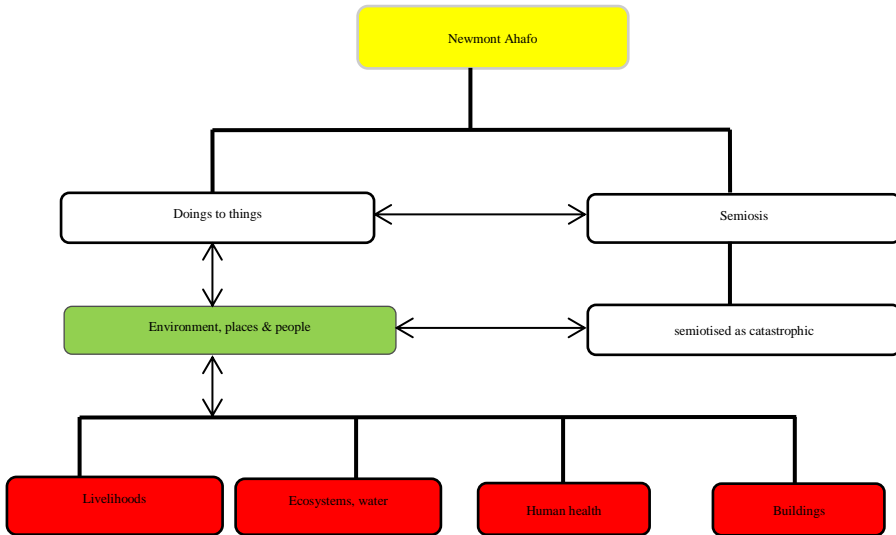
Figure 24 Summary of Newmonts doings

Additionally, the representation includes the local-locals as active agents in the discourse of monitoring Newmont's environmental effects. But in the actual practices, the local-locals are denied agency because the Newmont exclude them from the routine environmental monitoring. First, in line 15 of extract 2, there is an agreement to include the local-locals in the environmental monitoring process. Specifically, the inclusion can be realised in the transitive, `team is supposed to include the community members`. In contrast to the agency granted in the discourse, in line 16 of extract 2, the representation explicitly avers that `the team is made up of Newmont alone`. According to the CSO, the effect of the local community exclusion is that `the team is made up of Newmont alone, which always creates personal and conflict interest thereby resulting in inaccurate reporting on the state`. Conflict of interest and inaccuracy of monitoring reports suggest a challenge over the legitimacy of Newmont's environmental monitoring report. Therefore, this representation reveals a gap between Newmont's discourse on local community inclusion in environmental monitoring and the actual practice. Additionally, the representation is indicative of a struggle over discourse, in the sense that the CSO action in discourse constitutes a struggle over access to the forum to monitor and to jointly report on Newmont's environmental performance. To add, the CSO action in discourse can be seen as a critical discourse moment which challenges Newmont's dominance in the monitoring process.

Besides, the local-locals are included in the representation as sufferers of pervasive social practices of corruption by a high ranking official of Newmont Ahafo Project. For instance:

> Most of the key Newmont managers are doing ' back door businesses' within the company [Line24 of extract 2].
> Most of these key Newmont managers connive with its subcontractors and take some backdoor percentage from them before awarding contracts [Line 25 of extract 2].
> To the disadvantage of employees of the contractors, they are paid meagre wages since the contractors are aware of the corrupt officers/management [Line 26 of extract 2].

The pervasiveness of the social practice of corruption among Newmont's managers can be realised in line 24 of extract 2. Specifically, the pervasiveness of the situation can be realised in the modal verb, 'most'.

The question then is: If some of Newmont's managers are corrupt then what? Alleged bribe payment by Newmont's subcontractors and the alleged receipt of bribes by Newmont's managers affect the wages of the local-local employees of the Newmont subcontractors. For instance, line 26 of extract 2 lexically realises the effect of bribery on the local-local employees, 'To the disadvantage of employees' and the form of the disadvantage can be realised through the clause, 'they are paid meagre wage'. Representing the alleged social practice of bribery and corruption as pervasive could serve an ideological purpose of seeking the attention of the target readers of the petition.

In summary, the representation includes Newmont as the social agent which is involved in doing things to the environment and entities which exist in a dependence relation with the environment. The discourse includes the local community as the goals of Newmont's doings onto the environment. Beyond inclusion, as affected, the local-locals are included as active agents who make sense out of Newmont's social action based on the effect on their social practices such as farming.

In the next section, I will focus the analysis on selected elements of van Leeuwen (2008, 2016) socio-semantic categories of representation such as personalisation and categorisation.

(D) Substitution

There is a consistency in the inclusion of the affected community of experience through personalisation, specifically differentiation. The linguistic realisation of differentiation in the representation includes the use of pronouns like, 'we', 'us' and a determiner, 'our'. In contrast, the discourse includes Newmont and its agents through pronouns such as, 'they', 'your', 'you', 'some'. For instance, in line 1 of extract 2, the local-local individuals are included through the pronoun, 'we'. Also, the discourse includes Newmont though the pronoun, 'some' which realises unspecified Newmont managers. The realisation of social actors through, 'they', and, 'us', create a, 'they', and, 'us', a scenario whereby a, 'they', exist in conflict with the, 'we'.

Another way in which the representation personalises the inclusion of social actors is through the discursive strategy of nomination. In the CSO discourse, 'nomination' is linguistically realised through given names, surnames and also through the inclusion of designations. For instance, the representation instantiates nomination, in lines 38 and 40 of extract 2:

> Most of key Newmont Ahafo managers and staff strategically used their positions to the disadvantage of the company and the community members [Line 37 extract 2].
>
> Key among them are; David Darkwa (Social Responsibility Manager), Chris Kojo Yiadom (Community Relation Superintendent), Reinus Adam (Human Resource Manager-African Underground Mining Services (AUMS)), John Quits (Project Manager-AUMS) and the Newmont HR department [Line 38 extract 2].
>
> Just for the records, Mr. Charles Kwame Yeboah had got a lot of his favourites from outside the affected communities employed including his daughter, Judith Yeboah, who was a service personnel in NGGL, who had over 5 months to complete her service, to occupy a position of PITRAM [name of a company]administrator at AUMS [Line 40 extract 2].

In lines 38 and 40 of extract 2, nomination is specifically realised in a semi-formal way. For instance, line 38 of extract 2 realises nomination through the inclusion of the social actor's surname, given names plus designation within an organisation, David Darkwa [given name + surname]. Additionally, in line 38 of extract 2 nominations can be realised through the inclusion of the social actor's designation within the organisation, for instance, the inclusion of the designation, Social

`Responsibility Manager.` To add, in line 40 of extract 2, the discourse realises nomination differently by titillation. Line 40 of extract 2 linguistically realises nomination through the inclusion of the title, `'Mr'` to the full name of the social actor, `'[…] Mr. Charles Kwame Yeboah […].`

Within the genre of a petition, the discursive strategy of inclusion through nomination could serve the purpose of providing specific details to back specific allegation of wrong doing by particular office holders. The ideological effects of nomination are to enhance the status of the allegation and also to establish a prima facie case which the General Manager can probe further.

Besides, there is a pattern of representation which aggregates the accused social actors before they are nominated and categorised on the basis of their positions or functional roles within the company. For instance, in line 24, 25, and 28 aggregations are linguistically realised through the use of the determiner, `'most'`. The use of the determinant, `'most'` as qualification before nouns which are talked about could be a way to demonstrate that a greater number of Newmont's managers are engaged in corrupt practices.

To add, in line 37, the representation alleges that key management members use their positions to the disadvantage of the Newmont and its local community. Therefore, the reader will seek to ascertain by asking; who are they and which management positions do they hold? The petition discharges the burden of proof through the mention of the name of the managers, the management positions they occupy and the instances of perceived corrupt practice. This sort of representation is in line with van Leeuwen's assertion that nominated social actors in representation grasp the attention of readers relative to social actors who are given a passing reference (van Leeuwen, 2008).

Moreover, the discourse categorises social actors within Newmont on the basis of what they do, either in de facto and de jure ways. For instance, the representation categorised the nominated social actors within Newmont as persons who used their positions of influence in a de jure way and also to the disadvantage of both the NGGL and its host communities. Specifically, in line 24 of extract 2, most of the Newmont managers are categorised as corrupt officials on the basis of what the activist perceived them to be engaged in, `'they are doing backdoor businesses within the company'`. Further in line 25 of extract 2, the discourse provides the particulars of the corrupt practices the managers allegedly engaged in, `'they connive with subcontractors and take backdoor percentages from them before awarding contracts.` To unpack the term, `'backdoor percentages',` the use of this term within its context implies that the managers allegedly demand a percentage of the contract sum from contractors before contracts can be awarded to them. The implication of this corrupt practice is that such managers are unable to hold the subcontractors accountable for not paying their employees the agreed wages. This

implication is implicitly realised in line 31 of extract 2 as in, `[…] that managers of NGGL could not intervene should the employees complain of their working conditions due to this canker'. In plain language, the managers of Newmont are unable to address concerns over low wages of Newmont subcontractors because they illegal retain a percentage of the contract sum for their personal benefit.

Besides, the discourse includes social actors within Newmont through a discursive strategy of relational identification. This discursive strategy of inclusion is realised in the discourse in two ways; on the basis of work relations and also on kinship relations. For instance, the inclusion of social actors within Newmont through the discursive strategy of relational identification is instantiated in lines 40 of extract 2. This way the discursive strategy of inclusion is linguistically realised through the possessive pronouns, `his daughter' and `his favourite' [Line 40 of extract 2].

A similar, but different use realisation of inclusion through relational identification can be realised in line 26 of extract 2 where employees are realised in worker-employer relation. These worker relations are lexically realised in, employees, and contractors, and also realised through implicit differentiation between those who pay wages, contractors and those who earn wages, employees.

From my reading of the text, the use of relational identification could serve the purpose guiding the reader of the petition to appreciate the propositional content of the Coalition, which can be interpreted to mean that key managers of Newmont are corrupt. Moreover, the inclusion of social actors within Newmont through the discursive strategy of relational identification is interesting in the sense that such a discourse provide the evidential basis of the allegations on corrupt, and nepotic practices which work to disadvantage the local-local access to employment at the mines. Also, the relational identification on the basis of worker relations is interesting as it draws specific attention to the situation of specific employees and their employers for resolution by the target reader.

Additionally, the discourse employs the discursive strategy of classification in the representation of social actors. The classification includes; mine-affected communities,local-locals, non-local, Newmont employees, and employees of subcontractors. For instance, line 13 of extract 2, realises categorisation by classification by way of classifying mining companies in terms of size. This classification is realised in the noun, `Large-scale gold mining company' because the adjective large-scales put the company into a particular group among mining companies. This classification into a category of the large-scale company achieves a discursive purpose of particularising and assigning some qualities to Newmont. For instance, `Large-scale mining companies like Newmont are particularly destructive because it involves the processing of huge volumes of ground rock, using cyanide to

separate gold from the ore' [Line 13 extract 2]. The adverb, 'particularly', lexically realises the particularisation of negative effect because Newmont belongs to a particular category of companies. Perhaps, the use of categorisation by function suggests that the petitioners have adequate knowledge about the mining sector in general, and therefore seek to gain readers or listeners credibility. However, through the use of a simile, 'like' the author specifically mentions Newmont as one of those large-scale mining companies which produce destructive environmental effects.

7.3.2. DISCOURSE ANALYSIS OF CSO REPRESENTATION

From a critical reading of the CSO text and also by paying close attention to the meanings construed by the lexical choices of the representation, the discourse topics include; a dominant environmental discourse, affect or effect, local-local employment, accountability, corruption and nepotism, CSR and royalty discourses. However, these discourse topics are not watertight compartments but also they are inseparably linked. For instance, the environmental discourse appears to be the nodal point where the rest of the discourses 'congregate'. Inductively, the environmental discourse integrates other discourses in this way; threatened environment→threat to 'our ONLY means of survival'→dispossession from lands→threatened livelihoods→high levels unemployment→impoverishment→inadequacy of royalties and CSR →breach of SLO.

Based on my close reading of the text, lexical choices which express meaning over Newmont's interaction with nature include; environmental pollution, impacts, only means of existence, threatened serious destruction, environmental effects, livelihoods, ecosystem, harmful toxic, environmental monitoring. Based on a critical reading of these lexical choices, environmental management discourse refers to the meaning local-local activists make out of Newmont's interactions with the environment and its implication on their ability to meet their basic needs. For instance, the lexical choice, 'threatened' expresses a meaning over Newmont's action possibly exceeding the carrying capacity of the environment. Also, the lexical choice, 'environmental monitoring' within its cotext realises meaning in terms of the value local-local activists place on their role in routinely tracking and reporting on Newmont's environmental management practices.

Moreover, line 4 of extract 2 echoes environmental management discourse. This discourse can be realised through lexical choices such as, 'mine-affected', 'adequately offset' and 'impacts'. The environmental discourse is the dominant discourse because as figure 24 shows any other meaning the CSO makes out of Newmont's actions are interpreted within the context of destruction to the environment. Within their context, these lexical choices construe a meaning potential that Newmont's environmental management practices are inadequate to offset the

existing and impending environmental impacts. By this, a discursive moment occurs in which Newmont environmental management practices are challenged thus calling for alternative environmental management practices.

Closely related to the environmental management discourse are the participation and democratic accountability discourse in environmental management. For instance, in line 15 of extract 2 the discursive element, `local agreement`, and lexical choices such as, `team` and `include` point to what ought to be, a participatory environmental management practice. However, in line 16 of extract 2, the discourse construes an actual practice different from what ought to be. The difference between what is construed in discourse and actual practice is can be realised through a discourse marker, `contrary`. This discourse marker in its cotext indicates the beginning of something different from the expected.

However, the representation in line 16 of extract 2 is beyond inclusion but also it is about an expectation of accountability and transparency. The expectation of accountability and transparency in environmental monitoring can be realised from the meaning construed by the demand for inclusion and the creation of doubts over the legitimacy of the environmental monitoring reports produced by Newmont. Thus, this discourse can be seen as an instantiation of a struggle over discourse because the local-local activists are in a struggle with Newmont to be part of a routine monitoring process.

Related to the environmental discourse but different is the affect or effect discourse. This discourse is similar to environmental discourse because it includes doing to the environment. But it differs in the sense that it integrates the meaning local-local activists make out of Newmont's doing to people, places where local-local social action take place and other semiotic objects within local-local places. The 'affect' discourse refers to local-local individuals meaning-making about the impact of the mine on other activities within their routine places, on their livelihoods, infrastructure and the long-term effect loosely referred here as sustainability. The affect discourse is instantiated in the representation through lexical choices such as; `mine-affected communities, impoverishment, means of existence is threatened, cracking and the collapse of buildings, vegetables unwholesome`. Thus, in figure 24, the 'affect' discourse is visualised in the elements labelled in red ink.

Local-local employment discourse refers to the meaning which the CSO makes between Newmont's recruitment practices and the access of local-local individuals to employment within the mines. Lexical choices which echo local-local employment discourse include; `unemployment`, `permanent jobs`, and `key managerial positions`. These lexical choices within their context construe a situation in which the local-locals are positioned in discourse as discriminated against in terms of access to, `permanent jobs` and `key managerial positions`. In the representation, the causal narrative for the local-locals lack of access to permanent job differs from

conventional skills deficit. The discourse includes corruption and nepotism as the practices working to the disadvantage of the local-locals access to permanent employment at the mines.

Corruption and nepotism discourse is dialectically related to Newmont's employment practices because corruption and nepotism are construed in the discourse as working against the joint interest of both the company and the local-locals. For instance, in line 37 of extract 2, the discourse realises corruption:

> Most of key `Newmont` `Ahafo` managers and staff strategically used their posit1ons to the `disadvantage` `of` `the` `company` and the community members [Line 37 of extract 2].

Here the discourse, '`strategically used their posit1ons`' affords the representation ability to portray the affected manager as corrupt, since they use official positions of responsibility for personal gains such as employing their kith and kins as well as their favourites. The evidential basis for the abuse of office for private gain is provided in lines 40 of extract 2. Linguistically, corruption and nepotism are realised through a discursive strategy of relational identification of social actors such as, '`his daughter, Judith Barima`'. The representation makes a relational connection between the manager and an employee through blood relation which is realised in the pronoun, '`his`' and the noun, '`daughter`'.

Newmont pre-mining reports categorised the local-locals as lacking the requisite employable skills. In addition, in the process of engaging the nexus my gatekeeper, one implied that the youth who are advocating for employment lacked the education required for such jobs. Therefore, the CSO discourse portraying corruption and nepotism rather inadequacy of skills as the cause of high unemployment among the youth creates a polemic. The difference in local-local activist discourse and Newmont's pre-mining discourse constitutes a struggle for power to define the Newmont and local community employment relationship.

Also, the CSO representation construes Newmont CSR practice as a mitigation measure to Newmont's environmental problems. However, the discourse construes Newmont CSR as disproportionate to Newmont's environmental bills which are left for the local-locals to pick. What this demonstrates is that discourses in place, environmental effects, constitutes a mediational means which affords the CSO action of evaluating Newmont CSR performance alongside Newmont's environmental effects.

Though the CSO discourse evaluates Newmont's voluntary contribution, the NADeF Fund, as disproportional to environmental cost, '`would not adequately offset such impacts`'. This representation differs from interview talk about

NADeF Fund. For instance, the Ananekrom discourse construed the problem as the local-locals not having access to the NADeF Fund because those who stand-in for them are not sending their request into the empowered space. But the CSO discourse connects with the position of the President of the International Chamber of Commerce and the World Business Council for SD (WBCSD) that if all the CSR action were to be pooled together the environment will not be saved (Dryzek, 2013).

In summary, the persistent discourses circulating within the CSO petition include environmental, affect or effect, CSR, an expectation of accountability and bribery and corruption discourse.

Due to the interrelatedness of the social practices of Newmont and CD recontextualised in the CSO representation, I will use Dryzek's framework to analyse the content of the main discourses circulating with the CSO text. The use of Dryzek's framework to delineate the main elements of the dominant discourse will constitute a way of differentiating between discourses in the representations on Newmont and CD nexus. The constitutive elements of the environmental Discourse in the CSO text can be pooled together as follows:

    i.   Basic entities whose existence is recognised or constructed
- A company, corrupt officials, local-local people, participation.
- Houses, wells and cocoa trees.
- Forms of activities: recreated company actions.

    ii.   Assumptions about natural relationships;
- Not limit but implementation.
- Cooperation and competition.
- Equality in participation.
- Role of the state in redistribution.

    iii.   Key agents and their motive
- Community interest.
- Material interest.
- Compensation for properties.
- Compensation for livelihoods.
- Access to tenured jobs.

    iv.   Key metaphors and other rhetorical devices
- Environmental as only means of existence.
- Threats.
- Partial irreversibility of effects.

    v.   Openness to difference or homogenisation
- Excludes places.
- Excludes pictures of places and where the action occurs.
- Excludes voices of the company.
- Exclude voices of company officials.

NA methodology focus on micro discourses as the nexus within which Discourses circulate, it is productive to provide a context for the discourses circulating within the CSO text. Though the environmental, CSR, and effect discourses have proliferated

the CSO text they are imprecise because their constituent elements have not been systematically identified as in the case of Dryzek's environmental discourses. Moreover, because the discourses analysed in the preceding section were inductively identified I will in the next section use Dryzek (2013) framework as the context within which the discourses inductively pooled out from the CSO text can be understood. Dryzek (2013) classified environmental discourses into four main categories; limits and survival, promethean, SD, and problem-solving Discourse. [24]

7.3.3. TRAJECTORIES OF DISCOURSE

First, the storyline of the problem-solving Discourse is that there are serious effects of human activities on the environment, however, these effects can be resolved within the limits of the existing framework defined by the political economy of liberal capitalism. This problem-solving Discourse has three main variants: administrative rationalism, democratic pragmatism and leaves it to market approach. This section of the study will be guided by democratic pragmatism. Democratic pragmatism takes it for granted that environmental problems can be resolved within the structures defined by liberal capitalism. However, the expertise in solving environmental problems are not centralised but rather decentralised to include networks of actors including community mobilisations.

Second, there is a limit and survivalist discourse whose storyline is that nature is finite and the continuous exploitation of natural resources within the capitalist economic system poses a threat to the capacity of nature to support life. For this reason, steps have to be instituted to reverse an impending overshoot.

Third, the Promethean Discourse opposes limits and survivalists as well as a litany of lamentations over environmental degradation. Its storyline is that natural resources, ecosystems, and nature are non-existent entities. Also, Promethean dismisses limits to growth because price determines scarcity. If there is scarcity it will increase the price and cause the ingenious human in a technological world to explore new sources or develop substitutes. According to Promethean Discourse technology is deployed by the government. However, Julian Simon, adds human well-being as an alternative measure of resource availability. According to this view, global trends show that life expectancy is increasing, thus an indication that pollution is reducing (Dryzek, 2013).

Fourth, the SD Discourse reconciles the conflict between limits and boundaries and Promethean Discourse. Thus SD Discourse becomes the nodal point of environmental discourse. The storyline of SD Discourse is that the developing countries cannot follow the development trajectory of the developed world because the continuous

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[24] A summary of Dryzek's environmental discourses is presented in Appendix H.

exploitation of natural resources will place a burden on the ecosystem. However, SD Discourse recognises economic growth as a means of meeting the needs of ecology, economic growth, social justice, and intergenerational equity. Particularly, SD recognises that it just and fair for developing countries to exploit their natural resources in order to meet their basic needs.

The CSO discourse echoes a problem-solving Discourse to the extent that the discourse expresses the position that the socio-environmental problems caused by Newmont can be resolved within the existing framework of capitalist exploitation. That is, the CSO representation takes it for granted that the effects of Newmont's activities can be solved within the established organisational structures of Newmont. For instance, in line 10 of extract 2, the action, 'we present this petition to your outfit', and the purpose of the action is, 'to have a lasting solution to the already existing and impending challenges'. Implicitly realised in the what for of the action, is a belief that the leader of the capitalist organisation can find a lasting solution to existing and future problems.

To add, in line 15 of extract 2, the representation denotes democratic pragmatic as an element of problem-solving discourse. Democratic pragmatism discourse can be seen in the CSO discourse through the element of legitimate expectation over the inclusion of many voices in Newmont's environmental monitoring practices. In line 15 of extract 2 the legitimate expectation over the inclusion of voices outside of the Newmont can be lexically realised in, 'the environmental monitoring team is supposed *to include* the community members', my emphasis here is on 'to include'. In democratic pragmatism, the inclusion of different voices offers the solution legitimacy. Similarly, in the CSO discourse the exclusion of the local-local voices from Newmont state of the environment reports, delegitimises Newmont reports, as in the reports 'creates personal and conflict interest thereby resulting in inaccurate reporting' [Line 16 of extract 2]. Aside from legitimacy, there is the issue of democratic accountability and transparency in Newmont's environmental monitoring practice. For instance, in line 5 of extract 2, the representation expressed concern over a perceived lack of transparency and participation and in line 15 of extract 2 the representation revealed that there is a gap between Newmont's discourse on participatory environmental management and the actual performance. In addition to the inclusion of local community networks, the CSO representation appears to have given prominence to homo civicus rather than homo bureaucratis, because throughout the CSO representation state bureaucracy like the EPA is absent. The absence of state bureaucracy in the CSO discourse this constitutes a realisation of an element of democratic pragmatism.

But the CSO discourse differs from democratic pragmatism in the sense that it recognises the ecosystem and the environment, both of which democratic pragmatism does not. Not only does the CSO discourse recognise ecosystem but also the agents behind the discourse exist in a close and possessive relations with the environment,

'our environment', and the environment is their everything, 'our only means of existence is threatened and under serious destruction'. Here, 'threatened and under serious destruction,' suggests that the discourse move beyond recognition of nature to an evaluation of the effect of Newmont's interaction with the environment.

Nevertheless, lexical choices such as 'threatened and under serious destruction,[line6 of extract 2] and Damage caused to the environment will never be fully reversed, realises an encroachment of a limit and boundary Discourse. In line 12 of extract 2, the linguistic realisation of a near-limits and survivalist discourse is 'will never be fully reversed'.

But the CSO discourse differs from limits and boundaries in the sense that regardless of the threat, destruction, and non-reversibility of Newmont's negative effect on the environment, the CSO representation seems to suggest that these negative efforts can be 'adequately' monitored. The belief in joint monitoring as a solution is a departure from limits and survivalist emphasis of overshoot of the planetary boundaries and the need for a change in the societal and economic system. However, this representation cannot be seen as a contradiction or even wrong but rather a reflection of the dialectical relations and synergies which exist between environmentalism and affected voices.

Other elements of limits and boundary Discourse which the CSO discourse share includes lamentations over the negative effects of Newmont's doings to the environment and its ripple effect on semiotic objects of material importance to the local-local affected voices. For instance, in line 20 the lexical choices which realise lamentations over the effect of Newmont's blasting activities on local-local social action include, 'cracking and the collapse of buildings', 'causing deep cracks to wells', 'destroying cocoa trees' and 'vegetables unwholesome for consumption'. Further, line 21 of extract 2 contained lexical which realise the environmental effects of Newmont on individuals, 'causes fear and panic' to 'especially to children, hypertensive patients, and pregnant women'.

However, local-local representation differs from limit Discourse because the interest of the agent behind the CSO discourse is not concerned about the environment for the sake of ecology or aesthetics but rather their representation is from the perspectives of the negative effects of Newmont's action on their material interest and existence now and also in the future. To add, the CSO discourse differs from limits Discourse because it is not a concern about finding global solutions to global problems but finding local solutions to problems created by a global-local actor, which problems are suffered by local-local people living in their local-local places.

As different elements of different Discourses permeate the CSO discourse, there are also elements of SD Discourse which is a sort of becoming the 'nodal point' within

which the different discourses converge. Lexical choices which point to the presence of SD Discourse include; `environmental monitoring, lasting solution, impoverishment, and means of existence`. For instance, the transitive, `'to have a lasting solution'`, in line 10 of extract 3 realises the CSO quest for a sustainable solution to the threat to their basic human needs, 'means of existence'. It also implies the SD Discourse perspective that companies can act in a way that will safeguard the environment, reduce negative social and environmental impacts. Therefore, unlike the interview voices, the CSO discourse includes an element of SD Discourse which focuses on meeting present needs as well as future needs of local-local current and future generation.

In the next section, I will analyse how discourses afford and constrain how the CSO construe Newmont and CD nexus. The analysis will focus on how the CSO express the desirability and undesirability of linkages between Newmont's action and other elements in the situation. Besides, the analysis will draw on the language's system of modality to analyse how the CSO construe a relationship between Newmont and CD nexus.

7.3.4. INTERPERSONAL METAFUNCTION

Based on my critical reading of the CSO text the common pronouns used in texturing relationships include, a, `'we'`, `'us'` and `'our'`, on the one hand, and a `'your, they, them'` on the other hand. The first category, of pronouns, refers to the local-local people who are categorised as `'affected communities'`.[25] The second category refers to actors within or in the Newmont system whose actions have an effect on the mine-affected communities. The context of these pronouns shows that they are used to create interpersonal relations of the difference of 'affect' between the petitioners and its addressee. For instance, the pronoun, `'we'`, referenced as a community of negative experience. In contrast, the pronoun, `'some'` referenced an unnumbered officials of Newmont whose actions deny local-locals access to employment. Therefore, the pronoun, `'some'`, differentiates the 'bad guys' with Newmont's management from the good ones. Additionally, the petitioners used, `'our'`, to show their personal relations with the environment, which personal relations are connected to their livelihood, `'our environment and in fact our only means of existence…'` The inclusion of social actors is through a, `'we'`, `'us'`, `'our'`, versus a, `'they'`, on the one hand, express relational positioning within the discourse. Similarly, among community-level social actors, the representation makes relation differentiation through a categorisation of non-local and local-locals.

Furthermore, the CSO discourse makes negative connections between Newmont's actions on the basis of discourses internalised in the historical body of a collective. For instance, in line 1 of extract 2, the representation includes actions internalised in

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[25] These include 'we', 'us', and 'our'.

the historical body of a collective, `based on experience`, as the basis for which they infer into what their future will look, `would be worse of`, if nominated circumstances are not addressed. From the context, the discourse internalised as collective experience includes high unemployment, discrimination in access to permanent jobs, the experience of environmental pollution and livelihoods destruction.

Besides, the discourse construes the Newmont and CD nexus based on evaluation of Newmont's actions which are going and the meaning which the local-locals make out of the actions on entities of nature. For instance, in line 18 of extract 2, the representation makes a connection between Newmont and local-local means of existence based on ongoing actions such as `noise pollution, air pollution, and the environmental hazards`. The linkage of these forms of pollution to the local-locals can be seen in terms of the effect of the action on a collective means of survival, `our very existence are threatened`. Within its cotext the verb, `threatened`, evaluates the effects of pollution on, `our very means of existence`. This representation is interesting as `a very means of existence is threatened`, connotes sense that the environment which the group relied on is exploited beyond its carrying capacity whereby the group can no longer meet their basic human needs which depend on the environment.

Similarly, the discourse construes Newmont and CD nexus on the basis of action occurring at places and its effects on semiotic objects and people. For instance, in line 21 of extract 2, the representation construes an ongoing excessive blasting at an unnamed place and this action produces negative effects on people. The blasting is negatively evaluated as an activity which, `it causes fear and panic to community members especially children, hypertension patients, and pregnant women`.

Moreover, the representation establishes a linkage between Newmont social action and its negative effects on discourses in the built environment. For example, in line 20 of extract 2, the representation makes a negative connection between Newmont action, `blasting`, and discourses in places such as, `buildings`, `walls` and `well`, as well as outcomes of local-locals social action the such as, `cocoa trees and vegetables`. These discourses place in the built environment constitutes mediational means for evaluating Newmont and CD nexus.

The representation construes an undesirable relationship between Newmont action and existing socio-economic circumstances of the local-local individuals. For instance, in line 1 of extract 2, the representation includes an evaluation of the relationship between Newmont's action and the circumstance of a, `we`. The evaluative aspect of the language in use can be realised in the adjective, `affected`. Another adjective which performs evaluative functions within line 1 of extract 2 is, `high-level`, which qualifies a noun, `of unemployment`. In other words, what

the discourses in place affords the CSO to do can be sum up this way: past experience informed → possible worse future→worse future can be changed →if existing high youth unemployment is changed→if corruption among key management staff of Newmont stops→ high-level of youth unemployment will be reduced→and by implication there will be a brighter future.

Similarly, the discourse contains a negative evaluation of Newmont's CSR and royalty payment as mitigation social practices. Therefore, the discourse on royalty payment and Newmont CSR can be expressed as: we know royalty payment and NADeF Fund exists to mitigate socio-environmental cost but we take the position that these actions are inadequate. Simply put, discourse takes an oracular-agnostic position. Linguistically, the negative evaluation of the inadequacy of Newmont's CSR as mitigation measure can be realised in the negation, `are not convinced'.

Moreover, the discourse makes a connection between the participation of the local-locals in Newmont's environmental monitoring processes and the legitimacy of the environmental reports produced by Newmont. For instance, in line 15 of extract 2 a discourse in place, `local agreement', affords the collective social actors the ability to question the legitimacy of Newmont's environmental management. Though the abstract system of agreement making includes local community actors in environmental monitoring the representation indicates that they are removed. Due to the actual exclusion of discursively included social actors, the representation questioned the democratic legitimacy of the outcome of Newmont environmental monitoring reports on the state of the environment. The linguistic realisation of negative evaluation can be found in line 16 of extract 2, `creates personal and conflict interest thereby resulting in inaccurate reporting on the state of the pollution'. These lexical choices realise the absence of democratic accountability in the environmental monitoring process, failure to secure legitimacy for the process and the outcome.

The representation expresses a high degree of commitment to the truth of a negative relationship between Newmont action and their only means of existence. For instance, in line 6 of extract 2:

> Our environment, and in fact our only means of existence
> is threatened and under serious destruction.

Here the representation makes a realis statement about the effect of Newmont on not just the environment, but one in which the local-locals exist in a possessive relationship with, as in, `our environment'. Besides, the local-locals are positioned in a relationship which portrays the environment as the only way of survival and this is linguistically realised in, `our only means of existence'. Being their only means of existence is beyond mere ownership but also include the ability of the local-locals to meet their basic human needs now and in the

future. Therefore, this representation connotes a discourse of threat to the survival of a collective, as realised in the pronoun, `our`.

Similarly, in recreating past occurrence in the ongoing discourse, 'a petition', the discourse avers a certainty of knowledge about a negative relationship between Newmont past social actions and other semiotic objects in the situation. For instance, this pattern of representation is instantiated in line 11 of extract 2:

> The negative environmental effects because of NGGL's operations are catastrophic since these affect people's livelihoods as well as ecosystem.

In this representation, the local-locals take responsibility for the oracular statement that Newmont produces negative environmental effects. Linguistically, the certainty of knowledge of negative effect can be realised in, `are catastrophic`. Since every act of language use involves a choice, the representation could have alternative expressed this in uncertain terms such as, `seems catastrophic`. In contrast, the discourse employs medium modality in relation to averment about the future relationship between Newmont's action and other entities in the situation. For instance, in line 1 of extract 2, the representation expresses a medium commitment to the truth of the proposition on the possible worse future situation through the use of the modal auxiliary, `would be`, and not, `shall be`.

In the next section, I will use Clarke's relational map to summarise how the CSO discourse makes linkages between Newmont's operations and entities in local-local places.

7.3.5. SUMMARY OF CIVIL SOCIETY'S REPRESENTATIONS

Figure 21 visualises the negative linkages which the CSO representation make between Newmont social action and people, places and other meaning-making resources.

The analysis indicates that the action going on in the CSO discourse is an evaluative account of the effects of Newmont's action on the environment and various elements within local-local places. Furthermore, the analysis demonstrates that Newmont is the social actor behind the negative environmental effects such as dust pollution of vegetables and cracks on walls. Besides, the analysis reveals that the CSO discourse construes an undesirable relationship between Newmont's social action such as blasting and other elements, such as the effect of sound from blasting on already vulnerable people including pregnant women, children and hypertensive patients.

The analysis reveals that discourses internalised as a collective experience is a semiotic material which affords the CSO construal of a negative relationship between Newmont's action and the present circumstances of the local-local people.

Furthermore, the analysis indicates that discourses in a material object which exist in places where Newmont's action take place constitute mediational means for construing the gold mining and local CD. Moreover, the analysis suggests that CSR and royalty payment is an inadequate social mitigation measure.
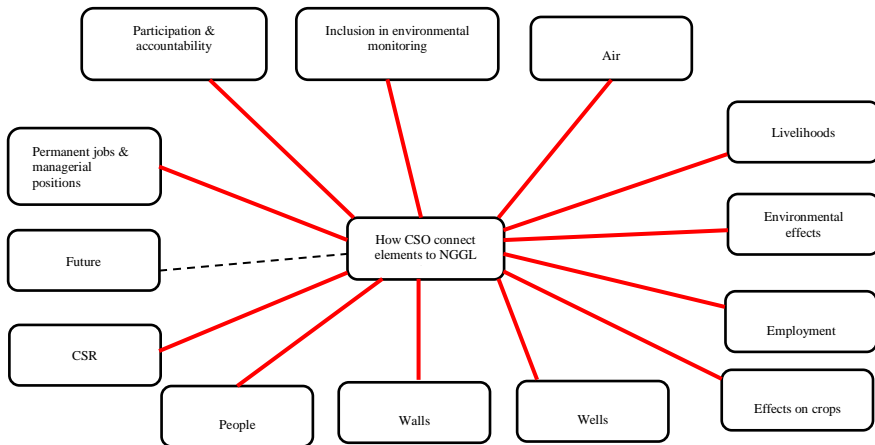
Figure 25 How CSO make connections between Newmont's actions and entities

Key:

──────────────────────────── : High undesirable relationship

------------------------------- : Low modality about a future relationship

Finally, the analysis shows that the CSO expect democratic participation and accountability in the environmental management process.

The next chapter will be a continuation of the stage of navigating the nexus of practice. However, the next chapter will differ from chapter 7 in the sense that it will analyse individual voices within the private sphere of everyday talk. In the next chapter, I will focus on analysing SA by inviting and individuals to talk about social action, and the connection between SA and their 'daily life'. In the next chapter, the voices of the local-local social actors will be analysed alongside pictures. The analysis of pictures will drive the messages in the representation forward by serving as visual evidence of what is going on at places where local-local individual social action and Newmont's social action interact.

CHAPTER 8. EMPOWERING THE SILENT VOICES

This chapter is a continuation of the analysis of the nexus of practice. However, chapter 8 differs from chapter 7 in the sense that chapter 8 analyses how individuals within their routine place use an interview as a social practice to account for the implications of Newmont's environmental effects on people, places and other semiotic objects. The voices analysed here reflect individuals' accounts of their everyday knowledge, experiences, and observations about Newmont's environmental effects in materially situated places. The voices of concern analysed in this chapter echoes 'what is going on' at the Ananekrom, Dokyikrom, Kantinka, and Yarogrumah communities. These four communities are part of the Newmont Ahafo Mine Catchment Communities in which Newmont action occurred or are ongoing.

The next section will seek to introduce the 'what actions are going on' or being accounted for in the Dokyikrom, Kantinka, Yarogrumah, and Ananekrom?

8.1. INTRODUCTION TO ANALYSING INTERVIEW VOICES

In the Ananekrom there is a voice of concern about the effect of Newmont on 'River Subri', which hitherto served as a source of potable water for residents within the Appensu South area. Besides, the Ananekrom voice calls attention to perceived leakages from the Newmont's Environmental Control Dam and its effects on crops and human lives.

The representation of the Kantinka community is about the unclear processes of the social practices of compensation and resettlement. It is also about how some 37 individuals in the Kantinka community experienced human rights violations in the compensation and resettlement process.

A voice of concern from Dokyikrom calls for the resettlement of the inhabitants from the Dokyikrom, due to perceived contamination of their only source of potable water. Besides, the Dokyikrom call for resettlement is based on accounts of individuals' routine experience of new types of diseases.

In the case of Yarogrumah community, the voice is largely about the environmental effects of Newmont's social action on crops and human lives. Furthermore, the voice from Yarogrumah is about how Newmont's actions negatively affect local-locals social practices like going to school and the availability of land for food crop farming. Moreover, the voice from Yarogrumah community concerns the Member of Parliament not being responsive to the calls from the affected local-locals for a voice.

Analytically, appendices G, H and I are included as sensitising tools which evolved out of my experience in proceeding into the analysis of the Ananekrom interview accounts without any guide. The practice of entering into an analysis of interview accounts without a guide posed a challenge as to what element should be placed where? The process was time-consuming as it also leads to duplications. The experience gained from analysing the Ananekrom interview prompted me to move into an analysis of the rest of the interview accounts in a systematic way, through appendices G, H, and I. However, the tables point to what I can see and say in relation to specific discourse and questions but also make room for movement beyond what is included in these tables.

In what follows I will offer a brief description of the local communities in which Newmont's social actions which are accounted for through interviews take place.

Description of interviews

Ananekrom is one of Newmont's catchment communities within the Appensu South area where individual local-local community people are involved in making meaning out of Newmont's activities in relation to human well-being at materially situated places. Most of the local community individuals in the Ananekrom engaged in agriculture as a source of income. The introduction of open-cut mining displaced these local-local individuals. Additionally, the introduction of open-cut mining produced adverse environmental effects on human systems.

In terms of gaining access to the Ananekrom, it was upon a phone call discussion based on referral by my gatekeeper, that I met P1 at Kenyasi Number 2 Four Square. He decided to take me to Ananekrom where he lives and experience the effects of the NGGL. P1 is a native of the Ananekrom and also a member of the Kenyasi Number 2 Youth Association. P1 tells me, that in the past, he has participated in the association's street processions and media tour of places where Newmont's actions occur. Additionally, P1 has a brother who at the time of this interview is convalescing from severe rashes on his body. P1 tells me ailments like that of his brother hitherto unknown to residents of mining communities are now rampant in the Ananekrom. Therefore, P1's representation is mediated by his experience of Newmont's action and the discourses in place within P1's routine environment.

In the Kantinka interview, the focus is on displaced actions, actions which occurred some time ago. Language is used to construe these actions as immediate and relevant to the ongoing discourse between P2 and R. Kantinka is a hitherto predominantly farming community located in Kenyasi South. Newmont designated and used Kantinka as its waste rock expansion site. Not being a tabula rasa, the use of Kantinka as a waste dump site generated tensions between the local-local individuals who hitherto farm and lived on lands which are now grounds for Newmont waste rocks. P2 is the Secretary of the Kantinka community. P2 together with 36 others have

resisted attempts by Newmont to make cash compensation for their houses which have been identified by Newmont for demolition. P2 and 36 others believe that the process of selecting some affected local-local individuals for resettlement at the Our Lady of Annunciation (OLA) resettlement while others are selected for cash payment is unclear and discriminatory.

Due to the perceived discrimination in the process of resettling and compensating affected residents, P2 and 36 others challenged the processes of resettlement and compensation at a High Court in Sunyani, the then Brong Ahafo Regional Capital. As at the time of the interview, the high court had referred the issue to the Minister for Mines and Natural Resources for settlement. P2 tells me the Minister had reached a resettlement agreement with the plaintiffs and the defendants in the case. Moreover, P2 have participated in decisions over the resettlement process and also experienced the effects of Newmont's action on local-local social actions. These constitute part of P2's historical body which he brings into how he links Newmont's actions to human well-being.

The processes of getting P2 to talk about Newmont and local CD issues have been met with two postponements, one failure to show up on a particular market day. However, on a particular day, I placed a call to P2 and in a talk, P2 proposed that we could meet at the Kenyasi Number 2 Youth Leader's office, just in an hour or so time. I gleefully accepted his proposal to meet and at the place proposed.

When we finally met at the Kenyasi Number 2 Youth Leaders office, and upon a brief introduction of myself and my Ph.D. study to P2, he demanded documentary proof of my legitimacy as a researcher, as a condition precedent to the interview talk. P2 claimed that in the past some people who came under the guise of being researchers later turn out to misrepresent him. I quickly pulled out letters of introduction from my Principal Supervisor and gave them to P2 to study. Upon reading these 2 letters, P2 gave the green light for the interview to proceed. I thanked P2 for his acceptance and also reassured P2 that the information obtained from him will be used for academic purpose only.

The next section will seek to answer the question: what actions are going on or being accounted for, and who are the social actors, places, interaction orders and objects which mediate the accounts of actions in the representation? Also, the next section will address the question; what happens to people, places, and objects whenever Newmont produces negative environmental effects? The next section will end with a summary of the findings along the lines of the specific research questions of the study.

8.2. THE ANANEKROM'S VOICE

The interview voices which constitute the object of analysis grew out and are informed by the issues which emerged at the stage of engaging the nexus of practice.

However, the analysis here differs from those at the stage of engaging the nexus of practice in terms of the level of concreteness. For instance, in this chapter, the discourse makes connections between specific individuals, places, and actions occurring within those places where people undertake their everyday activities. This stands in contrast to abstract accounts of action in the CSO representation. In the interview the context is not entirely defined by language as both the speaker and the hearer can make meaning beyond language in use within the ongoing discourse to include making sense through the mediation of the discourses in place.

From my close reading of the interview voice, the field of discourse is environmental effects occurring at places within the Ananekrom community. Actions going on within the field of discourse include pollution of 'River Subri', contamination of borehole and crops. These actions are connected to human lives through evaluations like, `endangering our lives', `see fishes dead', and the reference to expert opinion.

The impending section will apply socio-semantic strategies to analyse social actor representation based on accounts of actions in materially situated places.

8.2.1. SOCIO-SEMANTIC REPRESENTATION OF ACTORS

This section will present an analysis of social actors representation based on accounts of actions using van Leeuwen's analytical framework. The analysis will be based on the elements of; inclusion and exclusion, role allocation and substitution.

In the next subsection, I will analyse who is included or excluded in the representation.

(A) Inclusion and exclusion

Based on my critical reading of the text, the social actors included in the accounts of Newmont action and Ananekrom development nexus are shown in figure 26. The inclusion of social actors is realised through pronouns like, `we', and, `they'. Based on my analysis figure 26 represents the social actors according to their differentiated levels of closeness to the 'pie', the benefits from Newmont activities. For instance, the NADeF Committee which administers the NADeF Fund is included as closer to Newmont. The NADeF Committee is followed by the DA which receives part of the royalty paid by Newmont. At the periphery is the EPA which is mandated by law to regulate, monitor, and enforce standards and socio-environmental norms. Finally, the local community mobilisation like the KYA is included but as a social actor which is farther away from the pie. The social actors represented in figure 26 are represented as actors who exist as world entities, however, some of their actions are construed in discourse. In addition, the representation includes non-human entities which exist or are constructed in discourse. For instance, the representation includes non-human

entities such as 'River Subri', waste rocks, tailing dams, farms, and fishes as semiotic objects which mediate P1's construal of the mining and CD nexus.
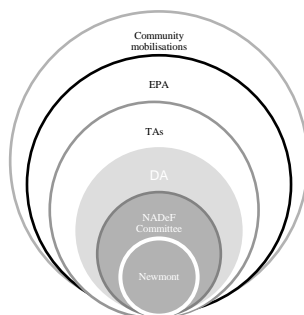
Figure 26 Social actors included in Ananekrom interview

The next subsection will focus on analysing the action going on and the agency assigned to different social actors.

(B) Rearrangement

There is a consistent way of representing Newmont as a dynamic social force behind transactive actions which are detrimental to human life. This pattern of representation is instantiated in line 12 of extract 5, 'the miners are, are putting us in a danger.' In its cotext, the transitive, 'the miners are putting us in danger,' realises the agency of Newmont because the noun, 'miners', within its context refers to Newmont. Line 12 of extract 5, includes 2 categories of social actors in the account of social action. First, there are, 'the miners are putting us in danger,' who are construed in discourse as the social agents behind the pollution. Second, there are a, 'we', or, 'us,' group of social actors, whose lives are being endangered because Newmont is polluting water bodies which serve P1 and his community of experience.

The account illustrates a pattern of representation which includes P1 and his community of negative experience, as victims of negative experience from Newmont effects on the environment. Compared to the government discourse of positive relations between mining and rural development, the Ananekrom discourse rearranged the role of Newmont from an agent of positive transformation of rural Ghana to one whose actions endangers human lives within particular places. Evidentially, in figure 27 the blueish colour of the water under a bridge shows that Newmont instead of contributing to improving existing sources of water have rather 'polluted existing sources of water'. Linguistically, the mediational role of the blueish colour in how P1 takes action can be realised in line 13 of extract 5, 'As you can

see the river is been polluted, is been blocked, now it is not flowing
anymore as usual'.

Beyond, realising agency, by representing, 'the miners', as people who endanger
the lives of the rural folks, the language in use rearranged the role assigned to mining
companies by Ghana's Minerals and Mining Policy as agents of sustainable economic
development by adding a Newmont's negative effects. Additionally, this
representation shows that there exists a gap between the role assigned mining
companies in government discourse and their actual performance in the local-local
places where Newmont engages in action. Therefore, this representation constitutes
a difference in representation between government discourse and local-local
discourse.

Newmont is construed as a social actor who is engaged in doings which negatively
affect local-local social action such as farming. For instance, in line 225 of extract 6
the action of a, 'they', is positioned in a negative relation to the social action of
local communities, 'when it crosses over and come into our farm, all the
crops have to go down'. The context is that whenever mine leakages run into
farms owned by P1 and his group the farmers lose their crops. This representation
expresses a difference in relation to government discourse which portrays mining
companies as possessing, 'the unique expertise', which exists for improving
livelihoods of their host communities.

The representation also includes Newmont as an agent whose actions negatively
affected entities within the environment. For instance, in line 17 of extract 5, the
representation attributes the death of fishes to leakages from Newmont's tailings dam.
Whereas including dead fishes can be seen as mediational means or form the
evidential basis which affords the action of assigning Newmont responsibility for
pollution of water bodies, fishes are also sources of protein for the rural folks who
lived close to the river. Thus the action taken with the discourse, killing of fishes in
water bodies, is that Newmont doings to the river affects the basic needs of the local-
locals individuals who depend on fishes from the water body for their protein needs.

Figure 27 Narrowing down on the social action of focus

Extract 5

```
10 P1 :      The name of the river is River Subri.
11 R  :      So whenever you see this eer river and eer this water
             here, what comes to your mind?
12 P1 :      What comes into my mind is that erm, the miners are,
             are putting us in a danger, because this river has
             been our source of drinking water before the miners came
             here but since they came, we cannot use it anymore.
13           As you can see the river is been polluted, is been
             blocked, now it is not flowing anymore as usual.
14           So, it is very dangerous for us, we cannot access it
             anymore.
15 R :       How dangerous is this to you?
16 P1:       We are afraid, they are using cyanide and other chemicals
             right here.
17           They have their tailings dam here and we suspect it is
             been flowing into it, sometimes you may come and see all
             the fish's dead (:) lying along the river.
18           So we are afraid to use it.
```

An interesting aspect of P1 discourse is P1's concretisation of agency through the use of discourses in place and time of the interview. For instance, figure 28 shows an

individual pointing at the water flowing beneath rock waste pilled around Newmont's tailings dam. In line 172 of extract 6, P1 makes meaning out of what exists in a materially situated situation, 'this water flowing', is 'dangerous water', because, 'So we believe it is a leakage from the tailing that is flowing through here and it leads to our village'. This representation allocates negative actual role backed by visual evidence as in figure 28 whereby P1's brother points at the water flowing beneath the waste rocks. The discourse in places such as the social practice of farming and its interaction with leakages from Newmont's environmental control dams affords P1 to take the action of portraying Newmont's practices as inimical to the local-local source of livelihoods.

```
Extract 6:

166 R :      What is the name of this place?
167 P1:      Here is Apensu South.
168 R :      Apensu South.
169 P1:      Yeah.
170 R :      Yes so this is eeer water flowing, what do you, is
             there anything you want to say about this?
172 P1:      Yeah this water flowing we sees it to be very dangerous
             water as you can see because there is a tailing's dam
             right this rocks and the water is flowing directly
             from there.
173          So we believe it is a leakage from the tailing that is
             flowing    through    here    and    it    leads    to    our
             village.
174 R :      [Offered P1 to take a picture of the rock].
175          Insert picture of water flowing through waste rock.
```


Figure 28 Alleged leakage from Tailings Storage Facilities (TSFs)

Besides P1's representation realises the agency of local-local individuals. For instance, line 227 of extract 7 realises the agency of the local-local actors. The local-

local agency can be realised through the transitivity, 'So we reported it'. The local-local action leads to another action from Newmont, 'and they have use some pump over there that is where the security is'. This implies that Newmont acts on the action of local-local individuals who are engaged in social action.

Moreover, in P1 discourse, the concretisation of the discourses in place as mediational means to taking the action of assigning agency is interesting. For instance, extract 7 is filled with deictic such as, 'over there', 'that place', 'here', 'where the security is', 'you can see' and demonstratives, 'this is', and, 'this leakage'. For example, line 215 and 217 of extract 7, show that the R and P1 are close to the place where the action accounted for is going on. Therefore, the potential meaning of the discourses in place, the actual sense made out of the elements at a place and the affordance of the discourses in taking an action can only be understood with the context of the here and now of the talk. Figure 29 is visual evidence of action taken by Newmont to manage the leakage of tails from its environmental control dams. The social practice of redirecting the leakage water into the Newmont Mine Plant prompt the representation in extract 7:

```
Extract 7:

210 R :    Are there some sites you want us to visit now?
211 P1:    Yeah, we can go over there.
212 R :    Thank you.
213 P1:    Mine leakage water they left it over here.
214 R :    Mine leakage water left over here?
           [R Offered P1 phone camera to snap the action]
215 P1:    You see this pipeline.
216        Insert pipeline.
217 R :    Yes.
218 P1:    It is being used to draw water from that place that
           point to the mines.
219 R :    Yes, okay.
220 P1:    And eerm look at how it leaks over here.
221        Previously, this leakage water was crossing into
           our village.
222 R :    Okay.
223 P1:    And when it get here, you see there is a farm here.
224 R :    Yeah.
225 P1:    when it cross over and come into our farm, all the
           crops have to go down.
226 R :    Okay.
227 P1:    So we reported it and they have use some pump over
           there that is where the security is.
228        So nowadays they pump this leakage water into the
           mine.
229 R :    Okay.
230 P1:    And yet still you can see even if they pump it you can ee,
           it is still here.
231 R :    Okay, so this is the pipe and the water that leaks?
232 P1:    Yeah.
233 R:     And then I can see how this also just on the farm.
234 P1:    Yeah.
235 R :    Do people live here?
```

```
236 P1:      Yeah, this is village as you can see.
237 R :      Wow! So has the EPA tested this water?
238 P1:      They have been here several times we reported it to them
             several times.
239 R :      And what is the outcome?
240 P1:      We do not get any outcome. When they go, they do not come
             the back again.
```


Figure 29 Place showing Newmont's mitigation action

In P1's discourse, the concrete way in which the representation includes actions going on and attribute agency of negative effect to Newmont could serve an ideological interest in seeking to downgrade the image of Newmont. The goal of portraying Newmont in a negative light could be to get Newmont to re-engage with P1 and his community of experience over how Newmont actions should affect local-locals well-being.

The next subsection will seek to analyse how P1's discourse represents social actors based on discursive strategies such as impersonalisation and personalisation.

(C) Substitution

The discourse includes social actors through the discursive strategy of impersonalisation through objectivation. For instance, in line 215 of extract 7, reference is made to an object which illustrates Newmont's action, 'You see this pipeline'. Through the discursive strategy of objectivation, the discourse assigns Newmont both agency and identity. By visually pointing at aspects of the object which exist in a place close to the social action of P1 and his community of experience and linking the remedial action to the prior action of P1 and his group, portrays an identity of an irresponsible company. The ideological effects of social actor

representation through reference to objects associated with a social actor are to concretise the implications of Newmont's environmental effects on local-local social action at a place.

Besides, the discursive strategy of objectivation realises the goal of my interview approach as a talk which connects the immediate and the displaced fields as a means of understanding structural challenges of mining and CD nexus from routine experiences of individuals acting or living in their routine places. For instance, in extract 5, 2 groups of social actors are included a, 'we', and a, 'they'. Though the, 'we', is materially absent, the interview based on accounts of action occurring at a place connected to the, 'they', provided an opportunity for the participants in the discourse to understand a, 'we', perspectives about social practices attributed to the, 'they', who are physically displaced in time and place of the interview.

Similar to the CSO representation, the discourse includes social actors by creating a difference between self and others. Specifically, the discourse creates a difference through the use of pronouns such as, 'we', and, 'us', which represent a community of negative experience versus a, 'they', who are the dynamic forces behind the doings such as using cyanide which P1 believes leaks into the external water bodies and kill fishes. The use of these pronouns creates a difference between the local-local individuals whose voices P1 represents and a, 'they', who is referenced as social agents behind the negative actions occurring in local-local places. The effect is that there exist those who are negatively 'affected', or 'the side-effect voices' (Anika Egan Sjolander & Ana Maria Jonsson, 2012) or community of experience (Fairclough, 2003).

In the next section, I will selectively deploy SFL analytical tools of evaluation and language system of modality to analyse how the discourse make connections between Newmont's action and other entities based on accounts of actions in materially situated places.

8.2.2. INTERPERSONAL METAFUNCTION

In terms of making connections between Newmont action and entities like farms which exist in material places, the Ananekrom discourse accounted for connections on the basis of accounts of what is being lost due to Newmont's actions at a particular place. For instance, P1 remembers that, 'previously all here were cocoa farms, they were full of crops, fruits, vegetables and now look at it'. In this case, the adverb of time, 'previously', indicates past discourses in place such as cash and food crops farming. P1 contrasts the past with a present by inviting the researcher to, 'now look at it'. This indexes the meaning which P1 constructs between Newmont action and what used to exist at a particular place and historical moment in time to a moment in time contemporaneous to the interview talk. The past

discourses he points to influence how he attributes meaning to the relationship between Newmont's activities and human well-being in situated places.

By way of bringing in individual experience at a place, P1 construed a negative relationship between Newmont's action and CD nexus based on his experience of the loss of incomes of P1 and the group he speaks for. For instance, P1 and his group experience the disappearance of entities such as cocoa and food crops, `they are gone'. Also, the representation that, `they are gone', can be interpreted to mean these sources of income and livelihoods have been destroyed to the extent that they cannot be replaced. This can then be likened to a limit and survival Discourse. But P1 make sense out of the disappearance of these entities on the basis of the effect of the disappearance on local-local social actors' ability to engage in basic social practices such as to pay school fees and to buy food.

The negative linkage to the social practice of individuals attending school shows that P1's discourse differs from the broader socio-political representation that mining companies contribute to improvement in educational outcomes in their host communities. Thus the voice is about the concrete evaluation of positive discourse, good things which existed prior to Newmont's coming and the negative discourses, things which have been lost due to Newmont's activities. However, where the interview took place affords the concreteness of P1's description of what has been lost due to Newmont's activities. The discourses in place such as Newmont's negative environmental effect on social practices like farming and paying school mediates P1's construal of Newmont as not contributing to improved livelihoods among the local-locals.

In terms of making connections between Newmont and CD nexus through memory and sense of a place, figure 27, mediates P1 memory and sense of a place in terms of what use to exist, and what now exists or no longer exist. Specifically, P1 remembers that, `this river has been our source of drinking water before they came, but since they came, we cannot use it anymore'. Thus, P1's memory of the past social practice associated with a materially situated place, such as, `our source of drinking water', and after Newmont entry into Ahafo Kenyasi analysis, `we cannot use it anymore,' affords P1's action of portraying Newmont, `they', as a group which pollutes local community source of drinking water. The linguistic realisation of making a memory and sense out of places as a way of connecting Newmont's effects to human activity can be found in the use of deictic and demonstrative pronouns such as, `this place'. This representation connects with Dry (2013) position that discourses serve practical material and political interests since in this case, the alternative material interest lost mediates P1's representation. P1's representation contrasts the government representation that mining companies should actively participate in local community initiatives in fields like potable water provision.

As P1's representation appears to homogenise the Newmont's actions as the cause of undesirable situations there is the need to avoid an accusation of cherry-picking. Therefore, I introduced into the interview a potential positive discourse connected to Newmont's presence in the Ananekrom. This potential positive social practice of Newmont exists close in terms of place and time of the interview. Thus it served as visual evidence of Newmont's claims and broader notions of corporate 'good works' which counterbalanced the accounts of negative effects. Figure 30 provides visual evidence of Newmont's positive discourse and the represented participant, the black pipeline [26]seen in the picture, close to Newmont's positive social practice.

Linguistically, in line 28 of extract 8, the researcher brings into the micro talk concrete evidence of Newmont's contribution to potable water provision at a place where P1 claimed the, 'River Subri is polluted'. However, Newmont's good works become a mediational means which P1's used to further concretise Newmont's negative effects on P1 and his community of experience's sources of potable water. Based on P1's experience in drinking the water from the borehole, P1 involved R in jointly making sense out of the potential good works of Newmont, 'You can sense some this thing in the the some ionisation this thing it seems like rusted chemical in the'. The pronoun, 'you', realises involvement of R by P1. Also, the use of, 'some ionisation', seems metaphoric and a smile, 'like rusted chemicals', appear to be a rhetorical strategy deployed in discourse to concretely sprinkle negative sensual images about the negative effects of Newmont's action on underground water at a situated place. But the deployment of sense perception of taste, 'sense some ionisation', linguistically transform the perception into actual meaning. The ideological effects of construing the presence of ions in underground water are to demonstrate that Newmont's pollutes both surface and underground water. Though sensual images exist in the situation, P1's action in discourse is influenced by Newmont's actions at a place. For instance, 'There is some place that the tailing's dam is leaking so and is the same place that where is not far from where the borehole is. So we are afraid it can leak through that one too'. So, because the TSF leaks at a place close to the borehole mediate the suspicion that a source of potable water is polluted.

By way of making connections between Newmont's environmental effects and human health at a place, P1 referenced health experts as means to enhance the status of linking his brother's skin diseases to the drinking of contaminated water. For instance, in line 40 of extract 7, besides P1 use of his historical experience of his own brother who is convalescing from skin rashes to make a linkage between the pollution of potable water and human health experience, P1 also provides evidential sources to enhance the status of the linkage construed through attribution to expert voice. The attribution occurs in, 'As you can see this brother here he has experienced

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[26] The black pipeline conveys leakages from the mines plant back into the tailings dam and its presence together with floods of water mediates P1's evaluate of Newmont's action.

severe skin rashes and he went to the clinic they told him that he is been using contaminated water'. The attribution to expert opinion is instantiated in, 'they told him that he is been using contaminated water'. The pronoun, 'they', referenced healthcare practitioners who diagnosed that P1' brother's health condition is due to the consumption of contaminated water. Though the before and after experience exist as potential meaning-making materials between Newmont's actions and human health, P1 activates experts opinion to enhance the status of the linkage between Newmont and the emergence of strange skin diseases.

Figure 30 Newmont CSR action

However, P1's attribution homogenises the causal factors as if there are no other alternative cause of skin rashes. This sort of homogenisation of the source of negative effects can be a potential source of achieving ideological purpose and interest in representation, in ways which are unclear. The ideological effect of attributing the claim of negative relation to expert voice is to give the claim a status of credibility.

In terms of expressing the desirability or undesirability of Newmont's actions, P1 expressed an undesirable relationship between Newmont action and local-locals source of water. The undesirable connection is construed based on accounts of the implication of Newmont's material action on water bodies. Specifically, in line 12 of extract 5, P1's discourse construes Newmont as physically doing something undesirable to a collective social actor, 'us'. Linguistically, the doings can be realised in, 'the miners are putting us in danger because of this river (.)[...]'. Within this actional process, there is a construction of a material process in the form of a cause-and-effect relationship, 'is been polluted, is been blocked, now it is not flowing anymore as usual. So, it is very dangerous for us [...].'

To add, in line 230 of extract 7, the representation expresses the undesirability of Newmont's mitigation action. The evaluation in discourse can be realised through a disjunct, '`yet still you can see even if they pump it you can ee, it is still here`'. This is because, '`yet still`', connects with the previous statement that a pipeline carries the water back into the mine. As visualised in figure 30, and expressed in extract 7, '`[...] And yet still you can see even if they pump it, you can see, it is still here`', P1 visually and lexically evaluates and take a position that the NGGL environmental management practices are inadequate. Therefore, one can conclude that there is visual evidence to the effect that, at least, from the affected individual's perspective, Newmont's environmental management practices are not effective in dealing with leakages from the mines.

In terms of making a connection between Newmont's action and people's routine activities at a place, P1 representation employs the use of deictic and demonstrative pronouns. These discursive strategies are used to foreground actions and their effects on specific elements like water bodies and crops in a materially situated place like farms and rivers. This involves construing Newmont as engaging in transactive doings onto entities such as water bodies, farms, and fishes at places such as the diverted part of 'River Subri'. Specifically, demonstratives such as, '`this`', '`that`', '`these`', '`those`' and deictic such as, '`here or there`', are used in P1's discourse to foreground specific actions occurring in specific places. For instance, in line 17 of extract 5 the use of the deictic, '`here`', indexes the potential pollution due to leakage of Newmont's TSF to a place and particular action. That is the tailings leakage 'flowing into River Subri'. The use of the deictic, '`here`', implies that the listener can determine the meaning of what is said by looking beyond language into a material place within a particular moment of time. Also, in line 213 of extract 6 the deictic, '`here`', indexes the proposition of mine wastewater leakage to a particular place where the R and P1 are co-present.

By way of expressing the degree of commitment to the truth of P1's averral on the undesirable relationship between Newmont's social action and a world entity P1 deploys a high modality to express certainty about the negative effects of Newmont's doing to a particular world entity, '`this river`'. Through the use of a high modality, the discourse somehow evaluates a world entity, 'River Subri'. Linguistically, high modality marker can be realised in, '`has been polluted`', and, '`not flowing anymore as usual`'.

Additionally, the representation expresses certainty about the negative effects of Newmont's actions on human lives. For instance, in line 12 of extract 5 P1 makes a certain claim that the, '`miners are putting us in a danger`'. This being an averral, it implies that P1 takes responsibility for the truth status of his claim relative to R who is participating in the ongoing discourse as co-creator of knowledge. Within P1's averral, there is an epistemic modality in a present continuous tense form. This creates the affordance for P1 to assert for certain that, '`the miners are putting`', them in danger, not that, '`the miners will, appear or could be putting them`'

in danger'. In terms of Scollon (2008) knowledge and agency axis, the possible position is oracular-fatalistic. That is the local-locals are aware of the danger posed by mining but there is little they can do. The ideological effect of expressing certainty in knowledge about the existence of negative effect from an ongoing action is to leave the reader with little room to reject than accept the representations. This is more so given the 'cultural capital' of P1 and the 'market place'. P1's routine activities such as farming are materially rooted in the place where the interview is taking place. Also, P1 is a part of the group which reported the leakage from the mines into the external environment. Therefore, P1 possess a good knowledge of the place where there is ongoing material mitigation of Newmont's negative action.

By way of expressing the relationship between how local-locals expect their representatives to stand-in for them and the actual performance, P1 construed a gap been the expectation of transmission of concerned voices into the empowered space and the actual performance. Furthermore, P1 categorically stated that the Committee does not transmit their concerns to the Newmont Company. For instance, the representation, 'when we tell them to go and tell Newmont or to help us with the NADeF money, they do not do it', realise an oracular position through the negation, 'do not'. This negation constitutes a categorical negative assessment of the NADeF Committee's interface role between Newmont and the local community. By this the social actor behind the discourse expects his representatives to be able to lobby for part of the NADeF Fund for their community's development. Additionally, P1 deployed the language system of modality to construe a negative relationship between the affected local communities and the NADeF Committee which is mandated to stand-in for the local-locals. According to P1, 'The Committee is not trusted to the community […].' The evaluation, 'is not trusted', constitutes a categorical expression of P1's knowledge of the sort of perception the local-locals have about the NADeF Committee and local community relations.

Besides, there is also an explicit opinion that both the Committee and the 'Newmont people' are cheating the local community. The transitivity, 'starting to believe', plus, 'they are cheating us', expresses present certainty about perceived unethical practices within the social practice of representation. Also, the categorical evaluative statement, 'they are cheating us', portrays absolute knowledge about the existence of corrupt practices involving the NADeF Committee and Newmont Ahafo Management. The ideological effect of this representation is that there is an inadequate representation as well as the co-optation of local-local representatives into the Newmont system.

In terms of domination, difference and resistance in representation P1 discourse challenge the government's construal of a positive relationship between mining and improvement in rural livelihoods. This is manifested in P1's account that Newmont's activities have resulted in the disappearance of cocoa and food crops.

Moreover, P1's representation shows instances of resistance to prior voices over the issue of whether or not by-products from the mines end up in the external environment. For instance, P1 visually demonstrated the leakage from Newmont's TSFs. Besides, P1 accounted for the negative effect of the leakage on entities in place such as fishes which are seen dead and also crops dying off. Yet a company voice which preceded the interview talk between P1 and R says that no bye product from the mine ends up in the external environment. In the year 2010, an independent reviewer report commissioned by the NGGL concluded that there was evidence of leakage from the tailings dam and in the year 2017. Also, a radio documentary produced by a broadcast journalist with the Citi FM represented citizen voices which revealed that there was a leakage from the tailings dam. Further, in the year 2018, P1 showed me visual evidence believed to be leakages from the tailings dam. Regardless of these voices of concern, Newmont representation in the Citi FM documentary categorically asserts that the design of the plant is such that no by-product leaves the mine into the external environment.[27]

An illustration of the historical trajectories of these different observations and the Newmont position will help concretise the issue of the struggle of voices over Newmont's environmental management practices, is represented in figure 31:
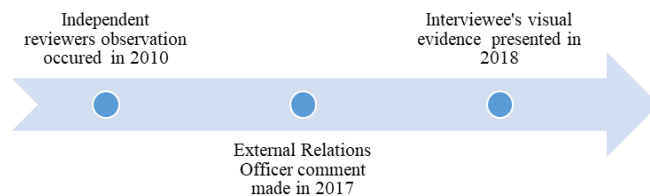
Figure 31 Historical trajectory of TSF leakages

The next subsection will aim to summarise the key findings arising out of the analysis of the Ananekrom interview. The findings will be summarised along the lines of the study's specific research questions.

8.2.3. SUMMARY OF ANANEKROM REPRESENTATION

The analysis reveals that the actions that are accounted for are about the implications of NGGL environmental effects such as pollution of water bodies, the disappearance

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[27] Note: Newmont External relations representation, Citi FM Documentary and Newmont's commissioned study report are excluded due to obvious reasons of space and time to complete the thesis.

of crops and the emergence of strange ailments, on materially situated individuals, places and other semiotic objects.

In terms of agency, the analysis indicates that NGGL is engaged in transactive actions, such as diverting 'River Subri'. NGGL transactive doings poses negative implications on P1 and his group, such as the extinction of fishes which supplement local-locals protein needs. However, the analysis suggests that P1 and his group have some level of agency in terms of reporting an instance of environmental pollution and eliciting feedback from Newmont.

By way of how social actors are represented based on accounts of action, the analysis reveals that social actors are represented through the discursive strategies of objectivation and differentiation through personalisation.

In terms of individual historical experience, the analysis points out that the social actors' routine experiences of the NGGL negative environmental effects such as the occurrence of a strange illness, destruction of livelihoods, fishes dying, streams and a bore being polluted mediated how P1 construe the Newmont and CD nexus. Specifically, these discourses in place mediate P1 construal of a negative relationship between Newmont social action and improvement in human well-being at the Ananekrom.

With regards to expressing the desirability or undesirability of relationships, the analysis revealed that there is an undesirable relationship between Newmont mining practices and local-locals social practices such as income generation from cash crops and drawing of water from open sources such as 'River Subri'.

The analysis shows that P1 uses high modality markers to express a negative relationship between Newmont's social action such as leakage of Newmont's tails into farms and water bodies and the destruction of entities like crops.

In terms of the represented expectation about their representatives, the analysis indicates a gap between individual expectations of the transmission of their voices into empowered spaces and the actual performance. Moreover, the analysis shows that there is a gap between the local-locals expectation that their representatives on the NADeF Committee will bring them tangible benefits, get them part of the NADeF Fund, and the actual situation of absence of benefit. To add, the analysis reveals that there is a suspicion of alignment of local-locals representatives to the 'Newmont system'.

By way of representation as sites of domination, difference, and resistance, P1 representation homogenises a negative relationship between Newmont action and local-local social action.

In terms of discourse topics circulating within the representation, the analysis shows that the discourse topics circulating within the social practice of a talk between R and P1 include; environmental effect, environmental mitigation, representation and discourses in a place like polluted borehole, polluted Subri, dead fishes and tailings dam leaking onto the external environment.

The impending section will focus on analysing a concerned voice from the Dokyikrom community. The analysis in the next section will begin with the identification of the discourse topics. This will be followed by an answer to the question; what happens to people, places, and objects whenever Newmont produces negative environmental effects at materially situated places?

8.3. THE DOKYIKROM'S VOICE

Based on my critical reading of P3 representation seven dialectically related discourse topics can be found. These discourse topics include a dominant environmental effect, CSR, local-local employment, Newmont and local community engagement, local individuals' expectation about representation, social agreement, and resettlement. Within these discourse topics, the discourses in places include a chemically contaminated borehole, a school building, a training centre, Newmont's freshwater dam, and a tailings dam. These discourses in place, including the talk between R and P3 together with displaced fields like Newmont's initial meetings with the chiefs and elders in Kenyasi South, constitute the field of discourse. In other words, the field of discourse in P3 representation exists within the immediate environment of the interview as well as in displaced past actions ancillary to the interview talk between R and P3.

The next subsection will attempt to answer the question; what sort of entities do the representations refer to and how are these entities connected to actions within a place or construed in discourse? Furthermore, in the next section, I will analyse social actor representation based on van Leeuwen, (2008) socio-semantic framework for social actor representation. Specifically, the analysis in the next subsection will focus on deletion, rearrangement, and substitution.

8.3.1. SOCIO-SEMANTIC REPRESENTATION OF ACTORS

The next subsection will focus on analysing who is included or excluded from the representation.

(A) Inclusion and exclusion

From my critical reading of the discourse from the Dokyikrom community, the following social actors are included Newmont, chiefs, affected individuals, the Assemblyman, Unit Committee and the Youth Association. These social actors are

realised in discourse through nouns, pronouns, and reference to objects connected to one social actor or another. For instance, P3 and his local-local community of experience [28]are construed in discourse through the use of the pronoun, 'we', who before the coming of Newmont lived in an, 'ordinary time'. On the other hand, Newmont and its agents inclusion in discourse are realised through the pronoun, 'they'. The discursive strategy of inclusion of social actors through the use of pronouns is instantiated in lines 126 and 126 of extract 9:

```
125 R :  Yeah, yeah yeah.
126P3 :  So they, they are helping us but the condition that we are
         in right now, even if they just even give us electricity,
         how are we going to survive?
```

In line 126, the pronoun, 'they', represent the NGGL, which is positioned as, 'helping' an, 'us', and a, 'we', which referenced P3 and his community of experience.

Aside from human entities, there are discourses in places such as semiotic objects which mediate how P3 construe the gold mining and CD nexus. For instance, P3 includes a picture of a child suffering from skin rashes as a semiotic object which affords P3 construal of the Newmont and Dokyikrom CD nexus. The affordance of the object in mediating the mining and human well-being can be realised in the talk below:

```
Extract 12
30         And we the community members here now, most of us when
           they use the water, it affects us a lot.
31         Like something like boils and so many, rashes and other
           things.
32         There is a boy here who had rashes sometime back.
33 R :     Can you produce any evidence of this?
34 P3:     I will give you the picture after this.
35         [P3 resented the picture to R, it is a picture of a child
           with rashes on the body].
```

In line 30 of extract 12, the world entity being assessed is, 'the water', from a materially situated borehole close in time and place to both R and P3. But P3 and his colleague's voices of experience assessment of the use of the water from the borehole is negative, 'it affects us a lot'. In line 31 of extract 12 P3 offered the circumstances of 'effect', including, 'so many rashes and other things'. In

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[28] P3's discourse realises the conceptual distinction between community of experience and members of the community. The community of experience refer to those individuals who live Newmont's negative environmental effects at Dokyikrom. These contrast with those who hail from Dokyikrom but reside in Kenyasi.

line 32, P3 attempts to provide a concrete evidential basis for the claims of negative effects. The concreteness of P3 evidentiallity can be realised in the deictic, 'here', which suggests that the victim of effect exist where the interview is taking place.

Though the social actor who experienced Newmont effects lives at where P3 and R talk is taking place, the social actor of 'effect' is not available at the place and time of the ongoing discourse between R and P3. Consequently, in line 33 of extract 12, there is a request for evidence. This request is followed up in line 34 of extract 12 with an offer to comply with the request, 'I will give you the picture after this'. Being right in the community in which the affected boy lives, P3 election to give a picture instead of taking R to the house of the boy suggests that P3 construe the picture as an important semiotic element in the situation which could enhance his representation. Theoretically, the inclusion of the picture as a semiotic element which mediates how P3 links Newmont's actions to human well-being connect with the assumption that language in use exists in the social world including semiotic objects like a picture (Jones, 2012).

Aside from the inclusion of semiotic objects as evidence of Newmont's negative environmental, 'effect', there is also a semiotic object which exists in a materially situated place. This materially semiotic object is used to show Newmont's potential

positive discourse. The potential positive discourse is linguistically realised in extract 9.

```
Extract 9

123           And then eeerm so look at how nice the school is how you
              are going to  say you do not need to stay here.
124 R         Offered P3 a mobile phone camera to a picture of classroom
              block constructed by Newmont.
125 R:        Yeah, yeah yeah.
126P3 :       So they, they are helping us but the condition that we are
              in right now, even if they just even give us electricity,
              how are we going to survive?
```


Figure 32 A six-classroom block provided for the Dokyikrom as part of Newmont CSR practice

Save the evaluation in line 123 of extract 9, P3 invites R to look within a place and see an object of existentialism and semiosis, 'look at how nice the school'. Inviting R to take look at suggests that an object exists at a place prior to the meaning made from it. But the adjective, 'how nice', constitute a potential meaning-making out of an ontological entity. Thus, within P3 representation there are also semiotic objects which are testimonies of Newmont's positive, 'affect', such as the school building in figure 32. These evidential sources of positive actions contrast with semiotic objects [29]which provide evidential grounds of Newmont's negative effect.

Therefore, it can be said that the representation in line 123 of extract 9 provides a potential mediational means which exist within the here and now of the interview talk between R and P3. But the actual meaning which P3 made out of the potential

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[29] Such as the picture of a boy who developed rashes on his body.

meaning of the semiotic object, school building, is based on a discursive construct, 'but the condition that we are in right now'. The ideological effect of this representation is that P3 conceptualise Newmont's contribution to improved human well-being beyond an increase in physical things to include non-material things like quality health.

In the next subsection, I will analyse which of the social actors included in the representation is portrayed as the dynamic social actor who engages in transactive doings. Also, the next section will analyse who is included in the representation as agentless social actors who suffers the doings of the activated social actor in discourse.

(B) Rearrangement

In terms of agency, there is a pattern of representation which includes Newmont as a dynamic agent, which is engaged in transactive actions such as pollution of the local community only source of potable water, a borehole. The representation concretised agency by linking Newmont to entities which exist in materially situated places close to where the borehole exist. For instance, in line 175 of extract 11, '[…] that is the tailing's storage facility that they brought'. Within its cotext, the pronoun, 'they', referenced Newmont. Newmont's agency is realised in the transitive, 'they brought'. Also, the phrase, 'that is', points to something which exists but whose existence is agentialised, 'they brought'.

There is a pattern of representation whereby Newmont is included as an agent of positive effect but the interplay of people, objects and places transform Newmont's positive doings into negative effects. For instance, in line 126 of extract 9 Newmont's agency is positively realised in the transitive verbs, 'they are helping us', and, 'it is helping us a lot'. In line 126 of extract 9, the representation asserts for a fact the assistance from Newmont. Within the immediate environment of R and P3 talk there exist a six-classroom block and skills training centre built by Newmont. These objects constitute sites of engagement which conjoin to mediate P3 categorical assertion of help.

Despite acknowledging the positive social practices of Newmont, the representation signalled that there is more than meets the eye. For instance, in line 126 of extract 9 the conjunct, 'but' signalled the existence of a context or an alternative discourse. The context can be inferred from, 'but the condition that we are in right now, even if they just even give us electricity, how are we going to survive?' Within its context, the condition refers to P3 and his community of experience historical experience of ill health attributed to the contamination of the only borehole in Dokyikrom by tails from Newmont's TSFs. The discourse of contamination of the borehole becomes a cultural tool which is used to transform the positive doings into a negative effect. The transformation of the positive discourse

can be realised in the negation, 'will not survive', which implies that the existence of a collective, 'we', is threatened by a cycle of discourses christened, 'the condition that we are in'. This demonstrates the usefulness of NA methodological focus on accounts of action as the nexus through which multiple systems circulate. By focusing on accounts of social action this representation captures the positive doings of Newmont and also the negative doings which come together to form the basis for the actual action taken by P3, to represent Newmont as the agent of negative effect on the local-locals' survival. However, it can be inferred from the representation that the local community actors are included as informed beneficiaries who can evaluate corporate good works within the context of their conjoining routine experience.

In terms of agency to participate in Newmont and local community interaction, the discourse reveals that individuals who exercise use rights over land lacked the agency to participate in Newmont's pre-mining engagement with local communities. This lack of agency to participate is instantiated in, 'You see this land is, eer we are under Kenyasi South' [line 38-39], 'So the elders of Kenyasi, […] the Newmont workers went and sat with them and made all the agreement together with our chief here'. The representation includes, 'the elders of Kenyasi', and, 'our chief here', as the social actors who represented the affected community of experience. The ownership of a place where P3 and his community of experience live and work can be realised in, 'we are under Kenyasi South'.

The representation also constitutes a struggle in discourse for the discursive space to participate in Newmont and local community interactions. The source of P3 and his community of experience discursive demand for participation can be realised from their position as the individuals who directly suffer Newmont's negative environmental effects. Also, the challenge to the existing social practice of being represented by the landowning class can be inferred from P3 averral that the elders who stand-in for the individuals in the Dokyikrom community are not a part of the community of experience for which reason they cannot adequately talk about Dokyikrom problems:

> […] those who are facing the major problems, you see one
> thing that they cannot talk […] much about this is that
> you see eeerm the community is the Committee Chairman is
> not staying here so the impact the impact that we are
> having, he is not facing those kinds of what, problems
> [Line 143 of extract 9].

Two things can be inferred from this, first, '[…] those who are facing the major problems,' and reside in Dokyikrom are not engaged and they are included as passive social actors. Second, the opinion leaders who actually stand-in for the

affected voices cannot adequately represent the individuals in Dokyikrom, 'they cannot talk much', because they are not a community of experienced and thus cannot feel the impact. This sort of social practice of using opinion leaders shows that mining CD engagement rather than reduce unequal power relations can be a source of increasing power inequalities between individuals who pick up the bills from mining companies and local elites like chiefs and assemblymen who live in the towns. Further, the analysis shows the relevance of place in determining who should have the agency to represent affected individuals. In line 143 of extract 9, the impacts of Newmont are indexed to a place, 'here', and those who endure the effects are those who stay, 'here'.

In the next subsection, I will address the question: how are social actors discursively represented in the discourse beyond the use of grammar and transitivity?

(C) Substitution

From table 2 the following are the actual social practices related to Newmont CD practice which are recontextualised in P3's representation; the social practice of some people standing in for others, Newmont local community engagement, Newmont's local community employment, Newmont CSR initiatives, resettlement and social agreement making practices. I will focus on analysing how the representation uses personalisation and objectivation as a discursive strategy to represent social actors in relation to accounts of social practices like CSR and local community representation.

Though P3 representation attributes agency to the NGGL, there is a pattern of representation through objectivation. This is a discursive strategy to foreground what is happening at a place and its relations with human life in the immediate text environment or in a displaced field. For instance, in lines 187 of extract 9, P3 invites R to look at a place and observe for himself a representative participant, 'You see the tailing's storage facility that they are having'. Here, the tailings dam objectivates Newmont's practices of managing poisonous waste like cyanide leakages into the external environment. Further, in line 192 of extract 9, agency is granted to the tailings dam, '[...] 'that is what is bringing all [...] problems that we are facing right now even if they just even give us electricity, how are we going to survive?' This sort of representation abstract the social agents behind the TSF as in reference through a pronoun, 'they'. In this context, objectivation serves an ideological purpose of concretising Newmont negative environmental effect through a focus on account of what is going on in connection with the tailing facility and at a particular place and time.

Similar to the representations in the previous section, where the discursive strategy of personalisation is used to create a difference between self, or self-group and others, there is a pattern in which P3's discourse employs the discursive strategy of personalisation to create a difference between Newmont and the local community

people. In P3's representation, differentiation between an in-group and others is realised mostly through creating a, 'we', and, 'they', difference in discourse. For instance, the, 'we', construed in discourse are included as individuals who exist before an agentive, 'they', came in and took action with their leaders. The agency of the, 'they', can be realised in, 'talk with our chiefs, our elders, our parents', as well as about the purpose of the talk, 'taking our land'. But because personalisation as a discursive strategy of construing difference between Newmont and local individuals have been explained in the previous section, I will analyse how P3 creates a difference between a community of experience and community of orientation.

Through P3's distinction of individuals from Dokyikrom between a community of experience and individuals who hail from the Dokyikrom, one can infer the difference in the values and interests of the community of experience from those of the community of orientation. For instance, in line 143 of extract 9, there is construed in discourse a difference between, 'those who are facing the major problems', and a, 'they', who stand-in for the Dokyikrom but cannot talk adequately because, 'they', are not a community of experience. This differentiation among individuals who hail from the same geographical place is relevant to construing the mining CD nexus in the sense that such a classification can unmask hidden differences between individuals from the same community due to their disproportionate share of costs in relation to particular actions. For example, the accounts of the action of pollution from the tailings dam as mediational means of showing who has the cultural capital to represent the community of experience makes the differences between the community of experience and community of orientation clearer.

There is a pattern of creating critical discourse moment as a discursive strategy of highlighting the difference. The representation contained a critical discourse moment in the sense of an expression of different perspective which leads to an apparent conflict within a representation. The representation at one breadth has expressed a desire that Newmont could have connected Dokyikrom to the national electrification grid. For instance, in line 115 to 116 of extract 9 the representation reveals that, 'the company is having their eeerm water dam, their tailings dam here which […] they have even eeerm send light, that is electricity there. […] And it is not even up to a mile, one mile to this place, they did not even provide us with any electricity'(Line 116 of extract 9). The implicit assumption is that the Newmont should have extended the electricity connection project to Dokyikrom. Yet in line 126 of extract 9, P3 questioned, '[…] even if they just even give us electricity, how are we going to survive?' So in this representation, the connection of the community to the national electrification grid constitutes a potential mediational means which influence how P3 construe the Newmont and CD nexus. However, the rhetorical question, 'how are we going to

survive?', implies that human survival rather than improvement in things mediates P3's construal of the mining and CD nexus.

Further in line 143 of extract 9, the representation categorically averred that, though the six-classroom block and skills training centre are helpful, 'but now we are saying that we do not need all those things because the life of human being […] is more important than to receive wealthy and all those things, you see'. This representation constitutes a challenge to some practices which were once desirable but are no longer desirable as in, 'but now we are saying that we do not need all those things'. First, this representation points to the view that time is not only a key factor in mine production and economic viability but it is equally crucial in terms of maintaining the SLO. Linguistically, the relevance of time in transforming an existing discourse can be seen, in, 'but now'. This shows that the community of experience past grant of an SLO seems to be transformed by Newmont's negative environmental effect. Second, the local-local individual's experience of Newmont's negative environmental effect, specifically the contamination of their only source of potable water, becomes an actual mediational tool used in discourse to withdraw the consent given to Newmont to operate. Therefore, Newmont's environmental effects are used as tools to take action, to withdraw the SLO with some implications. For instance, the action challenges a particular way of construing the mining CD in terms of increase in quality of social infrastructure and alternatively construe human survival at a situated place as the desired relationship between mining and CD.

Specifically, whereas P3 and his community of experience initially made a request for the company to extend electricity to Dokyikrom, the discourses in place, such as the social practice of dumping Newmont's waste rocks close to human systems, the purported leakage of tails from Newmont's tailings dam and experiences of strange ailments like abdominal disorders influence the transformation of the request. These discourses in place conjoining as sites of engagement which jointly transform the local community action, from a demand for electricity to a 'fight for survival'. This moment of apparent conflict becomes interesting in construing the mining and CD nexus as it reveals that Dokyikrom demands are mediated by discourses in place, experiences over time. For example, in line 126 of extract 9, the representation positively value Newmont's CD contribution, but expresses negative affect, 'they are helping us but the condition that we are in right now, even if they just even give us electricity, how are we going to survive?' [Line 131 of extract 9]. Within its cotext of line 131, 'right now', expresses the time dimension of this transformation of demand for electricity to a struggle for survival and it possibly suggests that the conditions at the time of the request no longer hold. An alternative way to analyse this representation could be to look at the apparent tension between interest in local infrastructure development as in the local community's initial demand for Newmont to extend electrification project to the community and the actual experience of negative effects which pull P3 and his group in between human health and local infrastructure development.

The next subsection will seek to address the question; what happens to people, places, and other semiotic objects at materially situated environments whenever Newmont produces negative environmental effects? The impending subsection will analyse how the representation makes a connection between social actors and Newmont's action through reference to what exists in the, `ordinary time`, and what is being lost in the mining era, through attribution to expert opinion, a reference to the social value, and through comparison.

8.3.2. INTERPERSONAL METAFUNCTION

There is a pattern of representation which connects social action to other discourses in place, people and objects through a metaphor of an, `ordinary time`, and mining era comparison. That is, the representation makes a connection between Newmont's environmental effects and people, places, and other semiotic objects on the basis of what used to exist in the ordinary time and what is being lost due to Newmont mining activities. This pattern of connecting objects, people and place through memory and sense of good things which exist in the, `ordinary time`, and what is being lost to Newmont's action is instantiated in the following lines:

```
7  P3 :      […] as we were here in the ordinary time we did not even
             know anything about mining, but later on some white men
             came here and that eerm they are coming to take our land.
             They talk with our chiefs, they talk with our elders, and
             they talk with our parents […].
11 P3:       That is those who were in their various homes, those who
             were in their various villages, and those who were in the
             various   cottages   this   was   the   pipe   that   was
             serving all of them.
             […]
19 R :       Yes before we go […] is this borehole still working?
20 P3:       Yes it is still working.
21 R :       It is working and there is no problem about.
22 P3:       But one, the problem that we are having, we are facing now
             that I was just talking about was when they came, eerm
             you.
```

In line 7 of extract 12, the representation recreates a displaced field of discourse through the metaphor, `in the ordinary time`, and connected this ordinary time to another time when, `when some white men came`, and include their purpose, `they are coming to take our land`. What used to exist, `this is the pipe that was serving all of them`, but because the white men came and made a tailings dam, the individuals in Dokyikrom begin to experience problems with the borehole. After the experience, in line 29 0f extract 12 there is an attribution to a `they`, Newmont workers, who, `have seen that`, that is they recognised that the borehole is polluted. The source of evidence is that, `they do not even want to use the borehole again`.

Furthermore, in lines 69-74 the representation includes a memory and sense of what has been lost due to Newmont's action:

```
69      Yes, from my memory it helped us in the past because
        you see because we were not having any underground or surface
        this thing that was destroying the land, it was okay.
70      We use to drink, we use to cook food, we use to
        irrigate our crops, we use to wash our cloth and
        everything that we do was this borehole. […]
72      We did not even have such experience at the time.
74      But later on, starting from 2008, 2009,2010 up to
        right now, when you go to hospital,[…]they will ask you where
        do you come from, when you say Dokyikrom then
        they will just tell you be careful of the water that you
        drink.
```

In line 69 the third person pronoun, 'it', referenced a borehole which existed in the, 'ordinary time', through the Newmont era and was useful because, 'we were not having any underground or surface this thing that was destroying the land'. Line 70 provides the positive discourses which hitherto existed such as individuals drawing water from the borehole for drinking, cooking and to irrigate their crops. In line 74, there is a contrast in terms of change in time and transformation of discourse, 'But later on', and includes specific years in which individuals begin to experience negative health effects.

To provide the evidential basis for how discourse construe the relationship between Newmont and individual experience there is a pattern of attribution to expert opinion, in two main ways. First attribution to the expert diagnosis of the source of the problem and also expert opinion on the effects on individuals, as in line 100 and 102:

```
96      […] as I am talking to you right now, we are having about 3
        eeerm test, I can even go, I can even show you the documents
        that.
100P3:  So that one is from the Ghana Water Company indicating that
        the water is not safe for drinking, it means the water is not
        good for people.
102     And then one is from eeerm a certain NGO that was
        WACAM so that report too came and they said the
        water is not safe for drinking […].
```

In line 100 the representation provides evidence for the claims that underground and surface mining activities have polluted their water through reference to the Ghana Company as, 'indicating that the water is not safe for drinking', and the negation, 'not safe', constitutes a linguistic evidence which linguistic evidence is collaborated in the material world by work done by an NGO, WACAM.

Second, there is a pattern in which the representation provides evidence of individual cases where experts have made reference to the sort of water individuals' use for domestic purposes. For instance, in line 35 of extract 12, through the discursive strategy of aggregation, 'some people', and the action this aggregated group

undertake, 'go to hospital for treatment', the representation attribute the negative relationship between Newmont's action and human lives to expert opinion. The attribution to expert opinion can be realised in, 'the only thing that the nurse or the doctor prescribes to you is that be careful of the water that you drink'.

But unlike previous representations which construe negative relationship, in this case, Dokyikrom or Tutuka is particularised in the sense that the mention of either of the names always elicit only one response from the doctors or a nurse, 'be careful of the water that you drink'. Thus, on the basis of an attribution to expert opinion the representation evaluates by comparison, 'the water is not helping those of us in this community nowadays'. Within its cotext, the adverb of time, 'nowadays', contrasts with an implicit previous time when the water was helping P3 and his community of experience. However, this sort of construction can achieve ideological effects by reducing the causes of ill health in the community to the contamination of water sources even though there could be other causes of new ailment being witnessed in the community.

There is a similar but different pattern in which the representation make a connection between Newmont's action and human health through an evaluation of the desirability and undesirability of action occurring at places where local community social action used to take place. The similarity lies in the sameness of the field in which the evaluation is made, 'human health' and the difference in representation can be realised in who is included in discourse as the agent of the negative assessment of a discourse in place, in terms of averral as it is the case here and attribution to expert opinion as is the in the preceding analysis. This pattern of representation is instantiated in lines 29 and 30 of extract 12 and lines 133:

```
23 P3:      They were having a tailing's dam around and then we were
            having a small (:) stream also at the place, I will show
            you that place too.
            […]
30          And we the community members here now, most of us when
            they use the water, it affects us a lot.
133P3:      Looking at how the tailing's dam is and how human beings
            are staying you see, you see it is not even good at all.
```

In line 23 of extract 12, the representation includes Newmont's tailings dam and a stream in a way that shows they are close in place to a semiotic object, 'a small (:) stream', which P3 and his group draw water from. Further, in line 30 of extract 12 there is an aggregation, 'most of us', who experience negative effects from the use of the water from the stream. The negative effects due to the use of the water from the stream can be realised in, 'it affects us a lot'. And in line 133 of extract 9, the representation evaluates negatively the co-existence of Newmont's action, 'tailings dam', and human systems. The negative evaluation can be realised in, 'it is not even good at all'. Besides, the focus of elements like the tailings

dam and the proposition of negative effects on P3 and his group paints an identity of Newmont as not that environmentally responsible company.

Furthermore, the representation evaluates the desirability or undesirability of what is going on by comparing what Newmont's CSR action offers with the cost of Newmont's action on an individual's health. In line 126 and 143 of extract 9, the representation construes a helping relationship between Newmont's action and 'us' however, the existence of other entities close to where the human system is referenced as a source of the problem, 'the condition now'.

However, unlike the CSO and Ananekrom, the Dokyikrom discourse construes a balanced or mixed evaluation of Newmont's CSR or CD initiatives. In line 126 of extract 9 the representation is certain about the desirability of Newmont's CSR contribution, 'So they, they are helping us'. However, this desirable evaluation is contrasted with an implicit a negation, 'So they, they are helping us but the condition that we are in right now, even if they just even give us electricity, how are we going to survive'? [Line 126 of extract 9]. Here the conjunct, 'but', introduces a new discourse, 'the condition', which a collective group lives in. This question creates a polemical orientation to the difference in representation as it opens up for alternative voices over the meaning of what is going on. Though this representation does not include other voice it can be seen as being dialogical in Fairclough's (2003) sense as it opens up to an alternative position. This is because the discourse includes one of the services which the mining industry use as their trump card in representations on local CD, electricity. The inclusion of the irrealis future action, as desirable but contrasted with uncertainty over the possibility of human survival under electricity suggests that even though mining companies may extend electricity to their host communities, the social actor in representation value human survival than technical neoliberal indicator like the supply of electricity to rural communities.

Similarly, in line 143 there is a desirable evaluation of Newmont's skills training activities, 'So it is helping us a lot'. But the representation waters down this desirable valuation with the introduction of a different indicator of valuing, 'human survival', and the evaluation is based on importance. Lexically, the contrastive conjunct, 'but', signals a change in discourse and, 'we do not need all those things', lexically realised negative evaluation of Newmont CSR action previously evaluated as desirable. The discursive tool which provided the opportunity for the representation to achieve such as contrastive evaluation is 'importance or relevance' as in, 'because the life of human being or the life of man is more important'.

Conceptually, this sort of representation amounts to evaluation by comparison but also reveals the social value of the social actor in the discourse. That is the importance assigned to the value of human life, in the actors' way of making connections, as opposed to mining companies technocratic and neoliberal indicators of the number

of schools and skill training provided in a host community. This representation connects with my position on the policy representation nomination of areas of relevance for mining companies CSR initiative. My position is that the existing conditions at local community and project activities should be the determining criteria of what company CD activities should focus on. For example, government discourse put emphasis on education, water, health, and sanitation. At the Dokyikrom, Newmont CD initiatives like classroom block and skills training centres have been provided in accordance with a policy focus. But the P3's perception that their underground water is polluted is the source of their demand for resettlement. Moreover, this sort of evaluation points to how far mining companies truly engaged their host communities in local community needs assessment and prioritisation. This is particularly interesting given that the discourse includes the view that those who participate in Newmont's local community meetings are outsider-residents of Dokyikrom who do not experience Newmont's environmental effects.

Additionally, in line 123 of extract 9 the representation, evaluates an entity by inviting R to look at a discourse in place, `so look at how nice the school is'. Here, the evaluation can be realised in the adjective, `how nice the school is'. In line 138 another semiotic object, `this compound', mediates positively how P3 construe Newmont CD nexus. However, these facilities as neoliberal indicators of training, skills acquisition, progress, and development are interpreted by P3 as subservient to human life. The subordination of these indicators to human life can be realised in, `but now we are saying that we do not need all those things because the life of human being […] is more important than to receive wealthy and all those things'. The conjunct, `but', signals that there is a contrary discourse, which is collective disapproval of corporate good works in the discourse. Linguistically, the collective disapproval can be realised in, `we do not need all those things'. Though there is positive company CSR discourses in a place other subsisting discourses in place such as the emergence of skin diseases, abdominal and menstrual disorders among some women mediate how P3 take action in the discourse. The negative discourses in place are used as key standards of value to downgrade Newmont's CSR contribution to the local CD.

Based on, `the condition', which transform Newmont's positive discourse into negative, P3 representation is similar to the CSO representation which evaluates Newmont's corporate good works as inadequate to offset Newmont's negative environmental effects on people, places and other semiotic objects in materially situated places. But the Dokyikrom representation' inclusion of Newmont's positive discourses as, `helping us a lot', contrast with the CSO representation which largely represents Newmont as producing mainly negative outcomes. Therefore, P3 positive evaluation of Newmont's action albeit transformed by an interplay of discourses in a place like the emergence of new forms of ailments due to perceived contamination can become a critical discourse moment, as it provides an opportunity for the company and the local community to reconsider the actions leading into and out of this construction.

Besides, there is a pattern of certainty about the representation proposition on the undesirability of Newmont's social action. In line 133 of extract 9, the representation contains a certainty in the form of an undesirable evaluation of the siting of Newmont's tailings dam to human systems. The undesirability can be seen in the clause, 'Looking at how the tailing's dam is and how human beings are staying you see, you see it is not even good at all'. The negation, 'it is not', lexically realised negative evaluation of what is construed as existing within the here and now of the ongoing discourse. The closeness of the undesirable action to the researcher and research participant can be observed from the involvement strategy, 'Look at how the tailings dam is'. This presupposes that both actors in discourse are close to the tailings dam and human settlement and thus can make sense of the closeness of the two world entities. Also, the representation implies that the actor in discourse would have preferred that the tailings dam is located far away from human systems.

Moreover, in line 112 of extract 9, there is a certainty that Newmont's CSR actions are a subject of dispute, and the certainty is realised in, 'mmm that is what now most people are quarrelling about,' and, 'most', expresses a high modality in relation to the number of individuals who contest Newmont's contribution to Dokyikrom, a sort of argument on the basis of numbers.

Furthermore, there is a certainty that the community people disapprove the conditions in which they live, and this certainty is realised in the categorical negation, 'is not':

113   Is not that we the community members we like the situation
             that we are in right now? [Extract 9]

Additionally, in line 29 of extract 12, the representation is quite certain about the proposition that Newmont workers have recognised that the borehole is contaminated. The certainty in the proposition can be realised in, 'they have seen', and that, 'there are some chemicals', plus the qualification that they, 'have been go [ne] deep into this thing'. To add, in line 30 of extract 12, the modal adverbial phrase, 'most of us', shows that a large number of the community of experience agree with a proposition of a negative connection. The certainty about the community of experience allegation of negative experience about the use of the water can be realised in, 'it affects us a lot'. In its context, 'it affects', expresses certainty about the community of experience 'attitude' to the use of the water in discourse. In this case, the expression of certainty plus aggregation to a large number of community of experience portrays the representation's commitment to the level of undesirability between Newmont's action and local community social action, a bore the Dokyikrom drilled for their use prior to the commencement of Newmont's activities.

In the next subsection, I will summarise the key findings arising out of the analysis of the Dokyikrom interview. The findings will be sum up along the lines of the study's specific research questions.

8.3.3. SUMMARY OF DOKYIKROM INTERVIEW

The analysis reveals that the actions that are accounted for are about the implications of NGGL environmental effects such as pollution of Subri stream, contamination of a communal borehole, the emergence of skin diseases and abdominal disorders on people, places and other semiotic objects.

By way of social actor inclusion, the analysis revealed that social actors included in relation to the social practice of mining and CD nexus include Newmont, TAs like chiefs and the KYA.

In terms of role allocation, the analysis reveals that Newmont is included as an agentive social actor whose negative environmental effects threaten the survival of local-locals who live in the Dokyikrom community. Besides, the analysis indicates that local-local social actors are included as passivated social actors who bear the brunt of Newmont negatively environmental effects.

Moreover, the analysis shows that individuals' experiences are brought into the representation through a situated history of what used to exist such as prior practices of using the borehole water without incidence of waterborne diseases and what happened after Newmont extended its activities close to the Dokyikrom community. The after Newmont experiences include incidences such as the emergence of skin diseases and abdominal disorders. To add, the analysis suggests that individual's experiences of skin rashes and abdominal disorders in relation to a place where Newmont's tailings dam exist close to human systems are included as mediational means which affords how P3 construes Newmont and Dokyikrom CD nexus. These discourse bore a similarity to the discourses circulating within R and P1 talk in the Ananekrom community, where P1 offers an account of the implications of Newmont environmental effect on local community sources of water and human health.

Besides, the analysis indicates that co-existence of the 'tailings dam' and human systems at a place is detrimental to human health. Further, the analysis reveals that P3 and his group prioritised the quality of human life over the growth in things.

The analysis demonstrates that P3 discourse expresses the desirability or undesirability of Newmont's doings onto people, places, and other semiotic objects through comparison of what Newmont offers such as the provision of a six-classroom block with the implications of Newmont's negative environmental effects on human survival at a situated place, Dokyikrom.

In terms of the modality of linkages, the analysis shows that there is a persistent pattern of the use of high modality in expressing the undesirability of Newmont's actions on human lives at a place such as producing skin diseases.

In terms of expectation about how representatives should act, the analysis reveals that P3 and his group expect those who stand-in for the affected voices to be members of the community of negative experience so as to communicate their concerns as informed and co-experienced voices.

With regards to manifestation of domination, difference, and resistance in P3 representation, the analysis shows that P3 discourse activation of human survival as actual mediational means within the immediate environment of possible mediational means like a school block constructed by Newmont constitutes difference and resistance to the broader social-political discourse of mining company CD contribution to social infrastructure as evidence of extractive-based development.

In the next subsection, I will analyse the concerned voice from the Kantinka community. In the section to come, I will begin the analysis with the identification of the discourse topics. This will be followed by a subsection on the socio-semantic representation of social actors. Also, the next section will analyse how the representation makes connections between Newmont's environmental effects and people, places, and objects in situated environments. Finally, the next section will end with a summary of the findings along the lines of the specific research questions of the study.

8.4. THE KANTINKA VOICE

The interview with the P2 differed from the tour of places and talk about actions happening in places as is the case in the Ananekrom, Dokyikrom, and Yarogrumah. In this interview, P2 could not take me to the places where he experienced actions which are accounted for in this interview. This is because of a ministerial intervention which led to an agreement that Newmont should resettle P2 and 36 others. Prior to the resettlement, P2 and 36 others had dragged the NGGL to court over human rights violations regarding their eviction from the Kantinka community.

Aside from the difference in terms of tours of places, P2 is an activist like P1, P3, and P4. Even more, P2 has gone beyond local community-level action to include leading some 36 others to sue Newmont over human rights violations pertaining to their eviction from Kantinka.

In brief, P2 account of past actions include; meetings →survey of houses → verification of survey data→publication of a list of qualified claimants for compensation or resettlement→disagreement over resettlement or compensation→road blockage→community meeting→pollution of Subri

stream➔community letter to Newmont➔verbal invitation from Newmont➔provision of a borehole ➔demolition of local social action➔legal suit at the high court➔ compensation paid to 12 plaintiffs➔court order to Minister for Mines to negotiate➔Minister negotiated a resettlement➔P2 and others moved from Kantinka➔ explanation of compensation processes➔pollution of a borehole➔report to WACAM➔Centre for Public Interest Law (CEPIL) and ➔[30]water sample test.

This account of actions shows a context displaced in time and the 'here and now' of the action going on, in the interview talk between R and P2. But these chain of practices is not discrete from the interview because these chain of practices feed into the interview and outwards into the future actions of changing how different social actors construe differently the gold mining CD nexus.

However, there is a need to make some conceptual clarifications here. An immediate environment of discourse is that in which people and things talked about are within the 'here and now' of the interview (Bartlett, 2014). In contrast, in a displaced field of discourse, the subject matter of talk relates to events, not within the immediate environment of the speaker and the material activity engaged in by the speakers. For example, 'on this day […]', implies a recreation of the time and event within the talk (Bartlett, 2014). Sometimes, there are blurred distinctions between immediate and displaced context. For example, if the ongoing discourse relied largely on the discourse between two discourse parties "the borderline between constitutive and ancillary language is often a fuzzy one" (Bartlett, 2014, p.26). In this case, the topics of the ongoing discourse are about actions which occurred in the past, and P2 offers a first-hand account of these actions. Because R has background information on the 'what is going on' the interview could be said to be constitutive of both displaced and immediate fields of discourse.

In the subsection which follows, I will analyse who is included in P2 accounts of displaced actions through van Leeuwen, (2008) framework for social actor representation.

8.4.1. SOCIO-SEMANTIC REPRESENTATION OF ACTORS

Social events entail various elements such as the forms of activity, persons with beliefs, desires, values, etc., social relations, institutional forms, objects, means, time and place, language including semiosis (Fairclough, 2003). Text can be analysed from 'a representational point of view' by looking at which element of text are included or excluded in the representation of a social event, and which aspects of the text that are included are given prominence (Fairclough, 2003).

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[30] The arrows in this representation indicates the order in which these events were recreated within the interview but not their order of occurrence in the actual practice.

In this subsection, I will answer the question who is included or excluded in relation to selected accounts of the actions in extract 13: meeting→survey of houses→verification of survey data→and publication of a list of qualified claimants for compensation[31]. This is in line with van Leeuwen's position that social practices require social actors in 'certain roles', therefore, actions as elements of social practice require social actors in active or passive roles.

(A) Deletion

From line 4-7 of extract 13 the following social actors and events they participated in are included, 'we', 'our', and, 'us', which refers to local-local individuals and, 'NGGL', which is subsequently included through a reference to a, 'they'. The representation also includes the interaction order between the, 'we', and Newmont, 'some meeting with us'. However, the account excludes the specific social actors who were present at the meeting, the place where the meeting took place and the views which were expressed and how they were expressed at the meeting. These exclusion are significant because their absence in discourse makes it difficult for further digging into what happened within the meeting. What happened within the meeting is relevant in analysing how local individuals initially received the information and the transformation of and in discourse that may have occurred since the initial meeting.

Additionally, in relation to the report on the event, 'we saw that our road has been blocked with full of stones (:) heavy stones which we cannot do anything', the representation backgrounded the social actor responsible for blocking the road. However, from the context, a reasonable deduction can be made that Newmont is the social actor behind the road blockage.

In the next subsection, I will analyse which of the included social actors is construed as engaged in transactive actions and which are construed in discourse as affected or agentive in making meaning out of the doings of a particular social actor to entities in the situation.

(B) Rearrangement

In this representation, there is a pattern in which Newmont is included as the social actor doing things to a collective social group:

```
4 P 2:      Yeah, eer on this day 27th March 2013, when we were there
            when NGGL came to our area and said […], they want to use
            our place for (0.5)eer waste dumping expansion
            so… [Line 4 extract 13]
```

[31] Selection is made in order to avoid repetition and also to reduce the volume of text.

```
7 P2 :        'So (0.5) they came on that day and then have some meeting
              with us after telling us that, they took some pictures of
              our houses, putting some eerm serial numbers (0.5) on our
              houses'[Line 6-7 of extract 13].
```

In line 4 of extract 13, a, 'we', existed in a particular historical moment and a nominated social actor, 'NGGL', came to a place possessed by, 'we', 'our area', and informed the, 'we', group about its intended action. This intended action is linguistically realised in, 'and said they want to use our place for (0.5) eer waste dumping expansion so'. The use of a possessive, 'our area',[32] suggest that P2 and his group referenced in discourse through a, 'we', have a close relationship with a particular place. This relationship could include tangible relations like properties on the land and intangible relations like historical attachment to a place.

Beyond the report on the information given, the representation includes material actions taken by a, 'they'. These actions are linguistically realised in the transitive, 'they took some pictures of our houses, putting some eerm serial numbers (0.5) on our houses'. These actions constitute a transformation of the action which was taken at the meeting, the local community people were informed. This representation is relevant to how local-local individuals construe the mining CD nexus because it portrays a situation where a collective, 'we' lived in an area owned by them were acted upon by the NGGL, thus setting the tone for the resistance to the company's action as later events show.

In line 12 through 14 of extract 13, the representation abstractly refers to a, 'they', [33]doing as the agent behind events like giving information about a list of the claimants for compensation. Also, a, 'they', are also the social forces responsible for events like the processes of selecting individuals for resettlement or cash compensation. But the discourse excludes the micro activities like attendance upon the RNC, who was present at the RNC, the mode of interactions at the RNC and the agreements or disagreement at the RNC. This abstraction could be made in order to delegitimise the way in which Newmont conducted the processes of deciding who qualify for compensation and who qualify for resettlement. More so, given the fact that P2 and thirty-six others have approached a high court over human rights violations in relation to how compensation and/or resettlement processes were conducted, this exclusions could serve an ideological interest of legitimising their court action.

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[32] But 'our area' could also be situated within the Akan notion of land as something which belonged to past generations, current generation and the absent future generation.

[33] From the context of discourse the 'they' realises Newmont Ahafo South.

Aside from being agentive in relation to social practice like resettlement and compensation, Newmont is also included as doing things to entities created in discourse. This pattern of representation is instantiated in lines 168 and 172 of extract 14:

```
168  P2:      Yes, yes Officer, you see, at the point in time, we came
              and noticed that even the one that I was our stream get
              polluted.
172           Even the borehole itself at first, at first the company
              was not working near us so when they get closer to us then
              we came to notify[ce] that the boreholes have also been
              polluted.
```

Even though in line 168 of extract 14 the representation excludes the agent behind the pollution, however, if line 168 is read together with line 172 of extract 14 the inevitable conclusion must be that, Newmont is the agent behind the pollution of the stream. This is lexically grounded in the adverb, 'even', before the noun, 'borehole', which seeks to emphasise a point that beyond what is said previously, pollution of the stream, Newmont has also polluted the borehole. The agency of Newmont can be realised in, 'when they get closer to us then we came to notify [ce] that the boreholes have also been polluted'. Through the inclusion of the circumstance, 'when they get closer to us', the representation establishes agency through association in time and place.

However, in contrast to the Ananekrom representation, in the Kantinka voice, there is a pattern whereby the, 'we', positioned in discourse as the affected are included as a dynamic voice beyond making meanings out of Newmont's doings to entities. But also, a, 'we', is included as an agentive social actor who is networking with relevant social actors to get their concerns addressed. For instance, the transitivity, 'we submitted our case to WACAM', realises the agency of P2 and his collective group. Additionally, in line 170 of extract 13 P2 and his group are included as agentive, 'So when we get that situation we have to invite them to come and see (0.1) how they will (0.1) give us some water'. Here, the agency of those who receive the doings of Newmont can be realised in the transitivity, 'to invite them to come and see'. The agency of P2 and his group demonstrate that even in relation to the company and local-local voices, the local voices have agency, they are able to get things done.

The agency of P2 and his group in getting Newmont to address its negative doings is similar to the Ananekrom representation in which a complaint from a, 'we', in discourse got the Newmont to move in to redirect perceived leakage of mine waste from the tailings dam back into the mine plant. However, the agency of the, 'we', in P2's representation differed from P1 in the sense that P2 has networked beyond the Newmont to include NGOs. For instance, in line 186 of extract 14 the, 'we', are included as agentive, through a description of their action, 'to [put] pressure [on] the WACAM people for them to go on the case to the court'. Within

this text, the agency of the, 'we', is realised in the transitivity, 'to pressure the WACAM people'. Putting pressure on the WACAM people emphasised the persistence of P2 and his group in getting things done for them, and thereby emphasised their agency.

Furthermore, a distinct aspect of the Kantinka voice is that it includes WACAM and CEPIL as non-governmental organisations which are not just agentive but also as social actors who transmit the voices of the affected individuals from the private sphere into the public space and empowered spaces for discussion and action respectively. For instance, from line 177 to 179 the representation recreates an event, how a complaint from P2 and his community of experience to WACAM led to the coming in of the CEPIL. Through the CEPIL some expatriates came in to conduct a water sample test. Additionally, because WACAM invited CEPIL, the centre later filed a case at the human rights court and this resulted in the referral of the case for a quasi-judicial determination by the Minister responsible for the mines and natural resources. Thus, the Kantinka voice includes itself as an affected voice whose initiative, 'invited them', led to a network of actions which transformed the discourse of disagreement over compensation into an agreement to resettle the affected voices. The attribution of agency in discourse to an affected voice is critical in the sense that such agency can imply the agency to jointly construe Newmont CD nexus or to resist a particular way of construing the Newmont and CD nexus as natural. But the inclusion of NGOs as social actors who transmit the local-local voices into the empowered spaces contrast those of Ananekrom and Yarogrumah community. For instance, in Yarogrumah the MP whom the local-locals expect to transmit their voices into the empowered space of government is included as not listening. In the case of Ananekrom, the EPA is included as a social actor who is not giving the local-local voices the feedback they expect.

The next subsection will aim to analyse the discursive strategies such as particularisation, nomination, and differentiation which are used to represent social actors in relation to how they construe the Newmont and CD nexus.

(C)   Substitution

There is a pattern in which the institutional social actors are nominated and particularised. For instance, the recontextualisation of the social practice of compensation or resettlement within the social practice of a local community meeting nominates Newmont, 'NGGL came to our area and said' [Line 4 of extract 13]. Also, the representation nominates and particularised WACAM and CEPIL WACAM. For instance, 'WACAM themselves came to our village to come and see with their naked eye whether we are living there or not' [Line 117 of extract 14]. Perhaps the nomination and particularisation of what Newmont did could be to make Newmont the object of attention in the interview. Also,

WACAM and CEPIL are given specific mention perhaps to enhance the status of P2 account about Newmont's unclear compensation or resettlement practices.

In contrast, the representation includes the local community social actors through the use of pronouns, 'we', 'us', and, 'our'. Social actor representation through pronouns sort of hide the identities and qualities of the individual local community actors. For instance, who were those who went into a meeting with Newmont on the 27.03.2013? Though suppression is inevitable in discourse, the specific names and qualities of the participants if provided could provide an opportunity for understanding what transpired at the initial meeting. It could also provide a window to understand how what transpired at the initial meeting connects with the compensation and resettlement practices accounted for by P2. Perhaps the details of the local actors are elided because social actors who are referenced in passing do not receive attention from the listener in the interview talk. This sort of representing an outside group as the cause of negative doings and taking agency away from the in-group could serve a political agenda of blaming the challenges of the compensation or resettlement practices on Newmont. After all the listener does not know what the local individuals said when Newmont informed them about its plans to resettle them in the future.

There is a pattern in the representation whereby there is differentiation in the identity of two social actors. For instance, Newmont is referenced mostly through the pronoun, 'they'. In contrast, the discourse construes a collective identity of some unnamed individuals as a community of negative experience. The community of negative experience is realised through the pronouns, 'we', 'our', and, 'us'. For instance, in line 78 of extract 16, there is a differentiation between a, 'they', who are portrayed as antagonist of a, 'we'. The antagonism of a, 'they', towards a, 'we', in discourse is lexically realised in the actions attributed to a, 'they', in discourse. For example, a, 'they', in discourse, 'will come and demolish', and, 'will come and spoil', the social practices of a, 'we', in discourse such as farming and charcoal burning. Additionally, in line 212 there is the averment that after the negotiation broke out, a, 'they', was fixated on causing harm to an, 'us'. This differentiation construes an identity for the, 'they', as persons who disregard the human rights of a, 'we', and, 'us', to engage in livelihoods practices for their survival.

The next subsection will seek to analyse the patterns of how P2 and his group make linkages between Newmont and people, places, and other semiotic objects in materially situated environments.

8.4.2. INTERPERSONAL META FUNCTION

There is a pattern of making connections between Newmont's action and entities in the situation by linking Newmont to undesirable events. For instance, 'we came and

noticed that even the one that I was our stream get polluted' [Line 168 of extract 14]. Here, there is sense-making in, 'our stream get polluted'. The evidence to back the sense made out of the state of a world entity recreated in discourse is provided in line 169 of extract 14, 'All our fish died'. There is meaning in the sense of ownership of an element of nature, 'our stream'. Also, sense is made out of the element of the environment on the basis of P2 relation of ownership and material benefit with elements within the stream. These elements which are owned, and also, are of material value to the local individual are construed in discourse as becoming extinct, as realised in the predeterminer, 'All', but not, 'some', of the fishes died. But in order for the reader in the text to understand that sense is made from the doings of Newmont to entities recreated by language in use, then recourse has to be made to the pronouns, 'they', and, 'them'. The use of these pronouns in line 170, cataphorically connect Newmont to the doings of which P2 make sense out of.

Furthermore, there is a pattern of representation in which P2 make linkages between Newmont's action and entities through a comparison of the positive discourses in times when Newmont actions were distant from local-local people and their routine places and the negative discourses which emerged after Newmont's activities are extended close to local-local people and their routine places. For instance, in line 168 of extract 14, 'at the point in time', suggests that at a particular historical moment when Newmont came into being P2 and his group observed negative effects on their source of water, 'our stream get polluted'.

Additionally, in line 172 of extract 14, the representation connected Newmont in an abstract way to the pollution of the borehole drilled by Newmont. The discourse makes a linkage by comparing the pre-mining status of the borehole to the period when Newmont extended it waste dumping activities to Kantinka. This is realised in, 'Even the borehole itself at first, at first the company was not working near us so when they get closer to us then we came to notify [ce] that the boreholes have also been polluted'. The comparison in discourse is realised in the period before Newmont which period is realised here as, 'at first the company was not working near us'. This pre-mining era is contrasted with the era of mining, 'so when they get closer to us'. Also, the adverb of time, 'so', and, 'then', are the lexical choices which mark the link between Newmont's doing and the new negative discourse, 'the boreholes have also been polluted'. For instance, the conjunct, 'so', and the adverb of time, 'then' could be replaced in its cotext with, '[to the extent that] they get closer to us [afterward] we came to notify [ce] that the boreholes have also been polluted'.

This representation is a sort of 'before and after' analysis in the sense, that before Newmont extended its dumping activities close to situated places in Kantinka, the stream was clean. But after Newmont extended its dumping activities close to

Kantinka the water source became polluted. However, perhaps as a way of enhancing the evidential status of the linkage, the representation connected local community action to a chain of social practices. For instance, the representation connected Newmont's doing to a chain of social practice such as Kantinka submitting a complaint to WACAM→ conducted a field visit to ascertain the situation→CEPIL invitation of water quality experts'→water sample test.

There is a pattern of representation in which Newmont is linked to undesirable actions like the destruction of social action of local individuals who rejected Newmont's compensation package. For instance, in lines 78 through 91 of extract 16 the representation includes Newmont as a social actor which destroys the livelihood activities of individuals at the Kantinka community. The representation includes these events in an irrealis way, through the conditional, 'if', plus the future tense, 'will'. However, the context of the usage of the future verb suggests that the representation sought to portray the usuallity of the occurrence of Newmont's deliberately 'destroying' local-locals' livelihoods activities. This connection is interesting in the sense that it contradicts government representation of the relationship between mining companies and local communities as partners in livelihoods development.

Also, P2 discourse contradicts Newmont's commitment to respect the human rights of its host communities. Though Newmont did not fulfil the statutory obligations imposed on it, by not exhausting the grievance resolution mechanism set out under act 703 the company undertook to evict the local-local people from their places of residence and sources of livelihoods. The practice of eviction without exhausting due process of law can be realised in extract 16:

```
Extract 16

78 P2:     No I miss the word (0.4) they bring some people in there
           so that they will come and demolish anything that we do
           over there.
79         So if we farm over there, they will come and spoil it.
80         At that time, after they will, they will resettle some
           people, the only job that you can do is (0.1) charcoal
           burning.
81         So when you gather your firewood to come and burn your
           charcoal, before you realise they will be there and then
           they will spoil it. […]
212        You see after they, they made their mind that they are not
           going to resettle us, everything that they do was to harm
           us, you see, for us to (0.1) even you yourself will say
           oh at this time 'dier' I cannot stay here so I
           have to leave (0.1) you see, it is a lot of
           problem, a lot, a lot of problem.
```

For instance, in line 212 of extract 16, the representation evaluates the desirability of Newmont's action on local-local individual's social action. For instance, after the dead log over the negotiation for the compensation payment, Newmont's actions are construed in discourse as having the intent to harm local-local action. This is

specifically realised in, 'everything that they do was to harm us'. The meaning of attribution of intension to harm is that though Newmont had engaged in 'demolition' and 'spoiling' livelihoods activities of individuals at Kantinka, Newmont had at the time of the reported demolition not exhausted the procedure set out in Act 703 and LI 2175 (2012). These laws stipulate that disagreement about compensation or resettlement between a mineral right holder and claimant are to be determined by the Minister responsible for mines. Newmont's failure to exhaust the process set out in the law before proceeding to evict the residents is interesting in the sense that it is contrary to Newmont's own public commitment to protecting the human and cultural rights of its host communities and people. Due to this perceived human rights violation, P2 and some 37 others proceeded to the human rights court to ventilate their rights. Interestingly, in the course of the trial, Newmont defence was that the court is not the appropriate forum to seek redress for disagreement over compensation or resettlement since act 703 imposed a quasi-judicial obligation on the Minister for Mines to resolve disputes over compensation or resettlement. Newmont's pleading was upheld by the court. A critical observation is that P2's attribution of intention to harm to Newmont's actions make P2 connection of relationship between local-local social action and Newmont's action different from P1, P3, and P4. These other discourses do not attribute intention to harm to Newmont's action.

There is a pattern of the use of high modality markers in expressing the feelings of local-local individuals in relation to Newmont's compensation or resettlement practices. This way of categorical evaluation of Newmont's practices is instantiated here:

```
15        So (:) we were there (0.1) some of our colleagues were not
          happy about the way the situation is going on because
          (0.1) all of us we were there, we had the same
          meeting you people said you are, they are going to resettle
          us (0.1) then why are they now eer doing selective justice?
19        Like (0.1) selecting some people to go and resettle them
          and leave some people here?
20        So (:) some of us did not agree with them, so (:) they did
          their (0.1) work and then leave us there.
```

First, in line 15, the representation aggregated the local community actors. This aggregation can be realised in the pronoun, 'some of our colleagues'. After aggregation the discourse then uses a high modality to express their disapproval of Newmont's practices, 'were not happy', and also in line 20, 'did not agree'. These negations constitute a high modality used in expressing the feeling or disapproval of an unnumbered people about Newmont social practice of selecting affected voices into categories of resettlement and cash compensation. At the same time, the use of high modality constitutes a sort of understatement via the negation of 'happy' and 'agree'.

Second, there is also the use of high modality in evaluating Newmont's practices as undesirable. For instance, P2 uses a high modality to express his degree of commitment to the unfair processes of compensation or resettlement. For example, `we had the same meeting you people said you are, they are going to resettle us (0.1) then why are they now eer doing selective justice?'` By representing, `selective justice'`, as doing of Newmont constitutes an evaluation of an ongoing practice based on values of fairness and justice. That is an evaluation of the process in which some individuals were selected for resettlement or compensation. This evaluation on the basis of values can be realised in the lexical `selective justice'`. `Selective justice'`, constitutes an evaluation of the practice of selecting individuals for resettlement and relocation in terms of cash payment. It also expresses implicitly the value which the social actor in representation expect to guide the practice of resettlement and relocation, the unsaid about selective justice can be justice or fairness in the selection processes.

Besides, the representation makes a connection between Newmont action and other entities, through reference to activities undertaken by experts. This way of connecting negative occurrences to Newmont is reflected here:

```
190 P2:      At the point in time we saw that the, the small boys and
             then small girls we eeer they get some spots in their
             skin.
191          Then some of them when they send them to the hospital what
             they told them is that they should drink clean water
             […] they should check up their water very well.
```

In line 190, P2 and his group, `we'`, take responsibility for the observation that within particular historical moment girls and boys in Kantinka developed some skin diseases, `they get some spots in their skin'`. But in line 191, P2 attributes to expert opinion in an indirect way, the assumption that the spots on the bodies of boys and girls are due to the drinking of contaminated water. Because whenever affected individuals go to the hospital, a, `they'`, which may reference health experts undertake an action, `told them…they should drink clean water […],'` thereby assuming the spots are caused by the taking of unclean water.

Contrary to government representation that affected individuals have the right to representation at the RNC, there is evidence that local-local claimants for compensation expectation about representation are not met. This is realised in a selected portion of extract 15:

```
90           They were saying that they took some decision with you see
             they bring in some RNC meaning eeer.
91 R:        Resettlements Negotiations.
92 P2:       eheh resettlement negotiation.
93           So our members were in so they try to convince our members
             so when they go and the (0.1) discuss some issues our
             members will not come and tell us.
```

Saved the attempt by, 'they', to influence the local-local claimant's representatives, it can be inferred from line 93 of extract 15 that P2 and his group expect their representatives at the RNC to give him feedback on the discussion at the RNC.

In the next subsection, I will summarise the key findings arising out of the analysis of the Kantinka interview along the lines of the study's specific research questions.

8.4.3 SUMMARY OF KANTINKA REPRESENTATION

From *Appendix H* the recontextualised social action in the Kantinka representation includes unclear resettlement and relocation processes, pollution of water sources such as a stream known as Subri, road blockage and negative effects on human health. Others include the submission of complaints to NGOs, water sample test, litigation, and resettlement.

Moreover, the analysis shows that the local-local social actors and Newmont are included in the representation through differentiation based on a, 'they', versus, 'us'.

The analysis reveals that P2 makes the connection between what happens to people, places, and other semiotic objects whenever Newmont's produces negative environmental effects based individuals experiences of absence of positive discourses and the emergence of negative discourses.

Moreover, the analysis reveals that P2's historical experience of an unclear and unfair process of Newmont's resettlement and relocation practices influenced how P2 negatively linked Newmont's actions to human well-being such as quality sources of potable water.

In terms of the relevance of place, the analysis indicates that P2 experiences with Newmont in relations to negative effects at materially situated places and the social practices going on at such places like farming, polluting a stream called 'Subri', the dumping of rock waste, road blockages, and destruction of charcoal burning work stations mediate how P3 construe the Newmont and Kantinka CD nexus.

The analysis indicates that P2 and his co-voices of negative experience expect their representative to give feedback on issues discussed at the RNC but they do not receive feedback from their representatives.

In terms of difference to other representations, the analysis revealed that the Kantinka discourse is distinct because it attributes an element of intention to harm to Newmont's actions such as intentionally destroying local-local individuals' social practices like farming which attribution is absent in other discourses.

With regards to discourse as a site of domination, difference and resistance, the analysis revealed that P2 and 36 others resistance to Newmont's attempt to impose the payment of cash compensation on them constitutes resistance to a dominant actor's attempt at using the RNC to institutional a particular way of representing as if it were normal.

In the next subsection, I will analyse a concerned voice from the Yarogrumah community. The analysis in the next section will begin with the identification of the discourse topics. This will be followed by an answer to the question; what happens to people, places, and objects whenever Newmont produces negative environmental effects? Though P2 and P4 are both local activist P4 interview differ from P2 because P4 interviews took the form of interview tour of P4 farm and his settlement on the farm. Thus the actions and entities referenced are all close to the here and now of the ongoing discourse between R and P4, unlike P2 whose interview occurred at a place where the Kenyasi Number 2 Youth Association usually meet.

8.5. THE YAROGRUMA COMMUNITY'S VOICE

The field of discourse constitutes of five discourse topics,[34] the language used to create previous events and the discourses in place within the here and now of the talk between P4 and R, the crops, places and people close to P4 farm where the interview talk took place. In this interview talk, the focus is on accounts of actions going on in the immediate environment or accounts of actions which have occurred in the past and their historical and future transformations. However, the interview talk itself constitute an action in the sense that it involves meaning-making out of the doings of NGGL and its agents.

In the next subsection, I will seek to address the question: How are social actors construed in discourse included in relation to accounts of social actions construed within the five fields of discourse?

8.5.1. SOCIO-SEMANTIC REPRESENTATION OF SOCIAL ACTORS

By the socio-semantic representation of social actors imply discursive strategies of social actor representation beyond grammar and transitivity analysis. In this thesis context, the focus is on the discursive strategy of deletion, rearrangement, and allocation.

The next subsection will seek to analyse who is included or excluded in representation.

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[34] See table 3 for discourse topics and summary of representation.

(A)   Deletion

In the Yarogrumah representation, there are social actors like MP, Assemblyman, and also P4 whose voices represents the absent others whom the MP and Assemblywoman stand-in for. Furthermore, the recontextualisation of the social practice of mining community employment includes social actors like Newmont, subcontractors, and P4 as a voice of local-locals who lacked access to a certain category of jobs, particularly permanent jobs within NGGL.

Moreover, within the social practice of mining and its effects on local individuals, the representation includes agents, 'Newmont activities' and the affected such as 'Williams', P4's sister and also P4's late father. Additionally, in talking about the social practice of Newmont's CSR the representation includes agents like Newmont and its managers and beneficiaries like the local-local individuals.

In sum, within these field of discourse, there are social actors such as NGGL, Newmont managers, subcontractors, local-local people, locals and community of experience of negative actions. These social actors are realised in discourse through given name like Williams and Newmont and also through pronouns, like, 'they', and, 'us'.

But which category of social actors is included in the representation as dynamic forces in relation to construed social practices become the subject of analysis in the next subsection.

(B)   Rearrangement

There is a pattern of representation which includes Newmont as a social agent which is doing negative things to people, places, and objects in the situation. In line 39 of extract 17, the representation includes Newmont as an agentive social actor, who produce negative effects on food crops through its doings such as the use of cyanide. Two examples from extract 17 and 18 will illuminate this pattern of representation. First, Newmont as an agentive social actor can be realised in, 'The cause that is their activities like the chemicals that they are using [...]'. Here Newmont is positioned as producing a negative effect (sense-making from its action) through a chain of processes, 'the chemicals that are using', and these processes negatively affect local crop out. Second, in line 9 to 11 of extract 18, Newmont is included as an agentive social actor which produces negative effects on P4 social action:

```
9          We had a lot of challenges concerning education
           and the development in our areas because
           previously, we used to attend school at a
           village called Koduhia and they came and
           resettled the school to eeerm OLA resettlement at Kenyasi
           No.2.
```

```
10          So […] they used to bus students from this
            particular place to that particular place
            where, where the resettlement is.
11          And the issues or the problems that we do
            encounter is failure of the bus to come and convey the
            students from this place to that particular place.
```

Reference line 9, the representation includes an expression of the enormity of the 'effect' due to Newmont's activities, 'a lot of challenges', and in the nominated field like 'education'. Also, the genericisation of transformation due to Newmont actions can be lexically realised in, 'the development in our areas'. However, my interpretation of this is that, 'the development in our areas', refers to how Newmont's actions transform local-local places like farms and fallow lands rather than the conventional neoliberal notion of development as progress in the number of things like social services and infrastructure like roads. This is because the social actor behind the representation could have used the expression, 'the development of our areas', instead of, 'the development in our areas'. Further within line 9 the representation nominates the problem caused by Newmont to education, in terms of loss of social practices a, 'we', used to engage at a particular place, 'we used to attend school at […] Koduhia' which. But Newmont's action has negatively transformed this social practice at a particular place, 'they […] resettled the school to OLA resettlement'. To add, in line 11 of extract 18, the representation evaluates the transformation, 'is failure of the bus to come and convey the students from this place to that particular place'.

The implication of this representation is that Newmont's resettlement practice limits the access of local-local students from the Yarogrumah community to attend a school where they live. In this sense, the agency is allocated to Newmont in relation to the social practice of education but in a negatively transactive role. This transformation of social practice is striking because it negatively transformed a local-local initiative, which initiatives Ghana's mining policy encourages mining companies, 'to support and actively participate in'. Additionally, this is quite relevant in a developing country context where mineral extraction is often seen by governments and the WB as a means of changing the low levels of education (Pegg, 2006). Thus, Newmont negative transformation of the social practice of going to school becomes a mediational means which affords how P4 signify, 'a lot of challenges', mining relationship to his CD.

Moreover, unlike others, the representation in relation to Newmont social practice of resettlement and another social practice of going to school is interesting. It positions personalised[35] social actors, 'my father', and, 'the Odikro of Koduhia', as

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[35] Personalised social actors through determination since within the ongoing discourse P4 father is known and because the position of Odikro is always occupied by one person at a time the actor in reference within a particular moment of history is specific.

agentive beyond making meanings out of Newmont's doings but rather as private individuals whose industry led to the establishment of a basic school and the payment of teachers' salaries. The agency of the two local-local social actors are instantiated below:

```
179        So  my  father  started,  he  and  the  Odikro  of  the
           Koduhia, they started with the school.
180        They built the school and even they were using their pocket
           money to pay the teachers before he became an assembly
           member and the government supported him and they built the
           school.
```

Transitive which realise the agency of the two personalised social actors include, `they started`, `They built the school`, and, `they were using their pocket money to pay the teacher`. Therefore, the representation that some local-locals have agency and actually provided social services which social service usually formed the basis for government and company legitimation of mining, points to the view that mining is should not be seen as the most viable approach to rural transformation in mineral-rich countries. This is because the Yarogrumah action is an exemplar that local-locals can bring about the positive transformation of their conditions without the intervention of mining companies. The two school actor who built the school and paid the teachers' salaries are farmers. This further suggests that rather focus on providing enabling environment for mining companies, the government could provide enabling an environment for sectors like agriculture could be given serious consideration due to its labour intensive approach and multiplier effect in the local and national economy.

The next subsection will seek to analyse social actor representation based on discursive strategies such as personalisation.

(D) Substitution

There is a pattern of representation of social actors through the discursive strategy of personalisation, at three different levels; differentiation, determination, and indetermination. First, there is a pattern of representation in which P4 sought to make a difference between his groups of collective negative experience and the authors of their negative experience. Linguistically, the differentiation of the community of negative experience from the others can be realised in the pronouns such as, `we`, and, `our`. The community of experience is differentiated from the others who engage in transactive actions, and these others are realised in discourse through the pronoun, `they`. For instance, in line 10 of extract 18, a, `they` are included in relation to action, `they used to bus students from this particular place to that particular place` and in line 11 of extract 18, a, `we`, are included as sufferers of the social practice of conveying students from one place to another, `the

problems that we do encounter is failure of the bus to come and convey the students from this place to that particular place'.

There is also a pattern of a discursive strategy of determination in the representation in which the social actor who engages in transactive action is nominated. For instance, this pattern of representation is instantiated in the nomination of Newmont in relation to assigning negative health effects suffered by many people including P4's father within a particular place, 'Chickenpox, a lot of people encountered that this thing here and we saw to it that it is the results of the Newmont activities because previously all that I am saying is the experience that we had before and after Newmont came here' [Line 59 of extract 20]. In this representation an aggregated group, 'a lot of people', are linked to Newmont's activities within a particular place close to the R and P4, 'here', and the source of evidence for this negative interpersonal relationships can be found in an objective, 'we', attribution of negative relation to Newmont. The evidential sources of the negative relations are individual 'before experience of human health and after experience' of strange diseases.

Moreover, nomination and relational differentiation occurs in line 62 of extract 20, whereby P4 referenced a specific individual who is within the immediate environment of the interview on the basis of kinship relations, '[…] even you can see the lady over there, that is my sister, she is stroke[...]'. The deictic, 'there', signals that the individual exists in the immediate environment of the ongoing discourse between the R and P4. Thus P4 invites R to look at a situated place and find in situated person evidence of health problems posed by Newmont activities. This linguistically realised in, 'you can see the lady over there'. Therefore, the affected individual who exists in the immediate environment of the talk becomes a mediational means which P4 used to take the action of involving R in co-construing the evidential basis of the negative effect of Newmont on human health at a particular place. The use of close relation who is suffering negative health effects attributed to Newmont is similar to P1 inclusion of his brother who suffered severe skin rashes. Just as the Ananekrom case, P4 nominates Newmont as the social actor responsible for the cause of his sister's health. The attribution of agency and nomination of Newmont in relation to the source of ill health condition of P4's sister can be seen in P4 linkage of a before and after experiences, 'they did not pinpoint and tell us that it is the activities of Newmont but per the experience that we had, (.) before and after the activity, before Newmont came here and when Newmont is here, that is why I am saying that it is due to these challenges' [Line 62 of extract 20]. The discursive practice of nominating Newmont in relation to social action within a place close to the interview is relevant as it affords the R to pay close attention to the effect of Newmont in reference to an individual in a situated environment. For stance, in line 62 of extract 20 the use of the deictic 'over there' implies that R can appreciate the effect of Newmont's action beyond what the use of language can afford. As R looked at the

land, and the linkage P4 made between the discourses in places and a recontextualised social practice, under the analytical lens of a 'before and after' comparison, the recontextualised social practice become concretised in the representation through mediation of the discourses in place like the effect of cyanide exposure into the environment on human health.

There is another pattern of a discursive strategy of indetermination in representation in which P4 categorises the social actors in discourse through reference to their roles in activity and roles as affected social actors. In line 34 of extract 17, there is a categorisation on the basis of experience of P4 and his collective group, 'we do not get the right, I mean foodstuffs […]'. In contrast, in line 39 of extract 17, Newmont is included through categorisation based the role of Newmont, 'The cause that is their activities like the chemicals that they are using […]'. Furthermore, in line 10 of extract 18, a, 'they', are included in relation to social action, 'they used to bus students from this particular place to that particular place'. Additionally, in line 11 of extract 18, a 'we' are included as suffers from the social practice of conveying students from one place to another, 'the problems <that we do encounter is failure of the bus to come and convey the students from this place to that particular place'. This discursive strategy abstract from the qualities of the social actors but foreground the social practices. Foregrounding the social practice has the effect of highlighting what a particular social actor does rather than who they are.

From this section, it can be concluded that the Yarogrumah representation refers to material actions happening in situated places. For instance, in relation to the social practice of going to school, the Yarogrumah discourse uses Newmont material action of relocating the school to a different location as a mediation meant to construe Newmont as a social actor whose actions create infrequent access for students from a particular community. The sort of actions the representation refers is connected to the next section which seeks to analyse how the representation make connections between the 'what is going on' and its relationship with people, places, and objects in the situation and on the good discourses which have been transformed by new negative discourses in place.

In the next section, I will address the question; what happens to people, places, and objects whenever Newmont produces negative environmental effects? The next section will focus on analysing how the representation makes connections between Newmont's social action and people, places, and objects through reference to expert opinion, memory, and sense of a particular place, how the representation made connections on the basis of individual experience, by employing evaluation and modality.

8.5.2. INTERPERSONAL METAFUNCTION

There is a pattern of representation which expresses the undesirability of Newmont action and its relation to other entities through negation, `is not`. For instance, the representation expresses undesirability over the differential remuneration between local-local employees of Newmont subcontractors and non-local employees of the subcontractors. This undesirability can be realised in the negation, `not giving`, and, `is not`, as instantiated in line 166 of extract 22:

```
That  is  why  they  are  not  giving  such  and  this  thing
remuneration to them and of which we […] that is not in right
direction (0.4) because you have to treat your employees at
par.
```

Line 166 of extract 22 recontextualise the social issue of discrimination in the payment of rent allowances to non-locals and the denial of the same allowance to local-local employees of Newmont's subcontractors. This practice of discriminating against the local-local employees of Newmont's subcontractors is objectively [36]evaluated in discourse through negation, `that is not`. This negation realises an expression of disapproval of P4 and his group about the practice of differential remuneration for people who engage in work of equal value.

There is a pattern of representation which shows that Newmont social action is negatively affecting the social action of P4 and his community of experience. An instance of this pattern of representation can be found in line 9 of extract 18, `we used to attend school at a village called Koduhia and they came and resettled the school to eeerm OLA resettlement at Kenyasi No.2`. From this extract, P4, and his community of experience social action which is negatively affected by Newmont's action can be realised in the past transitivity, `used to attend school at a village called Koduhia`. Newmont's action which affects this action can be realised in the attributed action, `they came and resettled the school to eeerm OLA resettlement`. Due to the relocation, to OLA resettlement children from Yarogrumah community miss class contact hours due to the irregular pattern of a bus transport system. The negative relations created through the resettlement and local-local social practices of going to school can be realised, `And the issues or the problems that we do encounter is failure of the bus to come and convey the students from this place to that particular place`. Linguistically, evaluation of the practice of transporting the students from one location to another can be realised in the noun, `failure`.

In extract 19, the meaning construed from Newmont's action on P4 and his community of experience's social action can be observed beyond an issue of access to school on daily basis to include a sense-making out of historical relations with a

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[36] Objective in the sense of a 'we' evaluation of the practice.

place. P4 and his community of experience are historically attached to the school at Koduhia due to the historical connection of the school to P4's family because P4 father started the school from his personal resources. This personal initiative of P4's father is due to the death of P4 father's child who used to commute from Yarogrumah to Kenyasi Number 2. This historical experience can be realised in, 'one of his kid was schooling at Kenyasi and […] when he was coming they took a car and they had an accident and he passed on'.

The pain of losing a child on transit from school resulted in the setting up of the school and the use of personal resources. In line 180 of extract 19, the representation includes further material action of P4 father and his collaborator in getting the school developed, 'they were using their pocket money to pay the teachers'. If 'they' started the school and paid the teachers from their 'pockets', and now the school is developed to the point where, 'everything is computerised this thing°' and then the founder of the school children are asked to attend a 'less endowed' school at a place outside their village, 'and you said he should go to another village where there is no access to electricity', could by inference amount to denying children from P4's family what seems to be their birthright. This representation not only contrasts with the role given mining companies in government's representation but also show that the mining company's initiatives can negatively affect local community initiatives, create vulnerabilities for hitherto viable communities as well as create inequalities.

Besides, there is a pattern of representation in which P4 make connections between Newmont's action and its impact on the local people through attribution to medical diagnosis. For instance, in line 44 of extract 20, P4 averred that, 'Unless you go to the hospital before they can detect it'. Specifically, in line 48 of extract 20, the representation provided the evidential basis for linking Newmont's activities to ill health through attribution to a medical diagnosis of cases close to P4, 'My best friend died that was last year […]'. This relational identification serves the purpose of position P4 as having a close insight into the case presented. Beyond relational identification, the representation makes attribution to a medical report and where the report can be obtained, 'if you get the family members, we can get the report that the water that he is drinking is not good' [Line 48 of extract 20]. In this case, the existence of a medical report which exists mediate P4 negative linkage of Newmont's actions to human well-being at a particular place.

Beyond attribution, to medical opinion P4 and his group routine experience mediate how they link Newmont to negative health effects. Though other representations have included routine experience like real individuals close to the point of the interview and pictures which mediate the situation, P4 representation differs slightly as it includes pictures, individuals close to the interview and two reported cases of death due to ailments contracted from Newmont's activities. In terms of the history of experience, in line 46 of extract 20 P4 introduces a collective historical body of a,

'we', experience. This is specifically realised in, 'and per the experiences that we had here, sicknesses and other stuff, we also we had the perception that it is because of all these things that are why we have what'. In this text environment, the specific mediational means which constitutes a collective experience include, 'sicknesses and other stuff'. Also, the representation include concrete evidence in terms of type of sickness observed, 'chickenpox' and a historical evidence, 'even chickenpox I was having, we were having one of the pictures of my father but I do not know whether I will find it, as he passed on whether I will find it or not'. The inclusion of P4's father as a sufferer of ill health concretises the issue as a discourse internalised and which experiential knowledge becomes a tool for a construal of Newmont and local CD nexus. Aside from expressing experiential knowledge as discourse internalised the representation also aggregated the extent of affect, 'a lot of people' [Line 58 of extract 20], and through the discursive strategy of aggregation, the experience is constructed as a widespread phenomenon. The ideological effect of aggregating the negative health effects of Newmont's doing is to make portray the absence of positive CD contribution, perhaps as a means for future re-engagement with the company.

Besides, the representation makes a clear linkage between Newmont's action and people, places, and objects on the basis of 'before and after' analysis. This can be observed in, 'a lot of people encountered that this thing here and we saw to it that it is the results of the Newmont activities because previously all that I am saying is the experience that we had before and after Newmont came here' [Line 59 of extract 20]. In addition to the evidence construed in the discourse, the representation pointed to evidence of ill health within the here and now of the ongoing discourse to concretise the present situation at a particular place. For instance, in line 58 of extract 20, the representation includes cases close in place and time of the talk between P4 and R, 'Chickenpox and other stuff even you can see the lady over there, that is my sister, she is stroke and we have another man at the next village too, he is being affected, he is now, he is also encountering those eeerm this thing, the stroke, and this thing'.

Additionally, the statement, 'you can see the lady over there', realises evidence of both P4 and R being right there at the place where Newmont's negative environmental effects manifest in the health of a particular social actor at a particular place. Moreover, the relational identification, 'that is my sister', shows how relationally connected P4 is to the negative effects of Newmont's action. These discourse in place constitutes critical discourse moments which challenges the conventional construction of Newmont's contribution to the health of the people of Ahafo on the basis of the company's contribution to improving health infrastructure and mobility of health workers rather. The foregrounding of evidence of negative environmental effects on human health at a place realises the relevance of nexus

methodological and theoretical focus on place as the circuits within which the experience, histories of individuals and actions are situated.

Moreover, there is a pattern of representation where sense is made from the activities of Newmont based on memory and sense of a place within the here and now of the interview. The referents for this sense-making are the past positive discourse before Newmont activities and the negative discourse after Newmont began its activities around the Yarogrumah community. An instantiation of this pattern of representation can be found in the recontextualisation of the social practice of using fallow lands for subsistent agriculture, which practice also provides a source of income to P4. P4 and his group have a sense of rootedness in that chunk of fallow land called fallow land because it means sources of food and income. This sense of rootedness in a particular place can be realised in, '[…], `yeah previously when Newmont was not here, we used to have a bare land, where we do our farming activities, where we get our food you know, this place is (0.4) most of our this thing is cocoa and other stuff`. But because Newmont neglected individuals' rootedness in a place the company conceptualise the land as bare land for which reason the company paid no compensation. Therefore, in the talk between R and P4, the memory of how P4, in particular, used to work on people's food crops farms during school vacation to get money to pay for his university education and how P4 and his group use to produce food crops from such fallow lands served as mediational means which mediated P4 negative construal of Newmont and CD nexus.

Similarly, there is a pattern of representation which makes a linkage between Newmont's activities and CD on the basis of what is being lost due to Newmont's activities. For instance, in lines 9 and 11 of extract 18, the representation revealed that P4 and his group, `we`, have lost something which serves social good prior to Newmont's activities, '`we used to attend school at a village called Koduhia and they came and resettled the school to eeerm OLA resettlement at Kenyasi No.2`'. Furthermore, in line 11 of extract 18 the representation problematise the issue of relocating the school, '`the problems that we do encounter is the failure of the bus to come and convey the students from this place to that particular place`'. From this quotation, the problem construed in discourse is the irregular movement of the bus in transporting students to and from school. Not only are students from a particular place, '`this place`', being denied access to education but also they are denied the right to benefit from a school which is 'a child of their father'. This concrete representation of Newmont's social practice of supporting community initiatives points to the fact that corporate social responsible practices can reposition school service in a way that affects groups which initiated self-help social service.

Additionally, there is a pattern of representation which makes a connection between Newmont and CD nexus through a representation of the undesirability of Newmont's environmental effects on entities in the situation. For instance, this pattern of representation is instantiated in extract 17. Although extract 17 is full of evaluation I will focus the analysis of undesirability on line 39 of extract 17. Extract 17 constitute

the beginning of the interview talk between the R and P4 and it can be observed in line 23, that R empowers P4 by offering R a mobile phone camera to take a picture of any mediational means of interest to P4 in relation to the gold mining and local CD. Even though within the here and now of the talk there are various mediational means such as cocoa and guava trees P4 selected plantain and cocoyam as actual mediational means. This choice can be important in construing the Newmont and CD nexus in the context of language as meaning potential and also based on the situatedness of language in the social and material world:

```
Extract 17
19 R :      eeerm, where are we now?
20 P4:      Wiasegruma community.
21 R :      Yes, but this environment, is that your farm?
22 P4:      Yeah it is our farm.
23 R :      Please take this camera, take anything of eeer interest
            to you within the, your environment.
24 R :      Okay.
25 R :      Yes, I can see so many crops here.
26 P4:      Yeah.
27 R :      so eeer looking at this picture, what is of interest to
            you in this  picture? What do you want to talk about  in
            this picture?
34 P4 :     even the appearances, it is not quality as previously, so
            the this thing the right this thing is not being what we
            do not get the right, I mean foodstuffs (.) because it
            will come in smaller what, small, small quantities  but
            previously, it was not like that and most especially the
            cocoyam.
```



```
35 R :      What is wrong with the cocoyam?
```

```
36 P4 :      The cocoyam you just look (.4) look at this one.
37           This one like this, this one it is about 2 years ooo but
             look at how (.0) eeerm the thing is.
             [P4 uprooted a cocoyam and showed me how small the tubers
             are]
38 R :       Cause of eeer your, the low eeer produce you get from eeer
             your cocoyam, plantain and other things, […] what do you
             think is the  cause?
39 P4:       The cause that is their activities like the chemicals that
             they are  using  […]  because  I  had  some  conversation
             with a guy, he was from eeerm Kwame Nkrumah University of
             Science  and  Technology  (KNUST),  he  also  came  here,  he
             was doing some work, project work.
             He  said  for  the  metres  away  from  where  they  are  doing
             their  activities  and  this  place,  if  we  plant  any  a
             foodstuffs,  they  have  eeerm  some  medicine,  I  do  not  know
             whether   they   call   it   cyanide   or   whatsoever,
             that  the  foodstuffs  that  we  are  and  taking  here,  it  is
             not  even  advisable  for  us   to   eat   it  but  there  is  no
             option for us.
```

In line 36 to 37, P4 invited R to connect to a particular cocoyam plant, within a particular place and moment of time of the interview. The concreteness of the representation can be realised in the demonstratives, 'this one', 'this one like this', meaning a focus on a particular one which P4 uprooted with his hand. Based a particular from P4's farm, P4 makes an implicit evaluation, 'it is about 2 years ooo but look at how (.0) eeerm the thing is'. By mentioning the age of the crop in relation to the evaluation of the output, implies that that P4 expected that 'the uprooted tuber shown in the ongoing discourse should have been bigger than what it is'. Also, my created text if compared with what is said, will show that the output from P4 farming activities is undesirable. Besides, in line 34 of extract 17 there is an expression of undesirability through negation, 'it is not quality', and since this negation amount to saying that the quality that exists is less than what is expected or desired.

In lines 36 and 37 of extract 17, the representation construed Newmont as the causative agent of the low output, 'The cause that is their activities like the chemicals that they are using'. Furthermore, the representation attribute the source of the connection to a researcher from the Kwame Nkrumah University of Science and Technology whom P4 claimed says the distance between the human system and the Newmont's TSFs like the crops make the food stuffs unwholesome. For instance, P4 says, 'whatsoever, that the foodstuffs that we are and taking here, it is not even advisable for us to eat it but there is no option for us'. Lexically, undesirability can be realised in, 'it is not even advisable'. Despite P4's recognition of the undesirability or unwholesomeness of the food stuffs due to the closeness of the farm to Newmont's activities the representation position P4 and his community of negative experience as vulnerable as in, 'but there is no option for us'. This presupposes that P4 takes an oracular-agnostic position. This means P4 and his community of experience are

aware that their foodstuffs are unwholesome but there is nothing they can do about it. Thus, this discursive construction contrast that of Ghana's Mineral and Mining Policy discursive construal of mining companies as social actors who have unique expertise in improving rural livelihoods. The undesirable output from P4's farm and his attribution of the undesirable output to Newmont's practices of using cyanide constitutes difference and resistance to government discourse construal of mining companies as promoters of rural livelihoods.

In relation to the social practice of implementing the social agreement between Newmont and local communities, the representation expresses an undesirable actual practice of implementing the agreement. Linguistically, the undesirability in the way the social agreement is implemented can be realised through negation, 'but not'. This negation is realised in the cotext of, 'They are delivering on that but not to the expectation' [Line 152 of extract 22], which shows P4 regards the implementation of the social agreement as less than expected.

The subsection to come will aim to summarise the key findings arising out of the analysis of the Yarogrumah discourse along the lines of the study's specific research questions.

8.5.3. SUMMARY OF YAROGRUMAH REPRESENTATION

In terms of the 'what is going on' the analysis reveals that P4 discourse is about accounts of Newmont's actions on people, places, and objects such as Newmont environmental effects on crop output and human health.

With regards to agency in relation to actions accounted for in discourse, the analysis shows that the NGGL engages in transactive actions of which the local-local individuals are included as sufferers. Moreover, the analysis indicates that prior to the activities of NGGL the local-local people were agentive in finding solutions to their problems, they started a school by themselves.

In terms of social actor representation, the analysis shows that social actors are included in the representation through the discursive strategy of personalisation, nomination, and aggregation which produces one ideological effect or another, for example, portraying the negative effects of Newmont on Yarogrumah development as widespread.

By way of an individual's experience as a mediational means, the analysis shows that local-local individuals make the connection between NGGL social action and their lives based on reference to expert opinion. Additionally, individual local-local actors make the connection between NGGL social action and local-local people daily experience through accounts of the positive discourses which existed before and the negative discourse which arose after Newmont started mining.

In terms of the linkage between mining and individual routine activities at a place such as farming and going to school, P4 construe a negative relationship because Newmont creates infrequent access to school for children in the Yarogrumah community. Besides, the local-local individuals make the connection between Newmont action and their daily lives on their farmers through the use of deictic and pronouns to concretise actions and entities which are sufferers of NGGL negative action.

Moreover, the analysis shows that the local-local individuals expect those who stand-in for them to act as transmitters and amplifiers of their voices of concern. But the actual performance is that the Member of Parliament is not listening to their voices of concern like the effect of Newmont actions on human health.

In terms of discourse as sites of domination, difference, and resistance, the analysis shows that P4 construal of a negative relationship between Newmont relocation practice and school pupil's infrequent access to school constitutes a difference in the construal of the relationship between mining and access to education. Moreover, P4's construal of a negative relationship between Newmont practice of using chemicals and crop output and wholesomeness of foodstuffs constitute a difference in representation relative to the government construal of mining companies as messiahs of livelihoods improvement.

NA methodology takes the analytical perspective that a micro event like an interview talk between a researcher and study participants is the nexus through which broad socio-political system circulate. Therefore, in the next section, the lexical choices circulating within the four interview talks which marked various social practices in social actor representation in mining CD nexus will become the starting point for pinning down the discourses available in the representations. Moreover, I will connect the discourse circulating within the preceding analysis to structural Discourse like problem-solving, limits and boundary, Promethean and SD Discourse.

8.6. CYCLES OF DISCOURSES WITHIN THE INTERVIEW VOICES

The persistent discourses topics circulating within the analysis of interview data can be identified as an effect, employment, livelihoods, resettlement, CSR and representation. However, these discourses topics are not discrete, and they overlap in the representation.

Primus inter pares of the discourse is what happens to people, places, and objects whenever Newmont produces negative environmental effects or the effect discourse. Lexical choices which mark the effect discourse in the representation include `destroying, threatening, contaminated, danger and experience`. For instance, within the interview representations, the negative environmental effect discourse

manifests in the form of discourses internalised as individual experiences, what is being lost within a place, contamination of water and also evidence of strange skin diseases. These elements of effect discourse become mediational means which affords interview participants construal of a negative relationship between Newmont and people, places and objects in situated places. For example, within P3 representation a picture of a boy who suffers skin disease mediates the recontextualisation of Newmont practice of using chemicals. But this effect arising from the use of chemicals is related to the local-local social actors' recontextualised social practice of drinking water from a borehole.

The mediation role of this picture in construing the effect discourse is co-construed between R and P in lines 31 through 33 of extract 12. For instance, in line 33 R demanded evidence of 'affect' based on P3 proposition and evaluation of 'affect'. Also, in line 33 P3 agrees to provide the evidential basis of his proposition. As can be seen from the picture of a boy who had rashes all over the body and P3 attributes the rashes to the effect of Newmont cyanide contamination of Dokyikrom only source of potable water. [37]

Additionally, the effect discourse is also instantiated in the analysis through a concrete description of positive discourses, good things that existed prior to Newmont's coming and the negative discourses, that to say things which have been lost due to Newmont's activities. This discourse manifested in the interview talk in terms of referring to mining as endangering human lives, polluting water bodies and destroying crops. For example, this discursive construction affords the concreteness of P1's description of what has been lost due to Newmont's activities. The manifestation of the effect discourse in terms of what has been lost provides a semiotic tool for P1 to construe the Newmont and local CD nexus as one of negative effect.

Besides, the various interview talks also bring into the representation of concrete evidence of Newmont's environmental effects on the health of particular individuals who lived close to places where Newmont's action takes place. These particular individuals and their places are close in terms of time and place of the interview talk between the researcher and participants. For example, in the Yarogrumah discourse the concrete evidence of individuals being paralysed, developed strange skin diseases and the relational inclusion of `my best friend' and `my father', as affected individuals who passed on due to Newmont's environmental effect affords P4 construal of the Newmont and Yarogrumah CD relationship in negative terms.

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[37] Extract 12 in appendix E refers.

The discourse in place, 'social agreement'[38], marks the social practice of mining companies seeking to obtain the SLO. This practice of obtaining the SLO is dialectically related to the social practice of mining companies offering employment quota to local communities. For instance, in extract 22 both the R and P4 instantiates the discourse of local employment through reference to the discourse in place, a social agreement.

In line 147 of extract 22, the R seeks to find out about P4 awareness of a discourse entity, 'social agreement'. P4's answer in the affirmative led to a follow-up by R on what is contained in the social agreement and in line 150 of extract 22 P4 revealed that one of the promises in the social agreement is, 'employment'. However, P4 evaluation of the discourse of preferential treatment of local-locals is negative, 'not to the expectation'. This is because P4 feels locals-locals are discriminated against in terms of access to employment in underground mining and processing unit.

Also, local-local individuals are discriminated against in terms of differences in remuneration between local-local employees of Newmont subcontractors and their non-local counterparts. Aside from the social agreement, another source from which this discourse is constructed is an observation of how Newmont discriminates in paying accommodation allowance to subcontractor employees who are non-natives of the Kenyasi area against the native. Based on these actual practices, P4 evaluates Newmont's actual social practice of mining employment of local content as, 'They are delivering on that but not to the expectation'. This is because P4's expectation is to see local-locals employed at the mail and underground departments.

Moreover, the various interviews instantiate the discourse of fear of loss of collective property. This discourse is lexically realised through the transitive, 'take our gold away', 'Newmont as a company came here purposely to come, do their mining, and take our gold away'. Related to the discourse of fear of dispossessions is mining companies social practice of making 'juicy' or lofty promises of compensation at the pre-mining stage of the project. For instance, this discourse can be realised in the lexical, compensation and properties, and this discourse is present for instance in P3 recreation of pre-mining engagement practice:

> 'When they mention some amount of money most of our parents at that time eeerm forgot about their properties that they have made here and went in for the money that they said that they were giving to them as compensation'.

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[38] Discourse in place in the sense that a social agreement exist as discursive event and influence social practice of employment. But it also constitutes a lexical choice in the sense of it being option in realising meaning about company commitment over recruiting local-locals.

Here the compensation discourse is foregrounded first in, `some amount of money'`, and second in the lexical, `compensation`. The metaphor, `'they forgot about their properties that they have made here'` compares the motivation act in a certain due to a promise deliberately failing to think.

There is a persistent discourse of resettlement, relocation, and compensation. For instance, the discourse of compensation, relocation and resettlement can be lexically realised in transitivity such as, `'they took some pictures of our houses, putting some eerm serial numbers (0.5) on our houses'`, [Line 7 of extract 13] and `'they ask you to verify your (0.1) your house'`[Line 10 of extract 13]. These set of actions constitute a micro social practice often referred to an as inventorying and cadastral survey. This social practice leads into another as it constitutes the source of the base data for compensation or relocation by a mining company. Aside from these, the discourse of compensation can be observed through the evaluations in line 12 of extract 13; `'they are not going to build for you, they are not going to resettle you'`. Within the context of the interview, the evaluations, such as the company is, `'not going to build for you'` and, `'they will pay you amount of money'`, served as discourse internalised in the historical body of P2. This discourse internalised influenced how P2 defined Newmont linkage to CD, as a violation of rights of the claimant of resettlement. The objects from which expression of the value of rights is constructed can be found in P2 historical body as someone who experienced eviction from his place of residence and livelihood source prior to compensation. For instance, this discourse can be realised in the statements, `'they bring some people in there so that they will come and demolish anything that we do over there'` [Line 78]; so if we farm over there, they will come and spoil it. The irrealis action verbs like, `'they will come and demolish'`, serve the social function of recreating past practices which formed part of the ongoing activity in the interview. In this discourse, the discourse of fear overlaps that of loss and thus instantiates my earlier information that the discourses echoed in the various representations are different but not separate.

Moreover, there is a recurring discourse of how the study participants expect those who stand-in for them to act on their behalf. This discourse can be inferred from discursive constructions such as, `'TAs are not helpful 'representatives to the NADeF Committees are not telling us the truth'` and when we complain we do not get back'`. The context of this construal is that representatives of affected voices are not acting according to the expectation of the affected voices.

A different way of realising representation discourse is in individuals' experiences of difficulty in getting their elected representatives to transmit their voices of concern from the private sphere onto the empowered spaces for redress. An instantiation of this discourse can be realised in line 204 of extract 23, `'For the MPs, they are not helping the community at all in terms of this Newmont and other stuffs'`. The evaluation can be found in, `'not helping'`, and the experience which forms

the basis for the negative evaluation can be realised in lines 205 of extract 23. The conjunct, 'because', signals that what follows will be either a narrative or an explanation. In this case, it is a narrative, 'since we started facing this challenges and other stuff you will even call, you will even call the MP that we need assistance'. Furthermore, in line 206 of extract 23, the representation includes the sort of expectation P3 have about their elected representative, 'He should come and, and listen', and then, 'so that he will also put it before the government', and the government, 'can also help you to resolve the issue', but, 'you will call the person the MP will not come'.

Aside from individuals who stand-in for others, the various representations instantiate a discourse of how local-local individuals expect Committee members who stand-in for the interest of others to act. This discourse can be realised in the lexical, 'we tell them', and, 'to go and tell'. For instance, in P1 representation about the social practice of a group of people representing others in rationalising the utilisation of the NADeF Fund, P1 alleges that, when we tell them to go and tell Newmont or to help us with the NADeF money, they do not do it'. Because the representatives do not do the telling, they lost their legitimacy to represent. Moreover, the lexical, 'Committee', realises the discourse of a group of people standing in for others. For instance, in P1 representation the lexical, 'Committee', in its cotext mark a discourse of a select group of people standing in for others. Within its cotext, the NADeF Committee is evaluated as lacking legitimacy and this can be realised in the negative evaluation, 'is not trusted'. That is, the Committee lacked the trust of those whose interest it is supposed to represent, the interest of voices of negative experience.

Engagement discourse circulates within the participant's representations. This discourse is a part of Newmont's social practices of finding the 'focal point' and 'the right person' through which the company can obtain the SLO. Engagement discourse appears in the representation in the form of information given to opinion leaders at the pre-mining stage. Expressions such as, 'they talk with our chiefs, they talk with our elders, and they talk with our parents and then after that […]', are textual markers of the sort of engagement recontextualised. For example, 'they talked with us', recontextualise the initial practices of engaging with the local communities. But a recurring issue within the discourse of engagement is the exclusion of the affected voices in meetings. This exclusion of affected voices from meeting occur because often time's opinion leaders stand-in for their communities. This reveals a structural inequality in the practice of engagement which has a goal of reaching out to all segment of stakeholders. [39]

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[39] This realises an overlap with the discourse of who stand in for the others and constitute evidence an overlap of different ways of representing within the various interviews.

In the different interview talks, based on the history of what transpired at the company and local community meetings, the recontextualisation of engagement becomes a tool which enabled different interview participants to assign Newmont an identity of profit maximising company. This can be realised in the text, '`Newmont as a company came here purposely to come and do their mining and take our gold away and give, and compensate those whom the lands belong to`'. This discourse portrays Newmont as whose core business is business, as its purpose of being in the communities is, '`to come and do their mining and take our gold away`'. Also, since its stakeholders are restricted in this representation to those who own land as in compensating those, '`whom the lands belong to`'. The closeness of terms associated with neoliberal accumulation such as, '`whom the land belongs to`' and '`take our gold away`', close to talk about representation implies that local-local experience with Newmont engagement practices revealed the capital accumulation veil behind Newmont's community engagement.

Closely related to engagement as a social practice is Newmont CSR discourse. Discourses in place which instantiates this discourse include pictures and lexical realisation of what Newmont has done as a practice of meeting the needs of affected communities. An example can be cited of a six-classroom block built as part of Newmont's CSR and included as part of extract 9 in Appendix E. Within extract 9, the representation lexically realises Newmont CSR as a philanthropic gesture, '`they are helping`', rather than as an obligation imposed on the company due to a tacit social contract between the company and the host community. However, there is a polemic in terms of the relevance of the gesture. This polemy is realised in the lexical conjunct, '`but`', which signals an alternative discourse, `the condition that we are in right now`'.

In summary, the discourses circulating within the activity of navigating the nexus of practice include effect, employment, livelihoods, representation, CSR, compensation relocation, and engagement discourses.

Due to space constraints, I will sum up only the constitutive elements of the dominant discourse in the representation, the effect discourse. The analytical option to do a summary of the constitutive elements of the effect discourse is Dryzek's (2013) framework for analysing environmental discourses. Below is a summary of the main elements of the effect discourse:

    i.   Basic entities whose existence is recognised or constructed
- Newmont.
- Water bodies.
- Places as mediational means.
- Tailings dams.
- Pictures as mediational means.
- NGOs.

- Experts, opinion leaders, and representative.
- Managers of Newmont.

ii.   Assumptions about natural relationships;
- Cooperation between locals-locals and NGOs
- The conflict between Newmont's action and local-local social action
- Mining jobs, quality water, farmlands, and life can co-exist
- Hierarchies in the administrative state
- Homogenise source of new ailments

iii.   Key agents and their motive
- Company interest is 'to take gold away'.
- Local-local interest has reduced the effect on health.
- Local interest to secure permanent jobs.
- TAs motivated by self-interest.

iv.   Key metaphors and other rhetorical devices
- Sprinkle horror stories.
- The metaphor of endangering lives.
v.   Openness to difference
- Attribution to expert opinion
- Includes Newmont's positive discourse
- Reduced difference by avoiding direct quotations

Scollon and Scollon, (2004) contend that micro discourses such as face-to-face talk between a researcher and research participants are the nexus through which Discourses circulate.

In the next section, I will seek to provide the context in which the discourses inductively construed from the interviews can be explained.

8.6.1. TRAJECTORIES OF DISCOURSES WITHIN NEXUS PRACTICE

Two conflicting discourses can be identified in the field of mining and CD nexus, the neoliberal Discourse, and the environmental discourse (Egresi, 2011). However, these discourses are imprecise[40]. Due to their imprecision, there is a challenge of fitness in terms of comparing imprecise discourses to Discourses which have been

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[40] They are imprecise in the sense of absence in the literature of a systematic identification of their constitutive elements.

inductively[41] teased out from the social practice of a researcher and research participant's talk.

An alternative category of Discourse which provides precision and fits into the inductively identified discourses is Dryzek categories of Discourses. Dryzek's four categories of environmental Discourses are; problem-solving, limits and boundaries, promethean, and SD Discourses. These Discourses have been described in chapter seven. Suffice to indicate that, I will include here administrative rationalism as a Discourse which is drawn upon in the interview accounts. Administrative rationalism as a problem-solving Discourse emphasis the agency of experts working for the public interest in an administrative state, but the role of citizens and markets are de-emphasised.

In this study, the analysis reveals that the discourses circulating within the social practice of talk between a researcher and the research participants contained echoes of problem-solving Discourse, particularly administrative rationalism. The analysis indicates that Newmont's action which occurs within local-local places generate so many problems. But the discourses construe these anthropogenic problems as resolvable within the parameters of the existing administrative structures. For instance, in the Dokyikrom discourse, the causal narrative and solution can be summed up this way: Newmont's tailings dam →exist close to a human system→leads to pollution of the borehole→leads negative health effects→resettlement is a solution→mining can go on as usual.

Furthermore, an element of administrative rationalism Discourse which the discourses generated from the local-locals and researcher interviews recognise is the hierarchy within an administrative state. For example, individual local-local actors in the Ananekrom reported the spillage from Newmont's tailing dams to the EPA as an expert institution. Moreover, the local-locals in the Yarogrumah community expect their MP listen to their voices of concern and to transmit their voices of concern to the government. The hierarchy can be summed up this way; local-locals report -to→MP report to→government finds a solution→expectation of democratic accountability, feedback.

Another way in which the discourses circulating within the interviews appropriate a problem-solving Discourse is by construing expert opinion as a technology of rationalising the effects of Newmont on human health. This matches with the administrative rationalism Discourse emphasis on expert opinion as a tool which can find solutions to the problems caused by human interaction with the environment. However, in the Discourses of P1, P2, P3, and P4 experts' opinion are used to diagnose the negative effects of Newmont on water bodies and human health rather than find solutions to the problems caused by Newmont's interaction with the

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[41] Inductively in the sense that the identification took place without predefined 'Discourses.

environment. Moreover, the discourses circulating within the researcher and research participants discourse is that technology, for example, a tailings dam, is construed as a source of pollution rather than the solution to the problem as envisage by administrative rationalism Discourse.

Besides, the discourses teased out from the interview representations differs from administrative rationalism Discourse because the analysis shows that individuals included in P1, P2, P3, and P4 discourses are motivated by material self-interest other than the public interest. Additionally, the discourses included individuals who stand-in for the affected voices as representatives motivated by individual material self-interest. The differences in the discourses and administrative rationalism Discourse are that whereas in the discourses individuals and their representatives are motivated by self-interest in contrast with administrative rationalism Discourse where is a generalised public interest for the present generation and the absent future. Also, the discovery of the interest of the affected voices is experiential rather a subject of technical procedure involving cost-benefit-analysis or risk assessment.

On the other hand, the lamentations in the representations resemble an environmental discourse close to limits and survival Discourse. The litany includes in the discourses in a place like; 'threatening our lives', 'fishes are dying', 'River Subri is polluted and not flowing again', 'arable land is becoming extinct and boreholes are polluted'. This litany suggests an ontology of near-existential extinction characteristic of the limits and boundary Discourse. However, the content of the discourses differs from the environmental Discourse of limits and survival. First, the difference in content can be realised from the absence of limits, boundaries, and overshoot in the discourses whereas the environmental Discourse of limits and boundaries recognise limits and boundaries. Second, limits and boundary Discourse differ from the discourses deduced from P1, P2, P3, and P4 representations by way of interests. Adherents of limits and boundary Discourse are concerned about the preservation of nature whereas the focus of the discourses deduced from the representation is on the attainment of material self-interest of local-local individuals now, excluding the future. From the content of the discourses, 'material self-interests' connote the pursuit of goods not beyond mere survival or meeting of basic needs now. Third, limits and boundary Discourse differed from the discourses deduced from the representation due to the scale of focus. Whereas, limits and boundary focus not on the environmental crisis as localised as it is globalised the environmental discourse in the representation focus on actions taking place or which took place within local-local places, which hitherto were places where local-local social action take place.

The discourses deduced from the representation share some amount of similarity with Promethean Discourse in terms of; individual social actors being motivated by self-interest and acting in ways that seek to advance their interest; recognition of the agency of individuals in solving an environmental problem; a recognition of hierarchy in humans relations and a recognition of capital, capitalist, people and

government as agents in the environmental field. But the discourses circulating with the van Leeuwen's social actor representation differ from Promethean Discourse. In contrast to Promethean Discourse, the discourses deduced from the social actor representation: natural resources are not becoming abundant; life expectancy is decreasing and not increasing; price does not define resources but human needs and also the representation reveals that the social actors recognise the existence of nature.

The application of Dryzek's framework to systematically analyse the discourses deduced from the social practice of a researcher and research participants is productive in the sense that the comparison between discourses and Discourse points to the missing link in the local-local discourse. For instance, even though Dryzek regards SD Discourse as the nodal discourse, within the environmental discourse, the discourses deduced from the social actor representation do not echo the two main elements of SD Discourse: intragenerational and intergenerational equity in the utilisation of natural resources.

The absence of elements of SD Discourse in the local-local and researcher discourse poses implication for the efficacy of both the government and company discourse on mining contribution to sustainable development at the local-local spaces where action occur. The absence of elements of future generation ability to meet their needs from the deduced discourses does raises a critical question which may warrant policy and research attention: Will the absence of elements of SD Discourse from discourse circulating within the analysis of an interview tour of local-local places undercut the GoG and Newmont sustainability efforts in the future?

This findings of the absence of elements SD Discourse in the local-local discourses connects with the summary of findings in the next section which portray a picture of a negative relationship between Newmont's social action and local-local actions, places, and people.

8.7. FINDINGS FROM THE ANALYSIS

The findings from the analysis of interview text are group into two main categories, the experiential and interpersonal metafunction level. In order to visualise the findings, I use figures 33 and 34 as presentational tools.

The analysis shows a dominant pattern of accounts of Newmont negative effects on people, places and the environment such as the killing of fishes in water bodies and polluting local-locals sources of potable water. Figure 32 illustrates this pattern of Newmont's being represented as engaged in transactive doing to the environment, people and places.

Moreover, the study shows that local-local social actors are not passivated but engage in making sense out of the doings of Newmont such as making meaning out of

Newmont's effects on crop yield at situated places. This sense-making influence and is influenced by Newmont's actions. For instance, in the Kantinka representation, the local-local social actors are included as agentive social actors who have the capacity to network with NGOs as a way of getting their voices of concern into the empowered spaces for redress. In figure 33 the two-head arrow connecting participants' sense-making to Newmont's doings indicates the dialectical relations between transactive doings and sense-making based on accounts of the doings.

Furthermore, the analysis indicates that the mediational means which local-local individuals deploy to construe meaning between Newmont's social action and CD include negative effects on human health realised in real human bodies at situated places and polluted water bodies in situated places. Figure 30 foreground the pattern in which the [42]local-local participants bring their experiences of severe effects on people, livelihoods, settlements and water bodies into account of actions of Newmont and how these mediate the way the different social actors represent differentially and construe differently the gold mining and local CD nexus.

At the interpersonal metafunction level, the analysis shows a pattern in which the recontextualising participants expect those who stand-in for them to listen to their concerns, transmit them into the empowered places and provide feedback on their concerns. However, the analysis points to a pattern of representatives not offering the affected individuals both a listening ear and a voice.

Moreover, the analysis reveal a pattern in which relationships are established between Newmont action occurring or which occurred at materially situated places such as farms and human settlements through either memory and sense of the positive discourses in a particular place or through a 'before and after' account of Newmont's negative environmental effects such as the emergence of strange skin diseases and severe abdominal disorders.

To add, the analysis reveals that the different social actors establish relationships between Newmont's negative environmental effects and people, places, and objects through accounts of what is being lost within a materially situated place, and also through reference to processes associated with Newmont within a materially situated place or both.

42

The double headed arrows in this figure depicts the interconnected of action and sense-making from the action, however, the arrows do not portray equivalence of action and sense making.
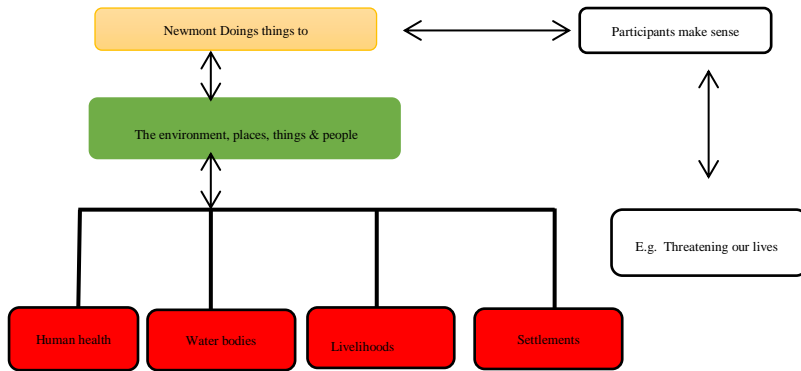
Figure 33 Summary findings on experiential metafunction

Besides, the analysis indicates that the local-local social actors' representation assign agency through attribution to expert opinion and discourses internalised as routine observations of actions and their effects on people, places, and objects in materially situated environments.

The analysis reveals a pattern of a negative relationship between Newmont's social action and people, places, and discourses in place. Figure 34 visually illustrates a global articulation of the relation construed by the participation in the study. In figure 34 the red lines indicate social actors attribution of an undesirable relationship between Newmont's social action and the entities included.
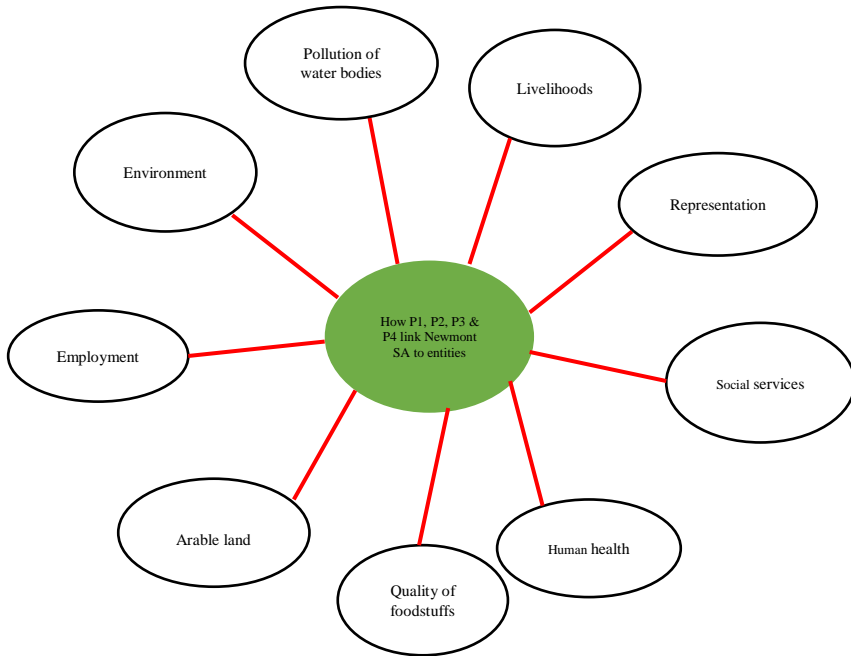
Figure 34 Participants representation of Newmont action and entities nexus

Key:

─────────────────────────────── : Undesirable relationship

The next chapter will seek to connect the findings emanating from the stage of navigating the nexus of practice with key findings from the review of the literature in chapter 2 of this study. Besides, the next chapter will include a reflection on the affordances and constraints of my methodological perspective in analysing how different social actors construe a link between gold mining and CD nexus.

CHAPTER 9. DISCUSSIONS AND CONCLUSIONS

The chapter aims at connecting the findings emanating from navigating the nexus of practice to the findings from the literature section. The chapter will also provide answers to the specific research questions of the study. Besides, the chapter aims to abstractly link the findings of the study to relevant theoretical perspectives which influenced the study.

9.1. INTRODUCTION

The study draws from a complementary combination of CDA, SFL, and NA theoretical, analytical and methodological perspective respectively. This complementarity approach provided an opportunity to embrace the complexity of the mining and CD nexus in a way that focuses on accounts of actions, people and mediational means.

The next subsection will seek to account for and clarify the practical challenges encountered in the process of doing the research.

9.2. METHODOLOGICAL REFLECTION

NA methodology constitutes the main methodological approach of this thesis. In the study, NA methodological approach is operationalised in the context of Fairclough's theory of discourse as a social practice.

Epistemologically, the thesis initially planned to begin with an analysis of naturally occurring social action. Specifically, the study intended to begin with an analysis of a naturally occurring talk at the Public Hearing of Newmont's Ahafo South EIS. Therefore, the researcher mounted a search for the video transcript. Initially, my informants within the EPA including the Head of Mining Department had confirmed the availability of the transcript. Despite the confirmations, the EPA could not provide me with the video transcript, because, `the archives people could not locate it'.

Initially, the study planned to analyse the video transcript in order thereby to discover and analyse the sites of dominance, differences, and resistance in the representations of the diverse social actors who come to engage in a moment of action. Additionally, the analysis was planned to connect discourses flowing from the moment of action where diverse social actors meet into the discourses which arose due to the project

interaction with the environment.[43]The initially planned to use the discourse circulating in the public hearing and out into the project's operational phase as a context for understanding the emerging discourses arising from project interaction with the local-local actors and social practices in materially situated places.

The failure to obtain the video transcript resulted in a modification of my empirical and methodological approach to an alternative approach which focuses on accounts of action in materially situated local-local places. Local-local places refer to routine places where individuals who hail from Ahafo engaged in social action such as farming. In order to operationalise the methodological focus on accounts of actions, the study conceptualised and applied interview as a social practice. The study's interview practice involved an interview tour of local-local places where Newmont actions occurred or are ongoing. Thus, interviews provided an opportunity to bring together what van Leeuwen (2006, 2008, and 2016) analysed separately, social actor representation and social action representation. The fruitfulness of the combinations lies in its ability to analyse diverse elements of inclusion and exclusion, reallocation and substitution based on an element of social actor representation like location and resources otherwise referred to as mediational means.

Applying NA methodology *suo motu* will have undercut the richness involved in touring materially situated local-local places, taking pictures of aspects of actions and beginning the talk on the aspect of the action selected by the study's participants. Therefore, introducing an interview tour of places of action extends NA ethnography from an ethnography of real-time action to an ethnography of real accounts of real environmental effects of Newmont in materially situated local-local places such as farms and borehole sites. Further, the conceptualisation and application of interview tour of places demonstrate an extension of Scollon's focus on studying real social problems of real people as a means of using an individual agency as nexus analyst to make life better for ourselves and others. Moreover, this study's finding that Newmont's environmental effects produce negative effects such as pollution of water bodies, the emergence of strange skin diseases, the inability of children to go to school connects with the abstract notion in Ghana's Mineral and Mining Policy that mining produces negative effects on the host local communities. This finding instantiates NA methodological and theoretical perspective that the routine actions of individuals are the nexus through which structural issues can be analysed and redressed.

Besides the study approach to interviewing as social practice extends Talmy, (2010) emphasis on how the relations between the interviewer and the interviewee influenced the creation of knowledge. In the thesis, instances where the interview participants indexes objects and places, invite the researcher to look at discourses in place and decide where next to go constitutes instantiations of an empirical process

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[43] The discourses circulating within the public hearing and out into the project interaction with the environment remains an unexplored field for future enquiry.

aimed at empowering interview participants. The ostensible empowerment emanating from the practice of interview tour of places demonstrate the relevance of interview in realising the theoretical position of the nexus analyst as an activist whose actions seek to transform negative doings, particularly, as the study discover unnoticed actions and expose them for critical analysis. Also, the empowerment from the interview process does not only lie in the interview participants agency to decide and point out but also in the action taken by the interview participant, endogenous disapproval of Newmont's actions within particular places. Moreover, introducing an interview tour of places to NA methodology and the social practice of taking pictures as the basis for beginning an interview talk reduces the challenge nexus analyst face in deciding which social action to focus on. Additionally, conceptualising and applying interview as a social practice reduces the methodological challenge of the irreversibility of action. In the thesis, interviews offered the opportunity for individuals to give accounts of action (s) occurring or which occurred in both immediate and displaced fields of discourses relevant to the interview talk or the mediated action.

In the study's process, there was a challenge of getting targeted institutional actors such as the MC, the EPA and the NGGL for interviews and discussions. The challenge of getting targeted institutional social actors to participate delayed my movement into conducting field interviews. The reason for the unwillingness on the part of institutional actors to cooperate or offer information could be that the GoG and with support from the Ghanaian Media have waged a campaign to 'end' irresponsible mining and also reduce negative social practices in the mining sector. This initiative by the government and its media collaborators led to the interdiction of some public servants who work in institutions like the MC. In the wake of these happenings, institutional actors seem suspicious of my work, since I could be an undercover agent of the government. The interesting thing about this account is that interview as social practice proved non-productive in terms of interacting with institutional actors within a political context of mistrust. But this in itself connects to Scollon's theoretical position that the objects of NA must be linked to the broader social problems of our time. To recast to this in epistemological terms, the broader social actions going on within a particular historical moment also affect the nexus analyst's empirical approach. For this reason, the study extends this theoretical position beyond the object of study to include the empirical approach in NA.

Though the interview tour of places proved productive its empirical application came along with logistical constraints and human security challenges. Most of the places where the interviews took place can be described as remote areas with an absence of motorable roads. This implies that I have to hire a commercial motorbike rider to transport me to and from the communities. The longer time I spend on touring places the higher I pay for the motorbike transport service.

Additionally, the interview tour of the places involved a risk of my life. Since the places toured are remote locations, the motorbike rider had to meander through

footpaths within cocoa farms to these places. There were near dangers of hitting my head against one cocoa tree or another as we meander through cocoa farms to places decided by the interview participants. To add, there were times I entertained fear of being attacked by agents of the mining companies because of the existing tension between the Youth Association and NGGL. This existing tension coupled with the fact that the company had denied me access to its officials suggests to me that the company may perceive me as persona non grata within its lease area. The fear of a possible attack on my life from the company can be understood in the context of the view that mining companies regard their host communities prior to the social scientist intrusion as manageable (Solomon et al., 2008). But mining companies perceive the social scientists' role in company and community relations as seeking to awaken the consciousness of the local communities in ways that render otherwise manageable local communities unmanageable (Solomon et al., 2008). Therefore, in the case of Newmont where the youth activists are up in arms against Newmont, I feared I could be targeted as a researcher whose actions fuel local-local resistance against the company. In context of NA methodology my fear connects with Scollon and Scollon (2004) view that not all social actors will appreciate the change introduced or intended by the discourse analyst since in this case, Newmont will not be happy about the voice which my study tour of places offers the local-local activist to transmit and amplify their accounts of Newmonts environmental effects at materially situated places.

The study encountered practical challenges in getting access to local-local social actors who are engaged construing the Newmont and CD nexus. For instance, although I used a snowball technique to recruit my interview participants, getting them to take me to places where the action occurred or is occurring took some time. Despite the fact that I had identified the interview participants prior to my planned visit to Kenyasi for the interviews, I stayed in Kenyasi for one week without conducting a single interview. This suggests that prior consent alone is not an adequate condition for getting interviews with participants to engage in an interview. The difficulty in moving from acceptance into actual participation suggests to me that one has to establish and deepen relationships in order to elicit participation. I deepened this relationship through participating in their routine social practice of taking a drink at the *Obodanso Drinking Spot*. By the second week of my stay, my gatekeeper encouraged me not to worry because I will get all the selected individuals to interview.

Complementing NA with van Leeuwen's socio-semantic framework which focuses on the 'how' of social actor representation extends NA focus on analysing doings, the linkage of doings to broader social issues and analysing the dispersed nature of power. The finding that Newmont's is included in representation as the social actor whose doing produces negative environmental effects with adverse consequences on people, places, and objects, for instance, individuals not being able to go to the market realises, realises NA focuses on analysing micro doings and their connections to the broader socio-political issue. In this instant case, the accounts of Newmont's negative

environmental effects are linked to the broader socio-political issue of "contention and ambiguity of mining" contribution to development(Bebbington et al., 2008). The evidence provided in the study to the effect that Newmont's actions negatively affect human health, crops and the ability of people to move freely instantiates the broader discourse that mining produces negative socio-environmental effects for the majority and gains for a privileged few. The disproportional share of the benefits and costs accruing from mining makes mining CD nexus "contentious". Moreover, the CSO demands on the General Manager to take actions to ensure that Newmont's action benefits the local-local instantiate the abstract notion that mining can contribute more to improved outcomes in human well-being, hence, its "ambiguity".

The next subsection will offer a micro-level description of the findings from van Leeuwen's social actor representation. The next section will also demonstrate how the findings from the analysis are linked to the findings from the state-of-the-art of the study.

9.3. DISCUSSIONS OF FINDINGS ON MINING AND CD NEXUS

The analysis of the previous studies revealed that mining and CD studies have placed less focus on how social actors' accounts of actions going on or which occurred in materially situated environment mediate how social actors link mining to human well-being at a place. Thus, the study contributes towards bridging the empirical gap through an analysis of how local-local individuals use social actor representation based on accounts of 'what is going on' in materially situated places to construe the mining and CD nexus.

The next subsection will present the findings from the analysis of the GoG Minerals and Mining Policy.

9.3.1. FINDINGS ON GOVERNMENT REPRESENTATIONS

The representation includes the government and its agencies as the dynamic force behind social practices like an improvement to legislation and ensuring equity in the redistribution of revenue accruing from mining. In terms of role allocation, the findings indicate that government discourse includes mining companies as the dynamic forces behind social practices like improving the livelihoods of rural communities. The findings show that agency is realised through irrealis transitive, such as, `'mining companies will be required to'`. In terms of substitution, the findings reveal that the government discourse includes social actors through a discursive strategy of genericisation. The ideological effect of the discursive strategy of genericisation is to cover up the differences in the qualities, actions, and degree of agency of diverse social actors in relations to the goal of the representation.

The study reveals that the government's construal of a positive relationship between mining and rural development is similar to the WB's neoliberal economic linkage of mining to poverty reduction. Moreover, the findings show that the government's discourse metaphor of mining as, 'an important pillar to rural development', is similar to that of the Ecuadorian government metaphor of, 'mining as a door to socio-economic improvement'. The findings also demonstrate that two different governments across different continents commonly perceive mining as a means of living well. One can infer from these similarities in representation that a particular way of representation has become dominant. These findings imply that government discourse is influenced by an economic value of increased incomes from mining and its trickle-down-effect of improved living well. The ideological effect of the GoG construal is to background the historical negative experience of mining and to legitimise and promote private capital participation in mining as a means to generate revenue to meet practical material and political interest. These findings support van Teijlingen and Hogenboom, (2014) study which reveals that a government discourse reflects a neoliberal perspective. In terms of NA methodological perspectives, the finding that a micro discursive event, 'government policy construal', connects with how global financial institutions link mining to human well-being realises NA focus on micro doings and the linkage of micro doing to broader socio-political problems. Through the government everyday social practice of using policy to engage in actions and interactions, the government reinforces the larger ambiguity and contention of the mining and CD nexus because the micro discursive event recognises negative effects and potential of mining to improve human well-being in rural Ghana.

In terms of evaluating the relationship between mining and rural development, government discourse, uses medium modality, for instance, 'should be', to express a positive relationship between mining and rural development. The study demonstrates that, in instances where the government discourse recognises the negative relationship between the practice of mining and other social practices, the discourse takes an oracular-agentive position (Scollon, 2008). This implies that the representation takes a position in the agency axis, that is the government has the agency to mitigate the negative effects of mining through deliberate policy intervention. Taking an oracular-agentive position in discourse produces potential ideological effects of persuading targeted readers of the policy such as NGOs and CSO in mining communities not to see the effects of the mining as fatal. Therefore the discourse seeks to obtain the consent of targeted readers in discourse in order for mining companies to continue their dispossessions and negative socio-environmental effects but in an opaque manner. The finding that government takes oracular-agentive position corroborates the view that in the post-neoliberal era governments assumed the role of a developmental state whose goal is to put in measures to ensure that mining benefits the citizens and regulate negative socio-environmental effects (Veltmeyer, & Petras, 2014).

In terms of commitment to propositions, the findings show that the government discourse uses medium modality markers to expresses certainty over the relationship between mining and other social practices such as improving the living standards of host communities. Though the representation uses medium modality, the context of the policy representation exists in the social world of the actual social practice of mining. Also, lexical choices like, 'recognises', and, 'in order to improve', suggest that the representation seeks to react to potential alternative views outside the text environment of the government discourse. The ideological effect of this positioning is that government discourse anticipates, recognises existing issues of social concern such as the negative effects of mining on the environment of the host communities and inequity in distributing revenue from mining. By promising to take actions in the future, the discourse seems to close the possibility of an in-depth discussion about these issues of social concern by concerned social actors like CSOs.

The next subsection will focus on pinpointing how the CSO representations connect with previous studies in the social sciences and discourse analysis.

9.3.2. FINDINGS FROM CIVIL SOCIETY REPRESENTATIONS

The findings demonstrate that the social action going on as seen by the CSO is an account of Newmont environmental effects and its implications on people, places, and objects such as ecosystems, environment, and livelihoods. The ideological effects of accounts of Newmoings negative environmental effects are to expose the absence of contribution to improved human well-being as a means of catching the attention of interested stakeholders like the Newmont and the GoG for redress. This finding collaborates previous studies which revealed that local activists protest over mining are about the effects of mining on positive discourses of local-local individuals such as existing sources of water, access to land for farming, small-scale mining and destruction of the environment (Bebbington et al., 2008; Taabazuing et al., 2012).

In terms of role allocation, the findings show that Newmont is the doer of negative things to semiotic elements such as *kontomere* which are globally realised as vegetables and walls of houses in situated places. Vegetables like *kontomere* are critical in social practices such as preparing *ampesi and fufu* soup both of which are popular indigenous meals of the Akan group in Ghana. Responsibility for the negative environmental effect is realised through the use of conjuncts such as, 'because of'.

Also, the findings indicate that CSO discourse represents the local-local activist as dynamic forces behind making sense out of Newmont's environmental effects on people, places and objects. That the CSO discourse makes sense out of Newmont negative environmental effects based on reference to a social practice such as the implicit reference to the social practice of preparing *komtomere stew* and *fufu soup using kontomere* demonstrates the relevance of the concept of mediational means in affording the CSO sense-making out of Newmont environmental effects. This is

because environmental effects can exist in situated places as ontologies but these effects become meaningful if they are inserted into the chain of social practices of individuals, groups, places and ongoing social practices at a place. This finding contributes to mining companies CD practice by emphasising the difference in terms of the salience of social identity of mining companies on the basis of what they do to the environment and what sense the local community makes out of the doing to the environment rather than the increase in things. Therefore, mining CD initiatives can be formulated on the basis of CSO sense-making out of Newmont's doings or from CSO perspective rather than from project perspective or industry norms. Such an approach has the tendency to ensure that mining CD initiative addresses the real needs of activists and affected individuals.

By way of substitution, the findings demonstrate that the CSO discourses differentiate social actors on the basis of a, `they'`, versus a, `we'`, or, `us'`. This suggests that the discourses include social actors in a way which makes individual social actors stand out differently in relation to other social actors. Thus, the pattern of constructing a, `we'`, `us'` and `our'`, versus a, `they'`, can be interpreted as demonstrating the salience of difference in ways of constructing social actors into categories of affected and beneficiaries in relation to accounts of Newmont's negative environmental effects on people, places and objects. This way of representing salience of difference is supported by the view that individuals and collectivities express and negotiate who they are by putting themselves in verbal or social spaces that make them either different or similar to others (Fina, 1997). That is to say 'Who we are is often defined in relation to who we are not or who we are similar to'. The micro discursive strategy of differentiating social actors in relation to the mediated action, on the basis of an affected, `we'`, and an agentive, `they'`, in nexus methodological terms constitute a linkage to the broader notion that mining is an enclave economy. That is, mining produces benefits for the privileged few who in the study context is referenced as a, `they'`, and socio-environmental costs for the majority referenced through a, `we'`, (Bebbington et al., 2008).

Furthermore, the findings indicate that the CSO representation includes high-level individuals officials of Newmont through substitution strategies of nomination, categorisation, and relational differentiation. For instance, the discursive strategy of relational identification of high order social actors in Newmont is linguistically realised through the use of the possessive pronoun, `his son'`, `his favourite'`, and, `his daughter'`. The unclear ideology behind the inclusion of Newmont official as unique individuals is to clearly identify them for further action by the addressee in discourse. Van Leeuwen (2008) observed that in contemporary Western societies, work organisation related representation which realises social actors via relational differentiation may be branded as nepotism or corruption. Therefore, the ideological effect of inclusion through the discursive strategy of relational identification is to emphasise the pervasiveness of corrupt and nepotic practices among a class of people who execute similar functions. To add, the ideology behind the strategy of relational

differentiation is to accentuate the difference in term of Newmont's local employment policy and actual practices going on in specific departments and events. This finding corroborates the previous study on social actor representation which indicates that categorisation is used to refer to high order employees on the basis of what they do (Taryn, 2018). Similar to Taryn, though the discourse also categorises lower-level workers in Newmont (subcontractor employees, & permanent workers) the representation excludes their names and also these lower workers are not accorded agency. However, the finding in this thesis differs from Taryn's, in the sense that lower-level social actors within Newmont are categorised on the basis of the negative functions they conduct. The thesis' finding differs because it categorises the high-level corporate social actors based on reference to concrete actions in their routine work practices. Conceptually, this finding extends van Leeuwen's view that, in contemporary Western societies, realising social actors on the basis of relational differentiation may be seen as corruption or nepotism to include that same view is true in contemporary non-Western societies. But same being true also demonstrate evidence of Fairclough's re-scaling of the global, national and local dialectic in the sense that the global abhorrence of the corruption and nepotism finds relevance in micro-events of local-local social actors. In terms of contribution to mining CD local community employment, the finding offers ideas of whose employment in the mines will be viewed by local-locals as an improved outcome accruing from the social practice of mining.

In terms of evaluation, the findings indicate that the CSO representation realises the expression of undesirability through discourses internalised in the historical body of individuals such as, 'based on past experience', of high youth unemployment, corrupt and nepotic practices, as well as the use of the language system of modality. Compared to the government discourse use of medium modality, the CSO uses high modality marker for example, 'high levels of', to express the undesirability of Newmont's negative environmental effects on the local-local people, places, and objects such as discourse in the built environment like cracks on walls and collapse of wells.

The findings demonstrate that the CSO discursively construe an undesirable relationship between Newmont environmental effects and the socio-economic practices of the local-local individuals at a place such as farming, and on objects like wells which local-local individuals draw water for domestic use from. The implication of this finding is that Newmonts mining practices are not producing a positive trickle-down effect. This finding corroborates the previous study which found that the environmental question in mining and CD practice is about the place-based transformation of livelihoods (Taabazuing et al., 2012). The place-based transformation of livelihoods and objects like houses and wells corroborates Scollon's perspective that all discourses and actions are situated in the material world. Therefore, to understand the affordances and constraints of social action there is the need to situate it in the material world. For example, right from the stage of engaging

the nexus to the stage of navigating the nexus of practice, pictures visualising cracks on walls are deployed as mediational means which affords locals-locals negative construal of the mining and CD nexus. In terms of contribution to CD practice, this finding provides an idea about the source of local community expression of undesirability, which can help mining companies work together with the researcher and the local-local activists to transform the existing Newmont and the local-locals struggle over the absence of positive impact.

In terms of certainty of representation, the findings show that the CSO discourse takes an oracular-fatalistic position that NGGL's CSR and mining companies' traditional development contribution through royalties cannot offset the negative environmental impacts. This finding supports previous studies finding that mining companies CSR as CD contribution have not impacted positively on socio-economic development and protection of the environment (Campbell, 2012; Taabazuing et al., 2012). The finding also corroborates a previous study which revealed that company activities which seek to obtain and maintain the SLO failed to address the sources of mining companies and local communities conflict (Moomen & Dewan, 2017).

This study's finding shows that the CSO construal of mining CD nexus contrasts the government discourse expression of a positive relationship between the practice of mining and desirable processes like sustainable economic development and economic empowerment of Ghanaian. The ideological effect of the difference in representation is to challenge the neoliberal economic construal which has almost become common sense among different governments. The difference between the GoG and local-local social actors representations corroborate a previous study finding that there exist differences in meaning-making between government discourses on the one hand and CSO and indigenous people on the other hand (van Teijlingen and Hogenboom, 2014). Also, the construal of a negative relationship between mining and socio-economic status of the local-locals supports the previous finding that mining is not providing the expected trickle-down-effect on the lives of the host communities (Taabazuing et al., 2012). However, this study's finding differs from previous studies in the sense that, in the CSO discourse expression of the undesirability of relationship is mediated through linguistic description construal of real effects of Newmont environmental effects on real objects like vegetables, walls, and certain categories of human beings such as pregnant women, hypertensive patients and children. The inclusion of a semiotic element in expression undesirability separates this study's finding differs from the previous study's findings which account for the absence of mining contribution to development in abstract terms like the 'Dutch disease', 'resource curse' and greed and grievance' (Bebbington et al., 2008). In the thesis, while there is an expression of grievance, the peculiarity here is that the CSO representation based their grievance on a concrete description of environmental effects on real people and places and also on concrete instances of bribery and corruption.

In summary, in NA, the focus is on how the discourses in place afford or constrain an action but not description or analysis. From the foregoing accounts of actions, the discourses in place such as Newmont's negative environmental effect on human health, livelihoods, human habitats, ecosystem and also social practices such as bribery, corruption, and nepotism constitutes mediational tools which afford how the CSO link Newmont actions to human well-being at a place.

The impending subsection will aim to link the findings from the interview discourses to the findings from the state-of-the-art section.

9.3.3. FINDINGS FROM INTERVIEW REPRESENTATIONS

The study argues that there is an inadequate empirical analysis of how social actors' accounts of actions occurring at situated places mediate how social actors actually construe how mining affects human well-being at materially situated places. This argument connects with a similar finding from a previous study that mining CD practice at the local and 'context-specific' level has not received adequate empirical and field research from scholars (Kemp, 2009). Therefore, findings from the analysis of the interview tour of local-local places will contribute towards building a theoretical understanding of how accounts of mining companies action going on or which occurred in materially situated places mediate how local-local social actors connect mining to human well-being. Moreover, the findings in this section will seek to link accounts of actions occurring at local-local places to broad socio-political issues such as the contention and ambiguity of how mining is linked to development.

The findings show that from the perspective of individual local-local actors the action going on is accounts of what happens to people, places, and object due to Newmont's environmental effects occurring at particular local-local places. Examples include the pollution of 'River Subri' in the Ananekrom, the contamination of a communal borehole at Dokyikrom and the effect on human health in Yarogruamah community. Though the interviews construal of the what is going on is similar to the what is going on in the CSO representations, the interview discourse differs in terms of the levels of concreteness in the inclusion of Newmont's environmental effects at the concrete local-local places. For instance, whereas language is used to described semiotic elements in the CSO discourse, the interview representation indexicalises semiotic elements within 'here and now' of the interview action. In the interview accounts, the situatedness of the accounts of Newmont's negative environmental effects in particular places and the effects of the actions accounted for on people, places and objects in situated material places demonstrates NA focuses on the situatedness of social action, discourses, and understanding of how things are in a situated material world (Jones, 2009).

In terms of inclusion, the findings from interview representation indicate that the key social actors who are engaged in making meaning out of the Newmont's

environmental effects include; Kenyasi Number two Youth Association and local-local employees of Newmont subcontractors. The ideological effects of including the youth as active agents in making meaning out of Newmont's environmental effects is that TAs leaders, assemblypersons and members of parliament are not adequately standing in for the interests of the youth and Ahafo such as listening to their voices of concern over concrete cases of discrimination in access to permanent jobs within Newmont. Therefore, the Youth Association emerged as a civil society which filled in a representation gap. This suggests that it is in the daily experience of youth and local-locals that the effectiveness of the social practice of representation in mining contribution to CD can be understood. Thus this finding extends NA focus on the experience of actors as a source of understanding society (Norris & Jones, 2005).

Moreover, the study reveals that the local-local people, places, and objects are included as recipients of Newmont's environmental effects. However, the representation positioned the local-local activists as agentive, expressing their voices of concern. But the agency to bring about desired outcomes is located in others. In the social context, the representation allocates the local-local social actors active roles in making meaning out of Newmont doings to the environment. The unmasked ideology behind the representation of local people as recipients or those expressing feelings is to emphasise the point that Newmont's actions are not producing the desired socio-economic outcome to the local-locals.

In contrast, the findings revealed that Newmont is included in the representation through the use of action verbs. Newmont is the doer of things. For instance, the findings demonstrate that agency for transactive doings to the environment such as pollution of water bodies and destroying aquatic life is realised through action verbs, `endangering our lives'. This implies that the social actor representation realises Newmont as a doer of negative things to the environment such as releasing cyanide into the water bodies which pollutes local-local sources of water for domestic use and as well kill fishes in the water. The use of action verbs to realise the inclusion of Newmont in representation as agentive demonstrates the significance of voice as one of the mediational means or cultural tools which afford how social actors take action in situated context (Norris and Jones, 2005). In the thesis, action verbs as cultural tools used in enacting Newmont ways of interacting with people, places and other semiotic objects are deployed by local-local individuals in a way which creates harmony with accounts of situated actions such as spillages from Newmont's TSFs and are in harmony with the material elements of places where interview accounts take place such as bluish colour of water under a bridge due to Newmont's diversion and pollution of 'River Subri'.

In terms of roles allocation, the interview discourses represent Newmont as an active and dynamic force in a social context but in a negative sense such as Newmont failing in its commitment to provide employment for the local-local individuals. The ideological effect of representing Newmont as engaging in actions which produce

negative environmental effects is to assign Newmont an identity of an irresponsible mining company. In the social context, the ideological effect of representing Newmont as doing negative things to people such contaminating potable water and dispossessing individuals from places such taking over farmlands is to portray Newmont as a company which is producing livelihoods vulnerabilities for the local-local social actors. Though previous studies such as Hilson & Yakovleva, (2007) and Mensah and Okeyre, (2014) support this study's finding on a negative relationship between mining and host communities livelihoods, this study's finding differ because the finding emerged out of the analysis of accounts of action within their materially situated places such as sites where Newmont dump its rock waste in the Ananekrom.

In terms of substitution, the commonest discursive strategy of differentiating social actors is on the basis of a, 'we', versus a, 'they'. This discursive strategy of differentiation is similar to that demonstrated in the CSO discourse. However, in Dokyikrom discourse there is another way of differentiating the 'self' from 'others' who are natives the Dokyikrom community. This differentiation is realised on the bases of who lived Newmont's environmental effects such as experience strange skin diseases and abdominal disorders and who do not experience Newmont's environmental effect hails from Dokyikrom. This way of differentiating affords the action of differentiating residents who experienced Newmont's environmental effects from the local elites who represent the local community but do not experience Newmont's environmental effects at a particular place. The ideological effect of this discursive strategy of representation is to deny the non-resident local elites who do not experience Newmont's negative environmental effects the legitimacy to represent the community of negative experience. This finding contributes towards local community engagement as an element of the social practice of mining CD. The finding call attention of mining CD practitioners who adopt a people-centred approach to pay attention to the effects of structural inequalities in the process of a mining company and stakeholders engagement throughout the mine life cycle.

The findings demonstrate that the interview voices articulated a negative connection between Newmont action and CD nexus based on Newmont's negative environmental effects like pollution of 'River Subri', the contamination of borehole water at Ananekrom and Dokyikrom, and also the emergence of strange skin diseases. In terms of evaluation, the study indicates that social actors make the undesirable connection between Newmont's doing and its effects on people through the use of discursive strategies such as memory and sense of a place, accounts of positive discourses before Newmont such as absence of diseases, availability of arable land and negative discourses which arose after Newmont entry into situated places such as low crop output and dispossession of farmlands at Yarogrumah.

The findings demonstrate that the interview representations connect Newmont's actions to human well-being through the use of demonstrative pronouns and deictic to index Newmont's undesirable action going on or which occurred in materially

situated places or in individuals experiencing Newmont's effects in materially situated places. This is realised through the use of demonstrative such as, `this place`, `that one`, and also through the use of deictic such as, `here`, and `over there`.

Additionally, the findings reveal that the use of deictic and demonstratives to index Newmont's undesirable effects on materially situated individuals and places seeks to demonstrate the concreteness of the undesirability of Newmont's environmental effects on individuals' ability to meet their basic needs of human existence from relevant materially situated places such as rivers as in, `this river has been our source of drinking water before the miners came here but since they came, we cannot use it anymore`. The concreteness of situated undesirable effects of Newmont can be realised in present continues verbs like, `destroying`, and, `threatening`, to portray the undesirable actions as currently happening at materially situated places. The material situatedness of the accounts of actions in particular places is demonstrated in the use of deictic like, `came here`. In the study, deictic together with demonstratives are used to foreground construal of Newmont's negative environmental consequences happening within a particular place, in particular, a moment of history and time.

The findings reveal that the discursive strategy of using deictic together with demonstratives to foreground accounts of undesirable effects in particular places and individuals living in situated material places demonstrates the relevance of Scollon and Scollon (2003) assertion that all actions including language in use indexes the material world. Though demonstratives are common in the English language it uses within the environment of an interview account of actions in the materially situated environment offers a meaning potential rather than complying with a system of grammatical rules. This is because the interview occurred within selected sites and the use of the demonstrative, `this`, instead of an indefinite article like, 'a rock' suggests that the listener can make a meaning out of what has been said by looking at the rocks within specific sites and places. The findings indicate that the use of deictic and demonstrative to foreground the accounts of situated actions in situated places realises the thesis's inclusion of 'place' a mediational means which social actors use to practically construe how mining affects human well-being at a materially situated place. Moreover, findings show that the interview representation use of deictic and demonstratives sets the interview discourse apart from the CSO representation which referenced semiotic objects in a sort of abstract way.

The finding demonstrates that how the local-local social actor's link Newmont's action to human well-being is mediated by the materially situated sense-making object available in a material place and time of the interview such as polluted streams, real human beings who are suffering from strange diseases and pictures of places where Newmont action is ongoing. The ideological effect of using present continuous tense, deictic and demonstratives to represent Newmont's action is to portray the actions as present ontologies which exist in situated places and can be verified by interested stakeholders. The ideological effect of showing places where Newmont's

action takes place is to visually demonstrate the good discourses which have given way for negative discourses due to Newmont's action. Additionally, the ideological purpose for the concretisation of Newmont's actions through demonstratives and deictics is to emphasise and persuade the listener-in-talk that Newmont is producing environmental bads at places close to the talk.

The findings suggest that the concretisation of Newmont's actions and its effects on people, places and other semiotic objects within the 'here and now' of the interview representation can be a novel finding in the field of research on how social actors link mining to human well-being at a materially situated place. The study's findings contribute to filling the empirical and 'context-specific' gap in mining CD practice (Kemp, 2009). The study's findings contribute towards resolving the challenges at the conceptual level of mining CD. The link of Newmont action to human well-being through concretisation of Newmont's undesirable effects at specific places constitutes ideas of local-local social actors preference for a people-centred mining CD rather than service centred mining CD. Thus, the study contributes towards resolving the tension between a focus on service delivery and people-centred approach (Kemp, 2009).

Furthermore, the study's finding contributes to mining CD practice in terms of providing ideas about the sources of negative attitudes and the absence of improved outcomes at specific local-local places. Theoretically, the interview voices connection of Newmont's undesirable environmental effects to constraining local-local positive social practices as such as farming and the inability of children from a materially situated place to attend school corroborates Taabazuing et al., (2012) finding that there are no trickle-down benefits from mining to the host communities but rather there exist deep geographic transformation of livelihoods. However, Taabazuing et al., (2012) findings differ from the finding of this thesis because of the level of concreteness in how the interview discourse links Newmont's undesirable action to real life social practices in materially situated places. The ideological implication of this way of representing how social actors link accounts of Newmont's actions to real life social practices is to demonstrate that local-local social actors expect the practice of mining to contribute to enhancing the ability of local-local individuals positive social practices like farming and children's ability to have unimpeded access to education at materially situated places where they live. Besides, the case of Yarogrumah demonstrates that the value behind linking Newmont's actions to human well-being through showing how Newmont's resettlement practice constrain children's access to education is not just economic but also includes symbolic value such historical relations with a social practice at a materially situated place.

The findings reveal that despite the expectation of mining as a means of enhancing individuals' ability to meet their basic needs at a place, some prevalent elements of SD Discourse seems to be absent from the interview discourse. For instance, the

element of ensuring that future generations meet their needs, the precautionary principle, responsibility for nature and balance in decision-making are absent from the individual local-local representation. The implication could be that there is a missing link between Newmont sustainability discourse and Newmont's actual practices on the ground. In terms of nexus analysis methodology, the seeming absence of intergenerational equity and precautionary principle violates Scollon's advice to individuals working towards combating ecological crisis to 'enlarge the future' by collaboratively construing the future together with the absent future generations.

The findings demonstrate that social actors make a linkage between Newmont's environmental effects and people, places and other semiotic objects based on attribution to expert opinion on concrete accounts of Newmont's negative effects on human health at situated places. The implication of attribution to expert opinion is that the messages individuals receive at places such as the hospital, clinics, and health centres about how mining affects human well-being are mediational means which local-local social actors use to link mining to human well-being at a materially situated place. These findings constitute an innovative way to make sense out of Newmont's environmental effects on individuals materially situated environments where Newmont's actions are going on or have occurred. Although Lovel, (2002) have revealed that external influence such as what is talked about in the media influence how local community people construe their relationship with mining this study's finding differs. It differs because the attributions to experts opinion are based on particular cases experienced by specific individuals who live in situated material places and who are closely related to the study participants as well as some being close to the place and time of the interview.

The findings demonstrate that the local-local actors make connections between Newmont's action and human well-being based on memory and sense of a particular place. This discursive strategy is related to another discursive strategy, accounts of positive discourse before Newmont activities and accounts of negative discourses which arose after Newmont. The ideological effect of this discursive connection is that local-local social actors bring in their values to the representation based on the utility they derived from their relations with different places such as rivers and fallow lands, social practices which existed in material places prior to mining such as crop farming relative to the negative socio-environmental cost which arose after Newmont's activities such as pollution of rivers resulting in death of fishes. Lawson and Bentil, (2014) found that Newmont's host communities were initially welcoming of Newmont's operations but later became 'resentful'. This thesis provides concrete situated accounts of past positive discourse such as the practice of cultivating food crops on fallow lands for subsistence and present negative discourse in place such as the dispossession of local-local farmers from fallow lands by Newmont as some actual sources of transformation local-locals positive expectation into resentment. In terms of mining CD practice, the finding contributes to Newmont's CD commitment to developing a framework to track the socio-economic transformation of Ahafo.

The deployment of accounts of actions through memory and sense of a place together with accounts of past positive discourses and current negative discourses as mediational means on how local-local social actors link mining to human well-being realises NA perspective that mediational means have histories and transformations which afford or constrain a mediated action. In the thesis, the history of good old practices of farming on fallow land served as mediational means on P4 construe Newmont mining practices as limiting farmers ability to produce food crops for subsistence. Also, the history of how P4 used to work on people's food crops farms on a day by day basis for his university school fees and how Newmont has negatively transformed the social practice of cultivating food crops mediated P4 construal of a negative relationship. These findings provide a conceptual frame and empirical ideas about the absence of improved outcome which characterised the Newmont and local community struggles. Thus, the action of making a memory and sense of action occurring at places, the absence of past positive discourses and the present negative discourses realises NA methodological focus on doing, for example, the doing of the discourse analyst in exposing empirical ideas about absence of improvement as a way of contributing to improved social practices.

Moreover, the use of memory and sense of a place and present negative discourses as mediational means realises NA focuses on how discourses, such as accounts of everyday action happening in situated places, together with their mediational means reproduce and transform broader socio-political problems (Norris & Jones, 2005). First, the present negative discourses connect with the larger socio-political discourse of mining as an enclave economy. That is, mining contributes positive benefits to a privileged few and negative socio-environmental outcomes to a majority. Second, the finding on the memory and sense of place realises NA methodology focuses on doing and how cultural tools such as accounts of negative practices enhance or curtail the doing in a situated environment as in, `what comes to my mind, is the miners are putting us in danger`. Here the transitive, `putting us in danger`, realise the doings.

Within the environment of the doing the memory of past practices associated with the situated environment becomes a tool like a harmer in the hand of a carpenter, used to take action, to construe a negative relationship between Newmont and human lives. For instance, the memory and sense that before mining a particular place used to be a source of water for domestic use and off-farm season agricultural activities of P4 and the group he speaks for constitutes a semiotic tool used to link Newmont to human well-being in a negative sense. Thus, what the interview discourse did is to use memory and sense of a place to demonstrate that the struggle between Newmont and local-locals is about meaning-making in terms of negative effects on positive discourses which used to exist, such as using the water from 'River Subri' for farming. Theoretically, findings based on memory and sense as well as accounts of past positive discourses and present negative discourses contribute to a mining CD

practice gap in terms of lack of empirical evidence the 'how' of connecting mining company CD conceptual framework with local realities (Kemp, 2009).

However, a critical empirical gap which remains is the nexus between local-local voices of concern on Newmont's environmental effects and the broader socio-political concerns over ecological maintenance and nature conservation. Also, there is a critical gap in terms of how the interview discourses index the more global discourse of the attainment of the tripple-bottom-line-objective. For instance, the United Nations Conference on Human Environment in Stockholm (1972) concerned itself with ecological maintenance for intergenerational equity. Later, the World Conservation Strategy, the International Union for Conservation of Nature (1980) broadened the scope of ecological conservation through a conservation-centred approach. The conservation-centred approach balanced ecological and economic concerns. Subsequently, the Brundtland Report adopted a more human-centred approach to sustainability. Further, the Brundtland Report recognises that imposing limits on economies of the global South in the extraction of natural resources will pose negative implications for both current and future generations to meet their needs (Kirsch, 2010). However, in 1992, the Rio de Janeiro Conference on Environment and Development set aside the equity concern of SD while adopting the protection of small areas as conservation sites.

Nevertheless, the findings from the interview voices demonstrates that the local-local individual discourses make a link between Newmont environmental effects not on the basis of the need for ecological maintenance as is the case for the UN Conference on Human Development (1972) but rather a concern for the effect on the availability of practical material needs of food, water, shelter and quality air. Furthermore, the findings from the interview voices on the surface differ from the Union for the Conservation of Nature focus on conservation-centred approach. The conservation approach focuses on rational use and sustainable yield through strategies like government ownership. But the interview voices are not concerned about state ownership or sustainable yield but rather about how Newmont can provide mitigation measures like adequate compensation and resettlement. Additionally, the interview voices differ from the Rio de Janeiro Conference on Environment and Development (1992) concern about balancing economic growth with environmental sustainability to the extent that the interview voices are not calling for a balance between extraction and sustainability but for practical measures to assure the attainment of basic needs now.

The missing link between the interview discourses and the more abstract elements of intergenerational equity is critical in the sense of how both the government and company sustainability discourses which are supposed to draw from these elements seem to have failed to mediate discourses of the local-local whose live close to mines. This raises a question of about feasibility of government and companies translating elements of more global sustainability discourses into concrete actions.

However, if the interview voices are analysed within the *Akan* worldview that nature or environment is created by God and that human beings have a responsibility to steward the environment for the present and the future generation, one can sense a glimpse of ecological and sustainability Discourse out of the interview representation. Therefore, due to the spiritual connection between entities of nature such as land, the *Akan* understanding of Genesis 1:28 is that human beings are not conquerors of nature but good stewards of nature. One of the ways in which this steward is expressed is through the *Akan* concept of land. The *Akan* concept of land is that land is a feminine, entity, *'Asaase Yaa'*,[44] given unto a communal group through the ancestors and ancestress to the present generation and the generation yet to come. Because land is conceptualised as a divine gift from *Onyame* (God), and also because the land belonged to the present and absent generations it must be handled with sanctity (Awuah-Nyamekye, 2009). Therefore, whenever interview participants use the collective pronoun, `our`, in relation to Newmont negative environmental effects on land-based social practices such as farming, the normative understanding must be that the interview participants are talking about Newmont's environmental effects on the current generation, their ancestors who bequeathed the land onto them and the children yet to be born into their communal group. If this inference holds, then it can be gainsaid that implicit Discourses of sustainability are reproducing and mediating the local-locals construal of the Newmont and CD nexus.

Besides, the foregoing suggests that, social and environmental issues in mining are not just about; investment, assets, ecosystem services, surveys, sustainability reports, integration of economic and environmental interest, availability of technology and effective regulation but equally include the socio-historical-religious meaning-making which social actors attached to the environment and how mining relates or restructure their relation to nature.

The findings indicate that local-local social actors make linkages between Newmont's action and people, places, and objects through their experiences of not being listened. Additionally, the findings suggest that the local-local social actors made linkages between accounts of Newmont's actions and their well-being based their routine experiences of their concerns not being transmitted to the empowered spaces by those who are supposed to stand-in for them. The ideological implication of this way of making linkages is that local-local social actors expect democratic participation in the decision-making process. Additionally, the study reveals that local-local social actors express the expectation of democratic accountability from those who stand-in for them. The study demonstrates that local-local individuals expect their representative to stand-in for them based on trust. These findings corroborate Ayee et al., (2011) finding that there remain serious challenges in terms

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[44] As a goddess of fertility she is also credited as the nurturer of the earth and also a provider of sustenance for all her children.

of the grassroots movement demand for accountability in the utilisation of benefits accruing from mining. But the thesis finding differs from Ayee et al., (2011) finding that grassroots movement are unable to demand accountability from public officers due to their low levels of awareness of citizens' right and mechanism available to the grassroots for ventilating local-local individuals rights. On the contrary, the study's findings demonstrate that local-local social actors are agentive in demanding accountability from Newmont and state agencies. Though, the thesis agrees with Ayee et al., (2011) finding that challenges remain, the thesis' finding situates the challenge differently. The challenge is that the local-local social actors' demand and expectation of feedback, as well as demand for democratic accountability from the empowered spaces, are not yielding the expected result. The implication is that individuals who stand-in for affected voices are failing in their duty to be democratically accountable to grassroots movements.

According to Stevenson and Dryzek (2014), in a deliberative democratic system, there is the transmission of the decision made at the public space to into the empowered space. But the thesis finding demonstrates that there is no democratic accountability because public institutions such as the EPA are not delivering feedback on the voices of concern from the local-local actors. Related to this is the exclusion of local-local voices from Newmont's environmental monitoring process. The implication of this exclusion is that the local-local voices which are expressed within the private sphere and the public space are not transmitted into the empowered space for authoritative action. These findings contrast with Stevenson and Dryzek (2014) view that the public space is a site for the inclusion of multiple perspectives and also a site for the transmission of multiple voices into the empowered.

However, in the sense of Stevenson and Dryzek (2014) deliberative democratic system, the study findings contribute to Newmont CD practice by providing a basis for meta-deliberation about Newmont's CD and environmental management practices. Meta-deliberation refers to the ability of a deliberative system to periodically engage in self-introspection, in order to transform itself if need be. In the thesis, the justification for meta-deliberation is based on concrete evidence of CSO and individual voices expression of exclusion from participating in environmental monitoring practice.

The study's finding on local-locals demand for accountability extends the conceptual horizon of grassroots demand for accountability. Conceptually, the study's finding on the failure of the grassroots to secure the desired outcome from their representatives can be analysed within the notion of the operation of power relations. Specifically, the thesis realises the inequality of power to secure outcome because the agency to speak in the empowered space is differently accessible to different social actors such as the affected voices and the individuals and public institutions which stand-in for them. The thesis demonstrates that agency to secure the desired outcome

is either vested in the MP who is not listening to the voices of concern or the EPA which is not democratically accountable to the local-locals.

The next subsection will seek to explicitly bring the research questions into the factual account of the research findings. The next subsection will constitute a factual conclusion of the thesis.

9.4. CONCLUSIONS

The answers to the research questions have already been covered in section 9.3. As a follow-up, table 3 summarises the answers to each of the research questions of the study. Also, table 3 aims to offer readers a concise presentation of the different ways of construing the mining and CD nexus.

The next subsection will attempt to pool together facts which demonstrate an answer to the 'what is going on' question and how agency is accounted for in the 'what is going on'.

9.4.1. What is the social action (s) that is/are going on or have happened and how is agency accounted for?

The question aims to analyse the accounts of doing of social actors particularly Newmont because it is the mining company whose CD practices are studied. Table 3 shows that the action going on in the GoG discourse is a discursive strategy of promoting and legitimising private capital participation in Ghana's mining sector. The promotion of capital can be realised in portraying mining companies as having, `the unique expertise`, relevant to the social practice of improving rural livelihoods. The legitimation of private capital participation in Ghana's mining sector occurs through portraying mining companies' supposed skills in livelihoods improvement as essential for livelihoods improvement. Because mining companies possess essential skills, local communities, `must tap into`, company expertise if only they want to improve their livelihoods. Table 3 shows that in the GoG discourse allocation of agency to mining companies is realised through irrealis verbs such as, `will be required to`. These irrealis verbs realise mining companies in discourse as dynamic forces behind social practices which seems beneficial to local communities. For instance the social practice of contributing to sustainable economic development.

Findings from the CSO representation show that the action construed in discourse is an account of Newmonts' negative environmental effects on people in situated places like pregnant women and hypertensive patients, on places such as farms. Also, the CSO account of Newmont's action and its effects on human well-being are also about the accounts of negative doings of Newmont on other semiotic objects such as cracks in walls, wells, and blockages of roads leading to a weekly market at Kenyasi. Agency

for these negative environmental effect is realised mostly through conjuncts such as, `as a result of`, `because of`, and, `due to`.

Though similar, the interview representation of negative effects of Newmont differ from the CSO on the basis of the level of concreteness of the interview accounts of Newmont's negative environmental effects on people, places, and objects in materially situated environments. For instance, in the Ananekrom discourse P1 uses the discourse in material places like effects of spillage from the mines on their crops dying off at a situated place and time of the interview to account for the what is going on in his routine environment. Additionally, P1's brother who was present at the place and time of the interview constituted concrete evidence of the emergence of strange diseases like skin rashes on human bodies which P1 attributed to the contamination of a borehole close to where Newmont's TSF leaks into the external environment. These concrete evidence which exists in the material environment of the interview are used as concrete mediational means within a social practice of the research interview to account for the action going on at materially situated places, the miners are endangering the lives of the inhabitants of the community. The concrete evidence of the negative effects of mining on human health mediates larger socio-political discourse that mining is bad for human development.

Moreover, the interview discourses differ from the CSO discourse in terms of how agency is realised in the two representations. Largely, the interview discourse realises agency for action through the use of action verbs, like, `endangering`, and, `threatening our lives`. The use of the present continuous tense in the interview voices show present ontologies in the discourse which harmoniously connect with discourses in place such as specific actions going on or which occurred in situated places such as 'spoiling farms' and loads of wood gathered for charcoal burning at the Kantinka community. But in the CSO discourse, the agency behind the 'affect' can be realised through a conjunctive phrase, `as a result of Newmont's operations`. However, the CSO and interview representation contrast the government discourse because the former constitute a delegitimation of Newmont's practice of mining in the five affected communities. The CSO and interview discourses delegitimise Newmont practices because the two accounts are largely about the absence of positive outcome on local-local social practices like going to school.

The differences in accounts of actions in terms of promotion and legitimation of capital participation in Ghanaian mines by the GoG discourse on the one hand, and accounts of negative environmental effects by CSO and local-local individuals discourse on the other hand connects to abstract theoretical argument of the possibility for improved CD contribution and also problems of a 'resource curse' and 'Dutch disease' respectively. The connection of social issues circulating within micro-events like CSO and interview texts to global issues demonstrates a realisation of Scollon and Scollon (2004) theoretical notion that the sources of larger socio-

political problems in contemporary times exist not in 'abstract notions of ideology and power' but in the routine accummulated histories and experiences of individual social actors within a moment of social action. Therefore, the thesis demonstrates that micro-events like CSO text and local-local individual accounts of actions constitute sites of engagement for understanding how the more global notions of mining and CD nexus is construed.

The next subsection will summarise answers to a question on the, 'how', of representation of social actors?

9.4.2. How are social actors represented in the mining and development nexus situation?

This question seeks to analyse the discursive strategies of social actor representation in ways which seeks to perform an ideological function albeit in an unclear manner. Table 3 shows that the government discourse genericises social actors through the use of lexical such as, `stakeholders`, and also, `partnership`. The genericisation of social actors in discourse elides the salience of the different levels of agency and conflict relations among the social actors included in the representation.

Table 3 demonstrates that the thesis findings particularly the CSO and interview discourses represent social actors through differentiation on the basis of a, `we`, who are sufferers and a, `they`, who produces negative environmental effects such as pollution of the air and contamination of source of water for domestic use of an affected, `we`. Though both CSO and interview discourses differentiate social actors on the basis of 'affect' the interview discourses concretise the effect by providing evidence of material action in situated places and its effects on people in situated environments. For instance, the leakage of water from Newmont's tailings dam into crops and also evidence of human beings suffering from diseases like stroke and abdominal disorders which hitherto were unknown to the local-local individuals. The critical element in this representation is that whereas the government discourse seeks to close differences the CSO and interview voices emphasise the salience of difference on the basis of who is negatively affected and who produces negative effects on others? The differentiation of social actors on the basis of an agentive, `they`, and an affected, `we`, suggests that social actor representation as an element of social practices which is dialectically related to the social practice of mining contributing to a local CD. Also, it shows that social actor representation is relevant in revealing unequal relations of power and unequal access to benefits and costs accruing from Newmont activities.

The next subsection aims at providing evidence of answers to historical body and trajectory question.

9.4.3. How do the various social actors bring in their individual experience in how they represent gold mining and CD nexus?

The question seeks to analyse how individual social actors bring in their routine experience or historical body and in the case of GoG and the CSO employ their historical trajectories into construing the Newmont and CD nexus. Table 3 shows that the presence of the GoG trajectory in the discourse can be realised through the verb, `recognises`. Within its cotext, `recognises`, shows the GoG awareness of the unequal distribution of the environmental costs and benefits accruing from mining. This history affords the GoG action, an offer to redistribute revenue from mining proportional to the environmental effects of mining on the host communities. Further, the GoG's offer to make improvement in a social practice which mediates the actual performance of mining contribution to CD shows that the government brings into the discourse its historical trajectories of the inadequacy of existing social practices which ought to mediate mining how to contribute to improving human well-being at places where mining take place.

On the other hand, table 3 shows that the CSO brings into its representation past history of Newmont's negative effects on people, places, and objects as well as the emanation of the negative effects into the future socio-economic situation of the five affected communities. The presence of the CSO trajectory of negative effects in discourse is instantiated in the phrase, `Based on past experience`, and also through reference to effects on semiotic objects like *kontomere,* genericised as vegetables. What the CSO does with its history of the negative effect is to construe a conditional worse future situation. Using historical trajectory to take an action can be a demonstration of the relevance of historical trajectory in understanding a mediated action. However, whereas the GoG discourse locates agency for resolving the problem in discursive actions like improvement in legislation, the CSO discourse assigns the responsibility for dealing with the problem in the General Manager of Newmont. The difference in the allocation of responsibility for resolving the negative environmental effects such as pollution of water bodies between the CSO and the GoG is critical in the sense that it connects inversely with the larger notion in the literature that the exchange of material benefits between companies and government's leads to governments concentration on promoting the interest of capital.

Moreover, the study demonstrates that the local-local individuals bring in their own real life experience into the discourse through the use of discourses in place in the form of Newmont's environmental effects and its implications on local-locals social actions like farming. For instance, in Kantinka P2 uses his personal experience of how Newmont dumping of waste rocks on roads constrained his ability to engage in a chain of essential social practices such as going to the market, selling his farm produce at the market and in turn buying essential items like toiletries from the market. P2's uses his historical body in terms of how Newmont's actions constrained

his participation in routine practices at a situated place as mediational tools to construe a negative relationship between action and social practices aimed at improving his well-being.

The demonstration that GoG and CSO discourse on the one hand and local-local individuals' discourse, on the other hand, use their trajectories and daily experience respectively to mediate global ways of construing the mining and CD nexus demonstrates NA methodological and theoretical focus on understanding global socio-political issues through analysis of micro-historical trajectories and individuals' routine experience. With regards to the research question at issue, the realisation of a mediated action as the conjoining of different trajectories of institutions include the trajectories of government's recognition of inequity in the distribution of revenue accruing from mining relative to the environmental costs borne by the host communities. This trajectory mediated the government practice, it forms the basis of the GoG's offer to act differently in the future. In addition, the conjoining of different sites of engagement includes life trajectories of individual participants who lived the negative effects of Newmont and its particular activities on the physical space and the multiple discourses arising out of these trajectories such as the demand for adequate compensation and resettlement and how these connect with positive discourses before Newmont mining activities. These trajectories of different social actors demonstrate that understanding 'how' mining CD is construed involved a focus on a specific event and the history flowing and out of the event.

The next subsection seeks to provide answers to a placed-based research question.

9.4.4. How do social actors represent the relationship between mining activities and their daily life at a particular place?

The question focuses on how social actors make sense of Newmont's action and CD based on accounts of actions occurring or which occurred at materially situated places. The question is based on the perspective that all social actions and the historical body and trajectories of participants in action are materially situated in a place.

The GoG discourse texture a positive relationship between mining and daily practices such as livelihoods improvement in rural spaces. Also, the GoG discourse linked mining to the more abstract trajectories of negative environmental effects on the host communities. Similarly, the CSO discourse makes sense out of Newmont's action based on abstract accounts of negative environmental effects on implicit semiotic objects like *kontomere* realised as vegetables, human health, and shelter of individuals who live in the Five Mine-affected Communities in Ahafo South.

Research question	GoG representation	CSO's representation	Interviews representations
1. What is the social action(s) that is/are going on or have happened and how is agency accounted for?	The findings indicate that social action which is going on is GoG promoting and legitimising capital participation in Ghanaian mines. Agency is realised using irrealis transitive like 'will contribute to sustainable economic development' and also through verbs which impose obligations, 'required' and 'will be required'.	The findings show that the action going on is an account of Newmont negative environmental effects on people, places and objects. For instance, Newmont's blasting activities pollute the air and vegetables, cause cracks on walls. The findings demonstrate that agency is realised using conjuncts, like 'because of' which includes Newmont as a producer of 'environmental hazards'.	The findings revealed that the action going on is individuals' account of what happens to people, places, and objects within their routine places whenever Newmont produces negative environmental effects. The study findings show that agency is attributed to Newmont through action verbs like, 'the chemicals that they are using' accounts for the low crop yields in Yarogrumah community.
2. How are social actors represented in the mining and development nexus situation?	The findings show that the government includes social actors through a discursive strategy of genericisation such as referring to diverse social actors with different level of agency as 'stakeholders'.	The findings reveal that the CSO representation uses the discursive strategy of differentiation to represent social actors based on a, 'we', who, for instance, suffer from air pollution against a, 'they' who produce the air pollution which affects a, 'we'.	Though similar to the CSO use of differentiation, differentiation is used differently in Dokyikrom. Differentiation is realised through a distinction between local community members who lived Newmont negative environmental effects and those who do not.
3. How do the various social actors bring in their individual experience in how they represent gold mining and CD nexus?	The use of the verb, 'recognises' in relation to sharing benefits proportional to environmental cost demonstrates the presence of prior experience. The GoG offer to act in the future, 'will introduce improvements' to the MDA tells of a government which experienced inadequacy of existing structures on mine CD.	The findings show that CSO brings into the representation collective experience internalised in their historical body, 'Based on experiences,' such as high youth unemployment the CSO construed a conditional worse off future situation for their collective group.	The findings indicate that the individual social actors bring into the discourse their experience of the absence of past positive discourses like availability of farmlands and the quality of water into making actual meaning out of potential meaning in the accounts of actions going on in situated environments such as spillages from the Newmont TSFs into farms.

4.	How do social actors represent the relationship between mining activities and their daily life at a particular place?	The findings reveal that the GoG discourse situates a positive nexus between the mining and social practice of improving rural livelihoods and routine experience of environmental effect within a discursive place, host communities.	The CSO makes an abstract negative connection between Newmont's actions and local-local daily practices like making shelter, cultivating cocoa and also cultivating and harvesting vegetables for consumption.	The interview voices construe a negative relation between mining and their daily practices like farmers in Kantinka market at Kenyasi, and residents of Ananekrom inability to use water from 'River Subri' for washing and drinking due to NGGL waste dumping and pollution respectively.
5.	How do the host communities expect their representatives to act on their behalf?	The findings suggest that government discourse textures democratic participation in the actual social practice of mining and CD.	Rather than an expectation of how representatives should act the CSO voices demand for direct democratic participation of the five affected communities in Newmont state of the environment monitoring practice.	The findings demonstrate that the local-local individuals expect democratic accountability from their representatives. The findings show that the representatives are either not listening or they are not conveying their concerns into the empowered spaces for authoritative decisions to be taken.
6.	How does the struggle over power to represent manifest in the different social representations?	GoG representation of ways of being as 'an important pillar' and ways of interacting as neoliberal 'partnership' universalises a perspective about mining CD in an unclear way.	The CSO demand for inclusion in a Committee to monitor and report on Newmont's state of the environment demonstrates struggle over discourse, struggle for access to a forum.	In Dokyikrom, the 'affected' local-locals voice of concern for participation in local community and Newmont meetings shows a manifestation of a struggle for a forum. Moreover, in Dokyikrom discourse, the use of human survival other than things like school block demonstrates a struggle for semiotic hegemony.

Table 3 Summary of answers to research questions

In contrast, the interview voices make a connection between Newmont action and local-locals well-being based on concrete negative environmental effects on people, places, and objects in materially situated places. An exemplar is how the Ananekrom discourse indexes Newmont's negative environmental effects in the material world of places like diverted 'River Subri' where blueish water in the 'river' provides the evidential basis of pollution of water bodies through Newmont practice of diverting existing watercourses. Also, place-based evidence of negative environmental effects includes indexing perceived leakages from the mines in material places like a materially situated place where there exists a pipeline which redirects perceived leakages from Newmont's TSF back into the TSF.

Moreover, the Ananekrom discourse situates Newmont's environmental effects on human health in materially situated places like the pollution of water from 'River Subri' and local-locals rootedness in the material place. The local-locals are rooted in 'River Subri' because the local-locals use 'river' for social practices like drinking, washing, and irrigating farms during the off-farm season. Above all, through reference to P1's brother within the 'here and now' of the interview as an individual who had skin rashes due to his residence and use of water at a materially situated place demonstrates the relevance of place as mediational means in NA methodology.

The findings demonstrate a realisation of Scollon and Scollon's theoretical perspective that all discourses, actions, and experiences are rooted in materially situated places. To understand how things are used to take action like construe how mining and impact on human well-being at situated places, the nexus analyst can analyse the linkage between local-locals social practices in materially situated places and how Newmont's action(s) occurring or which occurred in same materially situated places afford or constrain local-local social actors' social practices in such materially situated places. For example, Newmont's negative environmental effect on the local-local actors' social practices of using water from 'River Subri' for human consumption and irrigation during off-farm seasons provides a mediational means to understand how mining contributes human health and productive activities at a place.

The impending subsection will attempt to provide answers to a question on how individuals and institutions stand-in for the interest of affected individuals and groups in mine-affected communities.

9.4.5. How do the host communities expect their representatives to act on their behalf?

This question seeks to understand and analyse the extent to which the practice of individuals and institutions standing in for others as an element of mining CD practice interacts with other practices to mediate how the mining and CD nexus is construed. The study revealed that the GoG discourse textures democratic participation among social actors engaged in the actual practice of mining contribution to a local CD. In

contrast to what the government policy determined to be, the CSO and interviews findings demonstrate that in actual practice, Newmont does not truly engage affected communities in its routine environmental monitoring practices. Also, the findings from the interviews indicate that the public officials who stand-in for the interest of the local-locals are either not listening or they are not sending the affected voices of concern into the empowered space for an authoritative resolution of the local-locals concerns. For instance, the analysis indicates that P2 and his co-voices of negative experience expect their representative to give feedback on issues discussed at the RNC but that never was. This finding suggests that there is a disconnect between the voices at the public space such as the CSO and the private space such as interview voices and the empowered spaces such as the RNC as is the case in Dokyikrom discourse and cabinet as expressed in Yarogrumah interview. The findings connect with Scollon and Scollon advice that social actors involved in dealing with an ecological crisis such as the connections between Newmont's environmental effects and local-local social practices should 'cultivate relationships'. This is because ideas of how to improve and the motivation to increase desired output can be realised from the relationship between, for example, individuals and those who represent them in parliament or at the RNC.

The next subsection seeks to answer a more normative/critical research question, not explicitly articulated in the initial stages of the study. The next section aims to distillate the findings on hegemonic struggles in accounts of actions occurring or which occurred in situated places.

9.5. CONCLUSIONS ON HEGEMONIC STRUGGLES

The thesis is aimed at using social actor representation based on accounts of actions as a site for the analysis of domination, difference, and resistance in construing the Newmont and CD nexus. However, in consonance with Scollon and Scollon's (2004) refusal to locate power in others and deny others of power, [45]the study allowed the issue of hegemonic struggles to emerge from the analysis. The study seeks to make a contribution towards transforming Newmont's and its host communities struggle over making sense out of how Newmont should contribute to human well-being. It uses a nexus methodological approach to fill an empirical gap in terms of the inadequacy of concrete systematic analysis of how discourses in place mediate abstract construal of the mining and CD nexus.

The thesis recognises that the notion of hegemony as the universalisation of a particular way of representing an aspect of the world from a particular perspective is relevant to the thesis' goal of analysing dominance, difference, and resistance in how the mining and CD nexus is construed. The categorical assertion that mining

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[45] According to Scollon and Scollon power is ubiquitous, is created and recreated in individual action (Jones, 2009)

companies have unique expertise which must be tapped by local communities in order to improve their livelihoods demonstrates what Fairclough (2003) refers to as an attempt to universalise a particular neoliberal vision of economic change. The thesis demonstrates that the government representation seeks a dominant status for a neoliberal vision of an extractives-led poverty reduction as the only way out of poverty for mineral-rich African countries. This hegemonic aspiration parading as a universal can be seen in its form as a categorical assertion which makes no room for an alternative possible construal of the mining and CD nexus.

Furthermore, the modalised assertion that mining companies and local communities relations should be based on partnership demonstrates the relevance of hegemony in analysing domination, difference, and resistance in how the mining and CD nexus is construed. Partnership in its context seeks to merge the profit maximising interest with the local-locals interest of enhancing their livelihoods in ways which hide the potential conflict between the two. Also, this way of representing is less dialogical as its backgrounds the actual social concern of unequal power relations between mining companies and local communities. By this, the representation construes a particular vision on possible ways of interacting between mining companies and their host local communities as if it were universal. Therefore, discourse suppresses possible ways of representation.

Moreover, representing capital as possessing unique expertise demonstrates the presence of ideological works as it takes an unquestioned view about the transferability of mining companies' skills in extraction to the field of enhancing livelihoods.

The thesis discovered that the struggle for power to construe in a particular way manifest in the study through the different ways of representing. The differences in terms of what is included as important and what is excluded as less important realise a struggle over power for semiotic hegemony. For instance, the thesis discovered that although the WB and GoG think alike in terms of mining contribution to social service provision P3 selection of human survival as a different and important indicator of mining CD relative to provision of school block and skills training centre constitutes a manifestation of a struggle in discourse for different ways of representing. The concrete evidence of struggle over power to construe contributes to Newmont CD practice as the presence of concrete evidence transform the discourse of conflicting ideas of construing Newmont and CD nexus to what the nexus should be.

In the thesis, the presence of an element of neoliberal Discourse in the government policy and also the presence of elements of environmental and SD Discourse in the CSO and interview representations demonstrate the relevance of the power of discourse in this study. But the discovery that some elements of SD, such as

intragenerational and intergenerational equity seem absent [46]from the local-local discourses are interesting. Scollon and Scollon's analytical perspective is that a lot of what social actors do exclude others from their imagined futures or limit the future of absent others (Jones, 2009). But diverse ideas and people are brought on board when individuals agree to enlarge the future by mutually working with others to create an imagined future. Therefore, the ostensible absence of a common element of SD, intergenerational equity, in the discourse of those who experience direct environmental effects of Newmont practice is critically interesting in terms of understanding how Newmont's SD Discourses influence local-local social actors' discourses on how mining should affect human well-being now and into the future.

The next subsection will seek to answer the question; how does the study abstractly connect the empirical conclusions with some key conceptual fields of the study?

9.6 CONCEPTUAL CONCLUSIONS

The study discovered that the notion that social action is mediated by the cycles of discourses is relevant to construing the mining and CD nexus. In the thesis, the cycle of positive past discourses such as farming and negative present discourses such as the dispossession from fallow land mediate the local-locals action of construing a negative relationship between Newmont and CD nexus. Also, the cycle of past positive discourses and negative discourses like destroying farms, blocking charcoal burners workstations and the emergence of strange diseases demonstrates the study's position that local community-level actors complaints about the Newmont's effects on the environment are emblems of a larger problem.

Meetings between company officials and the local-local, local-locals letters to Newmont, and Newmont publications on local community public notice boards constitute interaction orders→social practices such as cadastral inventory of landed properties and the RNC selection of individuals for either cash compensation or resettlement, constitute some of the discourses in place→the experience of pollution of Subri stream and the experience of the demolition of local-locals social action are notable examples of the local-locals historical body→dumping of waste rocks at places such as roads and close to the homes, the blocking of roads and implication of deprivation from basic necessities like soap from a weekly market demonstrates the rootedness of individual experience in a place→and above all, the conjoining of these cycles of discourses mediate the micro construal of Newmont actions as intended to harm the local-local residents. In the thesis, the conjoining of these cycles of social practices demonstrates the relevance of the theoretical perspective that social action

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[46] 'Seem absent' in the sense that in the Akan worldview land belongs to the ancestors/ancestress, the present and future generation. Therefore the use of 'our land' and 'our only means of survival' by local-local Akan could implicitly include the past, present and future generations.

occurs at the intersection of interaction orders, discourses in place, historical body and materially situated places to the social practice of construing the mining and CD nexus.

The thesis discovered that the discourses in place and how social actors act are not always congruent because social actors can use supposedly positive company discourses as a basis to make comparison with the negatives discourses which exist within a place. The social practice of using mining companies direct contribution to local CD such as the provision of a school block and a skills training centre as means to construe mining positive contribution to human well-being and the local-local actor's action of prioritising human survival over improvement in educational infrastructure indexes the theoretical notion that there can be a struggle over in discourse over the same sign. Furthermore, the local-locals social actors appreciation of the positive discourse of Newmont in the form of provision of a six-classroom block realises the theoretical notion that if there can be a struggle over the same sign, it presupposes that signifiers or trajectories of discourses cannot be assigned in a categorical way to either side of the struggle.

Alternatively, the finding that a local-local social actor appreciates Newmont's CSR contribution to the field of education which constitute one of the GoG nominated fields for mining companies direct contribution to CD, hence an almost a taken for granted practice. The local-local social actor's appreciation of Newmonts CSR practice could demonstrate that the local-locals perspectives are structured by the capitalist ideology of gaining hegemony through direct contribution to the local CD. But the local-local individual prioritisation of human survival over an increase in the quality of educational infrastructure demonstrates that capitalist ideology is resisted by the local-local perspective. This demonstrates that hegemony is struggled for by Newmont as a means to have easy access to the resources but the struggle for hegemony is being resisted by the local-local activist.

In terms of nexus analysis theoretical and methodological perspective, the finding that a local-local social actor appreciates Newmont CSR initiatives like a six-unit classroom block but places human survival first demonstrates the relevance of the perspective that mediational means themselves take their meaning from the cycle of discourses within which they are appropriated. Therefore, the analyst must identify the significant mediational means for further analysis such as the negative effects on human health and the voices of concern over the legitimacy of those who stand-in for the mine-affected individuals. In terms of contribution to real life mining CD practice, the thesis realises the gap between the existing social practices and the social actor's actual action. This implies that company CD practices do not necessarily translate into influencing the local-locals social practice of making a positive link between mining and improvement in human well-being but rather influenced by an individual network of experiences at a place.

The observation that a study participant and his community of experience had previously demanded for electricity but later expresses doubt over whether the local community people can survive even if the company should connect their community to the national electrification grid demonstrate the perspective that dialectics exist within individual social actors historical body. Due to the dialectics in the individual historical body, the nexus analyst must map out the most significant cycle of discourse circulating within the historical trajectories of each individual social actor. Understanding and analysing the dialects of individuals historical body could constitute a useful approach towards transforming the company and local-locals struggles because larger socio-political struggles are rooted in particular experiences within materially situated settings.

Though van Leeuwen (2008) indicated that social actor representation brings together separate linguistic systems like transitivity, deictic and discourse element these elements have not been explicitly pointed out in van Leeuwen (2008) social actor presentation. This study makes a modest contribution to van Leeuwen's theory of social actor representation by explicitly connecting nouns/pronouns, lexicalisation, transitivity, deictic, socio-semantic tools like personalisation to analyse social actors representation based on actions occurring in local-local places within a particular historical moment. Moreover, van Leeuwen's framework provides for analysing separately social actor representation and representation of social action. But the study finds the notion of discourse indexicalising the material world a relevant analytical perspective which contributes towards the thesis' attempt at connecting social actor representation to accounts of action occurring or which occurred at situated places and are attended to by particular social actors.

The study aims to contribute towards filling a knowledge gap in terms of how social actors use accounts of actions in materially situated environments to construe how mining should affect human well-being in situated environments. The study's focus on discourses analysis of accounts of actions actually taking place or which occurred in situated local-local places where Newmont activities interact with local-local social action provides ideas about the absence of improved outcome, sources of negative representation and dynamic forces behind actions. The absence of improved outcome constitutes an empirical contribution towards Fairclough CDA aims to understand how contemporary neoliberal capitalism affords or constrain human well-being. This is because the indexicalisation of discourse in the material world of actual actions provides concrete evidence of local community social actors' ideas of how Newmont's interactions with the environment should contribute to improved outcomes in the social practices of individuals in the host communities. The ideas which are based on accounts of Newmont environmental effects at local-local places can serve as inputs for Newmont to negotiate and resolve socio-environmental sources of tension between mine CD practice and local-local social actors' ideas about how mining should affect human well-being.

That interviews as social practice→which is used to give accounts of Newmont's negative environmental effects at situated places→which accounts are used to create relationships between mining and people, places and other semiotic other objects→through relationships identities are enacted such as of local-locals as affected voices and Newmont as authors of affect→and the micro event construal of the local-locals as affected voices mediate a broader event like the GoG policy recognition of negative effect of mining on host communities. This not only demonstrates that interview as social practice provided an opportunity for the researcher and the research participants to engage in doings such as giving accounts of actions but also it shows the potential of the interview to extend Scollon and Scollon (2004) focus on analysing micro social action and its trajectories in broader socio-political concerns as way of contributing towards changing structural unjust social practices.

Though the study did not set out to change the nexus of practice in any direct way, I found that the notion of discourse as a social practice provides the theoretical means to connect the representations with material actions aimed at construing the gold mining and CD nexus. Based on the notion of discourse as a social practice and van Leeuwen's concept of recontextualisation I realised that the outcome of discourse analysis undertaken in the study can be connected with actual social practices in the field of mining CD such as CSO interaction with the media. Reconnecting the outcome of the study to the local-local activists and Newmont CD practices through group communication strategy constitutes a potentially productive way of resolving the mining company and local community struggles.

The thesis aims to contribute to filling the inadequacy or near absence of empirical studies on how social actors accounts of mining companies situated actions and the implications of accounts of actions on people, places, and objects in materially situated places come together as sites of engagement which are used to mediate broader construal of the mining and local CD nexus. The purpose is to contribute towards resolving the Newmont and local-local activists struggle over construing the mining and CD nexus. The thesis discovered that the absence of positive discourses such as the availability of arable land for food crop farming and the presence of negative discourses such as the constraints of Newmont's socio-environmental effects on people, places and other semiotic objects in materially situated settings such as leakages of TSFs into farms and water bodies mediate the more global construal of the mining and CD nexus as one of contention and ambiguity.

The starting point of the thesis is that different meanings can be made out of the same event and therefore there is the possibility of one way of representation become dominant. The study concludes that the CSO and local individuals, on the one hand, represent mining as detrimental to human well-being whereas the government represents mining as a social practice which aims to enhance rural livelihoods. The study concludes that coincidence of the WB perspective of the mining as a source of

economic growth with government perspective of mining as a pillar of rural development as well as individuals perspective that mining can offer permanent jobs is evidence that a particular representation has become dominant.

In chapter 10, I will outline how the findings from the thesis can be inserted into mining companies' social practices of engaging local activists who are engaged in construing the mining and CD nexus. Specifically, chapter 10 will outline how the findings can be inserted into the social practices of participants of the study. The chapter will also demonstrate how the findings of the thesis can be linked to mine CD practitioners' social practices of attending workshops, seminars, and also Newmont and local community stakeholders' engagement practices. Chapter 10 will contain suggestions of possibilities for future research by me or other scholars interested in the field of construing the mining and CD nexus through nexus analysis methodology.

CHAPTER 10. A LOOK INTO THE FUTURE: CHANGING THE NEXUS OF PRACTICE

The thesis aims at analysing the mining and CD nexus as a modest contribution towards changing the mining company and local community struggles over linking mining to human well-being at the host community-level.

10.1. INTRODUCTION

The study is influenced by the notion of discourse as a social practice which is dialectically connected to other elements of social practice. It is also inspired by Scollon and Scollon analytical and theoretical perspective that it is the doing which matters, such as connecting the results of discourse analysis based on accounts of action to the actual mining CD practice. The study will attempt to change the nexus of practice by recontextualising the study's outcome into actual social practices related to mining CD practice.

In the next subsection, I will outline how the study's findings can be connected to actual practices of mining CD.

10.2. LINKING STUDY OUTCOME TO MINE CD PRACTICE

But the critical analytical questions in this subsection are; what can the researcher contribute with towards the different social actors, not least the local-locals social actors who are engaged in the mediated action? Why tell the participants of the study what they already have told me about Newmont's environmental effects on people, places, and objects? How will the research outcome be 'sent back'?

NA focuses on doings and the task of the analyst is not only to engage the nexus of practice and navigate the nexus of practice action but also to contribute towards changing unjust social practice (Jones, 2009). According to Jones, (2009), it is the desire to contribute to change in practice which saw Scollon's involvement in the issue of higher sentencing for Native Alaskans and also his analysis of the US energy policy. In this thesis' context, 'sending back' in a systematised way what the study participant's told me constitute a way of making the study participants conscious of their power, the power of others and their consequences. In addition, in bringing back the findings into the routine practice of the activist and expert relation, can create transformation in the mining CD practice because 'unnoticed' elements in the situation may be exposed, doubts clarified and the lay activist may undertake mining

CD practices differently, at the next opportunity to participate in company and local community CD engagements.

In terms of the 'how' of inserting the outcome of the study into actual mining company CD practices, figure 35 visualises how the study will be recontextualised into a chain of actual practices in the mining CD nexus. Figure 35 shows that within 'Institution A' there is a practice of Newmont interaction with local-locals. For instance, in meeting over community entry and needs assessment. Though Newmont initiates such interaction based on a goal, local-local individuals may engage in which practices as routine activities. But the local-locals may also be influenced by discourses like what is in the news, what friends, and their family members who experienced mining elsewhere tell them as well as what they may have read from books.

Figure 35 indicates that within 'Institution B' there is a discourse of mining and CD nexus research. Here there are two types of social relations; the social relations between a researcher and research participants and also the social relations of expert and lay CD activist. First, the company local CD practices like meetings needs assessment and disputes settlements are inserted into the social practice of interviewing the local-local individual. This process is not neutral but goes through the filtration process of the social practice of interview tour of places. Though this study set out to reduce the possibility of imposing researcher categories on the interview process, inserting the Newmont and local CD practice into the interview involves being influenced by the goals of the research, the discourses in place, the historical body of the participants, the values of both the study participants and the researcher.

Moreover, figure 35 shows that within 'Institution C' the text from interviews is inserted into another social practice, the practice of 'sending back' the analyst findings to the researcher participants. This process involves transformation including the transformation from a relation of researcher and research participant to relations of expert and lay activists. Moreover, there is a transformation of the discourse from how social actors construe the mining and CD nexus into what the mining and CD nexus should be. This implies that the analysis of the analyst has led to a change in discourse and implicitly an anticipated possible change in practice, though discourse does not always cause action and action does not always create discourse.

Practically, the communication strategy for inserting the study's outcome into actual practice will be based on group communication techniques like a forum. The forum will include the CSO, the local-local individuals who participated in the study, NGGL, the media such as local and national radio stations. The forum will also target key state institutions such as the EPA, the MC, and the *Asunafo* South DA. At the forum, powerpoint presentation will constitute a medium of communicating key findings of the study to the targeted audience. The group communication strategy

proposed is cognisant of the conflictual nature of the relations between the local-locals and company and its collaborator state agencies. However, the thesis anticipates that group communication can trigger the transformation of negative social practice based on possible accusation and defence which may arise if different social actors with divergent perspectives come together in a moment of action. Also, the conflictual perspectives which may emerge from such a moment of action may themselves provide clarification to issues, proffer solutions and also constitute materials for the nexus analyst to re-engage in attempts at working towards change.

The place for the forum will a routine place of the activists such as the Durbar grounds at Kenyasi Number 1. To create dialogue, PowerPoint presentation will be followed by a question and answer session through which session the participants will be given the opportunity to ask questions and seek clarifications. This dialogue session will provide an opportunity for the EPA and the company to respond by denying one thing or another and through this, the nexus of practice will be transformed. The media will also have the opportunity to interview the researcher and other participants present at the forum for the purpose of their news stories. Through the news report on the event, the research will offer the local-local actors voices beyond their immediate environment and publics to the wider world through the publication of the news on radio stations online portals.

Besides, figure 35 shows that within social 'Institution C' there is a discourse of mining CD practitioner and academic expert interface. The outcome from the researcher and local-local activists social practice of interviewing such as publication of a book, book chapters, and journal articles will be inserted into the mining CD practitioners' social practice of attending seminars and workshops. At this site, there is a transformation of discourse as the researcher share findings on how the mining and CD nexus should be and the CD practitioner share experience at the organisational and practice level challenges of CD practice. The integration of researcher findings with practitioners experience generates tensions, which require further analysis. Due to the tensions, the outcome of the interface between researcher and practitioners are reconnected to the social practice of mining CD research.

In sum, the processes of inserting the outcome of the study into the actual social practice of mining CD includes; Newmont CD practices→social practices of interviewing local-local actors→text from interviews→sending back research outcome to study participants'→a publication from thesis←→mining CD practice. The arrow here indicates the sequence of recontextualisation and the last two arrow (←→) indicates the recursive nature of the process recontextualisation.

In subsection 10.3. I will point out the fields of future possibility for CDA approach to researching social actors' representation as an analytical approach to construing the mining and CD nexus.
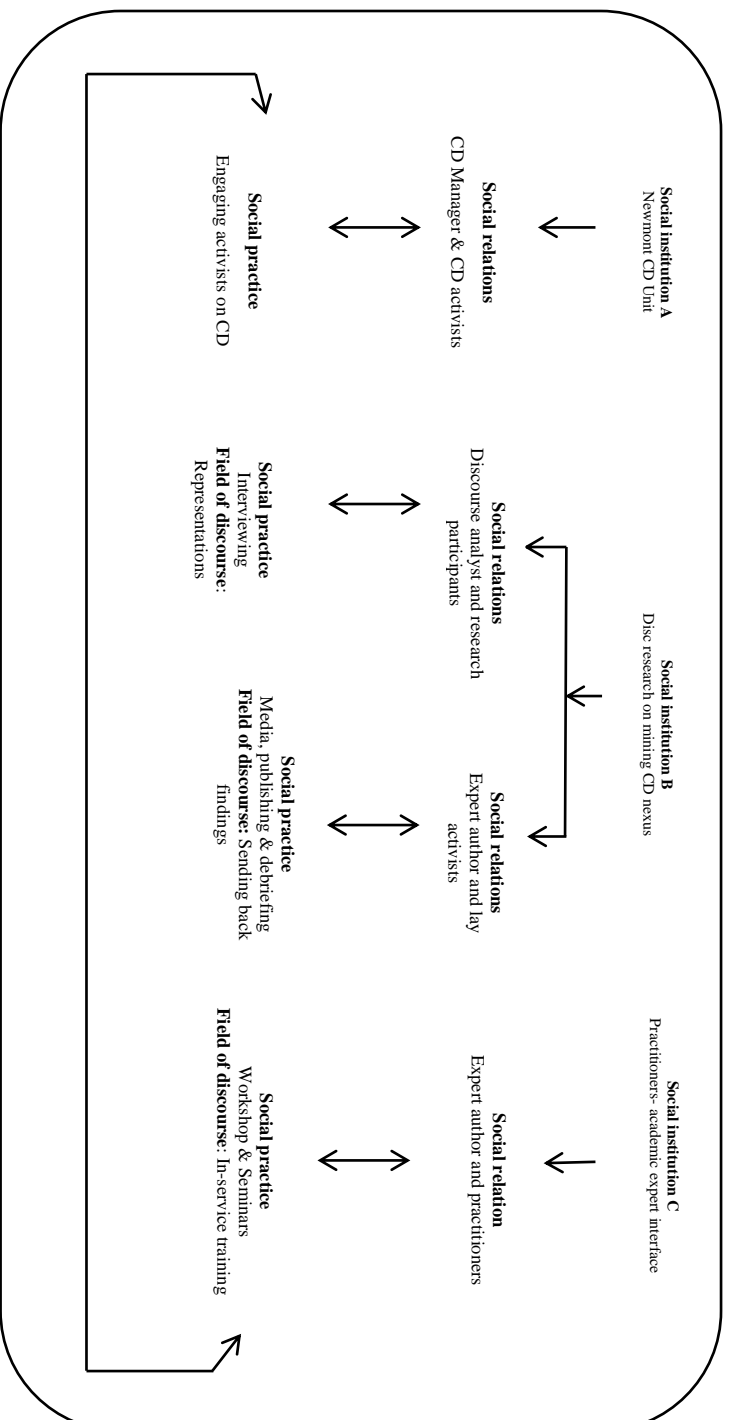
Figure 35 Inserting research outcome into Newmont CD practices (Adapted from van Leeuwen, 2008)

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10.3. POSSIBILITIES FOR FUTURE RESEARCH

There is a less research issue of power relations in terms of who has or do not have access to the resources and facilities to intervene positively? Thus, there is the possibility for future research to be conducted to produce empirical evidence of who has access to resource and facilities from mining and how discourses in place demonstrate actual utilisation to achieve a generalisable positive outcome to the local-local actors. Within this possible field of research, there could be a specific focus on analysing the operation of power relations in how decentralised authorities integrate mineral revenue into their development plans based on analysis of specific receipts and empirical evidence of socio-economic improvement. This possible future research can be linked to Fairclough's thematic focus on analysing the strategies of mitigating the crisis of contemporary neoliberal capitalism since state distribution of rent from extractive to subnational agencies like the DAs form a part of capitalism legitimation of its crisis. Future research on unequal access to resources and facilities to intervene in the actual use of power will contribute to CDA's goal of changing unequal power relations in access to resources.

Though Newmont has received awards as an outstanding company in the social practice of SD, the ostensible absence of some common elements of SD in the discourses of local-local social actors suggests the need for future research. For instance, the findings in the study suggest that there remain unanswered questions such as; how is Newmont SD Discourse recontextualised in the routine CD social practices of Newmont Agricultural Improvement and Land Access Programme (AILAP), community capacity building, and National Vocational Training practices? This question suggests the possibility of future research on the concrete social practices undertaken by Newmont in the field like livelihoods enhancement and environment management and at specific places. Such research will contribute to developing the concept of discourses in place as crucial elements which mediate how social actor construe Newmont's SD practices. Also, such research will contribute to realising democratic accountability which the research participants expect from those who represent them, including holding resources in trust.

There is a possibility of conducting future research on the link between the GoG legal discourse on environmental sustainability, the individual citizens' right to potable water, food, and a healthy living and the actual social practices and events in situated local places. Future research on the nexus between the legal discourse on environmental sustainability, the protection of human rights in relation to the environment and the actual social practice aimed that assuring individual citizens rights to safe environment will contribute to broadening NA methodological focus on learning 'place' as sites where chains of micro action as mediational means of broader socio-political practices circulate. It will also seek to contribute to Fairclough's CDA focus on analysing the strategies of mitigating capitalist crisis but from an empirical analysis of actions in materially situated settings in the global South.

Future research could also focus on understanding and analysing how different social actors struggle for space for the inclusion of their voices at the public space, the transmission of the voices into the empowered space as well as a focus on how the entire process of inclusion deliver the desired outcome or not to the concerned voices. Such research has the potential to contribute to extending the horizon of knowledge and practice about the neglected aspect of the inequalities of power and access to forums in mining CD practice. Methodologically, future research on the struggle for inclusion of voices will contribute to Scollon methodological perspective of building relations as a source of ideas, in this case, towards transforming the mining and CD nexus in a positive way.

Subject to access to data, there exists a possibility into the future for NA methodological approach to researching how the discourses which circulate within the natural occurring talk at the Newmont EIS public hearing connects with the discourses which arose due to the Newmont's interaction with people, places, and objects in situated places. Even in the US where the practice of EIS emerged, there are doubts about whether EIS actually influence practice on the ground (Dryzek, 2013). In a developing country context, particularly of a retrenched state, there is the need to study the connection between the practice of environmental impact assessment preceding project implementation and the actual practice of implementing or not the outcomes of the public hearing. This constitutes a fruitful way of understanding and analysing how voices of concern within the public space are transmitted into the empowered space at the initial stages of the project for authoritative action or otherwise. Future research in this direction will deepen empirical and conceptual understanding of deliberativeness with the mining CD environmental practices.

Future research could seek to address the question; what happened after I introduced an interview into the nexus of practice? The conceptualisation and application of interview as a social practice implies a focus on the what and how of the interview. Future research on what contribution may have or have not arisen due to the relationship of empowering between the researcher and the research participants will seek to deepen the how of the interview as a social practice beyond analysing the process of empowerment through actions in text and talk to material transformation in the social world.

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Appendix A. **Ghana' minerals and mining policy extract**

Extract 1

This is an extract from chapter 10 of Ghana's Mining policy, it covers the introduction to the chapter and subsection 10.4 Employment Generation and section 10.8 Rural Transformation and Community Participation.

1:          Government wishes to foster the development of a thriving mining industry that will contribute to sustainable economic development, economic empowerment of Ghanaians, the alleviation of poverty and, improvements to the standard and quality of life in Ghana.

2:          In this respect, Government has an important role to play in ensuring that all Ghanaian stakeholders secure the maximum direct and indirect benefits from mining.

3:          Government has established the following policies to achieve this goal.

4:          In order to maximise the generation of employment in mining, the mining legislation requires mining companies to give preference to the employment of Ghanaians.

5:   To promote this, the companies will be required:

      b.   to submit a programme for the recruitment of qualified Ghanaians to be approved from time to time by the Government; and,

      c.   to submit from time to time a programme for the training of Ghanaian personnel for the approval by the Minerals Commission. The Commission will ensure that companies exhaust all reasonable means to find qualified Ghanaians before any quota for the employment of expatriates can be approved. In this respect, a database of Ghanaian Geoscientists and other relevant professionals will be kept and regularly up-dated by the MC.

6:          Mining should be an important pillar to support the development of rural Ghana.

7:          To improve their livelihood, mining communities and mining companies should be partners in development and must tap into the unique expertise that mining companies bring along to that end.

8:          Mining companies shall be encouraged to actively participate in, and support the achievement of community initiatives, especially in the areas of health care, education, water, and sanitation.

9:          Government further recognises that the benefits generated by mining in the form of fiscal receipts must be utilised to ensure an equitable sharing of benefits having regard, in particular, to the needs of local communities most directly affected by mining.

10:   In order to achieve this, Government will introduce improvements to the existing administratively operated fund (the Mineral Development Fund) for apportioning part

	of mining revenues for development projects in local communities affected by mining.
11:	Legislation will be introduced to give statutory standing to the Mineral Development Fund.
12:	Amounts payable to District Assemblies and traditional authorities will be made under a transparent framework, and be given wider and more consistent publicity.
13:	The rights and interests of landowners and local communities regarding benefits accruing from the use of land shall be guaranteed during the entire process.
14:	Additional measures will be taken to maximise the accruing benefits and minimise the negative impacts of mining on local communities by requiring that:

a. training programmes and business development plans developed by mining companies give special emphasis to local beneficiaries;

b. mining companies make proposals on community liaison and consultation arrangements in their mining development proposals; and

c. local authorities, in conjunction with relevant governmental agencies, establish policies and procedures for full engagement of local representatives and other relevant stakeholders in planning and supervising local CD.

Appendix B. **CSO petition to the General Manager Newmont Ahafo Mine extract**

Extract 2

COALITION OF FIVE (5) AFFECTED MINING COMMUNITIES IN THE NEWMONT AHAFO
SOUTH COMMUNITIES

The General Manager
Newmont Ghana Gold Ltd
Ahafo Mine
Kenyasi-B/ A

Dear Sir,

PETITION OF THE AFFECTED COMMUNITIES OF NEWMONT GHANA GOLD LTD, AHAFO MINE, PRESENTED TO THE MANAGEMENT OF NEWMONT.

1:     Based on past experiences, we, the affected indigenous communities in the Newmont Ghana Gold Ltd Ahafo mine catchment areas would be worse off should the high-level of the unemployment among the youth of these communities, continues without being given a lasting solution, and the nepotism, corruption, greed, among other malfeasance by some key Newmont Ahafo mine management do not stop.

2:     Some permanent works and some key managerial positions are usually given to the non-locals as against the local-locals, regardless of the position or the qualification required.

3:     There have also been countless environmental pollution, and breach of trust between the company and the communities.

4:     The mine-affected communities are not convinced that the royalty payments and the corporate social Responsibility (CSR) contributions of the company into the NADeF Fund would adequately offset such impacts.

5:     We remain concerned that the management of Newmont is lacking transparency and participation, and might become a source of corruption and conflict.

6:     Our environment, and in fact our only means of existence is threatened and under serious destruction.

7:     There is further high-level of impoverishment of the majority of people whose lands and property were taken by the company.

8:     This has led to the wide scale opposition from the chiefs and people of the affected communities.

9: The mine-affected communities face numerous problems because of Newmont's operations in Ahafo mines.

10: It is in view of this that we present this petition to your outfit in order to have a lasting solution to the already existing and impending challenges in order to restore peace and prevent possible clashes between the company and the communities: …

Environmental pollution

11: The negative environmental effects because of NGGL's operations are catastrophic since these affect people's livelihoods as well as ecosystem.

12: Damage caused to the environment will never be fully reversed.

13: Large-scale gold mining company like Newmont is particularly destructive because it involves the processing of huge volumes of ground rock, using cyanide to separate gold from the ore.

14: This process also releases other potentially harmful toxic metals, the monitoring of which has been described as inadequate in certain mining operational areas in the Newmont Ahafo mines.

15: Per the local agreement, the environmental monitoring team is supposed to include the community members.

16: On the contrary, the team is made up of Newmont alone, which always creates personal and conflict interest thereby resulting inaccurate reporting on the state of the pollution.

17: They only report massaged figures and information favourable to the company.

18: The noise pollution, air pollution and the environmental hazards due to the operations of the NGGL, Ahafo mine are so numerous that our very means of existence are threatened.

19: Our food crops and vegetables are unwholesome due to the emission of poisonous chemicals into the earth.

There is excessive vibration resulting from blasting

20: The vibration resulting from blasting leads to cracking and collapse of buildings, causing deep cracks to wells, destroying cocoa trees, and making vegetables unwholesome for consumption.

21: Not only does the affect us this way, it also causes fear and panic to community members especially children, hypertensive patients, and pregnant women.

22: This results from the sudden explosion and falling of broken rocks after explosion.

Broad day light Bribery and corruption by some key Newmont Ghana Gold Limited's managers and its subcontractors

23:     This may sound untrue or fabricated to you but that is the reality behind the seen.

24:     Most of the key Newmont managers are doing 'back door businesses' within the company.

25:     Most of these key Newmont managers connive with its subcontractors and take some backdoor percentage from them before awarding contracts.

26:     To the disadvantage of employees of the contractors, they are paid meagre wages since the contractors are aware of the corrupt officers/management.

27:     So they give them in order to keep their contracts flout most of the contract rules and then decide to pay the local-local employees with peanuts, which are always nothing to write home about.

28:     Most of these contractors below and their employees are victims to the above; ORA, PPA, WBHO, CONSAR, ENI, with regards to contacts on the mill expansion project.

29   The contractors mentioned above pay their employees less than 40% of what the project agreed on.

30:     (Source, insiders).

31:     The insiders, most of whom are key leading managers of the contractor's further state that managers of NGGL could not intervene should the employees complain of their working conditions due to this canker.

32:     The community relation department, HR department, and external affairs were the key departments mentioned by the insiders.

33:     Notwithstanding that, should any employee voiced this 'open secrete', that person is automatically dismissed and unreasonable charges levelled against him/herself.

34:     Contractors like Geodrill Ghana Ltd, Boart Long Year, ATS, and Protea Coin, on the other hand, are not exemption to these dubious acts.

35:     In the same vain, these contractors also thread the same way and direction with such inadequate wages and salaries structure though a little above others.

36:     This is not a surprise because we have the same wicked and self-centred management from the HR, Community

Relations and the environmental and social responsibility department.

Some managers and key influential staff serve their parochial interest against the interest of the company and the affected community members

37:	Most of key Newmont Ahafo managers and staff strategically used their posit1ons to the disadvantage of the company and the community members.
38:	Key among them are; Joseph Danso (Social Responsibility Manager), Charles Kwame Yeboah (Community Relation Superintendent), Adam Sando (Human Resource Manager-AUMS), Kim Tailor (Project Manager-AUMS) and the Newmont HR department.
39:	These managers and many other managers make sure that their interests supersede that of the company they are working for and the community members by their favourites and family members.
40:	Just for the records, Mr. Charles Kwame Yeboah had got a lot of his favourites from outside the affected communities employed including his daughter, Judith Yeboah, who was a service personnel in NGGL, who had over 5 months to complete her service, to occupy a position of PITRAM administrator at AUMS.
41:	Surprisingly, Judith attended interview with some other community members with better academic background in HR, Information Communication Technology, administration, just to mention but a few.
42:	They had vast experiences and expertise as compared to her but they were rejected and given the opportunity to the daughter of Charles Kwame Yeboah.
43:	This pa1iicular position was not even advertised which indeed was highly against local agreement.
44:	This same person had his son, Elvis Obeng Yeboah, occupy the position of Dispatch administrator.
45:	Not only has Mr. Charles Kwame Yeboah acted selfishly in these ways, but he also builds and makes the contractors and workers of Newmont to rent presumably in order for the contractors to win their biddings.
46:	This is against ethics and ways to stop corruption.
47:	Joseph Danso has his brother, Awuah Gyamfi, in the AUMS.
48:	These people or employees are equally community members and deserve the right to work with the company.
49:	However, us ing your position to influence the system by getting your family member s undue advantage is tantamount to corruption.
50:	An insider source had it that these manager s decide who should be employed at where and at which position (source, HR department-NGGL and AUMS).
51:	The HR complained bitterly that these managers usually compel them (HR) to invite their favourites for interviews and subsequent employment.

```
52:        Does Newmont entertain corruption?
53:        These managers and the HR department conspire with
           the contractors and end up paying the employees
           (casual employees engaged by contractors like the
           ENI, PPA, WBHO, CONSAR, DRA, BOART LONG YEAR,
           GEODRIL, usually from the affected communities) with
           wages which are woefully inadequate.
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[Conclusion]

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54:        We are patiently giving Newmont Ghana Gold Ltd a maximum
           of one week to address the issue raised above.
55:        Failure to address these concerns at the peace
           negotlat1ons table could lead to instability and mayhem
           at the Newmont Ahafo Mine site, which we do not want to
           happen.
56:        The employment agreement was cooked and massaged by the
           NGGL and the forum moderator prior to the signing of
           the local employment agreement.
57:        It was to the total disappointment of the forum members,
           and, as such, the agreements on surface mining in terms
           of employment would not be a guarantee for peace and
           unity between NGGL and indigenous peoples and we call
           on NGGL management to give considerable attention to
           claims of the communities in order to achieve a lasting
           peace and co-existence.
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Appendix C. **Ananekrom interview extracts**

Extract 5

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10 P1:     The name of the river is River Subri.
11 R :     So whenever you see this eer river and eer this water
           here, what comes to your mind?
12 P1:     What comes into my mind is that erm, the miners are,
           are putting us in a danger, because this river has
           been our source of drinking water before the miners came
           here but since they came, we cannot use it anymore.
13         As you can see the river is been polluted, is been
           blocked, now it is not flowing anymore as usual.
14         So, it is very dangerous for us, we cannot access it
           anymore.
15 R :     How dangerous is this to you?
16 P1:     We are afraid, they are using cyanide and other chemicals
           right here.
17         They have their tailings dam here and we suspect it is been
           flowing into it, sometimes you may come and see all the
           fish's dead (:) lying along the river.
18         So we are afraid to use it.
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Extract 6:

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166 R :    What is the name of this place?
167 P1:    Here is Apensu South.
168 R :    Apensu South.
169 P1:    Yeah.
```

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170 R :      Yes so this is eeer water flowing, what do you, is
             there anything you want to say about this?
172 P1:      Yeah this water flowing we sees it to be very dangerous
             water as you can see because there is a tailing's dam
             right this rocks and the water is flowing directly
             from there.
173          So we believe it is a leakage from the tailing that is
             flowing through here and it leads to our village.
174 R :      Offered P1 to take a picture of the rock.

Extract 7:

210 R :      Are there some sites you want us to visit now?
211 P1:      Yeah, we can go over there.
212 R :      Thank you.
213 P1:      Mine leakage water they left it over here.
214 R :      Mine leakage water left over here? Offered P1 phone
             camera to snap the action.
215 P1:      You see this pipeline.
216          [Insert pipeline].
217 R :      Yes.
218 P1:      It is being used to draw water from that place that
             point to the mines.
219 R :      Yes, okay.
220 P1:      And eerm look at how it leaks over here.
221          Previously,  this  leakage  water  was  crossing  into
             our village.
222 R :      Okay.
223 P1:      And when it get here, you see there is a farm here.
224 R :      Yeah.
225 P1:      when it cross over and come into our farm, all the
             crops have to go down.
226 R :      Okay.
227 P1:      So  we  reported  it  and  they  have  use  some  pump  over
             there that is where the security is.
228          So  nowadays  they  pump  this  leakage  water  into  the
             mine.
229 R :      Okay.
230 P1:      And yet still you can see even if they pump it you can ee,
             it is still here.
231 R :      Okay, so this is the pipe and the water that leaks?
232 P1:      Yeah.
233 R :      And then I can see how this also just on the farm.
234 P1:      Yeah.
235 R :      Do people live here?
236 P1:      Yeah, this is village as you can see.
237 R :      Wow! So has the EPA tested this water?
238 P1:      They have been here several times we reported it to them
             several times.
239 R :      And what is the outcome?
240 P1:      We do not get any outcome. When they go, they do not come
             the back again.
Extract 8:

28 R :       So eerm, eerm, the crops Newmont says that they have
             provided you with alternative sources of water because
             they have blocked Subri but they have drilled boreholes
             and the borehole is, should be okay for you so why do
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                    you complain about this posing negative impact, effects on
                    your lives?
29 P1:              The borehole that they drilled, they did not drill it into
                    the very deep of the earth.
30                  Sometimes when you drink the borehole, the water it stinks.
31                  You can sense some this thing in the, the some ionisation
                    this thing it seems like rusted chemical in the.
32                  So and the water too we suggest it is very close to their
                    pit and the tailing's dam.
33                  It can leak through.
34                  There is some place that the tailing's dam is leaking so
                    and is the same place that where is not far from where the
                    borehole is.
35                  So we are afraid it can leak through that one too.
36                  Insert, P1 takes a picture of a borehole.
37 R:               [pipeline seen in the picture conveys the spillage from
                    the tailings dam to a controlled destination].
38                  So do, do you have people, who have eer, had proven cases
                    of eer, proven medical cases that eer, they, they eer,
                    experts say is due to eer, the drinking of contaminated
                    water?
39 P1:              Yeah we have had that problem. I think that was last 2
                    years ago, some people get foot rotted, skin rashes.
40                  As you can see this brother here, he has experienced severe
                    skin rashes and he went to clinic they told him that he is
                    been using contaminated water.
41                  And those and this, this the one we use to bath, to wash,
                    to do everything. So it is posing our lives into danger.
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Appendix D. Dokyikrom interview extracts

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Extract 9
109 R:              Yes, so eeerm you have enumerated so many eeerm
                    challenges that are as a result of Newmont, but
                    Newmont will often say that yes we have come to meet one
                    borehole,    we    have    drill   2   or   3   additional
                    boreholes
110 P3:             Yes
111 R :             What do you have to say about that?
112 P3:             Mmm   that   is   what   now   most   people   are   now
                    quarrelling about
113                 Is not that we the community members we like the situation
                    that we are in right now
114                 We have talked to the company, we have talked to the company
                    and […], we told them that you see, the community is not
                    big like that, the company is having their eeerm water dam,
                    their tailings dam here which the water there they have
                    even eeerm send light, that is electricity there
115 R :             Yeah
116 P3:             And it is not even up to a mile, one mile to
                    this place, they did not even provide us with
                    any electricity
117 R :             The tailing's dam
118 P3:             The the water dam
119 R :             Okay so they have connected electricity to the water dam?
120 P3:             Yes
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121 R :      But you do not have electricity
122 P3:      […], they will not even use five poles to this place.
             Five  poles  it  means  then  the  five  poles  they
             are  making  it  to  the  various  eeerm  corners  of
             the thing the town.
123          And then eeerm so look at how nice the school is how you
             are going to  say you do not need to stay here.
124 R        Offered P3 a mobile phone camera to a picture of classroom
             block constructed by Newmont.
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125 R :      Yeah, yeah yeah.
126 P3 :     So they, they are helping us but the condition that we are
             in right now, even if they just even give us electricity,
             how are we going to survive?
127 R :      So you are not anti-mining.
129 P3:      Pardon
130 R :      You are not anti-mining, you are not against mining?
131 P3:      I am not against mining but the condition that we
             are facing through here, I will just take you to
             where the tailing's dam is
132 R :      Yeah
133 P3:      Looking at how the tailing's dam is and how human beings
             are staying you see, you see it is not even good at all.
             […]
138 P3:      This compound, that is multi-purpose eeerm what do you call
it,          structure that they have just brought to the community
139 R :      Can you use this camera to take picture of the compound
             you are referring to?
140 P3:      Yeah
141 R :      offered P3 mobile phone camera
             […]
143 P3:      So it is helping us a lot but, you see they are being
             trained our members who are doing bakeries and other things
             but now we are saying that we do not need all those
             things because the life of human being or the life of man
             is more important than to receive wealthy and all those
             things […] see.
144          So we are now fighting for our lives so even the last time
             that eerm the media men came here we just told them that
             if they did not resettle here before this 2018 then what
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              we are going to do to the company we will take the right
              on our hand because our life is more important.
145           Many people are having eeer what do you call it, properties
              here so why do I, why do we have to leave our properties
              here and go and stay somewhere?
146 R :       So you want them to resettle you.
147 P3 :      Yes, we only need resettlement.
148 R :       Okay
149 P3 :      As at now we are, we are just eeerm, I am just talking to
              you, and we need resettlement because if they do not
              resettle us things may go bad.
Extract 10

244 R :       So where and when do you people usually meet to talk mining
              and then your, the development of your community?
              Where do you normally meet?
245 P3:       That time we do not even have any community centre so […]
              just, there is a certain mango tree there that we used to
              do our meetings.
246           So if we want to talk about anything, we just go
              there but when the company wants us they will just
              send us the opinion leaders.
247           We have some people that they call them opinion
              leaders.
248 R :       Who are those?
249 P3:       That is the chief is part, Committee members are
              part and then they will send the eeerm youth leaders too
              to the place but now…
250 R :       When you say the Committee leaders […]
251 P3:       Pardon.
252 R :       When you say Committee leaders, who are those Committee
              leaders?
253 P3:       Yeah we have the unit Committee.
254 R :       Okay.
255 P3:       So we have the chairman and then his workers that he is
              working, I think they are six people.
256           They just send, send them to eeerm Kenyasi to do that,
              those meetings.
257           Meanwhile we those who are facing the major problems, you
              see one thing that they cannot talk […] much about this is
              that, you see eeerm the community is the Committee Chairman
              is not staying here so the impact the impact that we are
              having, he is not facing those kinds of what, problems.
Extract 11

174 R : So what is this huge (:) eeer rock lying down here?
175 P3 :      Yes that is the tailing's stone facility that they brought
              after making all their, taking their gold and those things
              after washing them, this is where the particles comes.
176           You see, so we are just staying here, the particles too
              are here.
177 R :       What used to be here?
178 P3 :      What use?
179 P3 :      Yes before this dumping here, what used to be here?
180 P3 :      It was somebody's land.
181 R :       Okay.
182 P3 :      This place was somebody's land, this was our river
              Subri and now they have just made it a water dam.
              […]
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183 R :      So this waste, eeer is there any effects or are you
             enjoying? Eeer, what is it? What can you say about it?
184 P3:      Yes, the gravel seal, we do not have any problem about the
             gravels.
185 R :      Okay.
186 P3:      And then we even eeerm have small problem that they have
             just added dark soil to the, they have just added some
             eeerm how do you call it, eeerm chemicals to the gravels
             so that nobody can use it.
187          You see the tailing's storage facility that they are having
             when it rains, the water will just pass through the
             gravels.
188 R:       Okay, okay, okay.
189 P3:      To the place and then it just comes out so it means the
             all the water that we are drinking, part of these eeerm
             particles comes into it.
190          You see, so that is the major problem that we are, we are
             having with them.
191 R:       So do you think that eeerm the spillage of the water through
             the eeer storage facility and from and to the rocks, does
             that have any effect on you?
192P3:       Yes, that is what that is what is bringing all eeerm how
             do we call it, problems that we are facing right now, the
             problems that I just mention to you.
193 R:       So what is this water lying down there?
194 P3:      Mmm, this is the water dam.
195          This one initially it was a stream, named River Subri which
             those who cannot walk along to the community to come and
             eeerm fetch water, they used to drink and then even they
             even use for irrigation purposes.
196          But came and then the other side too was full of eeerm
             somebody's land, others were cocoa farm and other things
             and eeer they are just come and then eeerm plough all these
             things and now it has just turn into water dam.
```

Extract 12

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5 R :        Yes eerm, why, how, why do you agree to talk to me about
             mining?
6            What is it that motivates you to begin to be talking about
             mining?
7 P3:        […] as we were here in the ordinary time we did not even
             know anything about mining, but later on some white men
             came here and that eerm they are coming to take our land.
8            They talk with our chiefs, they talk with our elders, and
             they talk with our parents […].
9            […], there was only one pipe like this one
             [P3 points at the bore] which was serving the whole
             community.
10           [R gave P3 mobile phone to snap borehole in reference and
             took the mobile phone snapped the bore below].
11 P3:       That is those who were in their various homes, those who
             were in their various villages, and those who were in the
             various cottages this was the pipe that was serving all of
             them.
             […]
19 R :       Yes before we go […] is this borehole still working?
20 P3:       Yes it is still working.
21 R :       It is working and there is no problem about.
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22 P3:      But one, the problem that we are having, we are facing now
            that I was just talking about was when they came, eerm you
            see, they made a tailing's dam, and I will take you to the
            place.
23          They were having a tailing's dam around and then we were
            having a small (:) stream  also at the place, I will show
            you that place too.
            […]
29          But later on, now they have seen that now there are some
            chemicals that have been go deep into this thing so they
            do not even want to use the borehole again.
30          And we the community members here now, most of us when they
            use the water, it affects  us a lot.
31          Like something like boils and so many, rashes and other
            things, a boy here had rashes sometime back.
32 R :      Can you produce any evidence of this?
33 P3:      I will give you the picture after this.
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35          And then even some people when you go to hospital for
            treatment when they ask you eerm, gentleman or woman where
            do you live and you say Dokyikrom or Tutuka, the only thing
            that the nurse or the doctor prescribes to you is that be
            careful of the water that you drink.
```

Appendix E. Kantinka interview extracts

3 R : P2,   (…),eeh so how did you come into this issue of talking
             about mining and local CD issues?
4 P2 :   Yeah, eer on this day 27ᵗʰ March 2013, when we were there
             when NGGL came to our area and said   […], they want to
             use our place for (0.5)eer waste dumping expansion so…
5 R :   Please which area is that?
6 P2 :   That is Kantinka, Dormaa Kantinka (0.5) in Brong Ahafo.
7   So (0.5) they came on that day and then have some meeting
             with us after telling us that, they took some pictures of
             our houses, putting some eerm serial numbers (0.5) on our
             houses.
8   So they went back.
9   […]then a year later they came and take some pictures the
             inner of rooms (0.4) to discover that whether you sleep
             there or not.
10   So after sometimes they came back with a certain sheet with
             full of your house pictures and then they ask you to verify
             your (0.1) your house.
11   Then when you did sign, everything, then they give you one
             and then they also take one to their company.
12   So at a point in time we were there when they came that
             when you hear… you see your number on their notice board,
             it means that they are not going to build for
             you, they are not going to resettle you.
13   And they will pay you amount of money.
14   Then (0.5) then so they were picking a lot, some people
             from us.
15   So (:) we were there (0.1) some of our colleagues were not
             happy about the way the situation is going on because (0.1)
             all of us we were there, we had the same
             meeting you people said you are, they are going to resettle
             us (0.1) then why are they now eer doing selective justice?
19   Like (0.1) selecting some people to go and resettle them
             and leave some people here?
20   So (:) some of us did not agree with them, so (:) they did
             their (0.1) work and then leave us there.
21   At the point in time we were there when one day it was a
             market day, we were bringing our food for market to come
             and sell them so that we get something to go and buy some
             soaps and other eer social (:)like (:)using some soaps and
             other things.

167 R: So apart from eerm these resettlement procedures, do you
             have experiences with some environmental issues due to the
             mine.
168 P2:   Yes, yes Officer, you see, at the point in time, we came
             and noticed that even the one that I was our stream get
             polluted.
169   All our fish died.

```
170            So when we get that situation we have to invite them to
               come and see (0.1) how they will (0.1) give us some water.
171            Then they say they will build us a borehole.
172            Even the borehole itself at first, at first the company
               was not working near us so when they get closer to us then
               we came to notify[ce] that the boreholes have
               also been polluted.
173            So our main problem was water.
174 R:         So how did you get to know the borehole was polluted?
175 P2:        You see, just like what you are doing right now.
176 R:         Yeah.
177 P2:        A lot of people came to our aid.
               Even when we submitted our case to WACAM, WACAM themselves
               came to our village to come and see with their naked eye
               whether we are living there or not.
178            So after that they bring in CEPIL [centre for public
               Interest Law].
               CEPIL also bring some people from outside country to come
               and look for us.
               When they came, they went various houses, various,
               everybody houses to check whether what we are saying is
               true or not.
179            Then they brought in some eeer, eeer, what do you call it,
               environmental eer.
180 R:         Measurement….monitor…
181 P2:        Yeah to come and check, yeah to come and monitor the way
               we drink, somethings that we are doing   which   is   not
               helping us.
182            So they bring in some certain white people, when they came
               even it was eeer a drop then when they get our water and
               then   they   put   some   drop   in   it   and   said   our
               water has been polluted.
183 R:         Polluted, what did you do?
184 P2:        So from then then we do not have anything to say even in
               Ghana even in the whole town right now they have the same
               problem but they are not doing.
185            Do not have anything to say.
186            So what we do is […] to pressure the WACAM people for
               them to go on the case to the court so that we get resettle
               from   that   place   from   our   (0.1)   those   eer
               what do you call it, those problems.
Extract 15

78 P2:         No I miss the word (0.4) they bring some people in there
               so that they will come and demolish anything that we do
               over there.
79             So if we farm over there, they will come and spoil it.
80             At that time, after they will, they will resettle some
               people, the only job that you can do is (0.1) charcoal
               burning.
81             So when you gather your firewood to come and burn your
               charcoal, before you realise they will be there and then
               they will spoil it.
82 R:          What were the reasons?
83 P2:         Just because they want us to move from that place.
```

```
84 R:        But you have indicated that they have settled some and they
             did not settle some.
85 P2:       Yes so we those left over there.
86 R:        yes.
87 P2:       we were (0.1) they put some (0.1) those volunteers to come
             and demolish anything that we do.
88 R:        Now what was the reason why they didn't resettle you,
             people?
89 P2:       They are saying let me try to come here.
90           They were saying that they took some decision with you see
             they bring in some RNC meaning eeer.
91 R:        Resettlements Negotiations.
92 P2:       eheh resettlement negotiation.
93           So our members were in so they try to convince our members
             so when they go and the (0.1) discuss some issues our
             members will not come and tell us.
94           So after we sign for the (0.1) that sheet, it means that
             it is not necessary to say they are going to build you a
             house while we are also living there.
95 R:        Who were those who represented you at the (0.4)
             resettlement negotiation.
96 P2:       Yeah, that that man, another man was eeer, eerm Paul Fanuku
             and one women and then Adja Mensah, the woman I have forgot
             the name.
97 R:        Do they hold some positions in the community?
98 P2:       Yeah they were (:) as for the Adja Mensah he was the first
             person to to settle over there.
    99  Yeah, that man but those people I do not know.
```

Appendix F. Yarogrumah interview extracts

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Extract 17
19 R :      eeerm, where are we now?
20 P4:      Wiasegruma community.
21 R :      Yes, but this environment, is that your farm?
22 P4:      Yeah it is our farm.
23 R :      Please take this camera, take anything of eeer interest to
            you within the, your environment.
24 R :      Okay.
25 R :      Yes, I can see so many crops here.
26 P4:      Yeah.
27 R :      so eeer looking at this picture, what is of interest to
            you in this  picture? What do you want to talk about  in
            this picture?
```

                                    […]
34 P4 :   even the appearances, it is not quality as previously, so
             the this thing the right this thing is not being what we
             do not get the right, I mean foodstuffs (.) because it will
             come in smaller what, small, small quantities but
             previously, it was not like that and most especially the
             cocoyam.
35 R :   What is wrong with the cocoyam?
36 P4:   The cocoyam you just look (.4) look at this one.
37   This one like this, this one it is about 2 years ooo but
             look at how (.0) eeerm the thing is.   [P4 uprooted a
cocoyam and showed me how small the tubers   are]
38 R :   Cause of eeer your, the low eeer produce you get from eeer
             your cocoyam, plantain and other things, […] what do you
             think is the cause?
39 P4:   The cause that is their activities like the chemicals that
             they are using […] because I had some conversation
             with a guy, he was from eeerm KNUST, he also came here, he
             was doing some work, project work.
             He said for the metres away from where they are doing
             their activities and this place, if we plant any a
             foodstuffs, they have eeerm some medicine, I do not know
             whether they call it cyanide or whatsoever,
             that the foodstuffs that we are and taking here, it is
             not even advisable for us to eat it but there is no
             option for us.

Extract 18
4 R :   How did you come into a relationship with mining?
5 P4:   How do I?
6 R :   Come into relationship with mining, eeer how did you begin
             talking about, what is it that made you begin to talking
             about mining and then eeer issues concerning eeer local
             community.

```
7 P4 :      Yeah, for, for mining, I think when they came here that,
            they came here that was I think they started their
            activities 2004, 2005 around this particular place.
8           That is where I got to know about eerm Newmont
            Ghana Gold Limited, that is the mining (0.1)
            and we had a lot of °I mean challenges.
9           We had a lot of challenges concerning education
            and the development in our areas because
            previously, we used to attend school at a
            village called Koduhia and they came and
            resettled the school to eeerm OLA resettlement at Kenyasi
            No.2.
10          So […] they used to bus students from this
            particular place to that particular place
            where, where the resettlement is.
11          And the issues or the problems that we do
            encounter is failure of the bus to come and convey the
            students from this place to that particular place.
12          Sometimes the bus will come, sometimes too it
            will not come especially during raining season.
13          And even just recently, when the school reopens,
            the bus were not coming.
14          Even I called one of their eeerm managers, he is
            now at Accra, I was not aware that he has
            been transferred to Accra, I called him, and he is
            Mr. Paul.
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Extract 19

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178 P4:     So we called them, that time my father was alive and the
            Koduhia that I am talking of, the school was being even
            initiated by my father where one of his kid was schooling
            at Kenyasi and he had, when he was coming they took a car
            and they had an accident and he pass on.
179         So my father started, he and the Odikro of the
            Koduhia, they started with the school.
180         They built the school and even they were using their pocket
            money to pay the teachers before he became an assembly
            member and the government supported him and they built the
            school.
181         And later on we said his eeerm child should move from that
            particular place to another eerm, from that Koduhia, the
            school which was being built by that particular person.

182 R :     from his resources.
183 P4:     °yes to go another school and now to we are in everything
            is computerised this thing°.
184         The basic school they are using computers and other stuff
            and you said he should go to another village where there
            is no access to electricity.
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Extract 20

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43 R :      Eeer but practically do you experience challenges eeer with
            the foodstuffs you consume from this farm?
44 P4:      Unless you go to hospital before they can detect it.
45 R :      Okay.
46 P4:      and per the experiences that we had here, sicknesses and
            other stuff, we also we had the perception that it is
            because of all these things that is why we have what,
            generated such this thing.
47 R :      What type of sicknesses?
48 P4:      My best friend died that was last year, Williams.
            That one, that one was water, went he was admitted to
            hospital but I do not have the report here but if you get
            the family members, we can get the report that the water
            that he is drinking is not good (0.5) so he was sick, it
            was like eeerm a stroke, he was even, he was
            finding difficult to walk.
49 R :      So he was paralysed?
50 P4:      So he was only in the room you go there and he will be in
            the room, he cannot come out.
51          It, it took him about 2 years before he passed on.
52          He was a young guy, he completed yeah is it, and yeah.
            Senior High School (.) and he had that problem.
53 R :      So apart from the gentleman who died and they said the
            hospital report indicated that eeer the source of drinking
            water is contaminated.
54 P4:      yes.
55 R :      what types of eeer.
56 P4:      Chicken pox.
57 R :      chickenpox?
58 P4:      even chickenpox I was having, we were having one of the
            pictures of my father but I do not know whether I will find
            it, as he passed on whether I will find it or not.
59          Chicken pox, a lot of people encountered that this thing
            here and we saw to it that it is the results of the Newmont
            activities because previously all what I am saying is the
            experience that we had before and after Newmont came here.
60          Chicken pox and other stuff even you can see the lady over
            there, that is my sister, she is stroke and we have another
            man at the next village too, he is being affected, he is
            now, he is also encountering those eeerm this thing, the
            stroke and this thing.
61 R:       Eeer, have, has he sought medical attention and they
            indicated his stroke eeer is due to the activities?
62 P4:      Though we went he has been admitted to the hospital and
            they said it is a stroke but that is why I am saying that
            they did not tell us, they did not pinpoint and tell us
            that it is the activities of Newmont but per the
            experience that we had,(.) before and after
            the activity, before Newmont came here and
            when Newmont is here, that is why I am  saying that it is
            due to these challenges.
Extract 21


64 P4 :     Yeah, yeah previously when Newmont was not here, we used
            to have a bare land, where we do our farming activities,
            where we get our food you know, this place is (0.4)
            most of our this thing is cocoa and other stuff.
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65            We used to have a bare land where you will not plant any
              cocoa over there.
66            What you will do is foodstuffs but Newmont came and what
              that particular place is being taken by Newmont even during
              that was 2004, they came and they were saying that is a
              bare land so they, there is no compensation for us.
67            They did not compensate anyone so they just took
              the land like that.
68            So currently, we are finding it very difficult, those who
              are within the community are very finding difficult to get
              a place to farm for what, for food.
Extract 22

147 R :       Are you aware Newmont has social agreement with
              the Ahafo people?
148 P4:       Yes, they have it.
149 R :       What are some of the promises […] that were reached in the
              Ahafo agreement?
150 P4:       The agreement, one, one of them eeerm is about the
              employment issues that I am talking of.
151 R :       Yes, are they delivering on that?
152 P4:       They are delivering on that but not to the expectation.
153 R :       What are your expectations?
154 P4:       My expectation is that as I was saying that the employment
              issue though they said they have employed eeerm 40% the
              labour force (.) within the what, within the communities
              but eeerm the actual work, that was what I was comparing
              the Newmont, the underground, the eeerm.
155 R :       processing.
156 P4:       Processing, compared to the local-local this thing, most
              of the eeerm our local-local are being employed by the
              contractors  and not the Newmont, the company itself.
157 R :       So there is eeer, some kind of eeer remuneration
              differentials.
158 P4:       Differentials.
159           That one is even far, far, far differentials.
160           I can use example, eeerm there is a company I cannot
              remember the exact contractor.
161           He was paying, though he employed local-local and non-
              locals and he was giving rent allowances to non-locals.
162 R:        Okay.
163 P4:       whiles that rent allowances was not given to eeerm local-
              locals […].
164 R :       Did he offer any reasons for this eeer differences in
              treatment?
165 P4:       The reasons that they raised was that that those people
              who, the non-locals are not from this particular place and
              when they come they have to go and rent a room and other
              stuff that is why the local-local they are from here, they
              have accommodation and other stuff.
166           That is why they are not giving such and this thing
              remuneration  to them and of which we see to it that  is
              not in right direction (0.4) because you have to treat
              your employees at par.
Extract 23
202 R :       Yes or political influence?
203 R :       Yes, so for instance we have eeerm political structures,
              we have eeerm representation in the DA, we
              have MPs eeer and all manner of representation…
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204 P4:   For the MPs, they are not helping the community at all in terms of this Newmont and other stuffs.

205   Because since we started eeerm since we started facing this challenges   and other stuff you will even call, you will even call the MP that we need assistance.

206   He should come and, and listen to your this thing so that he will also put it before the government so that they can also help you to resolve the issue and you will call the person the MP will not come.

207 R :   What about your assemblymen who represent you at the assembly?

208 P4:   Okay for the Assemblyman it I mean sometimes you will call, they will come sometimes too they will, depending on the Assemblyman who is in power.

Appendix G. Summary of Dokyikrom interviews

Discourse topics	How do these Discourses recontextualise social action?	Who are the dynamic agents behind the social action?		How does the representation connect social action to other entities?			Evaluation
		As doings things or semiosis	*As the goal of the action*	*Attribution*	*Individual observations*	*Memory & sense of a place*	*Evaluation*
Representation	Generalisation of action	Company talking and meeting with Chiefs, elders and Committee Chairman. The company included as an agent whose action disadvantages local.	Settlers at Dokyikrom, affected	Displaced in time & place	Observations motives	-	Negative
Employment	Dynamically	Local people included as those who make meaning out of company recruitment practices.	Local people included as goals of discriminatory recruitment practices	Attribute to unclear processes of recruitment	Individual experience with Greedhill's recruitment processes	Made sense of company promise and actual performance	Certainty over his claims Locals disadvantaged
Engagement	Caused by the company	Newmont the sole decision-maker	Local people	Makes attribution to the company's independence from governmental control Indirect attribution	An observation about a top-down approach No listening ear	Reference to action the past	Negative
Effects	Metonymy	The company as doing things to things. Locals as makings out of company doing to things.	Places and entities Local people	doctors or nurses voices. Attribution water sample test by the Ghana Water Company. Indirect reference to an unnamed entity engaged by WACAM.	Observation of new forms of skin disease. Non-use of the borehole workers of Newmont.	Before and After comparison Water sources are cocoa farms are lost Reference to 'ordinary time'	Negative effects certainty negation
CSR	Images as evidence of corporate good works	The company doing well. Locals making meaning in the context	Local people as beneficiaries	Averal	Positive relationship	Construe high status for CSR action	Positive evaluation
Resettlement	Created in discourse	Local community	Newmont	Reference to environmental effects Attributes ill health to Newmont	Personal observations	Reference to loss of quality borehole water	Negative evaluation
Social agreement	Generalised	Newmont, elders, and chiefs P3 making sense of actual delivery	Those live in Dokyikrom	Attributed to business motive		Kenyasi clinic	The gap between agreement and actual

Table 4 Sensitising table for movement into data analysis

Appendix H. Summary of Kantinka interview

Discourse topics	How do these Discourses recontextualise social action?	Who are the dynamic agents behind the social action?		How does the representation connect social action to other entities?			
		As doings things or semiosis	*As the goal of the action*	*Attribution*	*Individual observations*	*Memory & sense of a place*	*Evaluation*
Effect	Activities and actors included	Newmont doings transactive	Entities like a stream, borehole; Affect human health	Reference to a chain of the genre of research	Observation of skin diseases	'That place I was saying, our get polluted'	We do not have anything to do. What we do is to put pressure on WACAM
Resettlement & relocation	Represent micro activities	Newmont doings transactive	P2 and his community of experience		Individual perceived bias	Blockage of road	'Some of our colleagues are not happy'
Livelihoods	Includes material actions	Newmont destroy everything 'we do'	P2 and his community of experience		Personal experience		'We are not getting access I There'
CSR	Material action of drilling a borehole	Newmont drilled a borehole P2 and his community of experience wrote to Newmont	P2 and his community of experience		Personal experience from action of community and community	Remembers a stream which was helpful before Newmont	Even the borehole became polluted
Representation	Concretise actors	Opinion leaders & Newmont	P2 and his community of experience		Personal Experiences		Representatives not giving feedback

Table 5 Sensitising table for movement into data analysis

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Appendix I Summary of Yarogrumah interview

Discourse topics	How do these Discourses recontextualise social action?	Who are the dynamic agents behind the social action?			How does the representation connect social action to other entities?		
		As doings things or semiosis	*As the goal of the action*	*Attribution*	*Individual observations*	*Memory & sense of a place*	*Evaluation*
Representation	Abstracts MP & Assemblyman non-responsiveness	The MP as a dynamic agent	Local communities		Experiences about MP not attending upon invitation		MP will not listen to concerns
Employment	Categorised employment into main work and subcontractor employees	Newmont Ghana Gold and subcontractors	Local-locals & local		Discrimination in access to rewarding jobs	Consar accident.	Workers demotivated
Effects	Concretise negative effect on local social action	Newmont	Local-locals	Expert opinion	Experience before and after Newmont existence Experience of chickenpox and stroke	The memory of vast arable land which used to exist. The emergence of new ailments	Foodstuffs not edible, but no option, The emergence of new ailments
CSR	Concrete representation	Newmont	Local-local		Beneficiary experience	The memory of how the availability of by day within a placed assisted him.	NADeF inadequate
Social agreement	Concrete representation	Newmont and local communities	Newmont and local communities		Practices of recruitment not conforming to promises		Not adhering to social agreement
Compensation	Concrete presentation	Newmont engages in transactive action	'We' construed in discourse		The individual experience of action	Memory and sense of a particular place.	'we are finding it very difficult'

Table 6 Sensitising table for movement into data analysis

Appendix J. Constituent elements of Dryzek's environmental Discourses

Discourse	Basic entities which exist or are constructed	An assumption about natural/ social relationships	Agents and their motives	Metaphors and rhetorical devices	Dialogicality of discourse
Administrative rationalism as problem-solving discourse	Experts and managers Liberal capitalism Experts Managers The administrative	Hierarchies Nature subordinate to expertise People subordinate to the state Experts and managers dominate in control Politics does not exist	Collective agent, the state Individual experts and bureaucrats Public-spirited motives	Administrative mining Navigating and steering	Openness to public inputs
Limits & boundaries	Authoritarian government Emphasise scientific experts	Private and public interest contradictory Conflict and hierarchy Assumed there is a limit Need for a change in order to avoid the apocalypse	Elites have agency Global and national elites partnership Each individual motivated by self-interest Now include local actors	Environmental doom Planetary-earth Carrying capacity (Dryzek, 2013) The tragedy of the commons Overshot and collapse	Brundtland accept limits exist but poverty require action Soften authoritarian management Move from limits to planetary boundaries Advocate for democratic mobilisation Embrace citizen action
Promethean Discourse	Ingenious social actor [47] Price Technology Market People Government	Growth unlimited Lomborg recognises severity but has faith in technology Deny the existence of nature Hierarchy in humans, minds dominate over nature Competition	Individuals motivated by self-interest Agency is ubiquitous	Mechanical trend	Julian Simon incorporated human development Lomborg sees beyond the self-regulating market to technology deployed by the government
SD	Governance rather than governing The integrated social and ecological system Lack of clarity on the availability of limits	Cooperation Nature is subordinate to a network of actors Environmental, economic, social justice, and long-term sustainability goals co-exist	Different agents at various scales Diverse motives Government public-spirited motive	Organic growth Nature as a means of production Connection to progress and development	Recognises burden on nature Recognises the needs of developing nations

Table 7 Summary of Dryzek's environmental discourses

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[47] Natural resources, nature and ecosystem does not exist.

Appendix K. Table of Abbreviations

AUMS	African Underground Mining Services
BITS	Bilateral Investment Treaties
CA	Conversation Analyst
CD	Community development
CDA	Critical Discourse Analysis
CEPIL	Centre for Public Interest Law
CSO	Civil Society Organisation
CSR	Corporate Social Responsibility
DA	District Assembly
DRA	Dialectical Relational Approach
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
ERP	Economic Recovery Programme
FDI	Foreign Direct Investment
GoG	Government of Ghana
HMD	Head of Mines Department
HR	Human Resource
IMF	International Monetary Fund
KNUST	Kwame Nkrumah University of Science and Technology
KYA	Kenyasi Youth Association
MC	Minerals Commission
MDA	Mediated Discourse Analysis
MDF	Minerals Development Fund
MSS	Material Situational Setting
NA	Nexus Analysis
NADeF	Newmont Ahafo Development Foundation
NGGL	Newmont Ghana Gold Limited
NGO	Non-governmental Organisation
NR	Natural Resource
OLA	Our Lady of Annunciation
RNC	Resettlement Negotiation Committee
SA	Situational Analysis
SAP	Structural Adjustment Programme
SD	Sustainable Development
SFL	Systemic Functional Linguistics
SLO	Social Licence to Operate
SRA	Social Responsibility Agreement
TA	Traditional Authorities
TRIMS	Trade-related Investment Measures
TSF	Tailings Storage Facilities

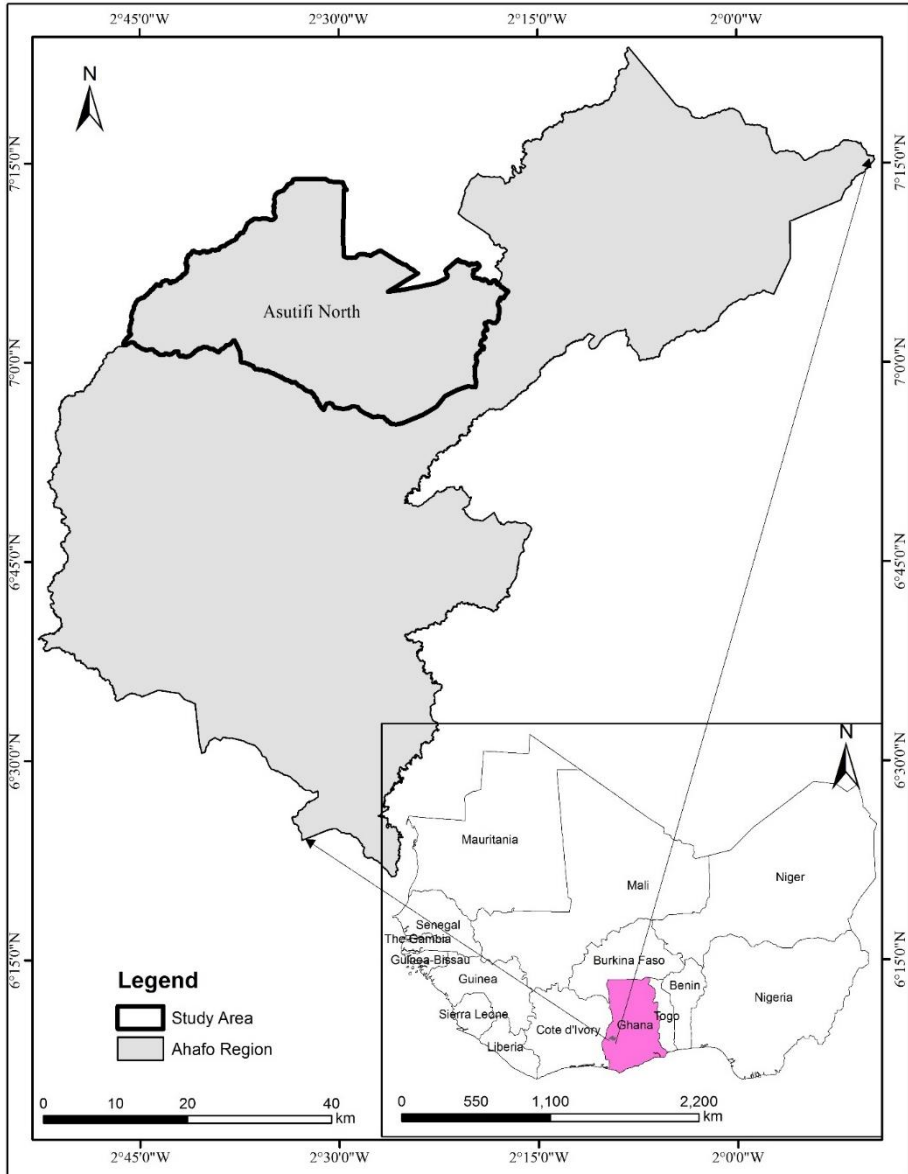|	
TNCs	Transnational Corporations
UDS	University for Development Studies
US	United States
WACAM	Wassa Association of Communities Affected by Mining
WB	World Bank
WBCSD	World Business Council for Sustainable Development

Appendix L: Study area in its locational context

TABLE OF CONTENT FOR APPENDICES