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*exemplified by defects and arbitration*

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# COUPLING PROJECT AND BUSINESS PROCESSES: EXEMPLIFIED BY DEFECTS AND ARBITRATION

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*Drawing on a study on the emergence of defects and arbitration, this paper will analyse how project processes are coupled with business processes in construction. Linking the project processes and the business processes are crucial for performance and innovation in construction. What is less clear is the character of these linkages. This study is based on a social-constructivist approach using documentary material and qualitative research interviews with strategically selected representatives of the construction process as well as the arbitration process. This paper suggests that points of accountability on performance provide excellent points of departure for analysing the links between project processes and business processes. A number of theoretical perspectives on couplings in construction as knowledge flows, as functions and regulation, as governance, as a loosely coupled system, and as ties have been identified. In conclusion this paper has proposed an alternative perspective on couplings as constitutive, which explores and challenges the very ontologies at play when it comes to analytical units, relations and effects. Consequently, the paper has sketched out alternative policy implications when it comes to improving performance and innovation in construction, most notably by mobilising leverage to change the perception of what counts as satisfactory.*

KEYWORDS: innovation, complex products and systems, organisation, quality, performance

## INTRODUCTION

As pointed out by numerous authors (see e.g. Gann & Salter 2000) the coupling between business processes and project processes are crucial for performance and innovation in construction. Still, most contemporary project management theories are dominated by a perspective on singular projects, thus ignoring the history and organisational context of the project according to Engwall (2003).

Drawing on a study on the emergence of defects and arbitration in construction, this paper will analyse how project processes are linked with business processes in construction. The emergence of defects and arbitration offers a valuable site to gain insights into the fundamentals of construction since defects and arbitration represent a potential disruption of the taken-for-granted assumptions of the firm, yet defects and arbitration is a routine in construction since it happens on such a regular basis. Thus defects and arbitration open up the ongoing process of linking the project and the firm for closer inspection.

## SOME PERSPECTIVES ON COUPLINGS

This paper briefly introduce and discuss five different perspectives on couplings in construction as: 1) knowledge flows, 2) functional and regulatory mechanisms, 3) governance, 4) a loosely coupled system, 5) and ties.

Although their ontological and epistemological grounding varies, these perspectives seem less

occupied with understanding the making of couplings as routines. Instead, we would like to introduce an alternative perspective of couplings as stabilisation of sociotechnical change or routinisation.

## RESEARCH METHODOLOGY

This study applies the social-constructivist concept of technological frames developed by Bijker (1997), in which sociotechnical change cannot be understood without understanding how technology is embedded in its context.

This study has used a variety of methods including participant observation, documentary methods and qualitative interviews.

## CONSTRUCTING DEFECTS – DEFECTS IN CONSTRUCTION

In a previous paper, Haugbølle and Forman (2009) have deconstructed the interpretative flexibility of the concept of defects or deviance, as we would prefer it, starting from the bottom and moving upwards. We followed/identified the controversies on “defects” between the various relevant social groups in order to render the interpretative flexibility visible in relation to “defects” as well as the processes that allow the controversies to be closed. The four interpretations are deviance as normalisation, deviance as leverage/liability, deviance as a random effect, and deviance as precedent. Further, we have demonstrated how “defects” are socio-technically constructed through three main processes: concrete negotiations on the

gap between expectations and realisation, setting and applying ground rules for the game of construction and arbitration, and by producing structures in the shape of norms or codes of conduct. Finally, we have argued that the construction of defects can be explained as the result of interaction between two dominant technological frames: the building frame and the juridico-legal frame. The first frame is constituted by relevant social groups like building engineers, architects etc., construction technologies etc. The second juridico-legal frame is constituted by relevant social groups like building experts, arbitration methods, arbitration courts etc. Consequently, the system of arbitration and expert appraisals along with construction practices and strategies is co-shaping a culture of deviance/defects that both intentionally prevent defects but simultaneously foster defects unintentionally.

## DISCUSSION

First of all, we would like to point out that the couplings are dynamic in character. This may be a rather trivial observation that most observers would agree upon. However, we would like to hold that being dynamic is not simply a question of changing a weak tie into a strong one or increasing the frequency of interactions as implied in social network analysis. Rather, the dynamism of a coupling implies that the relationship may be more significantly altered, or more precisely that the couplings are being reconstituted. The study on defects and arbitration has shown how the emergence of defects and the arbitration process significantly alter the relationship between the project and the firm.

Second, we would focus our attention on the constitutive forces at play and their impact on our ontologies on performance, innovation, project, firms etc. Consequently, the configuration of actors and arenas is kept in place through couplings that not only extends and reshapes the boundaries of the project and the firm, but also shapes what counts as satisfactory or not. Couplings are not just couplings but are the very forces that keep the network together and make the sociotechnical ensemble obdurate.

Third, the policy implication is not to skip the management recommendations of the other theoretical perspectives, but to supplement these – or more radically confront the limitations of these perspectives. So if we want to improve performance in construction, we would need to address those forces that shape our very perception of performance. Thus, we would (not only) be looking for improving the coupling between the project and the firm, but we would explicitly

explore and challenge the very ontologies of what counts as a project and firm, and what constitutes performance and innovation etc. Put differently, the baseline remains the same if we do not change it! So if we want to improve performance and innovation in construction, we would need to change that very baseline.

## CONCLUSION

In sum, this paper has identified a number of theoretical perspectives on couplings in construction as: 1) knowledge flows, 2) functions and regulation, 3) governance, 4) a loosely coupled system, and 5) ties.

Further, the paper has suggested that points of accountability on performance of for example defects, value, cost etc. provide excellent points of departure for analysing the links between project processes and business processes.

The paper has analysed the emergence of defects and arbitration in construction as the result of the mutual shaping of two technological frames: the building frame and the juridico-legal frame.

This paper has proposed an alternative perspective on couplings as constitutive, which explores and challenges the very ontologies at play when it comes to analytical units (project/firm), relations (couplings) and effects (performance/innovation).

Finally, the paper has sketched out a number of alternative policy implications when it comes to improving performance and innovation in construction, most notably by mobilising the necessary leverage to change the perceptions in both the industry and the legal system of what counts as satisfactory.

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