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Christensen, Bo Allesøe

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Valuing Nature: Connecting Eco-Economy and the Capability Approach

BO ALLESØE CHRISTENSEN

University of Aalborg, Denmark

ABSTRACT *This article analyses Kitchen and Marsden's eco-economy by asking whether it manages to dissolve the untenable dualism of facts and values associated with the positivistic distinction between normative and positive economy. The analysis shows that a tension still exists within eco-economy between accepting normative considerations and operating with certain welfare-economic assumptions not embracing the entanglement between facts and values. This tension is sought to be dissolved by connecting eco-economy with Amartya Sen's capability approach, thereby contributing to the future development of eco-economy exemplified by the notion of entrepreneurship and policy-making.*

Keywords: Amartya Sen; capability approach; eco-economy; entanglement of facts and values; Lawrence Kitchen; Terry Marsden

JEL Codes: A13; D63; O31; P16; Q10; Q57

1. Introduction

Lawrence Kitchen and Terry Marsden (2009) argue for reconsidering the concept of a rural economy, due to the eco-economic paradox characterising many rural areas, holding 'potentially high ecological value and show persistently low levels of economic activity and welfare' (Kitchen and Marsden 2009, p. 274). The effort of aligning 'high value and low activity' was described as the emergence of a new rural development paradigm. Kitchen and Marsden employed a novel theoretical creation in describing this developing paradigm, viz. namely the establishment of a relation between three different methodologies: ecological economics, ecosystem services and ecological modernisation. Naming this methodological motley crew 'eco-economy', the authors hoped eco-economy would form a descriptive framework wide enough to sustain a focus 'upon how and by

what means new and revised production-consumption chains, networks and relationships can become established both within rural areas and between them and their urban neighbours' (*ibid.* 2009, p. 274).

Eco-economy denotes the effective 'management and reproduction of ecological resources (as combinations of natural, social, economic and territorial capital) in ways designed to mesh with and enhance the local and regional ecosystem rather than disrupting and destroying it' (Marsden 2010, p. 226). A key initiator in this paradigm is the rural agent, best described in terms of Marsden and Smith's (2005) ecological entrepreneur. Against the backdrop of local economic changes, the entrepreneur reinforces new connections between producing and consuming sectors, seizing opportunities for aligning the high value and low activity. Rural economics, in Kitchen and Marsden's eco-economic version, seeks to protect the natural resources through building newer and more sustainable markets and economic infrastructures. Eco-economy therefore tries to understand the nature of economic practices as related to the worth of nature, with the aim of adding value to both community and environment. In the words of McConnell (2012, p. 174), it counteracts the damaging theoretical abstractions marking the neoclassical paradigm, instead revealing 'the underlying materialist conception of the social provisioning process'. It is, therefore, also part of the effort of a renewed declaration of economics as always being political economics (Boyer 2013), involving the recognition of many values and interests, and hence critical of a too myopic, pure market-oriented, neo-classical economic thinking.

This article makes a modest contribution to the eco-economic framework by taking its departure from recent developments in the philosophy of economics (Putnam and Walsh 2012; Hausman and McPherson 2006; Walsh 1996). First, it addresses a theoretical tension within the economic frame of the concept of eco-economy viz. the 'disappreciation' of the entanglement of facts and values. Kitchen and Marsden claim to be able to resolve the eco-economic paradox by being attentive to the numerous ways facts and values can be brought into play by establishing new connections between different sections of the economy. However, they cannot adopt their own solution, since one of their methodological premises blocks embracing the entanglement of facts and values from the outset. Putnam and Walsh (2007, 2009, 2012) have been at the forefront in recent years, arguing against any dichotomies between facts and values in sciences, including economics. Instead, an entanglement between these must be assumed, dissolving any attempt at reinforcing certain categorical differences in the sciences, for example an essential difference between an ethical-based and a (scientifically) factual-based predictive (positive) economy. Hausman and McPherson (2006, p. 60) describes the difference as the latter 'is concerned with the explanation and prediction of economic phenomena, while normative economics is concerned with evaluating economic policies, practices, and states of affairs from a moral standpoint.' Accordingly, for Putnam and Walsh, any considerations pertaining to the economy must be developed within a perspective realising the original normative and ethical import of this economy as well. This is particularly important when addressing the low economic activity described as part of the eco-economic paradox above, since it must be addressed through an evaluation of what constraints the economic activity faces of both a factual, nor-

mative and valuing character. The eco-economy is, it seems, still accompanied by an effort of keeping facts and values apart, most conspicuously by its assimilating of certain aspects of the method of ecosystem services, conceiving the worth of nature as determined by market-oriented thinking only.

Second, the article endeavours to dissolve the tension by embracing an evaluative framework of economics. One key figure here is Amartya Sen and his capability approach, supplying a genuine understanding of the entanglement between practical engagement and rational deliberations. It will be argued, analogous to the introduction of Sen's thinking into other disciplines focusing on sustainable development (for example, Ballet et al. 2011; Burger and Christen 2011; Rauschmayer and Lessmann 2011), that eco-economy will benefit from adopting principal aspects of Sen's approach, understood as a 'broad normative framework for the evaluation and assessment of individual wellbeing and social arrangements, the design of policies and proposals about social change in society' (Robeyns 2005, p. 94). Accordingly, this article will advance some suggestions regarding the resolution of the tension in eco-economy by analysing and incorporating certain economic-philosophical insights derived from Sen's capability approach. Within the limits of a paper of this kind, connecting Sen's capability approach to the eco-economy will, as a first approximation, be interpreted as supplying the latter with an expanded evaluative framework within which further practical and theoretical investigations can be carried out.

The article proceeds as follows. Sections Two and Three present the concept of eco-economy. One line of development is presented, connecting Marsden and Smith's focus on the importance of the localised ecological entrepreneurs, with Kitchen and Marsden's idea of eco-economy. This sets the stage for the contextualisation of economic thinking within a wider conceptualisation of rurality. This rich concept of rurality in spe will also set the stage for Kitchen and Marsden's modelling of the eco-economic approach through expanding network-initiatives captured in the metaphors of regrounding, deepening and broadening. As a bridgehead to the subsequent discussion, the tension in eco-economy is described in Section Four. Section Five elaborates on the tension by analysing how it is manifest in scientific comportment towards the object of scrutiny and transferred to the idea of the ecological entrepreneur. Section Six sketches Amartya Sen's capability approach as a framework and Section Seven proposes how this approach may be applied to dissolve the tension in eco-economy. Section Eight outlines some policy-implications of the capability approach for eco-economy putting the recapitulation into perspective.

2. Local Rural Development—Ecological Entrepreneurs Is What Matters

Establishing a local-induced development capable of restraining the stagnation of economic activities makes sense, primarily, as a bottom-up process with local knowledge and perspectives of innovative possibilities as points of departure. Marsden and Smith (2005) frame the locus of this point of departure as an ecological entrepreneur, the ideal type for local innovation and non-conventional think-

ing, aiming at seizing opportunities for sustainable economic, environmental and social development. The non-conventional part consists in ‘value-capturing’, merging social and entrepreneurial initiatives with ‘respect for ecological, human, social and manufactured capital’ (Marsden and Smith 2005, p. 441). Sustainable wealth-creation in this sense is committed to preserving cultural, ecological and environmental integrity and discovering new pragmatic ways of creating economic benefits in and for the local community.

Underlying Marsden and Smith’s (*ibid.*, p. 440) claim that sustainable development demands a localised bottom-up approach, is a certain diagnostic. First, globalisation in their view tends to distribute costs and benefits unevenly across different spatial, temporal and social domains. Communities not located to benefit from globalisation, risk facing an economic, political and social marginalisation. Local economic development, however, can be a counterforce; not as a ‘defensive localism’, but as a forging of new social organisations and networks linking producers and consumers within and across local spaces in new ways. This is important especially since one challenge, for example, food-networks, is the increased de-coupling of consumers from any knowledge of the systems of production, hence of possibilities of acting in accordance with this knowledge. Second, a rural economy is not equivalent to an agrarian economy. The agrarian modernisation process:

Involves scale-enlargement and cost-price reduction in the producer sector, further intensification of the production unit, specialisation and a drastic reconstruction of the rural area so as to create the most favourable production conditions for maximising agricultural (and standardised) production volume. In addition, while this process holds considerable crisis tendencies, it has been further encouraged by logistical retailer-supply chains and standardised quality regulation (*ibid.* 2005, p. 442).

This dead end is countered by exploring a rich concept of rurality, proposed by Kitchen and Marsden (2009), as an interaction of a plurality of sectors forming the basis of rural development—eco-economy. The ecological entrepreneur constitutes the main economic agency within this rich concept of rurality, taking part in sustainable development by seizing innovative opportunities through value-capturing.

3. Eco-economy and the Need for Considering Capabilities

The focus of eco-economy is the ‘recalibration of micro-economic behaviour and practices that, added together, can potentially realign production-consumption chains and capture local and regional value between rural and urban spaces’ (*ibid.*, p. 275). Hence, the forging of new connections between disparate areas and aligning these with questions of economic development, is at the heart of eco-economy. The concept of the ecological entrepreneur described above fits well into the picture of eco-economy (Figure 1), as a rural economic agent forging connections between disparate areas containing different economic values and facts.

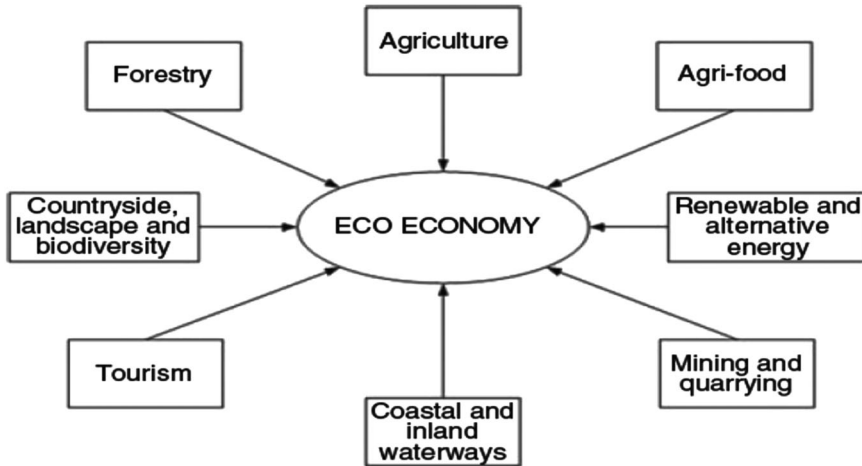


Figure 1. The eco-economy
Source: Kitchen and Marsden (2009, p. 276).

Furthermore, eco-economy is conceived as joining and applying three central approaches in rural development: ecological economics, ecosystem services and ecological modernisation. In Marsden's (2004) view, ecological modernisation is a joint venture of policy concerns aiming for more normative approaches within sustainable development through reform and transformation of social structures, governments, businesses and markets. In the same vein, ecological modernisation tries to bypass the dead end of a binary choice between either economic development or environmental protection, by aiming at ecological consistency between material flows, resource use and consumption (Kitchen and Marsden 2009, p. 277).

Ecological economics conceives economies as constrained by the finite biophysical world by embedding economies in, and making them depend upon, the ecosystem. Picturing the economy as part of overarching natural processes reinforces the possibility of economic growth as endangering as well as enhancing nature and human life. Systems of production, then, ought to be supporting rather than exploiting nature. Hence, ecological economics seeks to influence the economic process in the direction of enhancing the ecosystem, instead of damaging it (Røpke 2005).

The ecosystem services approach seeks to assign value to services provided from and by nature, hence biodiversity functions as a crucial life-supporting system. Parts of the ecosystem services approach focus on the valuation of non-commodity outputs from multifunctional agriculture taking into account

both positive and negative environmental, economic and social functions of multifunctional agriculture, and use willingness to pay and willingness to accept compensation as proxies to evaluate the benefits of non-commodity outputs of agriculture such as hedgerows, open landscape, water quality and biodiversity (Kitchen and Marsden 2009, p. 279).

Connecting these three approaches establishes the basis for a new rural eco-economy (Figure 2).

The inner triangle, in Figure 2, describes the traditional economy consisting of regular production; maintaining or changing the local ecology by social, cultural and ecological interaction with land resources; and mobilisation and use of resources, that is, exploiting and creating value from natural resources. Through rural development these three aspects 'are being socially reproduced and transformed by new attempts by rural actors to revalue and define their economic and resource structures' (*ibid.*, p. 280). Kitchen and Marsden apply the terms 'broadening', 'regrounding' and 'deepening' to describe the three dimensions of the rural eco-economy, terms that are picked from van der Ploeg and Renting's (2004) work on rural development. In relation to what can be termed 'classical' agricultural economy, the three dimensions emphasise new development trajectories seeking to bypass the 'treadmill' of agricultural enterprises (Marsden 1998; Ward 1993).

4. The Essential Tension

The above description of eco-economy, and the ecological entrepreneur, presents eco-economy as recognising the entanglement of facts and values within a normative informed overall perspective. It shows, furthermore, as an overall economic development the eco-economy is, basically, part of what Walsh (2000, p. 5) terms the second phase of classical economy. That is, after a 'dry' period of an almost pure (logical) positivist based economy, characterised by a separation of facts from non-cognitivist values and norms, the waters of normativity began to float again in the middle of the last century with the criticism, by Sen and others of positivist economic assumptions (see for example Putnam 2002;

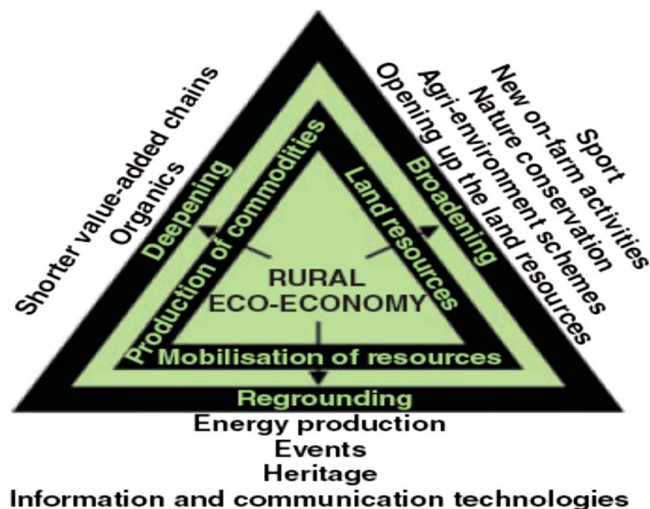


Figure 2. The rural eco-economy
Source: Kitchen and Marsden (2009, p. 281).

Putnam and Walsh 2012; Sen 1988). The second classical phase, then, is not so much a new phase, as it is bringing the normative assumptions of the classical phase out into the open. However, one problem persisted in this incipient reintegration of normative considerations into positive economics, namely leaving bits of the old positive economics untouched by normative considerations. In other words, a picture of reintegration creates the impression that two separate and independent dimensions, the normative and the factual, are just put together without considering their original entanglement (Putnam and Walsh 2009). One result is to make it appear as if one can decide how much these dimensions should be conjoined, leaving room for an economy untouched by normativity thereby preserving the original dualism but under changed circumstances.

An example of how this inherited dualism between facts and values creates a manifest tension is described by Putnam and Walsh (2009, p. 210) as ‘economists who assert the existence of a dichotomy between “welfare economics” and “predictive economics” are assuming the truth of a separation theorem they have never attempted to prove.’ The point being, as Sen (1988, p. 29) claims, that predictive economics increasingly influenced welfare-economic considerations and not the other way around. The reason was, simply, the expulsion of broadly conceived ethical and valuational considerations from economic analysis, since the economy was pictured—as a matter of fact—as a self-organising unit, like the market, or, in terms of agency, as based on the maximisation of utility only (see also Hausman and McPherson 2006). In contradistinction, a rigorous defence of entanglement is needed ‘to build a development theory black with the dire facts of the ... world, white with economic analysis, and red with a humane moral appraisal of the fragility of human attainments’ (Walsh 2003, p. 389). So, does the eco-economy embrace this entanglement, or is there some kind of unacknowledged dualist residue or tension involved? It will be argued that there is a tension and it creeps in, unintentionally, at two connected places in eco-economy.

The first place is in what can be characterised as Kitchen and Marsden’s predominantly descriptive, or somewhat detached scientific comportment when addressing the economy in eco-economy. As Putnam (2003, p. 112) puts it, the entanglement between facts, values and conventions within welfare economics

requires that we be able to make, and meaningfully discuss, precisely claims about ‘the morality’ ... [hence] about the priorities that should be assigned to education, to reducing levels of disease, to reducing levels of malnutrition, and ... a host of other value-laden issues.

Putnam’s examples aside, the point is that any description requires a certain evaluation as well, since any use of descriptive terms and the concomitant allegedly ‘neutral’ scientific comportment towards its study object, are already tied up with evaluative terms and a value-laden intentionality from the outset. This evaluative comportment, then, is governed by some sense of rational linguistic control containing the required evaluative standards appropriate in an objective sense to the evaluation’s ‘particular functions and contexts’ (Putnam 2002, p. 33). Hence, evaluation, as part of a reasoned thinking about economy, entails recognising the diverse reasons to value things other than just income and

wealth, and relates to the ‘real opportunities to lead the kind of life we would value living’ (Dreze’ and Sen, cited in Walsh 2000, p. 5).

To counter one possible objection, a diminished sense of (scientific) objectivity is not a consequence of this, since forwarding evaluation is not replacing objectivity with relativist subjective preferences. Assuming this would presuppose the positivist claim that the dividing line created by the distinction between the objective and the subjective is the same as the one created by facts and values—which is exactly one of the dichotomies that the idea of entanglement tries to bypass. Claiming, ‘murder is wrong’ is not less objective than claiming, ‘the universe is about 5 billion years old’. Both express two, albeit different, kinds of reasoned evaluation involving objective import.

Kitchen and Marsden, of course, use evaluative terms in their descriptions, which a quick glance at the description of the eco-economic paradox shows. However, they fail to consider, in a broader sense, what is the normative import of their proposed model. For example, how is income redistribution part of rural development? What kind of priorities should be made, and between what, when we discuss how to boost a rural economy? What kind of consequences would an eco-economic modelling and implementation have for the citizens in the implemented area? What economic picture of human being and doing is implied by eco-economy? What is the relationship between rural industries and the public sector in general, and what should and could it be? Should it be different in relation to different delineations of public spaces? What are the basic commodities needed for people to uphold a life they find satisfactory, and how do we secure that? These, and other relevant questions, of course, are expressing and addressing the inherent evaluative space in economy, explicating how this space could be approached without presupposing the answers.

Second, the tension appears in the possible discrepancy regarding the conditions for working out the connection between the different models proposed within the eco-economy. On one hand, eco-economy focuses on the normative conditions, especially when sustainability concerning nature is advocated. On the other hand, the economy in eco-economy is mainly modelled on the market as the space for economic transactions. Any notion of value, then, is basically a value determined by the market exchange only (Gowdy 1997, p. 38). Speaking about willingness to pay, contingent valuation, maximisation of utilisation or pure production-consumption chains, as Kitchen and Marsden (2009, p. 279) do, presuppose specific welfare-economic considerations, viz., the connection between utilitarianism and maximisation of utility, the cost-benefit analysis behind contingent valuation, or how willingness to pay is modelled on satisfaction of preferences.

Furthermore, the last aspect, the satisfaction of preferences, presupposes some sense of self-interest as an economic concept, which is the basic idea in the development of rational choice theory (see Walsh 1996; Orr 2007), and suggests understanding nature, or ecosystems (biotic and abiotic factors included) in terms of commodifications (Peterson et al. 2010). Failing to discuss the normative conditions and consequences of these welfare-economic presuppositions creates a possible tension between a normative framework directed at enhancing sustainability in nature and a more market-reducing welfare-economic framework valuing nature in terms of its contribution to this market only.

Overall, the tension can be described as a result of not recognising the space of the possible determination of values as not coinciding, or converging, with the space of the possible determination by pricing. In a minimal sense, then, this tension will, eventually, force us to reason and evaluate the connection between modern day imperatives of economic growth versus the conservative impulse connected with the sustainability of nature. So, contrary to their intentions, Kitchen and Marsden come very close to reinforcing the dead end of a binary choice between sustainable nature and economic growth within ecological modernisation that they set out to avoid. In sum, Kitchen and Marsden's descriptions of eco-economy bypasses the evaluative framework already implied by their use of evaluative terms, creating a tension between their use of different economic models without discussing the normative import of those models. It creates a refuge, or safe haven, for leaving normative values and questions out of consideration, and for using the conception of the market as the master concept under which everything else can and eventually must be subsumed.

Overcoming this inherent tension, it will be suggested that connecting eco-economy with Amartya Sen's capability approach will be fruitful. Before turning to this, however, the idea of entrepreneurship will be touched upon. This will expose some further presuppositions behind the tension, especially how it appears in the conception of economic agency. As claimed above, the tension was expressed in a detached scientific compartment towards the object of its study, economic developmental activity. This wanting evaluation of the normative import of eco-economy, it will be claimed next, spills over, so to speak, into the conception of entrepreneurship, producing an inadequate sense of economic agency. Removing this detachment by pointing to a specific kind of practice sensitivity, connected with rational evaluative deliberations, will clear the way for widening the focus of eco-economy by connecting it with the capability approach. Spinosa, Flores, and Dreyfus (1997) are important here by expressing an acute sense for conceiving economic activity as practice-engaging, hence the entrepreneur as an *agens* instead of *patiens* as Sen (2004, p. 4) puts it, viz. actively engaging instead of a detached controlling as a form of adapting.

5. Entrepreneurism: Value-capturing vs. Disclosing

To understand the difference between actively engaging and detached control, we will first present Schumpeter's (1912) significant distinction within entrepreneurship and use this distinction to compare eco-economy with the approach to entrepreneurship presented by Spinosa, Flores, and Dreyfus (1997). The result will be a difference between adapting in the sense of a more passive capturing of pre-given values versus engaging in the creation of new values as the active disclosing of a new economic reality.

Schumpeter (1912) has had a somewhat confused history since the last chapter of this work was never translated and incorporated in English editions (Peukert 2003). This chapter's importance lies in Schumpeter's description of a more dynamic conception of economic development against a more static conception connected with previous equilibrium models associated with Walras and Jevons (Medearis 2009, 40f). The problem, as Schumpeter saw it, was that

these equilibrium models could only demonstrate how development was a result of adaption to external circumstances. Schumpeter wanted instead to develop a theory of development showing how economic practices by themselves generated change instead of just responding to change, what he later termed adaptive versus creative responses (Schumpeter 1947).

Entrepreneurs, and their display of dynamic responses, played an important part as agents developing and creating new practices and circumstances in contrast to people with more static dispositions adapting to circumstances, thereby just reproducing the economic system. The latter is:

characterized by doing in essence what they have learnt to do; they are moving in a frame that is outmoded, and they are dominated in their views, in their dispositions and in their activity by the determining influence of the circumstance prevailing in their area ... [the former] by contrast are characterized by their perception of what is new; they change the outmoded frame of their activity, as well as the given data of their area (Schumpeter 1912, 543 here following Backhaus' translation (2003, 109)).

Besides being a precursor to the later discussion of adaptive preferences by Sen and Elster, without considering the normative implications of the determining factors though, Schumpeter here points to one aspect of Sen's notion of agents but as connected to entrepreneurship: that the entrepreneur is actively engaging in changing the circumstances prevailing in their specific area instead of just adapting to these. Does the notion of entrepreneurship within eco-economy resemble this active engaging, or is it more of an adaptive kind?

The scientific comportment Marsden and Smith (2005, p. 441) adopt in their examination revolves around 'problem-solving aspects of local and regional network building; that is, how networks function and evolve to shape knowledge and create a collective willingness to innovate to achieve mutually beneficial goals'. Key actors in this problem-solving process are the entrepreneurs who, as value-capturers, play a 'decisive role in enrolling and mobilising other actors into the network; create and sustain its structures, and innovate in developing new interfaces between producers and consumers' (*ibid.* p. 450). Hence, entrepreneurship is, as Marsden and Smith conclude their examination, all about capturing spaces and creating opportunities.

Even though their suggestions are innovative, their conclusion gets it 'upside down', so to speak. Following Spinosa, Flores, and Dreyfus (1997), the proper focus is presumably more on creating spaces and thereby capturing opportunities instead. To see why this is so, a return to the scientific theoretical comportment and its characterisation is needed. Recall that the aim for Kitchen and Marsden (2009, p. 274) is a conceptual rebuilding of the three approaches, ecological economics, ecosystem services and ecological modernisation, into a wider sociological and ecological framework, thereby explaining 'how and by what means new and revised production–consumption chains, networks and relationships can become established both within rural areas and between them and their urban neighbours.' Even though a kind of context-sensitivity is expressed here, as a conceptual and practical integration of the interconnections of rural eco-economy, the explanatory pattern moves from a theoretical adjustment towards 'case studies that begin to

show the ways in which these new interconnections are being reconstructed and practiced' (*ibid.*, p. 274). Hence, the theoretical compartment precedes, or is, at first, detached from, the practical engagement with the case-studies.

The same goes for characterising the entrepreneur as value-capturing by Marsden and Smith (2005). Capturing denoted a seizing of opportunities establishing the proper basis for developing new networks, or production-consumption chains, as a problem-solving response to societal changes. The entrepreneur is characterised here as a discoverer (Alvarez and Barney 2007; Alvarez, Barney, and Young 2010), in the sense of being 'responsive to external circumstances, and the entrepreneurial process is aimed at resolving an external deficiency' (Korsgaard 2011, p. 268) more than being a process of creation. So, despite Marsden and Smith's (2005) actual use of the phrase creating opportunities, the sense conveyed by their use of the entrepreneurship is more of a seizing of already given opportunities (capturing pre-given values) responding and adapting to external problematic circumstances. Now, there is nothing wrong with either entrepreneurial problem-solving, or confirming reconstructed theories per se. But the scientific compartment and the entrepreneurial responsiveness, however, both connote a sense of passivity and detachment. This might seem an insignificant point to stress but, as will become clear below, it has implications for how economic agency and the role of eco-economy are conceived. If Spinoza, Flores, and Dreyfus (1997) are right, then some Cartesian presuppositions are at work here, and these presuppositions are counter-productive for the conditions of development.

According to Spinoza, Flores, and Dreyfus (1997, p. 6), Cartesianism is characterised by an abstract, as opposed to situated, understanding of people, expressed by different kinds of detachments, exemplified—roughly speaking—by the detached emotionality of a surgeon operating, or a judge ruling. First, a distanced and wider view on things, like the judge ruling, is attempted by 'extracting ourselves from the immediate pressures of the moment, and to see what is before us in terms of its relationship to other matters' (*ibid.*). Second, a sense of non-involvement and being composed as connoted by our understanding of being objective is attached. A strategic attitude maximising economic income when sealing the deal, or the composure of the surgeon would be examples here. Third, these two senses combine into a third detachment from our embeddedness in and involvement with meaningful everyday practices. Adopting a certain instrumentalist view on things is one consequence, 'we can detach ourselves from the things we encounter and begin noting only the features of the things that most clearly serve the instrumental purpose at hand' (*ibid.*, p. 7).

Combined with the non-involvement and composed attitude, instrumentalism is efficient in maximising utility or engaging in technical problem-solving practices. The reduction of the value of nature to its potential market value, as described above, creates a conception of nature as instrumental in developing markets, detaching the conception of nature from the everyday practices where the value of nature is different from the market value. Cartesianism as just described can be understood as supplying some of the (historical-) conceptual conditions for what Sen (1987, p. 4) termed the engineering aspect of economy,

focusing on logistic issues rather than ends, and where ‘the object of exercise is to find the appropriate means to serve them.’

The sense of capturing, as in value-capturing, as well as the scientific perspective are compartments expressing a sense of detachment, or a modus of engineering approach, as just depicted. First, value-capturing as a problem-solving activity is seizing the opportunity before you, of enrolling people into an already given network and sustaining its structures. Furthermore, developing new interfaces between producers and consumers means rearranging a pre-given value-chain, or instrumentalising it to develop a new interface, not evaluating whether the overall production system within which this value-chain is embedded is appropriate. The ecological entrepreneur is, as a value-capturer, more of a jigsaw puzzle maker connecting pre-given pieces than the creator of the puzzle. Second, Smith, Kitchen and Marsden’s scientific compartment is detached in the sense of starting with problem-solving as the main scientific activity, using the methodology of eco-economy as a problem-solving tool without discussing the normative implications, or ends, of this methodology. It is this compartment which spills over into the ecological entrepreneurs who are depicted as if they are logistical entrepreneurs reconnecting already given value-chain elements.

The essential tension expressed above can be described as Cartesian through an effort of controlling development by holding on to logistical issues, efficiency as rearranging producer-consumer relations or using methodology as problem-solving, thereby creating a somewhat detached relation to the (ends of) economic practices studied. The interesting question, then, is whether this detachment is the proper scientific compartment when dealing with development and entrepreneurship. For Spinoza, Flores, and Dreyfus (1997, p. 24) the answer is no, since the detached compartment is not strong enough to engage with the change needed; instead, a compartment characterised not ‘by detached deliberation but by involved experimentation’ (*ibid.*) describes the proper entrepreneurial compartment.

If Spinoza, Flores, and Dreyfus (1997) are correct in their description of Cartesianism, and if eco-economy presupposes some of its conditions, then involvement should be stressed as creating spaces in which possibilities can be tried out. Even though Spinoza, Flores, and Dreyfus (1997) is not an economic treatise, the basis of their entrepreneurship concept, emphasising acting over adapting like Schumpeter, can function as a transition to Sen’s capability approach. First, entrepreneurship is at the outset connected to democratic action and the cultivating of solidarity. The entanglement between facts and values claimed as crucial for a right conception of economy, according to Putnam and Walsh (2012), is embraced here as a point of departure. The unifying spot embracing these elements is the conviction that the web of everyday practices is crucial for the understanding of ourselves, each other and the things around us. Things and people are disclosed as meaningful and not (just) instrumentally effective through our practices for dealings with them (Spinoza, Flores, and Dreyfus 1997, p. 19).

Second, what matters in developing these practices are capabilities enforcing this development as a change of the space disclosed. Hence, it is, again, not about value-capturing as much as it is about value-creating. One example from Spinoza,

Flores, and Dreyfus (1997) illustrates the difference. Imagine an entrepreneur developing a new fabric that keeps people warm, seeing the need for this fabric in the increasing number of old people, and the fact that old people are more easily chilled. This is not genuine entrepreneurship since it does not open a new space for human action. 'The entrepreneur is the person who develops a cold weather activity that elderly people subsequently seek out and that changes the way the elderly see themselves, their bodies, and their lives' (*ibid.*, p. 37). Even though this might not be the best example, it does illustrate the change of focus from a detached perspective to a perspective focusing on the possibilities, viz. activities and capabilities resulting from opening up a new space for action. In Schumpeter's understanding, developing a new fabric would be seen as a static kind of development, since just adding another fabric to the existing plethora of fabrics is an example of an equilibrating adjustment to external demographic changes in age composition.

Third, similar to Kitchen and Marsden's use of the concepts of deepening, broadening and regrounding, Spinosa, Flores, and Dreyfus (1997, p. 24) propose three entrepreneurial capabilities as pivotal for disclosing new spaces: articulation, reconfiguration and cross-appropriation. Articulation is a result of bringing particular aspects of a practice into sharper focus. It might be retrieving old techniques from some craftsmanship to address a particular problem, or establishing a local food network making the possibilities for buying organics explicit. Reconfiguration is, according to Spinosa, Flores, and Dreyfus (1997, p. 25), a more substantial way a practice can change by bringing into dominance previous marginal aspects of this practice. Within the practice of transportation, for example, driving a car is a matter of controlling it, whereas horseback riding is a matter of governing. The change from an aspect of governing to controlling reconfigured the whole idea and practice of transportation. Generally, one has a sense of gaining wider horizons in reconfiguration not unlike the sense of broadening by Kitchen and Marsden. The last capability is cross-appropriation, 'when one disclosive space takes over from another disclosive space a practice that it could not generate on its own but that it finds useful' (*ibid.*, p. 27). This aspect of change happens on all levels within the web of practices, from a cultural or a societal level, to industries, professions and even families. As an example, imagine how the use of mobile phones has changed our understanding of each other, ourselves and things around us, regrounding—as Kitchen and Marsden term it—different practices, including economic practices, differently on all these levels.

Now, the difference compared with Kitchen and Marsden is the predominant focus on practical involvement, of emphasising disclosure rather than a detached (scientific) comportment towards the surroundings. Engaging in involved experimentation requires a 'special sensitivity to marginal, neighboring, or occluded practices [which is] at the core of entrepreneurship, citizen virtue, and drawing people together into a community' (*ibid.* p. 30). One can hardly do anything but approve of the appeal to this sensitivity. But denigrating any reflective comportment, since it will involve, as a minimum, some sort of extraction from the moment, and, hence, a certain distance to a given practice, entails that Spinosa, Flores, and Dreyfus (1997) lack an ability to operate with a stronger sense of

rational deliberation. Their appeal to sensitivity faces the danger of solely reproducing an emotional or too engaged understanding, precluding any possibility of critique. Hence, they lack a sense of what Sen (1985, pp. 183 – 184, original emphasis) terms authorship invariance that certain evaluations of aspects of practices ‘must not vary with the person making the judgement, even though it can vary with the *position from which* the valuation is made.’

Although this may be too weak a claim on which to dismiss Spinoza, Flores, and Dreyfus (1997), they still need to show how a rational deliberation is part of disclosing possible spaces of action. The same thing applies to the sense of entrepreneurship as value-creating, since without rational deliberation how do we determine whether the values are right or wrong, or good or bad. Embracing the entanglement of facts, values and conventions, it seems we need to steer a course between the sensible engaging in practices (of disclosing possible spaces of action and creating values) and the composed rational deliberation of these practices, associated with Spinoza et al. and Kitchen, Marsden and Smith, respectively. Combining a sense of practical involvement with rational deliberations, and using this combination as a capability for evaluating and disclosing new spaces for action, is the position of Amartya Sen.

6. Sen’s Capability Approach

If the above ‘diagnosis’ of the eco-economy is right, dissolving the tension means embracing the entanglement of facts and values on two levels. First, the overall implications of this embracing for the economy should be described. This will be dealt with in this section by describing Sen’s capability approach as a framework for embracing the entanglement. Second, the implications for carrying out an enhanced eco-economic analysis in practice should be indicated. In the next section, what an eco-economic evaluative framework could signify within this frame is described. In both cases Robeyns (2005, 2006, 2011) informs the description of Sen’s capability approach.

In brief, the capability approach is a broad normative framework creating an evaluative space for assessing well-being and the social arrangements, design of policies and conceptions of societal change needed for this well-being to be established and developed. As an evaluative space it is not explaining well-being (or poverty, or inequality), but helps ‘*conceptualize* and *evaluate* these phenomena’ (Robeyns 2006, p. 353, original emphasis). The main inspirations for Sen are such diverse thinkers as Aristotle, Adam Smith and Karl Marx (see Sen 1988), all stressing, in Sen’s interpretations, the importance of people’s capabilities and possibilities of determining their lives, including the economic aspects of these lives, in accordance with reasoned conceptions of what a good life is. One consequence is the centrality of an overall recognising of human diversity, with the widening of the informational basis for assessing whether the diverse conceptions of well-being are actually realised as a result. Here, Sen’s repeated claims of not reducing any economic evaluation to either income, utility or happiness (often discussed together as well-being understood as well-fare) only has its *raison d’être*, since this will lead to a narrowing of the informational basis for carrying out the evaluation, with misrecognition of the diversity and

injustice as a result. Income, utility and happiness, however, can be used as parts of an overall evaluation, involving multiple factors implied in describing and evaluating people's well-being. The sole end of the economy, then, is making sure the freedom of realising these diverse conceptions of well-being is achievable, hence, development is enhancing and realising of freedoms as a rational deliberative process.

In evaluating whether this human flourishing is taking place, Sen deploys a number of concepts tying together context-sensitivity and rational deliberation, as described above. The strength of Sen's capability approach is, as Robeyns (2006, p. 353) describes, is in that it 'in practice comes in a variety of forms, in part because of the wide scope of the approach, but also because the approach is radically underspecified'; underspecified in the sense that corresponding to recognising the diverse conceptions of well-being, a wide space of interpreting Sen's evaluative concepts is possible. Furthermore, each of these concepts is value-imbued, expressing the entanglement of facts and values needed for dissolving the tension above. The concepts relevant here are Sen's notion of agency and the related notions of capability and functioning, all helping to describe and evaluate a possible space of freedom.

As Sen (1999, p. 18) puts it, part of the focus on freedom means understanding how freedom is a 'principal determinant of individual initiative and social effectiveness'. Hence, a given society's success is evaluated by the number of substantial freedoms its members actually have. Agency, to put it more crudely, means the ability of people to help themselves and be influential, which is central to any process of development. Opposite to an agent—as a person acting—is, in Sen's (2004, p. 1) terminology, *patients* or a patient. Overall, a patient is passive, adaptive and in need of attention, whereas an agent actively exercises the freedom to choose what to value. We have already seen an example of this above, namely the focus on adapting to external circumstances, facing the danger of picturing entrepreneurs as passive, as in need of opportunities to act on, and not as agents.

To put the matter slightly different, the agent chooses to choose, and it is this choosing which is the object for Sen's notion of freedom. This agency, then, is not an unconstrained freedom to act by separate individuals although it is constrained by social and natural factors (Sen 1988, p. 17). Sen captures this by differentiating between well-being and agency (Gries and Naude' 2011, p. 106), where well-being, first, is understood as each individual seeking to maximise his or her utility. Well-being, in this sense, is usually seen as tantamount to the ability of a person to control or command goods and services. This usually leads to a focus on income and happiness (pleasure, enjoyment or desire), because income determines how much a person can consume, and happiness expresses a parameter of how well a person fares (Basu and López-Calva 2011, p. 154). Contrary to this, Sen (1992, p. 56) claims 'a person can—and typically does—also have goals and values other than the pursuit of one's own well-being' implying, then, that agency and well-being, is a more complex orchestrating of people's possible beings and doings within social and natural orders. For example, if a person aims at the prosperity of her community, then we would need to evaluate her agency, and whether she achieves her goal, supported by a number of other evaluative criteria, hence,

requiring the expansion of the informational basis other than whether her achievement contributes to her own well-being, only. A sense of means-ends rationality is connected with agency, then, but in a wider sense than normal because, for Sen (1999, p. 36), freedom is both the end and the means of development.

This perhaps peculiar claim arises because, first, as Gasper (2000, p. 992) emphasises, very different people have reasons to value freedom as an end in itself, ranging from a political prisoner to people in rural districts wishing for a possibility of connecting to the market as a place for exercising their free choice. Second, freedom has instrumental importance as a means to reach other ends people have reasons to value. A simple example is the use of democratic elections, allowing people to exercise their freedom to choose whatever candidate they have reasons to value. This, furthermore, shows freedom as carrying a constructive role as well, since it enhances the free exchange of views, which ‘influences and modifies opinions and social values. For example, specifications of needs should arise from democratic debate as statements of community priorities’ (Gasper 2000, p. 993). To put it in Sen’s (1985, p. 221) words: ‘whereas well-being freedom is freedom to achieve something in particular, viz. wellbeing, the idea of agency freedom is more general, since it is not tied to any type of aim.’ Sen is not leaving the perspective of well-being for the perspective of agency. Rather, he is emphasising well-being as understandable within a broader notion of agency only. The two notions of functionings and capabilities are thus employed in describing this broader sense of agency.

The focus on agency emphasises peoples’ ability to do certain things and to achieve certain types of beings, as Sen (1988, p. 15) claims, such as being well-nourished, being able to move about as desired, and so on. It is these ‘doings’ and ‘beings’, which Sen terms the *functionings* of a person. A functioning can be contrasted with a good or a commodity as ‘what a person manages to do or to be. A good can enable a functioning but is distinct from it’ (Basu and López-Calva 2011, p. 154). A car is a good and being able to drive the car is a functioning. However, two people both owning a car, might not be able to achieve the same functioning in case one of them has lost their driver’s licence. This presents a first indication of why the broadening of the informational base for evaluating is important and what this broadening implies, since if the focus is on goods only, no knowledge about the individual besides the fact of owning a car is needed.

Hence, which functionings individuals are capable of achieving is paramount knowledge. First, knowledge about how the social, personal and natural contexts in which people are embedded, are factors either constraining or facilitating the achievements. Second, knowledge about peoples’ ability to convert these factors of embeddedness into a significant value within their lives is important. This qualifies the above distinction between *patiens* and *agens* since it is not enough to supply people with opportunities if they lack the possibility of realising these. Initially, the functionings achieved by a person indicates this person’s quality of life, that is, the degree to which this person lives in accordance with what this person has reason to value. But this is not sufficient either since there might be certain functionings this person could have achieved or realised and have reasons to value as well. These are what Sen terms *capabilities*.

A person’s capability is the various combinations of functionings (beings and doings) ‘that the person can achieve. Capability is, thus, a set of vectors of functionings, reflecting the person’s freedom to lead one type of life or another’ (Sen 1992, p. 40). The difference between functionings and capabilities is aptly described by an oft used example of Sen. A person fasting is clearly starving but fasting as a functioning includes the choice of stopping and hence not starving. But a person who has no option but to starve because of extreme poverty cannot be said to be fasting. Thus, ‘in assessing the achievements of the persons and of the society, the distinction between fasting and willy-nilly starving may well be very important’ (Sen 1988, 18).

So, if we want to know about achieved functionings, and which functionings are real possibilities, we need to look into the set of capabilities from which people can choose to live their lives. A person’s set of capabilities expresses the real freedom to achieve functionings, or, in other words, the actual possibility of choosing to choose. The distinction between functionings and capabilities, then, is between the realised and the effectively possible (Robeyns 2011). Thus, while working is a functioning, the real possibility of having a job is the corresponding capability. Figure 3 shows a schematic representation of the relation between contexts, capabilities and functionings.

Economic agents are depicted here as engaging different facts and values within different contexts, consisting of the broad informational spectrum for converting a freedom to achieve into actual achievement. Sen’s capability approach, as an evaluative framework, reinforces sensitivity towards different contexts, and their constraining or enhancing the relation between capabilities and functionings.

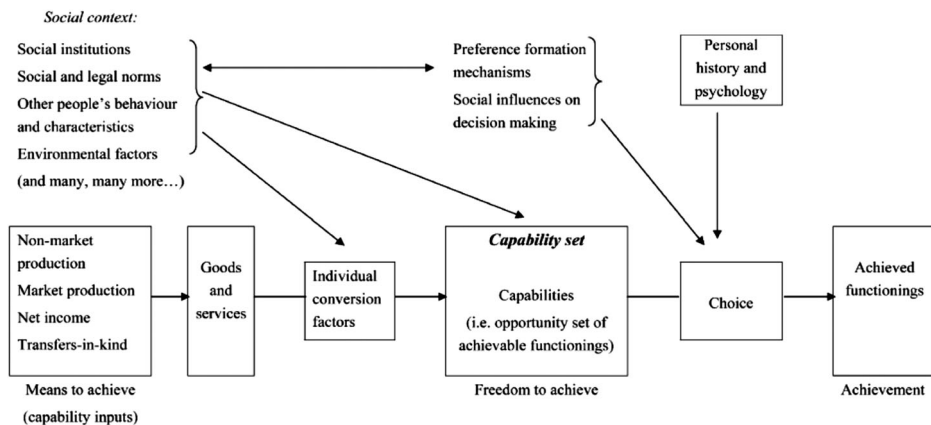


Figure 3. Capabilities, functionings, contexts

Source: Robeyns (2005, p. 98).

Note: This figure, unlike the actual process of choosing to choose, presents a non-dynamical understanding of the relationship between functionings and capabilities within social and personal contexts. What is left implicit is the natural context, ranging from environmental factors to the individual physique involved in conversion factors, and more broadly conceived, nature both as capability input, food for eating for example, and as a value in itself, such as the aesthetic value of a landscape.

This sensitivity, however, is accompanied by a reasoned scrutiny, in the sense that ‘valuation is to be a reflective informed exercise, not simply assertion of whatever one currently directly feels; it is to be value judgment in the true sense’ (Gasper 2007, p. 343). Hence, reasoned scrutiny is a public affair, carried out in public discourse and neither a reproducing of pure subjective preferences nor, at the opposite end, to be measured by a priori axiomatic rational structures.

To see how this combining of context-sensitivity and reasoned scrutiny is possible, without reproducing subjective feelings or idealised rational structures, we will use an example from Walsh (2007, pp. 68 – 69). Picture a poor mother and her daughter, with the household fruit bowl on one occasion containing three apples, x , y and z , all decreasing in size. On another occasion, apples equivalent to y (medium) and z (small) are in the bowl. If the bowl contains all three apples, the mother will, of course, pick y , but if there are only two apples in the bowl, she will pick z . The small apple is, of course, available on both occasions, yet she picks it on one and rejects it at another occasion. On a too rational understanding of this example the mother would be deemed inconsistent regarding her choices. But evaluating her choices, viz. contextually relating them to capabilities and functionings, then saving the biggest apple for her daughter is more rational than the allegedly ‘transitive law’ her choice could be measured by. Furthermore, although there are, of course, feelings involved, the mother’s display of preferences comes out as very objective, since lacking a bunch of treats for her daughter she unfailingly provides those which she is capable. Her choices are examples of reflective informed exercises as Gasper (2007, p. 343) claims, and due to the authorship invariance, we understand why the mother did what she did. With this brief introduction, it is possible to indicate how Sen’s capability approach can provide the necessary frame to dissolve the tension we claim exists in eco-economy.

7. Relaxing the Tension

The basic premise of this article is acceptance of Walsh and Putnam’s claim that economy is, from the outset, a practice or discipline defined by the entanglement of facts and values. Central economic concepts, such as agency, or Sen’s notion of capability, express this entanglement, rather than denying, or oppressing the significance of either facts or values. The question we have sought to answer is: how is this entanglement expressed in the concept of eco-economy?

To recap, eco-economy is a broad framework for modelling rural development by interrelating three methodologies: ecosystem services, ecological modernisation and ecological economics. Furthermore, the central economic agency within this rural development is the ecological entrepreneur, seizing opportunities and forging new networks. As a first approximation, we claim that eco-economy fails to embrace the entanglement; first, through the somewhat detached scientific compartment reinforced by not asking fundamental normative questions; and, second, by failing to address certain welfare assumptions within the juxtaposing of different methodologies, thereby creating a tension between the aims of overall sustainability and economic growth. Using Spinoza, Flores, and Dreyfus (1997) we characterise the tension further as depending upon a Cartesian

framework, defined by detachment from the practices studied, and an instrumentalisation of things by using these for some other ends, for example the market. This Cartesian framework, furthermore, shapes the notion of entrepreneurship, as an observer more than a participant, discovering rather than creating. Lastly, we claim that Spinoza, Flores, and Dreyfus (1997) are too prone to disavow the rational deliberation connected with an authorship invariance related to the practices we engage in, and propose Sen's capability approach as an optimal choice for combining a sense of engaging in practices with the rational deliberation of practices.

We will now reinterpret the eco-economy using Sen's approach starting with broadening of the informational basis. The focus on freedom in Sen's perspective clears the ground for understanding how the consequences of accepting the entanglement of facts and values, wholeheartedly, could be reconceived within the eco-economy.

First, it should be noted that both ecological modernisation and ecological economics could be incorporated, theoretically, fairly easily within the capability approach. Ecological economics aims at enhancing the ecosystem instead of damaging it, which is compatible with Sen's (2013) view of development as an expansion of freedom. Furthermore, ecological modernisation emphasises normative approaches, hence incorporating values within the perspective, and tries to bypass the binary choice of either economy or ecology. Both, however, are in need of tools for incorporating a wider informational basis into their conceptualising and evaluating of economic systems, which Sen's capability approach can supply.

Second, in Kitchen and Marsden's version of ecosystem services, certain welfare assumptions are implicit, reducing nature/material conditions to means or instruments in the development of markets only. Hence, one obvious starting point for relaxing the tension between facts and values is developing a richer perspective of the societal relationship towards nature as entangled, and not opposed, or based on an instrumental relationship. Polishchuk and Rauschmeyer (2012, p. 104) propose a broader conception of ecosystem services, based on ecological characteristics. Thus, ecosystem services can be understood as the conditions and processes through which natural ecosystems help sustain and fulfil life in general and human well-being in particular. This opposes a pure economic view of ecosystems as the means through which we obtain benefits only valuable by monetary criteria. Instead, sustaining life means broadening the valuation of ecosystem services to include goods (for example timber, biomass fuel), functions (for example water purification systems, ecological networks), as well as cultural and aesthetic aspects (for example, landscapes). This broader basis can function 'as elements of the environmental context affecting personal and social conversion factors over time' (*ibid.*, p. 110).

In the vicinity of ecosystem services, Sen (2002, 2004) addresses the theme of contingent valuation but with an argument directed at the social consequences. From Sen's perspective the problem with contingent valuation is that it by-passes a genuine possibility of adopting a social perspective from where well-being, as a relationship between capabilities and functionings, can be evaluated. It understands, so to speak, individuals as operators only in the market, and not as citizens capable of adopting perspectives not concerning their own well-being.

When an environmental good is seen as a commodity, as something purchasable and consumable by operators in the market, the determination of value becomes random, according to Sen, because it is dependent on the market only. If we accept that economic evaluation is a matter of broadening the informational basis of understanding choices, hence the relationship between capabilities and functionings matters, then what actual alternative sets of capabilities can the market supply for people to choose from? In other words, what are the actual freedoms the market can supply?

As Sen (2002, p. 541) claims, the market fails to specify any social states from which individuals can choose. Hence, each individual will choose a basket of commodities only for themselves, without considering each other. Sen's (2002, p. 542) capability approach, on the other hand, is concerned with 'getting the information that would make it possible to identify—and then obtain—that social choice which would correspond to the people's actual valuations of the relevant alternatives'. Hence, the reason why the spotted owl should be preserved (Sen 2004) is not because it might meet our needs, or supply us with (aesthetic) pleasure, or utility, in the future. Rather, it should be preserved for future people to have the freedom to experience this owl. Hence, modelling should be of peoples' agency of what they have reasons to value, and not on the framework supplied by the market. Development, then, is about the expansion of people's freedoms.

Ballet et al. (2011, p. 1832) are critical, accusing Sen of anthropocentrism and claiming that this still makes nature only a supply to humans, in broader terms than market-related ones though, but still without any inherent value. Sen, however, could argue that this critique actually confirms his way of saying it, since Ballet et al. (2011) have a reason to value nature's inherent value. Preserving the spotted owl, then, is expanding their freedom, as well as other people's freedoms of having other reasons to preserve the spotted owl. This, then, might be the minimal anthropocentrism needed for doing the kind of reasoned scrutiny among peoples' multiple reasons and values for doing what they do.

This applies to the notion of entrepreneurship as well, as the capability approach provides a framework for linking entrepreneurship with human development (Gries and Naude' 2011, p. 217), and not only the development of the market. The entrepreneurial capabilities addressed above should here be understood as reinforcing this aspect of development. Hence, the aim of the exercise of these capabilities is enhancing the freedom to live the economic life one has reason to value, without evaluating this life only in terms of utility, income or happiness. As already claimed, economic agency should be seen as displaying a lot of different aims for a lot of different factual/valuational reasons, all expressing a sense of fundamental freedom, or the lack of it.

Gries and Naude' (2011), furthermore, argue that entrepreneurship is part of capability sets, and through appropriate policy can become an achieved functioning. Agency, of course, is very important here, 'in the sense in which it allows an entrepreneur to spot an opportunity and utilise it' (*ibid.*, p. 218). Note that entrepreneurship is here connected to what was termed the discovery dimension above, viz. entrepreneurs responding to pre-given circumstances more than creating spaces for opportunities to present themselves. In some circumstances this

might be the best way, using policy to support the creation of achieved functionalities. However, as Gries and Naude' (*ibid.*) also observe, policies 'that aim merely to create a higher rate of new firm start-ups may be welfare-reducing if entrepreneurs do not value it in themselves.'

Again, this reinforces the point above that supplying people with possibilities is sometimes not enough. The capability to convert these possibilities into something for which one has reason to value is just as central. In the end, then, entrepreneurship should not be interpreted as an aspect of economic agency for only developing the market, it is more the capability to discover and create opportunities and being able to convert these as part of enhancing the economic freedom of people. Policy-making plays a significant part in this within the social context, among other social significant factors, as facilitating the discovery and enhancing the creation of opportunities for people to act on and with, as part of their reasoned scrutiny. Entrepreneurism has, in this sense, and as Kitchen, Smith and Marsden's examples show, everything to do with the economic agency unfolded in everyday life, seizing and creating opportunities as a relationship between a practical contextual sensitivity and a reasoned scrutiny. Entrepreneurism is, thus, combining the sensibility of how different practical circumstances are connected by Spinoza, Flores, and Dreyfus (1997) with Sen's rigorous and reasoned valuing of freedoms.

The tension within Kitchen and Marsden's eco-economy has now been if not resolved then 'relaxed', by using and discussing other efforts addressing Sen's capability approach within the three methodologies comprising the eco-economy. On one hand, connecting the eco-economy with the capability approach reconfigures the informational basis for understanding (eco-)economy within a much broader normative frame, allowing the entanglement between facts and values as a deliberate part of economic evaluation. This opens up the possibility of not understanding the space of possible determination of values, including the value of nature, as coinciding with, or being reducible to, the space of possible determination by market pricing. On the other hand, entrepreneurship, as a primary economic agency, is the complex relationship between discovering opportunities, an aspect of Sen's *patiens* structure, and creating opportunities, Sen's *agens* structure, as a display of the sensible moving between different practical circumstances of deepening, broadening and regrounding as Kitchen and Marsden (2009, 2011) term it, or articulation, reconfiguration and cross-appropriation as Spinoza, Flores, and Dreyfus (1997) term it. Even though these entrepreneurial capabilities might have been interpreted as being too close to one another, they all presuppose freedom and some sense of reasoned scrutiny, as a necessary condition for exercising their possibility.

8. Final Remarks

This article will conclude by pointing to some important implications of Sen's approach for policy-making. This is returning to Putnam and Walsh's understanding of the entanglement of facts and values as an inherent part of economy. As Putnam (2003) claims, Sen's understanding of economy is implicitly directed at laying out the practical implications of economic thinking, that is, as guided by

humanist and not anti-humanist values. Furthermore, as Gasper (2008, p. 235) claims, 'it brings a focus on core human realities, not on slices of experience selected according to commercial significance and/or convenience for measurement.' Basically, Sen's proposal for economic evaluation is 'guided by human development values rather than just the values of the market.' This is increasingly important within public policy making, since it is in danger of losing the guidance of humanist values, and being replaced with the commercial significance, or neo-liberal efficiency, as the only criteria of evaluation (see for example Harvey 2005; Wright 2010).

Sen supplies us with two core reasons for taking values seriously. First, since people use ethical values as part of their orientation in life, economics ought to pay attention to these as well. Second, people argue about, identify and evaluate these values, as part of their everyday life, in a way no textbook economic argument will ever achieve. If policy-making wants to be reality-based, and not a reproduction of an abstract methodology, like willingness-to-pay, then taking values seriously as part of the analytical basis informing policy-making is a necessity.

If our proposal of connecting eco-economy with the capability approach is accepted, then as Gasper (2008) claims, there are six points where Sen's thinking might provide us with a suitable frame for reclaiming the practical dimension, that is, reincorporating values and the arguing of them within public policy-making (Figure 4). The description of Sen's approach pretty much covers the general concerns. The important part is how Sen's focus on widening the informational basis is used within policy-making as an analysis of a wider range of values, which in Gasper's scheme is called implications.

Analyses using both quantitative (Kuklys 2005) and qualitative (Alkire 2002) methodologies have been undertaken to operationalise the concepts of functionings and capabilities (Robeyns 2006, p. 359f). Note that all the implications reinforce the notion of context-sensitivity claimed as important above, and the general concerns establish a wide range of reasoned scrutiny allowing the entanglement of facts and values to be expressed in concordance with peoples' differences. This transgresses any narrow focus on disciplinary biases, like abstract categories such as food-supply, willingness to pay or income, to focus on real people dealing with real issues in their everyday lives.

The transgression, however, leaves nothing out in terms of qualifying any reasoned scrutiny, but opens up the possibility of combining an acute attention to peoples' lives with advanced reflection from philosophical, social scientific and natural scientific contexts as well. This suggests that when it comes to policy making, when connecting eco-economy with the capability approach, the success of establishing regional developmental projects using eco-economy should be evaluated in terms of capability-enhancing and not standard cost-benefit terms with pricing utilised for aggregating all benefits and costs including willingness-to-pay.

This will open up a new research area of understanding the implications for policy-making when using eco-economy in connection with the different capability applications listed by, for example, Robeyns (2006, p. 360ff): general assessments of the human development of a country; the assessment of small-scale development projects; identification of the poor in developing countries;

General concerns			Implications
A BACKGROUND PHILOSOPHY on: - wide range of relevant information sources - partial orderings - ‘positional objectivity’ - reasoned freedoms, etc.	HUMAN & SOCIAL VALUES - wide range, plus - <i>central focus on basic human capabilities:</i> life quantity, life quality, etc., and their security		Values and their implications (rather than a timeless or methods-driven disciplinary agenda) guide choice of topic: education, hunger,...
			Values affect concept formation: - disaggregated view of entitlement-/vulnerability-groups
			Priority to respecting, promoting and engaging persons’ <i>agency</i>
EPISTEMIC VALUES - e.g. constrained roles of quantification, deduction, formalisation, statistics - e.g. realism above elegance/simplicity	ROLES OF VALUES IN POLICY ANALYSIS – Focus on and guidance by ends, not a presumption of particular policy means	→	- <i>Public action</i> is more than state action - Many public means are relevant - ‘Both/and’ not ‘either/or’
			Promotion of political commitment and <i>public spirit</i> for public action
ORGANISATION OF INQUIRY - Inter- and transdisciplinary communities of inquiry - <i>Democratic/participatory public reason</i>	COMPLEXITY AND INTERCONNECTION – <i>Entitlements analysis;</i> tracing the determinants of effective command over goods/things and in turn of effective access to valued freedoms		Focus and boundaries of analysis are reality-based not discipline-based: focused on persons’ lives not on abstracted general categories such as income or aggregate food supply

Figure 4. Values in policy analysis

poverty and well-being assessments in advanced economies; an analysis of deprivation of disabled people; the assessment of gender inequalities; theoretical and empirical analyses of policies; critiques on social norms, practices and discourses; and finally, the use of functionings and capabilities as concepts in non-normative research. For example, and as touched on above, if assessment of small scale development projects is done in terms of the quantity of new firm start-ups, which is often done in descriptive analyses of the innovative capacities of regions or countries, one is prone to miss the small-scale development done by entrepreneurs not understanding themselves as registered business owners. People passionate about their communities set up meetings to bring other people together, addressing a specific agenda and both bring and create new development within the community. Policy making predominantly directed at the creation of new firm start-ups as innovative effort, risks being blind to significant development initiatives not directed at establishing regular businesses, but still

contributing to the overall well-being, including economic well-being, of a community.

All of this, of course, calls for more complex analysis and discussions. But in the words of Paul Streeten (Gasper 2008, p. 234), ‘values are not something to be discarded, nor even something to be made explicit in order to be separated from empirical matter but are ever-present and permeate empirical analysis through and through.’ Hence, there is no other way.

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