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Introduction: Towards a Theory of Robust Innovation

Introduction

There is no denying a certain technology bias in innovation research (cf. Rennings 2000; Aderhold and John 2005; Kaudela-Baum 2008). Furthermore, but less striking, there is an economy bias in innovation research as well. Combining both biases we get the picture of the “hard core of innovation”¹: *technology goes economic market*.

Beyond this hard core, an alternative mainstream is about to establish itself. This trend is indicated by the increasing popularity of the labels of non-technological innovation (NTI) and social innovation (SI). At first glance, these two concepts seem to be the missing links to the whole picture of innovation. Yet, on closer inspection we still have our problems with them: Being in line with the OECD STI Scoreboard (2007, D8), most concepts of NTI focus on organizational innovations in economic entities as well as on marketing innovations. *The concept of NTI is thus still economically biased*.

Unfortunately, the notion of SI does not refer to a systematic approach to the entire social dimension of innovation either. Most economics literature uses the label for residual categories of non-economic success factors of economic innovation (cf. McElroy 2002: 37f) or even as a synonym for NTI (cf. Pot and Vaas 2008; Simms 2006). Less indirectly, SI has been defined as new forms of organization, new rules, or new lifestyles (Zapf 1994) as well as new ideas about social relations (Marcy and Mumford 2007). These definitions correspond in many ways with the most general one of Stefan Bösch and colleagues (2005) applying the notion to all cases of intended social change. All change in the economy and – against the backgrounds of virtualization and hybridization (Miles 2006) – many changes in technology can thus be defined as being social innovation as well.

1 Please refer to Lukas Scheiber’s contribution to this volume.

The bottom line is that nearly everything can be defined as a SI: a sect (Cornwell 2007), the eBook (Cavalli 2007), or scientific management (Mumford and Moertl 2003).

Geoff Mulgan, in his paper “The Process of Social Innovation” (2006), provides an excellent example of the corresponding confusion within the entire discourse: He refers to both the process of tertiarization of economies and the political institution of female suffrage as examples of social innovations, while claiming that social innovations fundamentally differ from business innovations, not without admitting that there “are of course many borderline cases” (ibid: 146) between social and business innovation. Against the background of the present discourse on SI, he is not even so wrong with that.

Superfluously, the *paradox of innovation* (John 2005: 54) is handed down from the general discourse on innovation to the specific discourse on NTI and SI as well: innovation can refer both to an object and a process. And, if we consider that an innovation is only an innovation when it succeeds on the market (cf. Rogers 2003; Aderhold 2005), then we find that innovations have a social dimension as well. But what is an innovation, then: Is a new object or idea an innovation, yet? Should we call the process of the development of an (process) innovation an innovation? Or does the notion apply to the process of its diffusion in(to) markets and societies? And, finally, if innovations also have a social dimension, then *is there a social dimension of social innovations*, too?

Both these questions and the confusion caused by them is more than just an academic problem: policy makers and triple helix managers demand knowledge on “Elements of Innovative Cultures” (Dombrowski et al. 2007), advanced indicators of innovation including its social dimension (Moris, Jankowski, and Perrolle 2008), and more systemic policy views (Soete 2007). Experts in marketing discuss the broadened role of their discipline and business against the backgrounds of the increasingly perceived increasing impact of corporate social responsibility concepts (cf. Uslay, Morgan, and Sheth 2008; Maciariello 2008) or stakeholder views (Troshani and Doolin 2007) on economic performance. Some even question the existence of “the pure commodity in the age of branding” (Wilk 2006: 303). And, finally, open innovation (Chesbrough 2003) has what it takes to become another epoch-making concept.

Hence, Mulgan (2006: 145) might be right to claim “that the pace of social innovation will, if anything, accelerate in the coming century”. At least, this idea corresponds with the increasing NTI focus of the OECD (2007), either

in spite of or due to the fact that both concepts do (not) refer to the same phenomena. In any case, there is some idea or certainty that the real potential of innovation lies in its social dimension (cf. Pot and Vaas 2008, whose concept of SI does not differ much at all from the OECD's concept of NTI).

One explanation for the lack of systematic approaches to most crucial aspects of innovation is an insufficient interaction between innovation research and social theory (cf. Aderhold 2005: 15). In the following, we will be stimulating interaction between innovation research and systems theory because the work of Niklas Luhmann (1987; 1997) provides us with both selective and universal categories for the systemizing of communication. Doing this, we will refer to Jon-Arild Johannessen and his colleagues as well, on two levels: we will pursue his "search for a systemic theory of organizational innovation" (cf. Johannessen 1998) by developing a systemic approach to the general phenomenon of "innovation as newness" (Johannessen, Olsen, and Lumpkin 2001: 20).

The result of the interaction between innovation research and systems theory will be a systemic concept of innovation that distinguishes between an object dimension, a time dimension, and a social dimension of innovation. This innovation triangle model will serve as an editorial framework for the individual contributions of the present volume. In this sense, the present introduction is a practical example of an alternative structure for discourses on (social) innovation, as well.

After the introduction of the authors and their contributions, the present text focuses on the social dimension of innovation and on economic innovations as a special case of social innovation. In this context, first evidence for the existence of non-economic markets is presented as well.

Based on this evidence, the introduction concludes with the vision of a theory of robust innovation, i.e. innovations that succeed in both economic and non-economic markets of society.