Mode 2: Theory or Social Diagnosis?

A Comment on Janus Hansen „Mode 2, Systems Differentiation and the Significance of Politico-Cultural Variety"

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Janus Hansen's essay examines in how far the Mode 2 concept (Gibbons et al. 1994, Nowotny et al. 2001) is applicable as a theoretical or analytical concept for a cross-national comparison of public engagement practices. Influenced by reflections on socially robust knowledge production and the role of science in society by Gibbons and Nowotny et al., Hansen begins his essay with the observation of a rising demand for public engagement (Gibbons et al. 1994, Nowotny et al. 2001). In the course of the article he confronts the Mode 2 concept with competing sociological approaches, in particular Luhmann's systems theoretical approach (Luhmann 1984) and Jasanoff's concept of political culture (Jasanoff 2005).

The article mainly focuses on a broad-critical discussion of Mode 2, drawing upon the arguments of earlier diagnoses (see e.g., Weingart 1997, 1999, Pestre 2000, 2003). In accord with them, Hansen argues that the Mode 2 approach lacks a sufficient social-theoretical grounding as well as a conceptually sharpened and sensitive tool for the analysis of politico-cultural variety in science/society interaction. Hansen claims that Mode 2 conveys an implicit thesis of convergence, seemingly suggesting that all modern societies are affected by similar transformations. Relying on basic principles of systems theory (e.g. Luhmann

1984), Hansen considers two aspects of the Mode 2 approach intrinsically problematic:

1) Mode 2 contests the theoretical assumption of social differentiation and instead observes a transgression between different societal systems.
2) It fails to distinguish analytically between changes on the sub-systemic and organizational level by relying on categories it claims are dissolving.

Although agreeing with the authors of Mode 2 and their observations of a transformation of science and academic knowledge production in the last 50 years—like Weingart and Pestre—Hansen doubts whether the empirical material Novotny et al. (2001) provide is sufficient to abandon well established basic principles of systems theory. While discussing Mode 2 as a theoretical and analytical concept in the first part of the article, Hansen later suggests that Mode 2 might be conceived as a diagnosis of social transformation, which implies a normative claim for engaging the public in techno-scientific decision-making, rather than a conceptual basis for theoretical and empirical analysis.

Hansen's vague differentiation in looking at Mode 2 both as a theoretical concept and as a social diagnosis remains a core problem throughout

the whole article. To initially define Mode 2 as a social diagnosis rather than a theoretical concept would have made most of the aspects criticized by Hansen less essential. Considered as a social diagnosis, speculative ideas such as the observation of converging social systems might have been discussed in more detail. By reading Mode 2 as a theoretical concept instead, Hansen's contention is correct that minimal consistency with basic principles of neighbouring social theories are necessary. However, in my reading of Mode 2 (Nowotny et al. 2001, 28, 32) the authors remain rather open to the question whether different social systems would really converge, or whether—according to Weingart's observations—transformations such as a scientification of politics and a politicization of science would take place within the systems (Weingart 1983, 2001).

In order to avoid these conceptual inconsistencies, Hansen suggests considering public engagement processes as poly-contextual organisations. Conceived in this way, engagement procedures can be compared by identifying similar overlying social trends having different local manifestations. As a theoretical tool which allows comparing engagement processes within the specific logics of their particular social systems and domains, Hansen introduces the concept of political culture developed by Sheila Jasanoff (Jasanoff 2005). He considers this concept a more fruitful analytical approach to a comparative analysis of legitimating practices in public engagement procedures. Accordingly he claims that Jasanoff's understanding of political culture corresponds to systems-theoretical assumptions. Furthermore, Hansen regards the concept as a helpful tool to observe and explain variation in the way public engagement is institutionalized and used in different national contexts and to empirically address questions of convergence or continued vari-

ety. Jasanoff's use of political culture consists of three relevant analytical dimensions, along which a comparative analysis of public involvement in techno-political decision making can be designed (Jasanoff 2005, 281):

1) Representation: how voices are made audible in the political and policy process and how political inclusion in turn affects the framing of issues

2) Participation: who actually takes part in politics, and who does not

3) Deliberation: the discourses in which political debate is conducted, together with their limits and achievements

Hansen suggests that these three dimensions of political culture could serve as a tool to compare public engagement procedures. This analytical approach, with which I agree, allows a comparative analysis of the specific patterns of interaction between different societal domains, depending on their national and sectoral contexts. It distinguishes between societal subsystems as relatively stable discursive environments and organizations, which may be more easily reconfigured by analyzing representation, participation, and deliberation.

To analyze public engagement processes—focusing on how they are shaped by their politico-cultural environments and in some cases consciously tailored to fit the politico-cultural contexts in which they unfold—Hansen suggests further comparison of public engagement procedures across different politico-cultural contexts. Because the success of engagement processes is likely to depend upon their compatibility with the politico-cultural context in which they operate, Hansen applies Jasanoff's (2005) three analytical dimensions to specific research designs. But he suggests furthermore that comparative analysis of public engagement processes, with regard to their ability to generate socially robust innovation,

should be based upon three additional analytical dimensions (Hansen 2009, 83):

1) Institutional embedding: where and how public engagement procedures are institutionally anchored
2) Procedural design: which actors have been included/excluded from participation, and how interaction is organized and roles are defined and distributed
3) Discursive dynamic: the communicative resources relied upon and how they condition each other

However, as Jasanoff's dimensions are already supposed to work as tools for the analysis of public involvement in technopolitical decision-making (Jasanoff 2005, 281), the added value of these latter dimensions remains unclear to me. From my point of view, Hansen's institutional embedding somehow narrows the analytical perspective from organizations to institutions and, at the same time, links it to neo-institutionalism, thereby inducing analytical difficulties which result from these multiple theoretical bases. The wording 'procedural design' implies a focus on the organization and procedure of the participatory process but does not address Jasanoff's original question of inclusion/exclusion. What exactly is to be compared within the procedure and organization needs further specification. In addition, the concept of discursive dynamic lacks specificity and I do not see the value it adds to deliberation.

Summing it up I consider Hansen's efforts to further develop existing analytical approaches in order to use them for the comparative analysis of public engagement procedures interesting and fruitful. I would, however, have appreciated a more comprehensive discussion of Jasanoff's (2005) political culture approach and its applicability to the analysis of public engagement procedures across different politico-cultural contexts. In particular, a more extensive discussion of

Hansen's three analytical dimensions is missing. Being clearer with respect to their exact focus, content, and compatibility with the suggested perception of public engagement processes as organizations might have offered interesting insights and hints at their added value compared to Jasanoff's (2005) categories. This, instead of revisiting familiar criticism of Mode 2, could have fostered the progress of the still underutilized and arguably underdeveloped theoretical and analytical tools of comparative analysis in STS.

Prologue: Mode 2 as a theory or as a social diagnosis?

In the article following Hansen's essay on Mode 2, I used social robustness from the Mode 2 framework as an analytical concept, following Hansen's suggestion to compare different international governance and engagement procedures in Nanotechnology. I found the criteria for social robustness (Nowotny et al. 2001, 167) quite helpful and I did not encounter in my analysis conflicts of Mode 2 with basic assumptions of systems theory as described by Hansen. The criteria of social robustness seem sufficiently openly designed to allow a comparison of governance and engagement practices within their particular social, political, and cultural contexts. But using social robustness as an analytical tool did not facilitate a more in-depth analysis of the discourses, practices, and implications of these new forms of governance and engagement processes. Also, their role in science and technology policy and their ability to frame techno-political decision-making in different social, cultural, and political environments remained dissatisfying. From the rather narrow social robustness perspective, most approaches I analyzed did not meet their purpose of generating a more democratic and responsible science and technology policy. Thus, the em-

pirical test of using Mode 2 and particularly the related idea of social robustness as an analytical category in a comparative study produced some interesting results, but their utility did not necessarily exceed that of a deficit analysis.

This supports the proposal of several critics, including Hansen, to treat Mode 2 and the idea of social robustness as a social diagnosis rather than a theoretical concept. In this respect, I agree with Hansen's suggestion to base comparative analysis on related, but further developed theoretical and analytical approaches. Jasanoff's concept of political culture clearly offers a more comprehensive and elaborate tool than Mode 2 and social robustness.

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