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APPROACHING A VIABLE COMPREHENSION
OF THE KNOWLEDGE SOCIETY

Josef Hochgerner*

Abstract

With different cultures and changing times, a meaning of the same phenomena may vary. This applies also to knowledge in knowledge society: a plurality of bodies of knowledge will be preserved depending on social context, cultural significance, values and interests of the concerned groups. However, addressing the topic of the emerging knowledge society, particularly the “knowledge cultures”, implies addressing the issue of “change”: social change, socio-economic change, cultural change, changes in technology, life styles, and “environmental baselines”. A new “knowledge paradox” may appear as the rising usage of scientific principles stimulates scrutiny of knowledge and breeds uncertainty in this way.

Keywords: knowledge society; socio-economic change; cultural change; knowledge paradox

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Shifting baselines

In different cultures, yet also in the course of time in one specific cultural environment, the same phenomena may have varied meanings, effects and implications. This even applies to the weather: a nice warm day with temperatures around 17° C in early December in Prague may be considered nice weather. In years of the past 20th century this would have been noted as a remarkable exception of usual weather, and welcomed as an extraordinary gift in a season that usually implied much lower temperatures as a rule of nature. During the 21st century, based on information and knowledge pertaining to climate change, such a day may be considered good weather as a result of bad climate, and, moreover, becoming a regular experience: The notion of an exception vanishes, a new notion of regularity will come up to expectations. What was contrary to the prospects of previous generations will turn to become normal in the next and future generations. This was affirmed in an empirical study involving three generations of fishers in a local community:

Shifting environmental baselines are inter-generational changes in perception of the state of the environment. As one generation replaces another, people's perceptions of what is natural change even to the extent that they no longer believe historical anecdotes of past abundance or size of species. [Sáenz-Arroyo et al. 2005: 1957]

Addressing the topic of the emerging “Knowledge Society” (KS), particularly “Knowledge Cultures” implies to address “change”: Social change, socio-economic change, cultural change, changes in technology, life styles, and “environmental baselines”. In science as well as in every day life knowledge derives from the past, yet the knowledge society is about the future. Yet knowledge is to be seen as one coherent body, shaped and established by more or less data and information: There is a plural-

ity of bodies of knowledge in society, some are disconnected or even contradictory, depending on social context, cultural significance, values and interests of groups concerned. Therefore, even in case of knowledge becoming the basic source of socio-economic development (as were in the past agriculture and industry), a variety of concepts and configurations of knowledge will be available, accepted and applied to unequal degrees. Methods and institutions of knowledge production, knowledge diffusion, and utilisation of knowledge will remain as complex as discriminative.

Science is initiated by asking critical questions and by application of appropriate methods to find answers. For example, related to the shifting environmental baselines mentioned above: Which information is carried by an iceberg? What do we know about icebergs and their social and cultural implication? Does culture make a difference concerning the relevance of icebergs? Icebergs breaking off in increasing numbers from arctic fields of ice and from the antarctic shelf may have the same shape icebergs ever had. Yet their abundance on the one hand, as their melting on the other hand will entail not only more of the same dangers to ships, but also new dangers to cooling the gulf stream in the north Atlantic and thus create threats to the climate and living conditions in Northern Europe. The cultural features connected to the phenomenon “iceberg” will change while the phenomenon of more icebergs is due to a culture of a society living on a carbon based economy.

The mutual shaping of science and technology (S&T) on the one hand, and culture on the other hand is addressed by Muldur:

As S&T shapes our society, they are themselves produced, taken up, reconfigured, shaped by society. That is one (double) way in which culture is decidedly scientific culture, and thus S&T is at the heart of [...] ‘Knowledge Society’. But to allow all sections of society to benefit from those advances – as well as to take part in that shaping process – individuals need to be provided with

the appropriate equipment, in terms of education, skills, awareness, and appreciation for the stakes in S&T endeavours. Vital for a democratic society in this day and age, such demands point to another crucial sense for scientific culture [...]. Actions to foster a thorough public grasp of what science is and how it contributes to society are thus *sine qua non* to a fully-fledged democratic society. [Muldur et al. 2006: 30–31]

Transition processes

In the transition from the “Industrial Society” to the “Knowledge Society” science-based technologies become indispensable engines of economic performance. At the same time globalisation shapes a new framework for the world economy as well as for the world society. Higher life expectancy and quality of life – in islands of prosperity in contrast to poverty regions (rising disparities). Moreover increasing individualisation, flexibility, mobility and migration entail ethnic and social rearrangements.

The project “Transition from imitations to innovations as social and cultural process – cultural sources of innovation” has been set up to analyse the role of innovation in the course of the rise of the Knowledge Society, and social change related to such processes. “Social change” depicts the transformation of structures in one or more social systems [cf. Zapf 2006].

Many approaches to identify properties and social impact of the Knowledge Society refer to:

- Science and technology. Increasing relevance of ICT, scientific findings, various “new technologies”, their utilisation, social pre-conditions and results [cf. Bell 1985, Gibbons et al. 1994].

- Innovation (products, production processes, services, organisations). Knowledge production becomes the main source of innovation and economic growth [cf. Heidenreich 2001, Haveman 2009, OECD, EUROSTAT 2005].
- Economy and production. Knowledge creates new sectors, services, and economic principles of the “knowledge based economy” [cf. Rooney et al. 2003, Rooney et al. 2005].
- Culture and learning. “Learning organisations” emerge across economic sectors and beyond the economy [cf. Flood 2009], improving knowledge as capacity for social action [cf. Stehr, 2004].

Analysis of cultural sources of innovation will require to address main agents (“drivers”) of social change and innovation (socio-technical systems, politics, the environment, demographic development, and – of course – culture, arts and science) at different levels of social systems [Weymann 1998]:

- Macro level, e.g. the state, politics, nation, economic regulations ...
- Meso level, e.g. corporations, enterprises, NGOs ...
- Micro level, e.g. life styles, patterns of behaviour ...

Understanding “knowledge” in the Knowledge Society

“Hands” (significant for the Industrial Society) and “brains” (most relevant in the Knowledge Society) assume new meanings in modified contexts: “Hands” become part of technological (socio-technical) systems, whereas “brains” become part of science systems “Mode 2” [Gibbons et al. 1994, Nowotny et al. 2004].

The main indicator of the Knowledge Society is not sheer lots of knowledge. Actually, other viewpoints should be taken in consideration, as Heidenreich [2003] suggests:

- The knowledge society extends principles of scientific knowledge creation and its implementation to wider walks of life.
- Rising usage of scientific principles at the same time increases scrutiny concerning perception, cognition and knowledge.
- Such scrutiny breeds uncertainty even though usually higher certainty is expected by augmented knowledge (a new “knowledge paradox”).

Social amplification of knowledge introduces scientific criteria (challenging truth, cognition and perception) to wider walks of life.

The Knowledge Society is not characterised by incessant extension of knowledge at the expense of nescience, but by practical, experimental procedures, which produce not only more knowledge, yet also more nescience, uncertainty and ambiguities. [...] This implies in practice that rules and implicitness are challenged more often in society. [...] A key indicator of an increasingly knowledge based society is accelerated oscillation between de-regulation and re-regulation. [Heidenreich 2003: 36; my translation]

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