Long Abstract

Convivial and Emancipatory Technologies - suitable conceptions for Technology in a Degrowth Society?

Part of the Special Session "Technologies & Degrowth Part 1: Theory"

The fundamental nexus of technology and society, and the understanding of this relation as socio- technical systems are insights that are well known since many decades in technical sociology. In its extremes they lead to the rejection of the hierarchic differentiation between technical artefacts and human actors in scientific concepts at all (Latour 1993). In a similar manner Niels Boeing states that we live in a so called "technosphere" which in his opinion (referring to Ellul 2005) is irreversible. Following this we assume that also a degrowth society, like all forms of human society that ever existed, will need technology and use it for fulfilling peoples needs.

But what will technology in a degrowth society be like and which ideas can help to clarify conceptions of desirable technologies? In this contribution to the special session we want to discuss the conceptions of "convivial" and of "emancipatory" technologies. What can they explain, what do they have in common, what are their differences and how can they be made fruitful regarding the ongoing degrowth debates? To answer these questions we lean on the thoughts of our ongoing dissertations.

Ivan Illich (1926-2002), world known author and degrowth thinker avant la lettre, coined in the early 1970ies the term "conviviality" as characterization of societal institutions and technologies. Niels Boeing (*1967), journalist and FabLab-organizer outlines an "emancipatory" technology experience. He is part of a younger generation, influenced by open knowledge and open source technology, some of which formulate an emancipatory critique of technology and following from this, criteria for self-determined technologies in an (anarchist) society (AK-ANNA 2011 and Stiftung Freiräume o.J.).

Convivial Technology

Ivan Illich developed his notion of conviviality as a third path in contrast to an industrialist mode of production, which he observes in the capitalist as well as socialist countries of his time. He used it to denote convivial institutions in contrast to manipulative institutions: the convivial ones are institutions such as parks or the telephone – you can use them, but you don't have to. On the other end of the spectrum are such institutions as military and schools that are compulsory (Illich 1971). He opens up the same spectrum with technologies and infrastructures - they can either be convivial or manipulative, or something in between (Illich 1973). As an example he uses the construction of new roads especially built for cars by this modernization they lose their conviviality because they are no more suitable for poor people and their animals or bicycles. This comes near to what Uta von Winterfeld asks for when she talks about the "right to sufficiency"- the infrastructures and social requirements in our current society are such that it becomes impossible not to use a certain technology like the computer (Winterfeld 2011).

Coming from this analysis it is possible to develop a scheme of the conviviality of technologies which can be used in relation to high and low tech solutions alike, as one of the writers of this paper does in her dissertation on degrowth technologies.

Emancipatory Technology

Niels Boeing calls for a differentiated understanding of technology delimiting himself from technology optimists and pessimists alike - and sees this as a necessary precondition to develop political strategies for an "emancipatory technology" that transcends capitalism.

Boeing describes it as an open technology that enables a self -determined production and usage and more precisely mentions three aspects as criteria: First an "open" technology means an open design, transparency of the technical structures and the freedom to decide about the usage of technology. Second he characterizes it as a non-commodity form of technology in the sense that the motivation to produce a technology derives from concrete needs rather than from demand- or exchange value orientation. Third, he underlines the importance of democratic decisionmaking regarding technology development and production.

Following Gershenfeld (2005) he thinks that especially the control about the production of technology has to get back to the users. Subsequently the best example for him is Open Source Hardware like Rapid Prototyping Machines. In his vision a decentralized form of production will take place in High-tech labs where the users produce technology for their needs and the differentiation between user and producer is overcome.¹

How to achieve this? Taking the current dominant socio-technical structures as point of departure, he sees the *appropriation* of technology (and especially all sorts of knowledge about it) by many people and as political fight by social movements as the most important process. The goal must be a broader comprehension of technology that opens up new opportunities for actions.

Relations to the Degrowth Debate

Illich directly refers to the early debates questioning growth and development of his time what Boeing does not. Nevertheless capitalist growth is addressed in his works: The sort of "technopshere" we live in is in Boeings analysis a result of capitalist logics. While the human being as "zoon technicon" develops technology for problem solving purposes or out of coincidence, technology development in capitalism is innovation driven in the sense that market requirements are the main reasons for production. Above that, the more the success of capitalism depends on technological innovation, the more the technical Knowhow is target to intellectual property rights and forms closed technologies. So his ideas of emancipatory technologies as open and transparent ones are incompatible with the current growth and efficiency oriented economic structures. In turn one could state that emancipatory technologies are degrowth technologies. But one important shortcoming we see is the absence of ecological aspects in Boeings considerations.

¹ On the other hand it is clear to him that not everybody can or has to be a technology 'expert'. The goal should be trust, responsibility and transparency.

Ivan Illich criticizes industrial society as such – capitalist and socalist alike. He opts for convivial life instead of consumption and he opposes the notion of development as a growth oriented concept of societal change and so became one of the antecedents of the post-development discourse (Illich und Rahnema 1997).

Commonalities and Differences

One of the main differences is the consideration of the relation between so called developed and underdeveloped countries which is the central theme for Illich. He unfolds his thoughts from a perspective form the Global South, whereas Boeing only a few times considers this point. Nevertheless they draw similar conclusions: Both conceptions highlight the importance of autonomy and self-organization against an ever growing technological complex. They also both discuss the accelerated interplay between investment and innovation. Both assume that production and consumption should be connected via non-market mechanisms. Albeit while Boeing seems to assume that the noncapitalist modes of production will lead somehow automatically to the necessary reductions, Illich claims self limitation in consumption as the way to go.

One crucial criterion for both is that people can decide for themselves which technologies they want to use or not. And last, both understand the control of technology through political processes as the necessary way to go and therefore demand to make technology much more subject to democratic processes as it is today.

Discussion

After exploring the notions of convivial and emancipatory technology and their connections to degrowth we want to discuss with the audience the following questions: Is everything that is convivial and/or emancipatory a degrowth technology? Is every technology that considers ecological limits convivial or emancipatory? What would it mean to work with such technologies in a post-growth society?

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