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Technology, modernity and democracy: critical theory and agency

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1.

"Only a god can save us" (not philosophy or any purely human reflection and endeavor); these are the well-known words of Heidegger in his famous 1966 last interview with *Der Spiegel*, published in 1976, after his death. In the same interview, he argued again that planetary "technicity in its essence is something that man does not master by his own power", and that "up to the present we have not yet found a way to respond to the essence of technicity". In order to save man from "planetary technicity", man would need to find again the irreversibly lost essence of technology (and things in the world). Heidegger could not envisage how that could be feasible: "I know of no way to change the present state of the world immediately" he said in this interview. But one of the few words of hope from Heidegger in this interview was about the future of his own thought: "How far I come with my own effort at thought and in what way it will be received in the future and *fruitfully transformed* ..." (my italics).

Heidegger informed and inspired the next generations of critical thinkers. Nevertheless, dystopian and utopian visions about technology and the world continued to be produced. Often dystopian visions offer only dead-end pessimism about the future of humanity in a technologically-driven society.

Andrew Feenberg's critical theory (of technology) I consider "*fruitfully transformed*" thought about technology and society, along lines that Heidegger suggested. It is an effort to recover or rebuild a modern concept of essence that can overthrow the deadlock, inside the continuing thread of the critical thinking tradition. But Feenberg's effort also has a strong bearing on the constructivist insights and contributions of recent "science and technology studies".

"The concept of essence needs to be reconstructed and revived", Feenberg concluded near the end of *Between reason and experience. Essays in technology and modernity* (2010). His proposal is to reconstruct and revive through "life affirmation as an existential category". He argues that "a reason that incorporates the affirmation of life in its structure is in harmony with the nature of things in a way that value neutral reason is not" (p. 207). This implies a revaluation of the role and importance of experience in the modern world relative to the scientific picture of disenchanted nature. Experience can reveal more than a "one dimensional" reality (Marcuse) that science cannot apprehend in its present form and can contribute to closing the gap between existence and essence through a new (re)designed technology responsive to values.

The dialectics between nature and society, reason and experience, function and meaning is mediated by technology. Technology is not deterministic; it is a product of social conversations (even a "social battlefield") between different kind of actors in the world of life and it may evolve from the pure cold "scientific" rationality to be a technology rich in the meanings (the "art" of technology) of communities, inspired by its affordances in the everyday life in the world. The integration of the new affordances revealed by experience is the product of increasing social activism through micropolitics in the communities of life, as well as through traditional mechanisms of democratic politics. A reconstructed democratic rationality is more than traditional social rationality. A rational critic of social rationalism must go beyond it and incorporate technical citizenship as a democratic contribution to technology's (re)design.

2.

Recent decades have shown the increasing role and power of technical citizenship in very different áreas. Feenberg has explored them in his career. He argues they offer a new hope for a future where values and meanings may be increasingly embedded in technology (re)design. We can make reason and experience converge again, after a long divergence where meaning and essences were lost, but we need a new social and democratic framework for (social) construction of technology and the world that may unveil new essences.

Technology has changed dramatically in recent decades. Heidegger's pessimism in the sixties of the last century can be explained in terms of the closed and inflexible nature of

technology (and associated "planetary technicity") in his time. But subsequently a dramatic change began to emerge and continues to develop: technology became increasingly digital - programmable, flexible, with powerful sensing and reacting features, small (at times very very small indeed), networked (more often by non-material linkages), clouded (and fogged) in increasingly cheaper computing devices. These novelties are changing "the big old technology" and making change and (re)design easier and more participative. Heidegger never understood the affordances of computers, what computing could be in the future, and he was not alone . He (as well as Marcuse) only knew the first generation of "mainframes".

Now we can see an opening opportunity for an alternative modernity based in technology through an extended democratic rationality that can promote flourishing through new affordances. Nothing is assured, but at least humans, can have an opportunity to discover and to fight for an alternative modernity mediated by an alternative technology. Not only "a god can save us" - we can perhaps save ourselves and the world. There are no guarantees, but we have room for hope. Democratic agency in technology politics may be able to overrule the casualty-based technology attentive only to efficiency and arid rational calculus.

3.

This talk discusses Andrew Feenberg's critical theory of technology, its main arguments, and how it fits within the complex constellation of critical thought in the context of western post-modernism. Feenberg is looking for a hermeneutics of technology which is needed to articulate dimensions of meaning in technology and how meaning relates to functionality: he seeks a new entanglement between means and function, reason and experience.

I will focus-discussion on two main issues: (i) the interactions between reason and experience and (ii) agency and technical citizenship, as well as some implications for public policies.

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I have recently edited with Feenberg a new book, *Technology, Modernity and Democracy*. My Portuguese translation is already available (2015) and the English version is now under publication (Rowman & Littlefield International). A Brazilian edition is in preparation. I have also translated Feenberg's *Between reason and experience, Essays in technology and modernity*. A Portugueses edition will be released soon, and a Brazilian one is expected during the next year (translated with Cristiano Cruz, from University of S. Paulo, and Ricardo Neder, from University of Brasilia; to be published by Editora UniB, University of Brasilia Press).