

Abstract

# Biohacking: New Do-It-Yourself Practices as Technoscientific Work between Freedom and Necessity <sup>†</sup>

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If one contends that ‘hacking’ has become a crucial cultural practice in—and, to some extent, in opposition to—digital capitalism [1–4], one may argue that ‘biohacking’, i.e., the extension of this practice to medical and biotechnologies and the life sciences, would constitute a key driver of the informatisation of the realm of life, as driven by processes of technoscientific convergence in the information paradigm ([5], 72ff.). Unlike older visions of a globalisation and of a unification of the human species enabled by technoscientific progress [6], this overall process of information displays a Janus face [7] insofar as the aspirations for global technological integration and universalist political hopes are tending to fall apart.

Due to the rise of biohacking, the overall process of an informatisation of life itself—which is, in turn, propelled by the informatisation of biological knowledge and technologies—is about to incorporate sections of the social world that extend beyond the traditional boundaries of academia and capitalist industry. As in hacking more generally [4], the moral visions in the biohacking [8,9] aka do-it-yourself (DIY) biology movement(s) [10] not only reveal broader contradictions, but at times offer critical perspectives and tangible alternatives to the ethico-political features of digital capitalism and to the overarching process of informatisation.

‘Biohacking’, however, is a notoriously ambiguous term: some biohacking practitioners and observers subsume to ‘biohacking’ all instances of use of modern biological and medical knowledge or technologies by groups and individuals who adhere to a hacker ethos as these take place outside the confines of academia and traditional capitalist industry. This, then, includes the DIY and artistic application of knowledge in genetics and biotechnologies [8,9] as well as experimental uses of a broad range of techniques for the modification of the human body [11]. However, these two sets of material practices have given rise to two distinct socio-cultural movements. While both are often called ‘biohackers’ (and in fact partly overlap with respect to practices and actor networks), their obvious differences have also given rise to distinct designations. While the former movement is widely known as ‘DIY biology’, the latter are designated variously as ‘grinders’, ‘DIY transhumanists’ and ‘cyborgs’.

In view of the Janus-faced process of informatisation and the similarly Janus-faced role of ‘hacking’ in digital capitalism, the present paper provides an overview on differences and commonalities between the two movements (‘DIY biology’ and ‘cyborgism’) by focusing on selected political, socio-economic and philosophical aspects. It is argued that, notwithstanding significant differences between the two movements, both exhibit a distinct coupling of late-capitalist subjectivity with a re-evaluation of self-created physical spaces [12] as loci of collective curiosity, with new visions of the commons in the digital era (as, for example, in the notion of ‘biocommons’), and with emancipatory notions of technoscientific progress, thereby situating technoscientific work between the realms of freedom and necessity in novel ways.

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