

# Introduction to Simondon

Gilbert Simondon was at the height of his philosophical creativity when, at the end of the 1950s, he wrote his two doctoral theses: 'Individuation in the Light of the Notions of Form and Information' and the complementary 'On the Mode of Existence of Technical Objects'. The 1965 essay 'Culture and Technics' represents the consolidation of the intellectual project developed in these earlier works and a programmatic restatement of its underlying political motivation: the formulation of a social pedagogy of technics aimed at the reintegration of technology into culture.

Already in 'On the Mode', Simondon had attacked the condition of contemporary culture as an ideological 'system of defence against technics', a symptom of the abstraction of human life from its material and technical environment. The purpose of this text had been to show that, on the contrary, the evolution of technical objects could be understood as a process of exteriorization of human biological functions, at once stimulated and constrained by shifting environmental conditions, and itself constitutive of the psycho-social domain in which norms and beliefs come to reinvest these biological functions with cultural meaning.

While in his main thesis on 'Individuation' Simondon had sought to elaborate a general ontology describing the functional overlaying of material, biological, technical and psycho-social systems and their evolution, in 'On the Mode', his analysis focused on the role of 'technicity' as a force of cognitive and, more broadly, cultural transformation intrinsic to tools, machines and technical assemblages. It is this implicit normativity of technics, its mediating capacity in the organization of the social system as a whole, that becomes alienated in a culture incapable of recognizing its own material conditions. As a 'system of defence against technics', therefore, Simondon believes that culture turns blind, if not outright resistant, to this crucial site of psycho-social invention, reducing technology to a set of neutral instruments at the service of a technocratic will or as a monstrous non-human double fomenting technophobic reaction.

Simondon does not define an alleged universal essence of technical objects, but rather their specific modes of existence in complex interactions with both the natural and psycho-social domains. Emphasizing their irreducible function as structuring mediators between humans and the environment, and between

individuals and collective, he rejects any social theory or psychology unable to account for the fundamental role of technics in the individuation of particular cognitive and cultural regimes. Individuation is a process which never determines a definitive state, but only a temporary resolution to a set of evolutionary instabilities. Technical objects and infrastructures, as much as organisms and ecosystems, are for this reason always subject to adaptive pressures. But technology is also special because of its quasi-autonomous form of agency in the refashioning of natural environments and societies to the logic of its own material efficiency, which is neither solely adaptive with respect to the environment in which it is situated nor merely instrumental with respect to the goals and designs of humans.

This synergy between environment, technology and culture can be relatively stable in pre-industrial societies, but is significantly disrupted with the mass reconfiguration of the social system around industrial production and the introduction of advanced control and communication technologies. Simondon sees his own age, that of Soviet collectivism, American capitalism and the Western European planned economies of the postwar period, as one in which culture, the normative expression of a particular human-technical milieu, is radically out of step with the actual technological conditions of these societies. The existential 'iron cage' of modern industrial societies is therefore not a natural outcome of social development but a default psychological by-product of the non-integration of these new conditions into culture. As a result of this non-integration, culture remains frozen in a pre-industrial posture of ideological closure and dangerously in conflict with the de-territorializing forces of contemporary technical systems.

The pedagogical programme proposed by Simondon aims at reversing precisely this condition of misadaptation. It is worth stressing that for Simondon an analysis into the mode of existence of technical objects reveals the inventive, anti-ideological and therefore anti-conservative power of technics when decoupled from the imperatives of productivity. The problem of technics is posed from the perspective of the historical conversion of the labour-form to the demands of productivity under advanced capitalism, along with the

corresponding reduction of technicity to labour. This conversion is not inherent to the technical system itself but is instead an ideological projection of our pre-industrial anthropological prejudices onto industrial and post-industrial technologies.

Simondon's argument in 'Culture and Technics' is framed in precisely these historical terms, extending the project of a reintegration of technics into culture from the more strictly ontological concerns of his earlier works to the broader dimension of the evolution of capitalist society and its possible transformation. The central aim of the essay is to substitute the superficial opposition between technics and culture with a deeper historical tension between pre-industrial and industrial forms of technical culture. Drawing on a distinction between closed and open social systems, first advanced by Bergson, and challenging the homeostatic model put forward by the cyberneticist Norbert Wiener, Simondon employs these two forms to designate the inner antagonism of the social system in its process of transition across the industrial-technological threshold. In a closed social system technics is fully integrated through its service of a local culture's particular ends, while in an open social system technics in the form of mass industry and distributed control and communications relays its psycho-social effects in a highly mediated manner and at a planetary scale. While the former tends to conserve the order of the social system, in the latter large-scale technical interventions produce delayed feedback effects that are never strictly calculable and that can disrupt the overall stability of the social system.

From this perspective, the opposition between technics and culture is an ideological conflict that arises out of the failure of the social system to institutionalize its own exposure to technological change and to the involuntary environmental and psycho-social effects that this change produces. In this vein, Simondon argues that in contemporary societies and at the largest order of magnitude, humans should be considered as 'technicians of the human species', because their interventions in the technical system are often returned to them in the form of environmental instabilities that require further techno-symbolic reconfigurations. But the danger, according to him, is that if these technicians of humanity are only either technocrats or cultural conservatives, then the political management of technological evolution will take the form of either passive adaptation or active ideological reaction. Central to his pedagogical programme, then, is the possibility of institutionalizing the openness of the technical system from

below, starting at the reprogramming of individual cognitive capacities towards collective processes of individuation that do not merely resist but invent and experiment in the human techno-symbolic milieu.

Simondon's position can be usefully contrasted with Heidegger's. Although Heidegger has often been caricatured as a technophobe, he shared with Simondon a belief in the ontological primacy of our embeddedness in a world of meaning-constituting practices and technically oriented affordances. However, by privileging manual craftwork and poetic creation as sources of existential world-disclosure, Heidegger's philosophy of technology essentially reproduced the normative framework of pre-industrial technical culture, if not the specific cultural anxieties of a rural petty bourgeoisie experiencing rapid modernization at the turn of the century in Germany. Heidegger in fact appears to advance a model of technological alienation in which automated production and calculation can no longer provide the allegedly unmediated relation to the environment (and between individuals) previously afforded in pre-industrial societies, thereby leading, in his eyes at least, to a planetary 'de-worlding' of human existence. Simondon would no doubt have agreed with Heidegger about the necessity for a radical counter-shift in our thinking. But rather than wait for a poet-philosopher, or worse, a poet-philosopher-king, to regather our sense of historical existence, Simondon asks for us, natural-born philosopher-engineers of the earth, to refocus our inventive potential (and responsibility) in the co-evolution of biological and technical systems.

Yet, almost fifty years since the publication of 'Culture and Technics', one might ask whether the development of global capitalism and the institutions that underpin it have not in fact encouraged a spontaneous reprogramming of the psycho-social domain in favour of a purely passive evolutionary adaptation to mass consumption, on the one hand, and technocratic management, on the other, thereby surrendering the space of politics to reactionary populisms seeking to re-territorialize culture against the openness of the techno-social system. What goes unsaid in Simondon is what ultimately explains this development: namely, the position of power taken for granted in his pedagogical project, and a certain faith in the neutrality of political institutions with respect to social antagonisms. The reintegration of technicity into culture, and a true politics of techno-social invention, must also include the de-neutralization of our political technologies.

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