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Book Review

Richmond, Sheldon. *A Way through the Global Techno-Scientific Culture.* Cambridge Scholars Publishers, Newcastle-upon-Tyne, 2020. 221 pp., ISBN: 9781527549227.

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"Plus l'homme est ignorant, plus son obéissance,
plus sa confiance dans son guide est absolue"
Qu'est-ce que la propriété? (Paris, 1840)
Pierre-Joseph Proudhon

Culture and Knowledge under the Technopoly Regime

In his most recent work, *A Way through the Global Techno-Scientific Culture*, published in 2020, Canadian philosopher Sheldon Richmond addresses essential questions of philosophy of technology and its inevitable political and social implications by characterizing contemporaneity under an autocratic regime marked by subordination to techno-scientific culture. For Richmond, favoured and guided by computer technologies, techno-scientific culture has gradually become predominant since World War II.

Although his book consists of eight parts – the preface, prologue, six chapters, and epilogue – Richmond dispenses with linearity in the reading of his work. Instead, as in a diagram or a mosaic, where components assume autonomy of meaning, the philosopher suggests that his readers establish their criteria, that is, orient themselves by their interests in exploring the work. This approach ensures a dynamic quality of the work. Nevertheless, the subjects treated oscillate around two central axes, maintaining an internal coherence in the sequential structuring adopted or provided by the author. From the preface to the third chapter, "Culture", Richmond discusses the main problems identified with the enormous contemporary technological sophistication. Thus, for example, in the first chapter, "Mystique", and the second chapter, "Knowledge", the philosopher discusses the manipulation of the sense of reality and the subsequent disintegration of stable experience of knowledge derived from what he has termed the "mystique" of computers. With the

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characterization of the conditions that in his understanding pervert the present, threatening humanism and humanity, the author then provides a path, a proposal for the reform of society.

It is with this perspective, that is to say, of proposition and confrontation, that between the fourth chapter, "Dialogue", and the epilogue, Richmond approaches the expedients he believes indispensable to break with the mystique and the oppressive authority of the technocratic elite and then establish a genuinely democratic relationship in the promotion of information/computing technologies. Thus, in the fifth and sixth chapters, respectively, "Philosophers" and "Criticism", the author suggests a transversal posture that prioritizes dialogue and cultural exchanges. This openness allows a type of learning guided by the dialectics of argumentation and individual experience or otherness marked by appropriations, approximations, and exchanges. Supported by Karl Popper and Michael Polanyi, Richmond seems to defend a more accessible and more exploratory interaction of subjects with computer technologies. He defends, thus, subjective experience and the dispensation of intermediaries or authority figures – and constraints – that advise the actions with the machines. Richmond's project resembles that of the Brazilian educator Paulo Freire in his training proposal through praxis. However, in Richmond, it is through the private posture of criticism – conjecture and refutation, hypothesis and falsifiability – that institutions and society can be reformed.

In his beautiful and thought-provoking book, Richmond points out that some of the central or most popular questions concerning the development of computer technologies are but an expression of mystique. These questions are doubts about the superseding of human intelligence by artificial intelligence, the possibility of the emergence of consciousness in and of machines, questions about the ethical nature or otherwise of eventual independent behaviour. Moreover, appropriation and/or anthropic projection, the habit of conferring human meanings to inanimate phenomena or entities, for example, to technology instruments, further serves as a stimulus to alienation. For the author, despite the effort to formulate a kind of metaphysics of machine, which hinders the free interaction of the "techno-subjects" – the ordinary users – with the apparatus, computer technology remains an object creation, artificial, with the purpose to supply human insufficiencies.

Among the concepts employed by Richmond, some are particularly important in his analysis and understanding of contemporary techno-scientific culture, namely, "techno-elite," "techno-subject", "technopoly" (taken from Neil Postman [1992]), and "mystique". According to the philosopher, the mystique is part of the exercise of "technopoly" power and characterizes the "techno-elite" within the technocratic regime. Mystique derives from and constitutes a broader process of domination and exclusion. Richmond names the "techno-elite", a privileged caste of techno-scientific culture, those with technical expertise and control over the distribution of specialized knowledge. The philosopher identified the autocratic and absolutist regime through which they rule with a "technopoly" or a monopoly over technology, its uses, functioning, and knowledge. By controlling information and knowledge, the mystique promotes naturalization of the difficulties in handling computer technologies by the "techno-subjects". In this way, it reinforces the power and authority of the "techno-elite". For Richmond, techno-subjects or ordinary users often believe that experts carry a tacit, and therefore private and non-transferable, knowledge that determines their privileged caste position. In reality, the technology elite – the experts, the technicians, the industry professionals – thrive and secure their power precisely on alienation from the workings of machines and, in particular, computing tools. The "technopoly" thus regulates the economy of knowledge.

Under the regime of "technopoly", the philosopher adds, everyday dependence is created while the subjects or "techno-subjects" are alienated from the inner workings of the computing machines. Knowledge is denied and restricted, and in this way, the mystique surrounding the devices acquires reality. The contemporary technocratic regime operates a

new kind of colonialism: technological colonialism. Alongside the imaginary and the customs, the Western expansion on the global periphery is renewed and updated. In this case, through the almost generalized use of information and computing tools, this situation was accentuated during the pandemic and the consequent adoption of social isolation and remote work. However, as we know, the novelty of this story is only apparent. During the 18th and 19th centuries, industrialization in Central Europe stimulated the predatory search for raw materials in regions such as Africa and Latin America, establishing a circularity: they became suppliers without any right to redress and, later, lay consumers of inputs billed abroad. The current crises in the semiconductor and energy industries exemplify this complex web of interdependence that shapes the daily relations of individuals and groups of people, companies and nations. Moreover, their regulation imposes a complicated geopolitical and diplomatic adjustment – as seen, among others, in the renewed conflicts between the US and China, which affect almost all countries – and does not respond solely or strictly to technical and/or industrial issues.

The issue of connectivity and inequality of access is complex, even for experts and scholars. In November 2021, a report by the *International Telecommunication Union* (ITU),[2] reposted on the UN website, pointed out that about 40% of the world's population, almost 3 billion people, have never used the Internet or any other modern information device. A significant portion of the invisible people does not correspond to Richmond's illustrative scheme, namely, the "techno-elite" and the "techno-subjects". Despite effective technological dependence, distant areas in developing countries and rural regions remain apart from the realities of the big centres. In these spaces of absence, mystique acts even more intensely. It is fed while it disseminates and crystallizes the policies of neoliberalism, which transforms knowledge and access to technological goods into mere consumer relations. The promotion of connectivity warehouses to serve the almost 3 billion invisible people, by itself, that is, in an uncritical way and without articulation with other structural measures of inclusion – the fight against poverty, higher-quality public education –, only favours the increase in power of the "techno-elite". To the invisible people, the only thing left is subjection as new "techno-subjects".

The expansion of technopoly affects local culture and knowledge by imposing new patterns of behaviour and thought in an illusion of global integration, which erases ethnic specificities and then operates a homogenization of behaviours and identities. Technopoly works through ethnocide. Therefore, techno-scientific sophistication threatens not only humanistic values – already questioned before with Nietzsche and Heidegger – but the very constitution of humanity. Automated systems replace the labour force of men and women to the same extent that spaces of sociability and interaction are displaced to virtual agoras. This movement establishes not virtual reality, but virtuality considered the real. This conception is the proposal of a "metaverse", for example. In this sense, says Richmond, the contemporary presumption that is diagnosing metaphysics' death is mistaken. There is a detachment: from man to machines, namely computing technologies. The mystique gives a metaphysical and absolute character to computational instruments. In this process, the mystique of technology replaces the mysteries of nature.

In mystique, therefore, symbolic and material aspects are articulated. Richmond points out that mystique also includes elaborating a particular technical language – such as jargon in art – whose decoding acts as discrimination of class identities since its content is often inaccessible to ordinary users, to non-specialists. This movement is yet another expedient in the historical relationship between the dominated and the oppressors. However, Richmond avoids employing traditional Marxist classifications. Although he mentions Marx and uses the

[2] Link to the ITU report: https://www.itu.int/en/mediacentre/Pages/PR-2021-11-29-FactsFigures.aspx. Link to the report on the UN page: https://news.un.org/en/story/2021/12/1106862. Accessed on December 05, 2021

term "revolution" nine times throughout the book, at no point did the author admit to a more profound or structural political and social sense. Instead, he preferred to adopt qualitative terms less laden with ideological connotations, such as "reform", "change", and even "radical transformation of society". In reality, the Canadian philosopher relies on the division elaborated by C. P. Snow in his well-known work Two Cultures, published in 1959, in which the chemist and writer schematizes Western history and thought utilizing two predominant, distinct and irreconcilable cultures, namely that of the natural sciences and that of the humanities.

With C. P. Snow, Richmond intends to demonstrate that economic status does not determine social or caste status within the techno-scientific culture, nor does the expertise that defines the expert depend on formal, academic education since rich and poor alike are equated by identical inability and frustration in the handling of sophisticated computer technologies. Thus, the dissatisfaction with computing instruments does not stem from a supposed natural intellectual inaptitude identified with particular social groups, nor from a timid and constrained individual posture. Instead, the recognition of belonging to the "techno-elite" or the "techno-subjects" is more complex and nuanced. Supported by Snow, Richmond says that the distinction arises from different conceptions of the world, that is, if guided by humanistic values – of attention to eminently human needs and, therefore, erratic and sensitive – or by a post-human ideal of behaviour, of aspiration to technical objectivity guided by the automation of behaviours and reflection, in which all criticism and objective knowledge are dismissed. The inclination between one or the other will determine the continuity of the human species.

The programmatic sense with which Richmond exposes the crisis of contemporaneity – the elimination of the human through the adoption of an automaton behaviour, based on an ideal of technical objectivity; and the annihilation of all truth content of knowledge and, thus, the elimination of knowledge itself – nevertheless maintains an optimistic character. Alongside individual interaction as a means of acquiring indispensable technical knowledge, Richmond proposes a return to the Socratic method as an alternative to the monopolistic control of techno-scientific culture. Only through democratic debate, accessible to all and open to dissent, would it be possible to establish an effectively humanistic system within the technopoly regime. In other words, by valorising liberties based on a "techno-plurality". However, more than the mere democratization of equipment and access, it becomes fundamental to create self-management mechanisms to maintain the means and technological knowledge, that is, its popularization. Unlike democratization, popularization allows the "techno-subjects" to assume – through dialogue and criticism – the individual and collective autonomy that is indispensable both for the interaction with technologies and to produce techno-scientific knowledge.

The central question posed by Richmond in his work consists, therefore, in the search for a form of democratic modelling of social institutions that can restore the material dimension of computer technology and, thus, of breaking the circularity of mystique. For the Canadian philosopher, the most efficient administration of the knowledge economy must contemplate the plurality of perspectives and abilities and provide the free enterprise of criticism. With the radical transformation of society and managing information and/or computer technologies, knowledge is rescued, and humanity is preserved.