



Artificial intelligences and political organization: An exploration based on the science fiction work of Iain M. Banks

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ABSTRACT

This paper, using science fiction as a heuristic support for exploring technical potentialities, is based on part of the works of Iain M. Banks, the novels of the “Culture series”, in order to examine the role of artificial intelligences and the effects they could have on the life of a community from a political point of view. This series of science fiction novels portrays a galactic civilization based on anarchistic principles in which intelligent machines are largely responsible for managing the tasks linked to the handling of community affairs, thus freeing up the population to pursue more spiritual or fun activities. The first part of this paper shows that beyond the elements included in the stories, the Culture novels can be a way to address political questions that are raised by the widespread presence of highly evolved machines in the organization of a society. The second part, which takes into consideration the supposed founding principles of this civilization, examines the anarchist thought in order not only to display the correspondences between this thought and the vision of Iain M. Banks, but also to show that the various anarchistic currents are in a way outdistanced by the emerging challenges posed by these novels. The third part, written again from a political standpoint, attempts to establish more concrete connections, based on discernable evolutions in computerization or automation of technological systems, which seem to be working their way into a growing number of social processes and their regulation.

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1. Introduction

Through analyses combining a literary perspective, political theory and forward thinking, the objective of this contribution is to test a hypothesis that sounds like science fiction, but could go beyond science fiction itself. This hypothesis is based on part of the works of the Scottish writer Iain M. Banks, notably the “Culture novels”, and the social organization that is described in these works. This series of novels portrays a galactic civilization ruled by anarchistic principles in which problems of shortage are overcome and power structures seem to be dismantled. In this civilization called the Culture, artificial intelligences or “Minds” are responsible for managing the tasks linked to

the handling of collective affairs, thus freeing up the population to pursue more spiritual or fun activities. The type of social organization described by Iain M. Banks in his novels¹ exists mostly because of the protective support provided by these artificial intelligences.

If this hypothesis is considered beyond a literary point of view, could it help to conceive the role that “intelligent” machines, or at least highly evolved ones, might play in social and political organization? How could these machines be integrated into collective life? How far would their inclusion go concerning their ability to modify institutional workings? In the civilization model of the Culture, certain ontological distinctions have disappeared, since these entities behave like people and are treated as such.

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¹ An explanatory essay from the author is also available on the Internet (Ref. [1]).

Vessels and space stations have their own “Minds” that make their own choices. In a way, these “conscious” and “sensitive” machines, which are much more intelligent than humans, “are” these spacecrafts. They are the reflective backbone of the Culture, which in fact they control more than they actually live there.

If we follow the vision of Iain M. Banks, the development and the widespread presence of these artificial intelligences have disrupted the political system, and even the conception of politics. This would be a very specific application of anarchistic principles. The author has indeed created an organized world in which the plan to replace the government of men with the administration of things has been carried out, thanks to artificial intelligences and limitless material wealth and energy. In this model, there would not really be any political choices left to be made.² Difficult decisions brought about by resource allocation problems would have no reason to be, or at worst could be resolved using enhanced processing power. Abuse of power would not really be feared, since power would in a way be allocated to these artificial intelligences, which, constitutively, would have risen above these challenges (or in any case, for who this type of temptation would be senseless).

In the work of Iain M. Banks, these elements are not simple elements of science fiction scenery: they play an important and intimate role in the stories. Going beyond literary analysis, they can be used as a basis of questioning regarding the possibilities of “social” regulation without direct human intervention, or more precisely, with the mediation of machines evolving towards a form of artificial intelligence. This contribution will also be a way to test up to what point and on what basis such a hypothesis can hold up. Can advances in computer technologies lead to re-imagining the possible ways societies can be regulated?³ If so, to what extent? What is left of politics when it becomes dependent on computer systems that are more and more advanced?

It is difficult to answer these questions without finding (and it is also one of the challenges of this article) how to initiate a discussion about techniques which do not exist in practice, or which exist only in a potential state. The solution proposed here is to consider future-oriented fictional works as heuristic media.⁴ More precisely, works of science fiction can be taken both as a reservoir of thought experiments and as forms of problematizations (in the sense of Michel Foucault). These works may not have been conceived as thought experiments, but the majority of them can be considered according to this model, in particular by providing hypotheses to work with (What if...?). Science fiction can be considered jointly as a way to problematize not only developments in the field of science (if one remains attached to the name of the genre), but also, and perhaps above all, more or less direct consequences on

social and political systems. In the manner of Michel Foucault,⁵ these problematizations can be conceived as ways for thought to seize objects which have a relatively new appearance. To be more precise, they may be ways to examine conditions of possibility and function so that between the beginning and the end of the work of fiction, the representation of a question is changed. In the case of a literary work, these problematizations may also merely be the rearrangement of diffuse representations more or less consciously taken up by the author.

Reconsidered in this manner, the fictional material can find methodological support to also become a medium of knowledge, even if its content may seem very detached from reality. On the subject at hand, it can consist in identifying narrative situations in which the reader can see these “artificial intelligences” operating. These representations are scattered, but their combination is expected to draw a relatively coherent configuration,⁶ with the added benefit of intellectual freedom enabling to go beyond the question of the (largely artificial) borders between what is technical and what is political. Even if the envisaged technologies are still hypothetical, potentialities can thus be actualized, not in reality, but in a fictional construction (which can happen to create effects of reality). Treated as a form of problematization (also with its share of reactivation of more or less ancient myths), science fiction can then be more easily related to other forms of problematization, such as those which are available in political or philosophical reflections, or those which weave the discursive accompaniment of technical developments.

To progress in this type of questioning, it is no longer possible to maintain a vision of machines from the last century. That would mean misunderstanding the challenges that might come up in the more or less near future. It is necessary to “take out the notion of machine from an industrial conception”, to quote an objective set by Frédéric Vengeon in a syllabus from the *Collège international de philosophie*.⁷ And above all, it is necessary to restore not only the mechanical nature of machines, but also the digital one.⁸

In fact, this evolution of machines appears to generate important consequences. For a long time, humanity has

⁵ See Ref. [16].

⁶ From a methodological point of view, familiarity with the author's work helps, but it is usefully supplemented by the collection of the positions he has taken up and what is concerning the “paratext” (See Ref. [18]).

⁷ See Ref. [42].

⁸ As a first approach, we could start by examining the characteristics identified by Dirk Nicolas Wagner: “In essence, a rough portrait of today's machines could be painted along the following lines: At an accelerating pace, machines are becoming more and more powerful. Indicative of this process is Moore's Law, which states that the power of processors doubles every 18 months while cost remains the same. Increasingly, computers are becoming social artifacts rather than mechanical objects. The functions executed by machines are becoming ever more important. To an increasing degree, computers are influencing the entire environment physically, economically, and socially. The way machines take over different functions is changing. Rather than machines directly manipulated by humans, more and more complex tasks are being delegated to them. Machines no longer act in isolation but are interacting with humans and with other machines. The Internet provides a common global infrastructure that is open to any actor – human or artificial” (Ref. [44]).

² See Ref. [8], especially p. 632.

³ Which can lead to conceiving computer algorithms, “artificial intelligences”, etc., as being “actants” also likely to be integrated into the “collective” and participate in it more or less actively, if we use the terms and perspective proposed by Bruno Latour to re-integrate non-humans into sociological analysis. See for example Ref. [28].

⁴ See Ref. [38].

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