Philosophy in Review

Luciano Floridi, "The Logic of Information: A Theory of Philosophy as Conceptual Design."

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Luciano Floridi. *The Logic of Information: A Theory of Philosophy as Conceptual Design*. Oxford University Press 2019. 272 pp. $39.95 USD (Hardcover ISBN 9780198833635).

Floridi, in his Preface, warns the reader: 'This book will require not only graduate-level knowledge of philosophy, patience, and time, but also an open mind. The last three are scarce resources' (xiv). One can't do much about the scarce resource of open-mindedness. Having an open mind, I think, is too much to expect from a reader. As Floridi states, according to his 'maker' epistemology (in chapter 2), every section, but especially the third section, 'The Maker's Knowledge Tradition' (35-38), and fifth section, 'Minimalism' (39-41), everyone works with mental models to generate expectations and predictions. (The philosopher-psychologist Kenneth Craik, not mentioned by Floridi, argued for the hypothesis of mental models, in his book *The Nature of Explanation*, Cambridge University Press 1943.) When predictions are falsified, we have the choice of viewing those false predictions or countered-expectations, as exceptions.

However, the reader and reviewer can do something about the other two scarce resources, patience and time. The impatient reader with little time on their hands can justly ask, given the Pareto principle of the 80/20 rule: which 20% of the book covers 80% of the content or message of the text? My answer is, read the Preface and then skip to the Afterword. However, grasping the key idea of the book is an even quicker way than using the Pareto principle to obtaining an overall Gestalt of the book, or a mental model of the book to use Floridi's own theory of mental models. Indeed, the key idea of the book, mental models, unlocks the book in no time. Mental models are simulations of reality, of what we want to understand, of what we want to know as the answers to our questions, including the open-ended, ultimate questions of philosophy. I think I can demonstrate by example the whole book by considering the question: what expectations does the title of the book generate in the mind of the reader? What mental model, what question answered by the mental model, is stimulated by the title of Floridi's book?

What logic can information have? That is the question that popped up in my mind on reading the title of the book and that became part of my mental model of the book. According to Floridi, the logic of information is basically the logic of design (not merely *conceptual design*, as stated in the subtitle, but design as such, the very core of design that applies to everything designed, all systems, and even natural systems where design is not of humans or of gods, but of nature as a consequence of the accidental and incidental but connected happenings.) Moreover, the core of the logic of design reduces to the logic of requirements. That is about 10% of the book since it is discussed in the last chapter of ten chapters, excluding the Preface and Afterword. More exactly, the logic of design as the logic of requirements is discussed in chapter 10, the third subsection titled, 'The Logic of Design as a Logic of Requirements' (197-204), comprises seven pages out of 205 pages of text excluding the Preface (ix-xv, that is six pages) and excluding the Afterword (207-213, that is another six pages). But one could fairly ask, is the book really just about the logic of requirements?

Suppose the logic of information goes beyond the logic of design or requirements. Suppose the logic of information includes the logic of knowledge: then is the book about the logic of knowledge, about how knowledge is structured from the perspective of the mathematical and computational theory of information? I think the book is just that: an answer to the question: how can we restructure both epistemology in specific, and philosophy in general, from the perspective of the mathematical and computational theory of information? That is not so far-fetched: Shannon the inventor of the mathematical theory of information did write a classic paper on the Turing machine (the basis for the architecture of digital and informatics technologies such as computer processing,

applications, storage, and computer algorithms) as requiring a two state system ('A Universal Turing Machine with Two Internal States,' in Shannon, Claude Elwood, Herman H. Goldstine, John McCarthy, and W. Ross Ashby (eds.), *Automata Studies*, Princeton University Press 1956, 157-166).

Here, then, is my mental model of Floridi's book: Floridi's book is about the *logic* of information in a broad sense of logic as an intellectual structure or an intellectual architecture for information as the basis of epistemology and philosophy. But then, one can also fairly ask, is Floridi's title misleading? Given Floridi's title for the book, one might expect a book about logic in the sense of formal, symbolic logic as applied to information. Whereas, the reader of large chunks of the book finds that the book is not that at all. Rather, the reader finds that Floridi unexpectedly provides a very broad theory of the architecture of information. Moreover, the reader finds that Floridi provides an architecture of information as a means for redesigning epistemology and philosophy. Instead of a technical book in logic, we have a somewhat technical book, or rather a book that uses technicalities, and analytic philosophy argumentation, as a flagship book pleading for a revolution in philosophy, or as Floridi titles the Afterword, 'Rebooting Philosophy.'

However, for the general reader of large chunks of Floridi's book, the book might appear just as another work in the core of contemporary analytic philosophy. Floridi's chapter 8, 'Logical Fallacies as Bayesian Informational Shortcuts,' is definitely a case-example (a model/paradigm) of hardcore analytic philosophy done to show how some well-known fallacies committed by those not exposed to a basic course in Scholastic Logic, let alone formal symbolic logic, namely, *affirming the consequent* and *denying the antecedent,* are useful as cognitive shortcuts if treated probabilistically. For the scholarly reader interested in the history of philosophy, one finds erudite discussions of Plato, Kant and Hegel. Also, for the scholarly, historical reader one finds in Floridi's book a sympathetic discussion of J.F. Fries, Leonard Nelson, and Karl Popper. Though, for hardcore analytic philosophers who are readers of Floridi's book, who think that the history of philosophy is the history of analytic philosophy, Floridi more expectedly discusses some of the members of the Vienna Circle, such as Mortiz Schlick and Otto Neurath, in the third section, 'Non-naturalism and the Foundational Problem in German Speaking Philosophy' (119-122) of chapter 6. However, those analytic philosophers, who think that Bertrand Russell and G.E. Moore banished forever the serious consideration of British Idealism as having anything other than mystical and literary value for the fuzzy minded, might be upset with the fourth section, 'Coherentism Naturalism, and the Refutation of Scepticism in British Philosophy,' in chapter 6. Floridi discusses F.H. Bradley, among others, with the same amount of respect as he discusses Russell and Moore, in the very same section.

For those analytic philosophers who want exactness, formalism, and sharp distinctions, there is Floridi's attempt to refute radical, Pyrrhonian scepticism. Floridi presents a so-what argument: if the informational content of brains in vats cannot be told apart from the informational content of ordinary brains in the heads of people (or for that matter, artificial brains in computational devices), so what? No informational difference means that radical scepticism has an immaterial result to the test of the difference between the hallucinated, imagined, artificially created, and the supposedly real. But I have simplified Floridi's argument against the radical sceptic, and skimmed over his useful and important exactness in the sixth section 'Possible Worlds and Borel Numbers' (126-130) and his discussion of the 'Hamming distance' in the seventh section, 'The Edit Distance as a Modal Metrics' *(*131-135*)* of chapter 6. My point about Floridi's extensive scholarship, heavy dose of analytic philosophical discussion, his exactness, and formalism, might seem to counter the mental model that I propose for the book as arguing for a new design for philosophy. Floridi's book might seem to be just another book in mainstream analytic philosophy; nothing very revolutionary. I think, despite

appearances, that Floridi is trying to revolutionize philosophy from within the mainstream, and here is how.

The purpose of the fine-tuned argumentation in Floridi's book is to herald, and more importantly to show, the path to a revolution in philosophy. Walking along the revolutionary path, philosophers ask and answer questions of ultimate importance of the main condition of our world these days: the information age where digital technology has transformed everything. Floridi, as did the British Idealist, R.G. Collingwood (not mentioned by Floridi along with the other British Idealists he discusses), teaches us that philosophy will go astray if philosophers do not ask fundamental questions required to understand and interact with the conditions of our times. Floridi asks 'What can enable humanity to make sense of our contemporary world, respect it, and improve it responsibly, and hence help in solving 'the most important problems'? The answer seems quite simple: a new philosophy of information' (211). Collingwood, 95 years antecedently, asked: 'all thought is for the sake of action, and … everyone who offers us a philosophy must answer the question "what shall we do to be saved from … present distresses?" This book does not profess to give an answer ready-made' (*Speculum Mentis or The Map of Knowledge*, Clarendon Press 1924, 35). However, one might challenge, in Collingwoodian fashion, Floridi's plea for a 'new philosophy of information:' What does Floridi's new philosophy of information tell us to do about our 'present distresses,' the transformation of humanity into peripheral devices, or 'inforgs' (as Floridi calls the state of humanity now)?

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