**Franco 'Bifo' Berardi *AND: Phenomenology of the End***
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Franco Berardi is an influential figure in the world of the arts, part of the radical protest movements in 1960s Italy, and currently teaches the social history of communication at the Accademia di belle Arti in Milan. A Marxist theorist and activist in the autonomist tradition, he worked extensively with Félix Guattari on schizoanalysis, and within this book draws upon the philosophical thought of Gilles Deleuze, Jean Baudrillard, Michel Foucault, Martin Heidegger, Slavoj Žižek and Jean Piaget. Those familiar with Berardi's work have criticised this book as overly repetitive of earlier ideas, but as a first time reader this offered an opportunity to engage with a contemporary overview of his work. Engaging with the dense and rather obscure language presented in the text was rather like watching *The Matrix*, requiring multiple single readings to gain understanding, offering new insights each time.

*AND* focuses upon the media, technology, post-industrial capitalism, digital connectivity, alienation, over-stimulation and automation. The phenomenological approach assumes that we cannot know or understand everything in totality, unlike Galileo (24), who thought the formalisation of all knowledge was possible. He provided the starting point for those seeking to 'digitise' communication by numbers, although "… political power has never actually been able to control the entirety of social relationships, and reason has never been able to reduce the infinite complexity of reality to knowledge." (258).

Berardi compares technological changes with biological mutation: meaning had been created through language, but has now been invaded by the machine (164), which is causing pathological effects as the digital and organic interface. Modern malaises including ADHD, panic and dyslexia are described as the result of this (41), with the connection between man and machine limited by organic factors (186), and humans able to construct meaning between each other in a way that computers can't replicate (35)

One of Berardi's key theses is that we are moving from an age of conjunction to an age of connection. Conjunction offers a collective subjectivity, a 'community of desire, not of necessity', in which meaning is co-created through interaction and interpretation, and each meaning is an unrepeatable event, particular to a moment in space and time. In connection, control is asserted by the rules of the game, where functional interaction, compatible interchangeable elements with finite possibilities leaves no margin for ambiguity or nuance in messages. In a digital environment "only what fulfils the standards of compatibility can connect, meaning that certain elements will be unable to connect to others," (25) leading to questions as to what happens to the discarded parts.

As the book questions whether we are in an age of revolution, or merely disruption, it considers past disruptive technologies, including artistic perception, the invention of the printing press and the light bulb. In the past, in a capitalist society, so long as the body kept working, the mind could be free, but in our post-capitalist society, the mind is under constant strain and use, and can't cope. We are now defined as being in a semiocapitalist society, on the brink of collapse due to mental over-stimulation, where 'human reason is exhausted' (38). As information has become too much for any individual to process, we are

relying more upon algorithms, which don't offer a conscious choice. We don't have time to think things through, and make decisions in an increasingly automatic way, with no time to extract meaning and pleasure from the experience (43-44). Marx (184) viewed "knowledge as an instrument for changing the world", but we now just do not have time to think. Even within the university, academic research has become part of the production machine, no longer at the service of society, but at the service of the economic machine, with little space for intellectual freedom. Open sources practices are seen as part of the resistance (194), a resistance that Berardi identifies as futile, as technological innovation "reshapes our social environment, empowering those who adhere to it, and cutting off those who resist it" (314).

Berardi offers particularly interesting insights into Puritanism in American history, as a religious movement which sought to strain out 'past identities', and 're-formatting' was essentially 'an experiment in digital language' (69). Binary choices were presented in good/evil, light/darkness, etc., and sermons were epitomised by lucidity and rationality (124). We see similar language in Berardi's discussion on futurism (168), in which he discusses the annihilation of the past, and the focus on the future, and art that becomes abstract because it can't depict the 'horrors of reality'. Puritan art couldn't depict anything in heaven above, or on earth below, so was limited to what was within the imagination, paving the way for 'digital perfection'. Now, as Baudrillard states "reality itself was being confused with its image", as we see in dystopian films such as *The Matrix* and *Cloud Atlas*, and as the visual crosses borders. Porn and drugs are part of the response, with a desire to disconnection from society as a means of coping, taken to the extreme in Japan with Hikikomori with over 700,000 shut away in their rooms, detached from the physical world (104). The artist is described as disruptive (196), because the artist speaks the language of conjunction, the engineer speaks the language of connection:

> "When the engineer is linked to the artist, he produces machines for the liberation of time from work and for maximum social usefulness. When the engineer is controlled by the economist, he produces machines for the entanglement of human time and intelligence with the iteration of the maximization of profit, and the accumulation of capital." (198)

It is not clear whether Berardi was indicating that the body is part of the digital process or not, as the 'cognitariat' separates 'virtual activity from bodily existence and communication' (144). The visualisation of language, however, "changes the bodily conditions of life and of communication, but does not eliminate bodily existence" (190), and only by passing through experience do people develop (300). A concern with the sexualisation of the body, especially women's bodies, is evident, including the sexualisation of the body, the development of the burqa, the latest generation deprived and depleted of the presence of the mother by precarious working practices, with children being looked after by nannies as they 'spend more and more of their time interacting with screens' (241) – the classic language of 'moral panics'. The importance of language in creating meaning is identified, noting that although money and language are both nothing but symbols, both have the power to persuade (156), as people try and make their understanding of technology fit the old models that they understand.

Berardi feels that a high price is being paid for being part of the machine, with a focus on productivity, and an 'intensification of the rhythms of work' (110). Technology has increased our productivity, but that time has been captured and subjugated to work, as we have become slaves to the machine, under the forces of capitalism (303-305). Capitalism has also created 'precarious labour', in which businesses can buy 'packets of time' from workers, without being obligated by the social protection of the worker (205), producing a feeling of scarcity, a sense of competition, leading to less solidarity and sharing than previously existed (174).

*AND* offers challenging and disturbing questions from a rather dystopian perspective. Berardi ends with the expectation that humans can expect to be subjugated by AI, and that in order to feel a sense of 'illusory belonging', people will cling to nation, religious faith or ethnicity. To create meaning requires time, he says repeatedly (162, 277), and that's certainly what it has taken with this book, with repeated readings, and is undoubtedly something that is in short supply in our digital economy, where it is easy to become slaves to machines.

Dr Bex Lewis is passionate about helping people engage with the digital world in a positive way, where she has 19+ years of experience. Trained as a mass communications historian, her PhD undertook a Foucauldian analysis of Second World War British propaganda posters. She is currently Senior Lecturer in Digital Marketing at Manchester Metropolitan University, and Visiting Research Fellow at St John's College, Durham University, with a particular interest in digital culture, and how this affects the third sector, especially faith organisations. She is Director of social media consultancy Digital Fingerprint, and author of *Raising Children in a Digital Age: Enjoying the Best, Avoiding the Worst* (Lion Hudson, 2014).