

Protocol

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The subtitle of *Protocol* is ‘How Control Exists After Decentralization’ which is the question Galloway sets out to answer in his book. Previously the issue of control has been dealt with extensively by Foucault and Deleuze. Foucault addressed the central control in sovereign societies of the classical era followed by the decentralized control of the disciplinary societies of the modern era. Deleuze continues where Foucault has left of and states that with the advent of new technologies such as computers we are now living in societies of control. These societies are defined by neither central control nor decentralized control.

Inspired by Gilles Deleuze's ‘Postscript on control societies’ Galloway continues on theorizing this “third historical wave by focusing on the controlling computer technologies native to it.” (Galloway, 2004: p. 3) He admits that “periodization theory is an analytical mindgame” (Galloway, 2004: p. 27) but it helps in analyzing control in different societies. He argues that our current apparatus of control is made possible by the diagram of the distributed network, the technology of the digital computer and the management style of the protocol. So after the era of central control and the era of decentralized control we are now living in an era of distributed control which is made possible through networked computing and is being regulated through protocol.

The ubiquitous example of the distributed network is the Internet which is an enormous distributed computing network connecting millions of computers: “a network of networks.” (Galloway, 2004: p. 38) The Internet was originally designed to withstand a nuclear attack meaning that there cannot be any centralized hubs in the network. Instead the network had to be independent of centralized command and control. This often leads to the perception that the nature of the Internet is chaotic and anarchic. However a distribution of

command and control does not mean that there is a lack of control: "I argue in this book that protocol is how technological control exists after decentralization." (Galloway, 2004: p. 8).

His approach to this question is an alternative one compared to previous approaches of the Internet: "This alternate path recognizes the material substrate of media, and the historical processes that alter and create it. It attempts to chart what Manuel DeLanda calls *institutional ecologies*." (Galloway, 2004: p. 19) and "to look at a material technology and analyze its specific formal functions and dysfunctions." (Galloway, 2004: p. 18) This material approach of network protocols is the focus of the first chapter. By seeing the network as a material technology as "sites of variable practices, actions, and movements" (Galloway, 2004: p. xiii) Galloway wants to move away from the use of the network as a metaphor. He takes on a rather Marxist approach in trying to discover the inner workings of the current dominant diagram of the distributed network by peeling away the covering layers:

"The unmasking of the inner workings of the commodity in Marx is the kernel of his entire work," Galloway says, "and people have used that in a method in everything from feminism unmasking the kernel of patriarchy, to film theory unmasking the inner working of the apparatus of cinema. So I'm trying to do a similar thing by unmasking the inner workings of computer networks." (Halter, 2004)

Galloway studies the Internet as the current biggest and prime example of computer networks. The Internet is being regulated through computer protocols which are written down in Request For Comments. The two most important protocols of the Internet are TCP/IP and DNS and these also illustrate the dual nature of protocol. The TCP/IP protocol suite actually consists of two protocols, TCP and IP. TCP is responsible for the monitoring of the transport of the data and IP for the routing and fragmentation of the data. A computers connected to the Internet has an IP address which consists of numbers. The DNS protocol is responsible for translating (easy to remember) domain names into these numerical addresses. A domain name consists of a top-level domain and one or more subdomains and the resolution of the domain name works with the same

hierarchy. The qualities of TCP/IP facilitate peer-to-peer communication and make it a distributed technology in sharp contrast to DNS which is highly hierarchical and decentralized: “one protocol radically distributes control into autonomous agents, the other rigidly organizes control into a tree-like decentralized database.” (Galloway, 2004: p. 53)

TCP/IP and DNS and other RFCs form the main body as his object of study. He looks at the code of protocol as “*one reads any text* (the former having yet to achieve recognition as a natural language), decoding its structure of control as one would a film or novel.” (Galloway, 2004: p. 20) Film scholars see movies as texts that can be interpreted but the text of protocol is *against interpretation*. It allows encoding or decoding of values but it does not allow transcoding. According to Galloway this means that the focus should not be on the meaning of protocol but on the (im)possibility of protocol. This critical approach with an eye on the political conditions remain important throughout the whole book.

Galloway moves from the material layer of protocol to the formal layer of protocol thus moving from a technical level to a social level. In this formal approach protocol is defined as a special type of object: “Protocol is a universal description language for objects. *Protocol is a language that regulates flow, directs netspace, codes relationships, and connects life-forms.*” (Galloway, 2004: p. 74) Thus protocol not only regulates technology but also life and the body. In our current era life has become matter, code, that is being regulated through protocol which has political implications. According to Galloway “[...] protocol always appeals to the body [...] it always operates at the level of desire, at the level of 'what we want.' ” (Galloway, 2004: p. 241) However, in order to connect to the network we must abide by protocol which illustrates protocological control. Protocol functions as a controlling power because of a constant dialectic tension between it's democratic horizontal nature and it's highly regulated vertical nature. This is also visible in the institutions where protocol has emerged. These rather bureaucratic institutions, which are open and democratic, achieve standardization of protocols through a process of agreement.

So if protocol is our current form of control how can we resist it? Protocol allows nodes to connect to the network and “Only the participants can connect, and therefore, by definition, there can be *no* resistance to protocol (at least not in any direct or connected sense).” (Galloway, 2004: p. 147) Connecting to the network means participation which automatically means abiding by protocol. Since protocol is a technology of inclusion there no longer is an outside from which resistance to power can be organized: “I suggest that to live in the age of protocol requires political tactics drawn from within the protocological sphere.” (Galloway, 2004: p. 151) These political tactics are deployed by hackers, tactical media activists and Internet artists who play with protocol and pin down its flaws and limitations: “The best tactical response to protocol is not resistance but hypertrophy.” (Galloway, 2004: p. 244)

This raises questions about the future of protocol: "Protocol is a universalism achieved through negotiation, meaning that in the future protocol can and will be different." (Galloway, 2004: p. 243) So change is possible, but only *within* the protocological.

References

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