

Footnote: Natural Networks

The notion that the hierarchical structures of capitalism are reflected in nature is false. It is a misconception. Hierarchies that "appear" in nature are mere constructs of the human mind to help classify - and thereby better understand - the elements of the natural world. [PDF]

Termites in a mound, bees in a hive, ants in a nest all form economically-functional social groups. But they are not hierarchies. No king termite, bee or ant is in command, issuing orders downwards through a hierarchy of officers for the workers below to execute. The ancients knew this.

Go to the ant, thou sluggard; consider her ways, and be wise: which having no guide, overseer, or ruler, provideth her meat in the summer, and gathereth her food in the harvest. - Proverbs 6:6-8

A pack of wolves may appear to have a leader, but it does not. The apparent leader does not - indeed cannot - bark orders to, or instruct, the others. He cannot because he cannot speak. Command requires the use of symbolic language, which he does not have. And he has no other way of signalling what he would want the others to do. Each wolf acts unilaterally. He decides for himself what to do and when. His actions are decided by his instincts in response to sensory inputs from his environment. This environment comprises the lie of the land and the past or anticipated actions both of his prey and of each of his pack-mates. The dogs thus form only what appears to be an egalitarian team of peers whose unilateral actions co-ordinate because they are instinctively compatible. In fact, each is acting as an independent individual.



Notwithstanding, man can make *machines* work as egalitarian teams.

When computers were first linked together into networks, the regime under which they were constrained to communicate was hierarchical. The big mainframe computer in charge of the group (the king) would *poll* each of its subordinate computers, in turn, to determine which one should be allowed to *speak* at any particular time. This was later replaced by a better regime in which the computers were equal peers arranged into a logical ring. The computers continually passed a baton (called a token) around the ring. Only the computer currently in possession of the token at any given time could *speak*. He held onto the token for the duration of his *speech* and then passed it on.

However, pretty well all computers today communicate according to a completely egalitarian regime called Ethernet. Computers on an Ethernet operate unilaterally without any central control device or token-passing. Yet they are able to share, equitably, a common transmission cable (the equivalent of their world) which joins them all together in a way that allows each to exchange data with any of its peers directly, quickly and efficiently. These computers converse according to what may be aptly called a protocol of good manners. You don't speak when somebody else is speaking. And if you inadvertently start to speak at the same time as somebody else, you cease for a random period before attempting again. And it works perfectly.

If machines can do it, then surely humans can. If humans can, then an egalitarian society could be constructed that would be inherently able to self-regulate, without the need for civil and government hierarchies. And its economy would not have to be ordered by corporate hierarchies.

[Parent Document](#) | © February 2004 Robert John Morton

© This content is free and may be reproduced unmodified in its entirety, including all headers and footers, or as “fair usage” quotations that are attributed as follows: “ - [article name] by Robert John Morton <http://robmorton.20m.com/>”