

Information cannot be free

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Information is an a widely misunderstood feature of modern society. It is seen as absolute and objective, however, neither of these are the case. As Shannon pointed out, the relationship between information and noise is fundamentally paradoxial.

Shannon and the Mathematics of Information

I will offer the reader a short introduction to the work of Shannon. Shannon was basically beset with the problem of designing error-free transmission through a given physical medium (telephone wires). What he discovered is that:

1) Information, or a messages percieved as informative content ulitimately depends on the reciever. There is no objectively informative message. For instance if a lecture is given by a American professor on Economics, different information will be recieved by, for instance, an english speaking Economics student, an english speaking Art student, and a non english speaking person. The quality of the information depends entirely on the formulations of the recipient.

2) The more information a sender attempts to pack into a message, the more tendency it has to be percieved as noise. For instance, acronyms are a popular way to con-dense a message. In example the message: "NLP is a very hot field at this time." If it were recieved by someone who had no idea what what Natural Language Processing was (or Neuro-Linguistic programming) the message would be meaningless noise- discarded by the perceptory apparatus of the reciever. We are by no means limited by acronyms, no real field of study would be possibly without this condensing or abstracting mechanism.

3) The more redundancy a message contains, the more likelihood that it will be recieved as information. This is a more complicated phenomenon to illustrate in terms of literary messages. If you are familiar with communication engineering, this can be illustrated by the "checksum" value contained within every packet or quantum of information. The checksum is used by the recipient to make sure the information contained within is valid. If found to be corrupt, it is discarded (and often the source is re-interrogated). Geneticists believe that the highly redundant nature of our own DNA is an example of this rule in effect.

Absolute Information Implies the Absence of Information

If you take the above principles to thier fullest extent, you will likely begin to notice thier paradoxical nature. The more information I attempt to send, the more potential for noise (anti-information or entropy). The more I try to prevent noise, the less information (redundancy is a lack of information, redundancy is the lack of information) I encapsulate in the message.

Now this brings us to the issue of communication networks. It seems that the thesis of "media engineering" is to allow the so called "free flow of information" (the popular hacker mantra). As I illustrated above , the complete free flow of information would end up as noise (this is evident but conveniently ignored by the hacker culture). It almost seems as if the proponents of this theory believe that the so called "lies" or false information would inevitably burn themselves off in some kind of semiotic state-change, as if misinformation (which implies deliberate falsification) were the product of the said obstruction of the free flow of data. The meaning of "misinformation" or lies is apparently not directly related to the structure of communication. ("the truth can be found in a lie" :))

Censor Is Not A Four Letter Word

If we accept the above terms, that the free flow of information Is Not The Ideal, then of course we begin to contemplate the realm of censorship. Censorship is not an altogether detrimental thing. Even the most so-called liberal parties participate in the activity of censorship. Without such selective limiting of data, there would be no coherence, and therefore noise. In the most common form of internet correspondance, the Listserv (or newsgroup), the owners of the lists (whose motives range from artistic to stricly commercial) have to constantly wrestle with the dynamic of free-flow vs. censorship. In the former situation, we have the inevitable "flame-war" an explosive sematic feedback phenomenon, ultimately uncondusive to any kind of useful constructive discourse. In the latter situation, we have nothing but data put in-formation by the moderator, with no forum for interchange (this is often a situation that is highly critisized).

Finally, the purpose of this essay is to dispell the popular "information should be free" rubric, to show that our reality is merely the interplay of these two forces: noise, and information (or as termed in previous essays communication and information). We cannot base social policies on this platform, and it is utterly futile to try to realize it (Freenet, ect.). Often times, social inequality is blamed on the percieved obstruction to the access to information. Social inequality, I hypothesize, is based on other unknown factors (social inertia?).