Power and politics: A threat to the Global Brain

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1. Introduction

As a collective, or set of collectives, it is no secret that human society at all levels faces many problems that can only be tackled with cooperation in and between groups of individuals. Due to the global nature of today’s world, there are many issues that require collaboration between very geographically and culturally distinct groups. Such problems include but are not limited to: uncontrolled climate change, vast poverty, and a variety of wars with many global causative factors. Prior to best deciding upon the best methods by which these problems might be solved, an understanding of what human society actually is must be reached. Such an understanding will illuminate our strengths and weaknesses and indicate ways that we might be able to increase our collective ability and efficiency.

For a starting point towards improving the human condition, this paper champions the idea of society as a vast planetary superorganism. This vision both reinforces our collectivity and points a finger in the direction of potential solutions to our problems. These solutions rely upon the ability of an advanced “Nervous System” for the superorganism that will be able to effectively manage problems that society faces in its environment. This new nervous system, based on expanding and advancing information and communication technologies (ICT) has already transformed our world and promises great things for the future.

A vulnerability to the superorganism’s evolution arises based on the central role that information and communication play. Specifically, it is the danger that the current power brokers in the world today will be averse to changes that will arise in society’s structure as we continue to evolve. If not resisted, these elements of society may be able to halt the superorganism’s progress, or slow it down enough to significantly damage ourselves and our planet. After further detailing this problem, a methodology for scholarship and action will be proposed that could be hugely important in assisting the superorganism’s development.

1.1. Humanity as a superorganism

The idea that society functions as a superorganism put forth in detail first most notably by Spencer (1860), later modernized by Stock (1993), and since elaborated upon by Heylighen (2007a) and is now a relatively widely known interpretation of our species. The numerous analogies between society and those things that have been historically accepted as discrete organisms are vast, but need not be enumerated in depth again in this paper. A healthy debate has raged over the past several decades whether or not such collections of individuals should be elevated to the point where they are actually considered a new type of organism. These debates have focused largely on what the appropriate unit of evolutionary selection is, and whether or not arguments by analogy are enough to validate superorganisms’ existence. Important are the arguments made by Haber (2013) who defends the concept of the superorganism by strengthening both strains of argument. While Haber’s paper focuses on the status of insect colonies and did not make mention
of human society, it will for now be accepted that his arguments may be reasonably extended to “human colonies,” though this extension is not trivial.

Regarding the “unit of selection approach,” this paper will follow the approach of Haber (2013), Wilson and Sober (1989), and Hölldobler and Wilson (2009 pg. 24–29) that states that three levels of selection can be in play at once. There is the level of the gene which says, more so than individual organisms, it is the genes that compete for survival. Those genes whose phenotypic manifestations help the genes to get passed on are the genes that are selected for. This theory was most famously championed by Dawkins (1976). Next, there is the level of the individual organism which is the focal point of traditional Darwinism, and finally the level of the group. Group level selection states that competition between groups can appear, and traits that allow for the survival of the group can, in certain circumstances, be selected for. This acknowledgement of three selection levels and their interplay ultimately leaves the door open for groups of individuals to evolve as one and develop the functional organization that is often used to characterize organisms.

Haber goes on to address the weakness of “similarity arguments” by rightly stating that that discussions over whether or not colonies of individual organisms should be considered “organisms” or “superorganisms” in their own right have fallen prey to “category error.” He insightfully realizes that there is no “paradigmatic organism” by which a “colony–individuals (i.e. superorganisms)” can be judged. Organisms vary widely in the natural world and attempting to evaluate a colony against such a loose conception is unproductive. Instead, he argues that it is enough to acknowledge colonies’ biological properties in their own right. By doing so, Haber releases the baggage associated with the terms “organism,” “colonies,” and “superorganisms. Haber goes as far to call for these term’s abolishment, but to remain consistent with a majority of relevant literature this paper will continue to use the term “superorganism” with the understanding that it is merely a subcategory of the term “organism.”

1.2. The power of symbolic information

The human superorganism has been shaped by the forces of cultural evolution (Last, 2015a), a process dependent upon the creation, storage, manipulation, and transmission of symbolic information. Remarkably, culture has proven capable of forming complex systems of organization called “metasystems,” entities first described by Turchin (1977) and later well enumerated and defined by Last (2015b). A metasystem is a biological level of systemic organization. These organizations have been seen to transition from one stable to state to the next in what Last calls a “Metasystem Transition.” Examples of these include the evolution of single to multicellular life, and single organisms into the very colonies that this paper has accepted as “superorganisms.”

Last argues that, via techno-cultural evolution, human society has already undergone metasystem transitions to higher levels of organization. These stages largely follow the traditionally accepted phases of human organization from band/tribes to chiefdoms, from chiefdoms to kingdoms, and from kingdoms to the nation state. (Last, 2015a) Last’s Information Energy Metasystem Model (IEMM) states that human metasystem transitions occur when humans are able to harness new energy sources and manage them with new levels of informational control. Not only is the idea of humanity as a superorganism defensible and compelling, but it is powerful. This view along with the IEMM predicts that we are on the verge of a major transition in which digital information and renewable energy sources will allow for a new level of human organization and bring about a new, radically different phase of organizational stability in society.

The success of the next human metasystem lies largely on the shoulders of what has been termed the “Global Brain” (Goertzel, 2002; Heylighen, 2007a). The Global Brain is a phenomenon that could be said to exist in all phases of human evolution, though before now on a limited scale. It can be understood most basically as a system of human collaboration that allows for collective intelligence and advancement. It is now growing rapidly to a critical point due to the expansion of information and communication technologies ICT. Such advances are allowing for far more numerous, more varied, and more documented interactions. The Global Brain’s power lies within its ability to leverage information to make informed decisions regarding the Earth’s resources. Important in these advances are the “Network of Things,” Artificial Intelligence, and other such technological advances. Unique to the Global Brain, however is the central position that humans play in this advanced vision of society, rather than visions that focus on the advances being made in artificial intelligence. As Heylighen states, just like the neural networks in our brain, the global network processes this information in a distributed manner, with billions of human and technological “neurons” working in parallel—on partly the same, partly different data—while aggregating their results into collective decisions and action. (2014).

This observation by Heylighen is not just an analogy. It is obvious that humans collectively are more intelligent than they are on their own. Each individual has their own knowledge and own perspective that they bring to the table when discussing a matter, and aggregating such perspectives can often lead to a richer, more informed discussion. Therefore, intelligence does not just stop within our heads but rather exists among us as we create, share, and store symbolic information. This paper acknowledges the potential of the Global Brain to incredibly increase our abilities by more closely linking our improved collective intelligence with machine intelligence.in an explosion that has been termed the “technological singularity” (Heylighen, 2014; Kaku, 2014; Kurzweil, 1999). With these increased abilities, the thought is that we may be able to transform our world into a successful and sustainable “utopia” in which our Superorganism prospers far into the future.

However, despite society’s advanced technological state, we are not there yet. Clifford Geertz (1973) once painted a compelling picture of human society and culture that still nicely illustrates the state of our superorganism. The appropriate image, if one must have images, of cultural organization is...the octopus, whose tentacles are in large part separately integrated, neutrally quite poorly connected with one another and with what in the octopus passes for a brain, and yet who nonetheless manages both to get around and to preserve himself, for awhile anyway, as a viable if somewhat ungainly entity. (1973). This imagery suggests the concept of humanity as one body, not yet fully grown or coordinated. Geertz’s ungainly octopus is still in many ways an accurate characterization of our world’s cultural state. Despite global flows of resources, information, and capital many communities remain greatly segregated and limited from one another, resulting in what Last has called a “Potemkin Village” (2015). The global Potemkin Village is characterized by global economic integration, but vast societal divides that keep us from having a stable, meaningful global community capable of addressing problems that face us all. Fortunately, the vastly expanding web of connections in our world (the global brain) appears to be capable of integrating the widely varying cultural currents into a coherent pattern, giving the properties of rhythm, coordination, and harmony to the way in which we interact with each other.

However, in order for a grand global society to truly emerge, our cultural information flows must be actively sorted in such a way as to achieve wide-scale coordination at both the local and global levels. As Last said, the mere increase in “information potentiality...requires a purposeful re-organization of that new potentiality” (2015) in order to achieve desired goals. There are at least two key aspects of the emerging human metasystem that will critically affect the system’s functioning and wellbeing. These aspects firstly has to do with the quality and quantity of the information transfers/cultural exchange. There must be a certain level of diversity and productiveness in the exchanges between humans in order for a robust and coordinated Geertzian octopus to emerge. The other critical aspect is the question...
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