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The reality of our Cybernetic environments

This paper provides an introduction to the thinking of everyday human and computer or technological interface (smart phones, tablets, etc.), as it occurs in creative and social contexts today. Cuurently we inhabit a world of high technological reliance, such that it can be argued that technology has become an environment of living, of dwelling, meaning society has become a cybernetic environment. From such subtle tech-driven social landscapes, our orientation to technology, as described by Heidegger (1977), is increasingly being inscribed in our social environments. Some commentators suggest that such technological modes of dwelling are in fact unsustainable, yet unquestionable.

While technology and our relationship to technology is often the subject of questioning embedded within the logic of conservative and pragmatic models, where technology is simply a tool, a means to an end, despite its growing improvements and dependencies. There seem to be little questioning about the relationship between everyday technology that we consume, and the not-so-invisible inequities and imbalances that are rendered and unquestionable by the same technologies (e.g. job displacements due to tech advances). We need to develop strategies that confront techno-centric worldviews and foster deeper questioning of our relationships with technology. An interface can be defined as a place where two or more complex systems come into contact in order act upon or interact with each other. Of interested to us, should thus be the interfaces of everyday computational, media and communications technologies (e.g. cloud computing, real-rime multiplayer gaming, smart phones, tablets, and a host of hand held and personal computing devices.

In such configurations the interface plays a significant role in reducing the complexity of representation of each of the interacting systems. The principle of computer interface design conjoins the reduced complexity with metaphoric designs, rendering the interface as a transparent layer, in order to support human representational contexts. Interface design theory reduces the complexity of design to focus upon causes of human computer activity, a focus that leads to concealing the complex set of processes and interrelations unfolding in the world.

Willis (1999) describes this cyclical nature of design as ontological designing and views it as a hermeneutics of design that is specifically concerned with the nature and agency of design. Here design is viewed as a pervasive and fundamental human activity. According to Fry (1999) design is described as a complex that involves the designed object, the result of design; the design agency of both the designer and the tools used in the design process, and; the design in process, which is seen as the continual designing of this agency as it is inscribed in designed objects. Many conceptualisations of design (or creative practice) focus on only one or two of these elements, while all three are required in order to come to an understanding of a complex designed phenomena in the world (specifically when adopting a systemic viewpoint). Some researchers suggest (Sade, 2004), that ontological designing provides an orientation towards the phenomena of study that is holistic and capable of capturing the inherent complexity and interrelatedness of the phenomena. Such an approach is required in order to develop a mature understanding of the changes that humanity faces as our constructed environments become "infused" with networked computational media technology. It is within such environments that we can develop deeper understanding of cognition, intelligence and knowledge, between human and nonhuman agents.

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As technology becomes a cybernetic environment, a number of ecological perspectives have emerged to address the problems presented by the increasing complexity of cybernetic environments, to develop theory that situates the subject within a web or network of complex interrelations, and to develop understanding of subjectivity itself (Armstrong, 2002; Kerne, 2001; Nardi and O'Day, 1999). Each of these researchers has extended creative/design practices to include concerns related to the social and cultural nature of interfaces/interactive media based on theories of ecology or ecological philosophy. However, they do not attend to sustainability or consider the influence of the material interface. Armstrong (2002) explores Deep Ecology and develops an ecosophy to underpin his work. The nature of modern technology as presented by Heidegger (1977), however highlights contradictions intrinsic to any developing ecosophy where technology is an environment of living. Recalling the main principles of Deep Ecology: a recognition of the equal and intrinsic value for all beings; the development of deep relationships and connections with the world, involving a deep questioning; a self realisation or wide identification that the environment that supports our life and in which we live is part of the self; the development of a gestalt ontology; the development of a philosophy of dwelling, ecosophy; and, a commitment to positive action.

The separation of information from material has seen the material instantiations of information becoming disposable, without a thought of the consequences. Puckett (2002) provides an eye opening report into the flows of e-waste and the resulting impacts. Increasingly concerns disappear behind the convergence of our unsustainable desires for dwelling and an ever-tighter coupling with interactive media systems (e.g., mobile telephony, evolving into computers, game platforms, which form the basis for another cycle of consumption and waste). Advertising of such products promotes greater freedom, flexibility, while concealing the material impacts of the mobile phone industry.

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