

VIRTUAL ENTITY

The passage from the virtual through the possible to the real is the fundamental act of creation ... Ontology is not an abstract science ... Now the new virtualities, the naked life of the present, have the capacity to take control of the processes of machinic metamorphosis. (Hardt & Negri, 2000).

Introduction

Virtual Entity is a philosophical research starting from the assumption that the concepts of authenticity, ownership, uniqueness and seriality are, within the digital domain, no longer valid. In fact there is no substantial difference between copy and original on the Web, and these two categories are not relevant. Since any file can generate an infinite number of entities identical to itself, there is no scarcity on the Net, and any resource is indefinitely available. Assuming possession is related to the numerical proportion between resources (objects) and potential owners (subjects), then, whereas resources are not limited, the concept of ownership and the idea of property become superfluous.

If socialist and communist experiments in real world were limited by the presence of state ownership, Virtual Entity is proposing the implementation of a non-property system within the digital domain.

The practical method to achieve such result is a new radical software being specifically developed to release, license, and catalogue digital files. This system, transforming the traditional approach towards metadata, is based on the idea that any file is an independent creation living its own life and experiencing various levels of transformation and progressive generation (of meaning, shape, and entities) in the course of its virtual existence. This way digital resources, interpreted as cultural units, are considered the main actors of the web.

Cosmogony

Digital artificial world is structured by specific rules that are somewhat different from those expressed and manifested in the physical world we normally experience. One relevant difference is the definition of identity. Since every 'singularity' is reproducible in infinite number of identical copies, and there is no substantial difference between copy and original, because the copy of a copy is exactly the same as the copy of the original, the basic distinction between copy and original is not relevant, and digital identity is not unique. Comparing this to any analogue reality, we can immediately perceive that some of the values applying to physical world are to be reconsidered within the digital domain. For example, an analogue tape recorded from a vinyl record will play a different quality of music than that of the vinyl, and the quality of the incision will be more and more compromised if we continue copying the same track from one tape to another. This quality decrease structures an inversely proportional relation with the distance from the original content. Reproduction always depends on the system used, both in case of analogue and of digital carriers. Speakers, amplifiers and players reproducing a sound can affect the quality of the result. But, in the case of an .aiff audio file, for example, any copy will perform the same music, given an identical system to be played from. Although this argument is rather obvious, it leads to the idea that, since there is no

constitutional uniqueness inside 'digitality', there is no relevant reason to limit the amount of copies that are to be created. From another perspective, this example shows a peculiar fragility that electronic content implies. In fact, any electronic resource is depending on a certain variety of elements to be reproduced and perceived (a player, an hard disc, a computer, a mini disc, and so forth). Any damage to a single part of such complex system is compromising the fruition of the entire. If a photographic picture on paper can be visible when a corner of the image is corrupted, it will be very difficult to display a file whereas a small part of it is damaged. Although electronic and digital creatures have certain properties in common, Virtual Entity is focusing on digital entities living in the net, so to say digital files online. The possibility to define these as 'immaterial' lays on the fact that the region where these are perceived is often very far from the server they are laying on. People belonging to generations not educated to a basic computer literation often think mails are physically landing on their specific machine, missing the point internet is basically 'sitting' somewhere else and simply copied and/or displayed on local terminals. This apparent immateriality and cohereness renders the perception of the internet obfuscated by common beliefs. There is a specific moment when a file is created, and there exists a very first instantiation of any file that is uploaded, published and shared online. Once this poiesis is performed, the entity is free to proliferate indefinitely. Virtual Entity names this very first file that reaches the internet a 'native file', or master. There is no way to distinguish it from all its 'nemeses', after the act of creation. Since identity appears to be distributed rather than concentrated, digital identity requires a specific approach according to its essence. Virtual Entity is a project structured by a double nature, and these two perspectives interweave a dialogic relation. While a theoretical reflection on 'digitality' and its constitution is taking place in the background, the development of a practical system to license and identify files online has begun.

Substances

Any copy of a file can be defined as an instance of the file entity. The main idea of Virtual Entity is that, any time a native file is created and uploaded to the Net, it is possible to initiate a Soul for this file. The Soul of a file, according to Ve's imaginary, is the combination of a set of Metadata plus editable space for information interchange, not very dissimilar from a wiki. Digital entities are subdivided in four main substances, that are Text, Audio, Video and Image. All entities are either natural born analogue or natural born digital. An interesting process to be taken into account is 'transmutation': what happens when content is mutating substance, or carrier, from analogue to digital, and vice-versa? Substances are always immanent, and an entity can be defined in accordance to more than one substance, because this identification depends on the specific approach to content, rather than on a supposed unique matter. A number of critical examples and ambiguities can be analysed and tested. If software, as source code, is considered text, an executable is something more malicious, composed, an 'organon' creating a different functioning. Be software a daemon, or a polumetis spirit, it is not a simple entity.

Metadata

An important and problematic element of digital content management is the organisation of Metadata, that is information about information. Main issue is establishing a compatible form that is firm through time. One critical aspect is that, if metadata are stored inside a file, when information is updated on one copy of the file, all other copies are not accessing the new data. Another problem is the lack of persistence through successive codification, encoding, editing and transformation. Storing metadata inside the Soul of a file, that is a database separated from any instance and independent from a specific file structure, is a technical proposal to overpass some of the limits the use of metadata encountered so far. In such structure information would be accessible from any instance of the file, because the repository of metadata is always providing the latest version. The idea of dividing entities in four groups is useful also in this: a core metadata set listing a certain number of fields that are substance independent, is combined to other fields that are substance specific. A possible approach to define these basic elements of description can be the following: metadata have to be, as much as possible, both machine and human understandable. To be optimised, only a minimal amount of necessary information is to be considered relevant; permanent and global characteristics are preferred to local, non permanent methods of description. Inspiring researches are the Latent Semantic Analysis on one side, that focus on the relationships, in vectorial semantics, between a set of documents and the terms they contain, and the symbol abstractor named Singular Value Decomposition, an algebraic method to describe the peculiarity of an object.

