PREOBJECTIVITY

(TRYING TO GIVE) AN ANSWER TO THE QUESTION »WHAT IS A DIGITAL OBJECT?«

An Essay by Anil K. Jain

Descartes was the founder of the modern philosophy of subjectivity - and therefore also created the understanding of the »object« as we know it. In antique and medieval thought the subject (respectively the »hypokeimenon«) was not only »grammatically« but also ontologically held as the underlying substance. So it carried a similar ontological state as we might ascribe today to the material world of things (if we are not constructivists), and in the system of the categories of being of Aristotle only the substance of the »hypokeimenon« existed independently (see Categories: ch. 5). Interestingly, it is exactly the self-activity of the subjective mind that is also at the bottom of Descartes' subject-based epistemology: In reference to itself the subject creates certainty on itself (see *Meditations*). The subject can thus not only be taken as the (seemingly) »safe« starting point for all further knowledge but was ultimately set apart from the world and its »things« which are opposed to it as mere objects of thought. Karl Jaspers coined that with the term »subject-object dichotomy« (see Way to Wisdom: pp. 28ff.). Objects can now only be reckoned and described in reference to the subject. It is not really relevant if one, like Berkeley, supposes that the objects are non-existent without the perceiving subject (see Treatise Concerning the Principles of Human Knowledge), or, like Kant, simply points to the fact that the objects of recognition are limited by the conditions of subjective perception (see Critique of Pure Reason) - the object is chained to the subject, and any effort to break this chain or to eradicate this distinction does not free the objects from subject-dependence but rather eliminates the subject (see in this manner e.g. Harman: Tool Being). What remained were a being without sense (see also Heidgger: Being and Time).

But what happens to the objects in a world that increasingly dematerialises - especially economically (see e.g. Coyle: The Weightless World)? Is the reality of the subject dismissed along with the materiality of the objects? These are highly relevant questions, but in order to address them we must first turn to the more basic issue: What is the meaning of »objectivity« in the digital age? Respectively: What is a digital object? I want to try to give some answers to this question in the following, and I do so in almost complete ignorance of the current discourse. It is thus very well possible that my answers were already given elsewhere (and maybe much more pronounced and eloquent). But perhaps this allows for an approach relieved of the burdens of knowledge and with an unobstructed view. In this approach the non-digital (analog) object is the contrasting point of reference in order to let emerge the character of the digital object, and, again, this non-digital object is indeed a material object of sensual perception. Mere mental objects (without material correspondence) will not be included in the investigation. Not only are they obviously less suitable as contrasting elements, they also have a very different ontological state. It would thus make things more complicated and I openly admit: I am searching for simple answers. Not because I want to avoid difficulties (the task is hard enough), but because there is a beauty in simplicity which I adore. And I confess: my answers are absolutely subjective. Yet, as explained above: Talking about the object is only meaningful on the background the subject - regardless of the amount of »construction« we assume in subjectivity. The question of the character of digital objects hence implies the question: What is the relevance of the digital object for the subject (and that means: for us)?

This already imposes the first problem (and builds the ground of the first answer): The digital object does not exist for the subject (as long as it stays digital) - as »digital« signifies the form of storage (of data defining the object) as discrete numerical values, and in this stored state the digital object is not (or at least not directly) accessible for the subject (and its perception). It is true: one can see, for example, a hard disk on which digital data is stored, and one can touch it. But the data itself is not perceivable. With an electron microscope one could make visible structures that would (in theory) enable to reconstruct the data. But not that which the data represents. And also a print or a screen display always implies a (twofold) transformation: a transformation into something perceivable and a transformation of digital data into another (analog) form of representation. The digital object therefore has always a representative character. In this respect, it is irrelevant whether the digital object is to reproduce an (existing) non-digital object (as it is e.g. the case with a digital audio recording) or if we are dealing with an object which was originally created in the digital domain, for it always represents that which it is meant to be when it leaves the digital domain. And it must leave the digital domain, it must be (sensually, aesthetically) »embodied« in order to become an object of perception and interaction for the subject. (Example: The digitally stored note data of a software synthesizer is only making us cover our ears or dance when we can hear it as – analog – sound waves).

On the other hand, one can, of course, ask if there is a true difference between the analog and the digital and if this difference is as »substantial« as it initially appears. Generally, digital data consists of discrete values while analog signals are continuous. However, for the subject this difference disappears when the information density is high enough. A digital image that bears more pixels than the human eye can discern is (subjectively) indistinguishable from an analog picture. And even »objectively« the difference disappears if we assume a world according to the laws of quantum physics, since in a »quantum world«, in theory, it were possible to digitally represent all the available information (if the digitalisation is excessive). The digital representation then contains the same amount of information as the non-digital object. So, is there no »real« difference between the analog and the digital (leaving the representational character of the digital aside)?

As noted above: While (most) non-digital objects are basically »self-sufficient« in order to unconceal their object character (that is: their appeal) to the subject, digital objects require an embodiment and therefore they must transform in order to become an object (of perception and of desire) for the subject (transformative character of the digital object). However, this implies two requirements that make a true difference: a *transformation rule* as well as a *sensual medium or interface* are indispensable preconditions. The digital object is hence not only dependent on the subject but on knowledge about the rules of transformation and the existence of suitable »object carriers«. For in case that the transformation rule(s) are unknown, we at best get a random object. One could, for example, »play« image data on an audio CD player,

but the result will hardly be »musical«. When lacking an appropriate interface the digital object may well be kept forever locked in the darkness of its existence for itself. Because of a lack of knowledge and/or suitable devices access is not possible. Accordingly, as opposed to the actuality of the non-digital object, the digital object can be characterised by *potentiality*, and its actualisation is highly *demanding* (in terms of knowledge and infrastructure).

Additional essential characteristics of the digital object are its (unlimited and identical) reproducibility and its (simplified) alterability. While the non-digital object can never be fully identical with its copies (because perfect reproduction is impossible in the analog realm and there are always slight differences even between seemingly identical objects) the digital object can never be unique (even if it exists only once). With minimal (technical) effort an endless amount of perfect copies can be produced, and (currently), for the »display« of the digital object, a copy must be created in the working memory. Therefore, not only do we face a devaluation of the original, as Benjamin stated it for »The Work of Art in the Age of Mechanical Reproduction«, but along with the difference between the original and the copy the relevance of the original disappeared. And also in respect of the capitalist logic of profit there is a dramatic difference: the non-digital object is protected to a certain extent by its materiality (as its duplication is »expensive«), but digital objects can be copied (almost) for free. The reproduction of digital objects could therefore become an unlimited source of income for »copyright«-owners. However, at the same time the possibility of duplication threatens the valorisation - if the consumers start to copy the digital objects on their own. The »copyright« therefore serves (in ironical contrast to its name) as a means to limit the right to copy (of the desiring subjects) and becomes the primary juridical battlefield in the digital economy.

The dialectics of the alterability of digital objects is located on another level: in comparison with non-digital objects, digital objects have a much higher plasticity. The reason is that in the digital realm changes to the objects can be carried out relatively easy - assumed that respective (digital) tools (like word processors or image editors) are available. Digital objects thus »ask« to engage in a creative play. A (musical) mix, for example, is echoed in countless remixes. The plasticity of the digital object may, however, also serve for an optimisation, i.e. an adaption of the represented reality to an ideal reality when we, for instance, make the sky in a vacation snap look brighter. Here, we find ourselves at the crossing to the other side of the dialectics of alterability. The possibility of manipulation, which is immanent to the plasticity of the digital object, also implies a loss of trustworthiness. What is more, the (manipulated) reality of the digital tends towards a (hyperreal) flattening in which all disturbing elements are eliminated: a (represented) world, sterile und superficial like an advertisement brochure. After all, this tendency can also be traced in social network profile pictures which more and more imitate the aesthetics of (extensively edited) comp cards. Even more problematic are the effects of plasticity in respect of possibilities for political exploitation, i.e. to »synthesize« a reality that is in accordance to one's goals. The digital plays into the hands of this desire since it lacks the resistance of the material (as in the analog domain), and the evidence of any manipulation can be eradicated easily. Therefore, digital objects are well suited for the absorption of resistance by (their) consumption.

Another property of digital objects seems to counteract manipulative uses: their *verbosity*. Metadata is embedded into many digital objects informing about various »facts«. Through metadata the object, so to say, »speaks« about itself and becomes a *»reflexive*« object. That which in non-digital objects has to be investigated painstakingly (by means of archaeological or forensic methods) or which is even never revealed, is presented readily by some digital objects. For example, many digital cameras insert a metadata set including the date, time and place of creation into the image file. But also in this case it is true: the rule of extraction must be known – and as soon as it is known the metadata can be manipulated.

Another element of the verbosity of the digital object can be seen as betrayal: the trace of digital objects in digital networks can be followed easily (using their signature, their digital fingerprint). Checksums do allow that in a fast and easy way. Via a bit-by-bit comparison one can even achieve an absolute *identification* of the digital object. In humans this is impossible, human fingerprints and even genome comparisons can never fully determine the identity. Since even in the case of monozygotic twins, which share an identical genome, one would insist on denying that they are the same person. In digital objects, however, identity is unambiguous (although »pluralistic«). The same stored sequence of numbers means that it is the same object. And this »identity« can be tracked and the tracking data can again be stored (digitally). This means we can (and do) have digital objects on digital objects in the form of comprehensive databases objects (which is another element of the recursive »reflexivity« of digital objects). Via »data mining« these databases disclose information also on the relations of digital objects. All that taken together makes digital objects highly transparent – and this is true even if we can never trust what we can »see« through digital objects (because of the possibilities of manipulation). This means that their transparency is to be read in the positive as well as in the negative sense, and, accordingly, there are counter-strategies against the transparency of digital objects (like data encryption or the obfuscation of traffic origin via proxy servers).

But how can the original question – what is a digital object? – be answered considering this highly ambivalent »nature« of the digital object? – I want to dare an approximation by the following definition: Digital objects are digitally stored sets of data for which rules of transformation and devices exist that convert them into (sensually) perceivable objects. (At least, there must exist interfaces by which the digital objects can be fed into the nervous system). As long as the digital objects stay within the digital domain they are representative for what they may become. I therefore suggest to call them *»preobjects*«. The preobjectivity of digital objects points to the fact that both in respect of their ontological state and time dimension they bear *potentiality* but not actuality. Regarding the dimension of space, (stored) digital objects are *infinitesimal*, point-like. Only when embodied (via media) they expand into area and space. Further characteristics are their *reproducibility* and *alterability/plasticity* as well as their inscribed (reflexive) *verbosity* and *transparency*. Although their digital being suggests unambiguity, the digital (not-yet-)object is highly ambivalent and more than any material object unfinished and contingent. This, however, is likewise an invitation to us – to do something (with it).

LITERATURE:

- Aristotle: Categories. Online resource: http://classics.mit.edu/Aristotle/categories.html.
- Benjamin, Walter: *The Work of Art in the Age of Mechanical Reproduction*. Online resource: https://www.marxists.org/reference/subject/philosophy/works/ge/benjamin.htm.
- Berkeley, George: *Treatise Concerning the Principles of Human Knowledge*. Online resource: http://www.gutenberg.org/files/4723/4723-h/4723-h.htm.
- Coyle, Diane: The Weightless World Strategies for Managing the Digital Economy. Capstone, Oxford 1997.
- Descartes, René: *Meditations on First Philosophy*. Online resource: http://oregonstate.edu/instruct/phl302/texts/descartes/meditations/meditations.html.
- Harman, Graham: Tool-Being Heidegger and the Metaphysics of Objects. Open Court, Chicago/La Salle 2002.
- Heidegger, Martin: Being and Time. SCM Press, London 1962.
- Jaspers, Karl: Way to Wisdom An Introduction to Philosophy. Yale University Press, New Haven 1951.
- Kant, Immanuel: *Critique of Pure Reason*. Online resource: http://www.guten-berg.org/files/4280/4280-h/4280-h.htm.

INFORMATION SHEET

Author(s):	Anil K. Jain
Title:	Preobjectivity
Subtitle:	(Trying to Give) An Answer to the Question »What is a Digital
	Object?«
Year of Origin:	2015
Version/Last Updated:	02/01/2017
Original Download-Link:	http://www.power-xs.net/jain/pub/preobjectivity.pdf
First Print Publishing in:	_

In case that you want to cite passages of this text, it is preferred that you quote the PDF-version (indicating the version number/update date) – even if a print-version is available – since the PDF-version may be more profound and/or corrected and updated.

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