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The Cold Desert of Software Reality

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Abstract. The current state of knowledge of our lived world is in constant confrontation of two environments that does not yet fully converge. On the one hand stands a person with his or her own cultural traditions and historical development, and on the other hand stands the technology *per se*, in its relatively rapid development phase. These two parts constantly roam without bringing us a significant breakthrough in knowledge, which is the needed human cognitive reference point when interacting with computers. Our aim is to find out certain nodes of understanding between these two worlds, and propose a hypothesis for their possible approximation.

Keywords: Cognition, Cultural techniques, De-abstraction, De-reality, Interface hermeneutics, Knowledge, Human-computer interaction, Processive subject, Post-media, Proto-medium, Reflexive interface, Simulacra, Software reality, Visual thinking.

1 Introduction

„Thought can be raised up from its powerlessness only through something that exceeds the order of thought. [...] it is certain that every thought emits a dice-throw, but it is just as certain that it will be unable to ultimately think the chance that has thus engendered it.“ (Badiou, 2003) [2][pages 84-85]

The current state of knowledge of our lived world is in constant confrontation of two environments that does not yet fully converge. On the one hand stands a person with his or her own cultural traditions and historical development, and now an intense user of technology, and on the other hand stands the technology *per se*, in its relatively rapid development phase (super technology, computational systems, complex physics algorithms of elementary particles, etc.). These two parts constantly roam without bringing us a significant breakthrough in knowledge, which is the needed human cognitive reference point when interacting with computers. Our aim is to find out certain

nodes of understanding between these two worlds, and propose a hypothesis for their possible approximation. We proceed from the point of view suggested by Vilém Flusser:

„Design [same as *in-formare* on the side of *techné*] means, among others, faith. The fact of posing questions is a collective attempt at laying hold of faith, and to give it a form.“ [9]

To arrive at a certain contact area, we must begin to use terms referring as closely as possible to the state of technological progress.

Therefore, we introduce in the hypothesis of the project the following concepts: *proto-medium*, *processive subject*, *reflexive hermeneutics*, art as a form of realization of *visual thinking* („Visual perception is visual thinking“ [1][page 16]), the term *post-media*, and ultimately *de-abstraction*. With this we want to point out the necessity of new differentiation procedures, giving rise to forms of thinking in their own territory.

Only in such in its own territory can we construct new social and cultural realities, which will no longer be rather primitively distinguished between the virtual and the real [7], but will use them for new integrations.

This is especially true for the concept of a *processive subject*, which of course is based on a traditional framework: „Logic is beneficial for the subject in that the subject acquires certain education for other purposes. The education supplied to the subject by logic is based in the training of thought, because this science is a thought about thought, and lets the subject have in his head thoughts regarded as thoughts.“ [10]

Analogously, we can talk about art and aesthetics in a new context, i.e. searching the original media for lines, shapes, colors and light, which can be translated above all in a reflexive process: „[...] aesthetic phrase is the phrase par excellence of the faculty of presentation, but that it has no concept for which to present its sensible or imaginative intuition, it cannot therefore determine a realm, but only a field. Moreover, the field is only determined to a second degree, reflectively, so to speak: not by the commensurability between the capacity for presenting and the capacity for conceptualizing. This commensurability is itself an Idea, its object is not directly presentable.“ [11][page 168]

2 Baudrillard/Virilio

„*The simulacrum is never that which conceals the truth—it is the truth which conceals that there is none. The simulacrum is true.*“ (*Ecclesiastes in Baudrillard, 1988*). [5]

A pair of inspirational authors of the so called French theory, Jean Baudrillard and Paul Virilio, each presented in numerous studies a fairly serious view of the gradual transformation of the concept of social reality.

Certainly, it is not a classic approach to a sociological topic, but rather a particular social philosophical construct, which points to an apparent inconsistency between the traditional concept of a contemporary, especially post-structuralist and late systems theory.

For both the authors is problematic the very principle of construction of a social fact, since the advent of new technologies is gradually easing the presumed *original* link between the constructed subject and its *target* object.

This *game* is now entering a new mediation logistics, which strongly obscures the principle and definition of the boundaries of the real.

Let's say a limit, at which each theory begins as from its original line of demarcation, and which exhibits a foothold interpretation or concept and which, if it is to remain the default, fixed point, can no longer be *mediated*.

If we would have expected a next possible mediation of this limit, it would become just a sort of transitional phase of mediation, and not the necessary, constitutive element of a new theoretical foundation.

Now, if we leave aside the question of what exactly is the output of the actual social construction, because the issue involves an interdisciplinary rather than narrowly sociological, we can look at how the two protagonists of the French theory approach the topic.

Baudrillard's thinking leads to understanding the difference between the assumption of a solid foundation of theory, which is situated at an exact location, and a somewhat vague territory, on which to draw the border. Touted at this point is the question of whether Baudrillard was willing to build such a differing line, i.e. the difference of a *reflective interface*: the internal and external interface, where simulation procedures and simulacra may take place in a so called real.

Strictly speaking, Baudrillard is concerned here about a mis-match and instability of both *spaces*, because the localization of theory in the place of the real is clearly hypothetical, and the very border of the real location is only analogous. We can talk about the unclear boundary lines, on which then arises every conception of reality that wants to define the realm of reality. To simplify, we can say that even if the boundary lines within the theory were most precise, nothing can change the fact that they are plotted in just an approximate and unstable space, and what is most important, the plotting is limited to the practice of using tools for marking transport lines. It does not give us anything accurate about how eventually the lines *fit* in the construction of reality.

This means that during the construction of theories we cannot be based on the assumption that we have a certain map beforehand that allows us to follow the right path in terrain of the real.

The very concept of abstraction faces the problem of the initial definition when describing a reality: Namely that we start from a certain map (i.e. from a pre-bounded territory) of what we will after refer to as reality. From this view it is obvious that the construction of the social fact somewhat brings the real model in advance together with the way how a given fact will appear.

The design of theory more or less pre-characterize the space, into which will the social reality be placed.

And from here, there is only a short journey to the discovery that given models in principle start only from possibilities how forms (maps) are created. According to these maps it is possible to construct a specific version of the real.

„Today abstraction is no longer that of the map, the double, the mirror, or the concept. Simulation is no longer that of a territory, a referential being, or a substance. It is the generation by models of a real without origin or reality: a hyperreal. The territory no longer precedes the map, nor does it survive it. It is nevertheless the map that precedes the territory—*precession of simulacra*—that engenders the territory, and if one must return to the fable, today it is the territory whose shreds slowly rot across the extent of the map. It is the real, and not the map, whose vestiges persist here and there in the desert that are no longer those of the Empire, but ours. *The desert of the real itself*.“ [4][page 1]

In a sense, we are talking about the need of **de-abstraction**, and thinking about the concept of **de-reality**.

In essence, we get into a situation where one can quite justifiably speak of various **synthetic versions of the real**, in which different versions of social reality are true, if they are firstly defined, how they should be displayed.

With a little exaggeration, we could use Baudrillard's example: „Go and simulate a theft in a large department store: how do you convince the security guards that it is a simulated theft? There is no ‚objective‘ difference: the same gestures and the same signs exist as for a real theft; in fact the signs incline neither to one side nor the other. As far as the established order is concerned, they are always of the order of the real.“ [6][page 181]

For Paul Virilio is the very own design or version of reality limited by the acceleration potential of each mediation, which means that we are talking about the use of speed in the mode of display, show or transmission of data to establish the *real*, which is more or less dependent on the cultural limitations of speed:

The development process of civilization history according to Virilio corresponds rather to certain systems of braking, a strenuous reduction of excessive acceleration, so that the format of the reality was available within the normal, everyday activities and thus stable in the *slow* logic of perception.

The starting fact is then the traditional reality in the context of an appropriate *constraint*, say to a certain extent a slowing, or at present *vice versa*, a gradual acceleration, which, however, shall not exceed the limits of ordinary human perception.

The reality of contemporary reality is, however, that most data streams takes place at speeds considerably in excess of that normally lived in everyday life.

The logic of perception gradually begins to be expanded and supplemented by increasingly rapid movement of intermediating data and it is at the expense of the *slow*, but long maintained traditional version of the social construction of reality. The very problem of construction of the real is now starting to be closely associated with the concept of vision.

„With photography, seeing the world becomes not only a matter of spatial distance but also of the *time-distance* to be eliminated: a matter of speed, of acceleration or deceleration.“ [13][page 21]

With the advent and use of modern technologies will therefore come to the stage *units of information*, for which we do not sufficiently have a matching empirical coverage, thus we are replacing the slower perception logic with binary simulation models.

„[...] what is given is exactly the information but not the sensation; it is *apatheia*, this scientific impassibility which makes it so that the more informed man is the more the desert of the world expands around him, the more the repetition of information (already known) upsets the stimuli of observation, overtaking them automatically, not only in memory (interior light) but first of all in the look, to the point that from now on it's the speed of light itself which limits the reading of information and the important thing in electronic-information is no longer the storage but the display. As the rational universe goes, so goes the effect of the real.“ [12][pages 46-47]

Under these circumstances the system of construction of social reality is effectively altered, especially in terms of the intervention of gradually accelerating forms of mediation, which we cannot then adequately rewrite into the construction of the lived reality, but only through a binary analog model. Thus, with considerable limitations.

The constructed reality it is still socially encoded, but its range of visible parameters begins to exceed the dimensions of the lived everyday life. It is quite adequate to note the constantly generated differences in the system of expansion, and in some respects even the acceleration of *reality*: Mainly because the generated differences can become in the long run a new and very effective element of the procedure of stratification.

3 The Software Reality

It is necessary to remember: In sociology we still have to work with a certain minimal concept of reality, which, however, currently holds two risks:

- The first risk is a low level of intermediation of the so called *software reality* of modern technology. We are talking mostly about the secondary slowing, when the response rate of human perception on intermediation of data and on new forms of display is not only slow, but also inadequate. For example, the analysis of the social situation in film or television productions disregards in majority of the cases the fact that firstly a cinematographic model of reality is supplied (i.e. cinematic reality), and only then some forms of social action are depicted.
- The second risk is the new *traffic light optics*. Fast data streams are usually getting high priority, which is supporting the accelerating optics, and not the slowing. Which of course means that the construction of social reality is a whole series of co-creation of the acceleration phase of cultural techniques and forms of mediation, which gradually displace the original format of human perception.

However, the actual risk would be neglecting or ignoring warnings that the new optics indicator above suggests. Social reality is going to be steadily ahead of us rather than behind us. And here lies the first problem, according to the authors.

We should now ask, what theory of the real we talking about, when is the *position* (the borderline of the real, say the definition line) in motion, which ultimately dictate the *field* or placing of the unstable social reality and subject to incompleteness (see the work of Gödel).

"Yes, we must now get used to the fact that there are alternative spaces and times. Because of the technology that allows us to project the scenes that we can at least

compare to the concreteness of the scenes that we perceive with our senses, we are forced to philosophize as an alternative as well. [...] Because there is no non-virtual reality, because reality is only a borderline concept that we are approaching and that we can never achieve, that is why I can talk about alternative ways of achieving reality. Achieve it can be done technically and theoretically. We can say that a number of theoretical considerations discusses the alternative realities". [8][pages 11-12]

At this point shows up the question of interpretation of complexity, or different versions of the oscillation between alternate realities. And we ask mainly because the current concept of social contribution to the construction of reality (i.e. the space of real) is certainly not completely emptied, but partly relegated to the background in favor of alternative concepts of the real.

This procedure leads to subsequent findings: Let's say that the concept of Berger and Luckmann [6] is based on certain, unspecified assumption of elementary continuity of the social, the seen and the mediated. Because the latter is more problematic, it is necessary to try to sort out the disparity of the said parts. Such disparity results from the fact that the chosen form of social structure of the reality does not specify those three elements and puts them in one row or to the same level.

Baudrillard's concept of the real can serve us as a certain approximate guide. Let us first look at the impact of modern technology, which almost fundamentally changes the relationship of mediation and *reality*. Mainly for the simple reason that it is actually a cultural technique of the access to what is known as reality.

Devices and technological tools for the creation of the visible world of our PC terminals, digital satellite communications and high definition television data formats offer new techniques of imaging procedures, as well as more sophisticated *norms* of software design of reality. Basically, these are discreetly, but steadily, changing paradigm of *social reality* before our eyes.

The current accelerated and especially *data neutral* production of the world of displaying points to one remarkable turnaround. The world is currently using advanced and sophisticated techniques while displaying is not becoming closer, but just the opposite: it is increasingly distant, removed, and mediated. For example, in the case of photos we've seen a shift in vision logistics: All the details of pictures are essentially equally important, are on the same level of relevance, and even though a part is removed, the whole remains essentially the same.

The situation is different in case of the mental and display maps of humans: Exposure is set to produce the differences, in agreement with Freud that cultural movement or development is happening possibility of creating differences rather than sameness. In other words: Culture is about setting differences, controlling the events probability by means of differentiation. The synthetic production of reality actually eliminates the differences by their static fixation.

Technological gadgetry of media create in advance each event by capturing partial segment and by its formatting in alternative environments of the software reality. Differentiation in this case is falling victim to the unification of communication.

While photographs, for example, highlight the sameness of details, the concept of human vision is different. Photographs work with depth of context, mutual differences between the features, but also with a considerable motivation for remembering. The

whole of the seen is never the same, as in the case of the just mentioned photographs, but rather structured, profiled and particularly differentiated in its parts. Technologically profiled reality introduces another concept of displaying and showing than that, with which humans *ordinarily* work. Its principle is a certain sameness of distributing individual points for display.

Our daily experienced reality, however, does not accept such a sameness of deployment, not only because it works from a certain principle of *anesthesia*: Thus, the fact that something in perception must be suppressed in order to see something; but also and especially because we use profiling of a system of the seen into a system **ordering data linearly**, not in parallel, as in the case of display technology.

In our daily process of social construction of reality we create procedures that put in the logic of viewing the necessary contexts, which replace (and thus make us perceive) the parallel ordering of data.

The technology of *display* does not produce contextual links as a replacement for putting the data in parallel, but on the contrary, the technology is the very principle of connecting one-direction data. This creates a different *reality*, say a *software reality*, which is different from the original idea of the social construction of reality.

This of course brings us into a situation that highlights the problem of *social construction of reality* as a type of model, say modeling reality according to different logic of perception: The social construction of reality always depends on the parameters of available vision techniques. And vision techniques have currently very significantly changed since stable versions prevailed of a so called social construction of reality.

Current technologies offer the processing of data in a form that requires complicated theoretical modes of mediation, and its output no longer corresponds to the *normal* state of vision of the real in its everyday, stable form.

4 Conclusion

We do not need to go too far to recall that the *stable form* of reality is still in place: Of course it is not possible to say that e.g. buildings, streets, cars and parks were something other than they seem, but the thing is somewhat more complicated. Although the original reality is still in *its place*, it seems to have, to put it mildly, somewhat shifted to the background, just as our machines for thinking and seeing begin to read the *reality* of the virtual as something more open.

The actual boundaries of the original reality are not easy to tell, but are constantly reinforced by tradition and the lived experience, so they remain in the normal contours of a relatively stable arrangement, which one cannot say about the world of the virtual. This ambiguity, however, was fully realized e.g. by Vilém Flusser:

„I do not know whether we are in the world. We are in the field of options from which arises the world. And do not like the term that we are situated in the world neither. Rather, we should say that we realize ourselves in the world.“ [8][pages 11-12]

It is the reliance of the virtual field on the multiple mediation of devices and advanced imaging techniques that highlights the gradual separation between the relatively stable boundaries of the real world and the slightly but steadily shifting borders of the virtual world.

The critical point of separation, the line that still holds together both of the worlds as credibly as possible, is inexorably approaching closer, forcing a new paradigm to describe what we call social reality.

Because it will be the human, who takes that description and with its help will need to cope with a changed situation. This human cannot get enough reassurance that some things still remain within their borders.

The human boundary will have most likely to be attacked again, perhaps even exceeded, at least in the sense how it will answer the questions provided by the virtual world.

Baudrillard's description of this new state of affairs is very close to finding that the spectacularity of the new imaging techniques flips the so far fixed points of bounded reality towards a software designed reality.

And what's more, the problem of truth as a correspondence between a description and an account of a fact gets another form.

This theory is necessarily based on a certain assumption about the possibility of establishing a harmony, say some consistency between what is being described, and what should be matched by the description. The theory is thus a systemic procedure in the sense in which both sides of the movement thought certain data can be fixed into a conventional or validable framework.

However, in a software designed reality there comes a change: The technology of the virtual production occupies a space for coupling data so that they can form a certain proportion or logic of arrangement, which could be further simulated.

These are generated entities that have no necessary connection to the empirical coverage in the mode of everyday life, or to the previous move in a tradition of thought, but may be assembled purely according to the rules of connecting data sequences. This means that it is possible to perform e.g. a continual upgrade of objects or their duplication without having the underlying software platform to capture their configuration as the ideal state of order, which would be the target of efforts to understand the truth of such a state.

But then the space to determine the state of affairs is therefore already occupied, because the state of affairs (say the facts) is already part of the actual production of that software reality. If we are to search for truth in such a regime, then we must admit that this regime is a space that cannot be filled, because it is already set to self-relatedness of each such a whole so established. But then it is true, what Baudrillard says:

“The secret of theory is that truth does not exist. [...] Truth establishes a space that cannot be filled.” [3]

As long as the cultural differentiation technique works, it is not possible to statically fix a single space of truth. If we claimed truth as a border of a certain area of reality, then such an area can no longer be occupied, and it cannot be therefore productively differentiated.

In principle, such an area falls out of the cultural production techniques, because the possibility of laying differences is deprecated. To construct reality in the social régime will be a little more difficult in the given state of affairs, because a theory that would allow such construction will gradually involve a far greater proportion of probability than the current notion of reality *is able to hold*.

We assume that this is a time to explore the *hermeneutics of the interface*. Mainly for the reason that the dyadics of the current thinking is still lingering on the level of the intellectual dimension, whereas it is necessary to take into account the spiritual dimension as well.

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