

## Virtual to begin with?

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### Introduction:

#### **Hyperbolic expectations and one-sided assessments in praise of electronic media**

A lot of fuss is being made these days (and has been made for years) about virtuality. The prophets claim that we have entered the new millennium ahead of time, and that it will be an electronic heaven. To quote Pierre Lévy, one of the most prominent harbingers of such a perspective: "Virtual worlds will be instruments of self-knowledge and self-definition for humanity (...) They are home to the 'angelic bodies' (or virtual images) of the members of collective intellects." (Lévy 1997, 98) Many questions come to mind. To raise just one: Who is it who will have such an 'angelic body'? Will people, for example, in the poorer regions of the world take part in these collective intellects, once they no longer lack the electronic equipment? Will the Pentecostal miracle – already dreamt of by Marshall McLuhan (cf. McLuhan 1964, 80) – include everybody? I'm afraid "the light of virtual worlds" that Pierre Lévy believes will "illuminate and enrich human intelligence" (Lévy 1997, 100) will only be a partial light – partial in that it will shine for only a minority of humankind, and partially light in one aspect alone, and close to darkness in another.

Other diagnoses are opposed to this angelic prospect, presenting instead an apocalyptic assessment of our electronic future. To quote Jean Baudrillard: "Virtuality aims only for prostitution, for the extinction of the real by its double." (Baudrillard 1995, 92)

Rather than commenting on this understanding of prostitution, I will limit myself to stressing that these angelic and apocalyptic assessments aren't all that different from one another. They certainly *sound* different, but the underlying diagnosis is quite similar: we are said to be facing a total change; everything will be electronically transformed, nothing will remain as it was. This totalizing feature can then be described apocalyptically when seen from the viewpoint of good old reality, and angelically when regarded from that of a glorious future.

A third group tries to take up a sort of middle position between the extremes, by saying that, today, reality and virtuality are simply converging toward equivalence, such that in each case the term 'virtuality' can be replaced by the term 'reality' and vice versa – and that doing so is the hallmark of progressive thinking. But this alleged middle position, I'm afraid, is just as one-sided as are the angelic and the apocalyptic ones. The diagnosis given is – in all three cases – uniformist: it is assumed that virtuality is the one and only determinant of our future. What these assessments lack is differentiation and, to begin with, a closer look at the phenomena as well as the concepts one uses (or, in my view, misuses) when advocating *totalizing* views of this kind.

My intention is not to deny at all the relevance of the processes labeled as 'virtualization'. I love and enjoy many of them. I merely object to the totalizing cultural, philosophical, or sociological assessments that are made about them.

## **Intent of the essay**

What I will try to do is first to provide a historical and critical survey of the usage and meaning of the term 'virtual'. This may help us to distinguish misleading, traditional ballast from appropriate options in the contemporary usage of the term. Secondly, I will address tendencies complementary to current virtualization, thematizing in particular the contemporary revalidation of non-media forms of experience. Thirdly, I will address an epistemological question: to what extent has so-called 'reality' always implied virtual constituents? My hunch is that reality was already virtual to begin with.

## **1. 'Virtual' – Semantic And Historical Considerations**

### **1.1 Current usage of the term 'virtual'**

Let me begin by analyzing the current usage of the term 'virtual'. *In everyday usage* (apart from specifically technological usages) 'virtually' is largely equivalent to 'practically', 'as good as', 'to all intents'. This is the standard meaning in English – and also in French where 'virtuellement' has adopted from English the meaning 'presque', 'à peu près'. The same holds for the current usage of the term in many other languages.

*In computer jargon* a specific meaning of 'virtual' was first introduced with reference to simulations of a process or device. The paradigmatic case was that of 'virtual memory', a hard disk simulating the behavior of RAM; 'virtual' here designates something that is not actually real but that nevertheless functions as well as if it were real.

As we can see, there is an obvious congruence between the everyday and the technical usages of the term. In both cases 'virtual' is equivalent to 'as good as'; the virtual approximates to the real. This feature is then radicalized in the aforementioned cultural discourse around electronic media, in which the virtual is said to be a more complete version of the real, and the traditional relationship is therefore inverted: the virtual ostensibly representing the primary future meaning of the real, and superseding the traditional meaning of the term. In earlier times 'potentiality' had been the concept corresponding to 'reality', that which gave the latter its shape and distinction. Today 'virtuality' is the new paradigmatic term, one, however, that tends to do away with 'reality' altogether.

### **1.2 Historical usages**

In order to better understand the novelty of this situation, I'd like to look back in history and offer a survey of the historical rise of the term 'virtual'. This, I

hope, will help us discover some of the term's historical implications, as well as its burdens, as well as to determine which current usages make good sense and which are untenable.

### **1.2.1 Aristotle's ontological account: actual being as the actualization of potentialities**

'Virtuality' was originally a term belonging to ontology; it referred to the structure of being. From Aristotle (384-322 BC) onwards, 'virtual' was equivalent to 'potential'. According to Aristotle, every entity can be described in terms of actuality (*energeia*) and potentiality (*dynamis*). Already with respect to their existence, a tree, a statue, a woman, or a man can be understood as actualizations of potentialities. The same applies to the tree's being burnt, the statue's transformation from a temple to a museum, the woman's becoming a dancer, and the man's getting old.

In this ontological framework, reality corresponds to actuality. And actuality is on the one hand superior to, but on the other hand also dependent on, potentiality. You cannot actualize what wasn't a potentiality beforehand. So in one sense, there is a one-to-one relationship between actuality and potentiality: actuality cannot contain more than potentiality did – the difference is merely modal. In another sense, however, the realm of potentiality is broader than that of actuality can ever be. There always remains a wealth of potentialities awaiting realization; potentiality is the inexhaustible ocean of actual being.

So, in the traditional sense, actuality and potentiality do not belong to different orders, but to the one order of being. There is no separate realm of potentiality – a potentiality of this kind would be merely empty. Potentiality – or, as it was to be called soon after, virtuality – is not a counter-concept to reality, but an inner element of reality, preceding every actual state of the real.

### **1.2.2 Middle Ages: 'virtual' designating the potential as striving for actualization**

Whereas Aristotle spoke of 'dynamis' — translated literally as 'potentiality' — Thomas Aquinas (1225-74), when renewing Aristotelian ontology in the high middle ages, introduced the term 'virtual' as a synonym for 'potential'. From then on it became a familiar substitute for 'potential' in philosophical language. Nevertheless, there was a slight difference between the old and the new term. 'Virtual' accentuated the potential's driving force to become actual, it was equivalent to 'emanating from the force of a thing', designating an active, not just a passive potentiality.

### **1.2.3 Michelangelo: full-fledged virtuality**

Now I want to step outside philosophy for a moment and consider an application of the Aristotelian-Thomist concept of the virtual to the arts and in particular to sculpture. Let's move on from Athens and Paris to Carrara in order to join Michelangelo (1475-1564) as he selects his blocks of marble.

How does he view them, and what is his understanding of the sculptor's activity like?

Michelangelo repeatedly emphasized that his intention was not to *create* his sculptures but rather only to *free* the figures already virtually present in the marble. According to him, the sculptor's work consists only in taking off the surrounding husk and thus allowing the dormant figure to appear, to be revealed. The sculptor does not produce the shape of his statue, he only brings the virtual figure to the fore.

This, I think, is a telling example of the virtual's progression toward the real. In Michelangelo's view (which was typical for the Renaissance), the virtual is completely defined and already semi-actual, it is not a mere, but a full-fledged potentiality - only until now a hidden one.

#### **1.2.4 Leibniz: a new, epistemological account of 'virtuality'**

The next step was taken by Leibniz (1646-1716), who claimed that our prime ideas (unity, causality, opposition, and the like) are innate to our intellect. He explains this by comparing the intellect to a block of marble whose veins already mark out a specific shape, say, that of Hercules.

Just as the sculptor has only then to expose these veins and to polish them into clarity, so the innate ideas of the intellect are in need only of being made explicit – as opposed to being received or acquired. Here Leibniz is obviously applying Michelangelo's model to the intellect. "Ideas and truths", he says, "are innate in us – as inclinations, dispositions, habits, or natural virtualities (*virtualités naturelles*)" (Ibid).

What's new here is not so much the dynamic view of the virtual – with cognition being understood as the actualization of an inner, virtual content of the intellect, rather than as the acquisition of information from the outside — for this dynamic tendency has been familiar to us ever since Thomas and Michelangelo. The specific step made by Leibniz consists rather in the fact that the term 'virtual' no longer refers primarily to ontology but to epistemology.'

Both elements – the active understanding of the virtual and the shift to epistemology – are important factors for the reevaluation of the virtual in modern thinking, which in general turns from a static to a dynamic and from an ontological to an epistemological perspective.

#### **1.2.5 'Virtual' as pointing to a plurality of orders**

Thus far, despite all other developments, one feature has remained unchanged: the virtual and the actual belong to the same order (be it ontological or epistemological) as opposed to different orders. Let me now turn to the exceptions to this pattern: sometimes the term 'virtual' points to a plurality and difference of orders.

### **1.2.5.1 Kant: the merely virtual presence of the non-corporal in the corporal world**

Kant provides a first example. Whenever he uses the term 'virtual', he does so with reference to the question of how an object of one order can appear in a different order. His paradigmatic case is the presence of the soul – which by definition is non-corporal – in the corporal world. Kant's answer was: the soul has a virtual as opposed to an actual (or local) presence in the corporal world: "its presence in the world is not spatial, but virtual" (Kant 1770, A 25 § 19). Here the virtual is obviously not understood as an antecedent version of the real (as in the tradition from Aristotle onwards) but as a counterpart to it.

### **1.2.5.2 Bergson: a more complex view of the relationship between the virtual and the real – criticism of the traditional pattern**

It was Bergson who established a new and more complex understanding of the virtual – keeping it autonomous as well as connecting it with the real.

According to Bergson, the virtual first constitutes a domain of its own with its own worth. The realm of our virtual images and imaginations cannot be reduced to our relations with the real. But, secondly, the virtual is also important for our activities within reality. Our perceptions, for example, have virtual images at their origin, which then, via a series of intermediary steps, achieve actualization by giving rise to concrete sensomotoric actions. Thirdly, however, these actualizations do not bring about a simple copy of the virtual image; rather, the actualization of the virtual always differs from its original form. The actualization of recollection, for example, as it occurs in sensation and perception, does not consist of an identical reproduction of the virtual image. Instead, the latter is transformed into a specific perceptive or sensorial image, and could just as well have been transformed into a slightly different one.

Based on this complex view of the relationship between the virtual and the real, Bergson develops a harsh criticism of the way in which traditional ontology and epistemology conceived of this relationship, when they understood the potential as merely the antecedent double of the actual, possessing no property of its own. Bergson puts an end to the one-to-one relationship between the potential and the actual, and highlights instead the autonomy of the virtual.

So, according to Bergson, the virtual and the real constitute different orders which are nevertheless connected with each other: although our every action requires contributions from the virtual side (images, recollections, etc.), the actualization of the virtual does not simply replicate the virtual, nor can the virtual be exhausted by its actualizations. In stating that the virtual is not simply replaced by its actualizations, Bergson's conception differs from the traditional model; and in emphasizing that the virtual cannot absorb the real, Bergson's conception also differs from current hyper-claims about virtualization.

### **1.2.6 Intermediate summary**

To provide an intermediate summary, for a long time there was only one type of usage: the virtual was understood as the potential and thus belonged to the same order as the actual. This feature goes back to Aristotle's ontology and stretches, via the Middle Ages, through to Leibniz's extension of the model to epistemology. But the limits of this feature are obvious. Understood as the potential, the virtual has no worth of its own; its only destiny is to become actualized and thus to vanish as virtual. This is an imperative inherent in traditional ontology and epistemology: being and cognition are to be perfectly realized, potentiality is to be transferred as completely as possible into actuality.

Only later did a different understanding arise that advocated the the notion of a status for the virtual distinct from that of the order of the real. Prepared by Kant, this understanding was strongly developed by Bergson. But in this Bergson did not turn from simple monism to simple dualism. He also addressed interconnections between the virtual and the real. The real is indeed impregnated by the virtual, yet the virtual and the real also remain distinct.

From this historical survey we may draw the following advice: the relationship between the virtual and the real is a complex one and is to be reduced neither to a traditional, realistic, nor to a postmodern, virtual monism. Differentiation – taking into account intertwinement as well as distinction – ought to prevail.

### **1.3. 'Virtual' in the discourse around electronic communication**

Does the current usage of the term 'virtual' with respect to electronic communication live up to this demand?

#### **1.3.1 Terminological clarifications**

Let me first observe that there are currently three different usages: a technical, an Internet-related, and an environmental one.

The technical usage – with 'virtual' designating simulations of a process or device in computing – was already mentioned above with particular reference to virtual memory. A second usage is related to the Internet, with 'virtual' referring to the electronic generation of things occurring there – think, for example, of virtual communities (cf. Rheingold 1993). A third usage refers to 'virtual reality' (VR) in the narrow sense, where, equipped with gloves and goggles, one experiences computer-generated environments and events in a realistic way.

#### **1.3.2 How does the 'virtual' affect our understanding of the 'real'?**

These three versions have a different relationship to and impact on our understanding of the real. With respect to the technical usage, we readily accept the idea that there is not much difference between the virtual and the

real – virtual memory functions in just the same way as real memory would (at most it is a bit slower). The Internet-related usage may make people inclined to consider the virtual as just one more version of the real – albeit a particularly useful one. It is only the third version, the talk of virtual reality in the narrow sense, which engenders controversial claims, because with reference to this usage it is often suggested that the virtual might completely take over in the future, that for everything real in the old sense it might substitute a better, virtual version – with traditional reality simply becoming more and more shallow and shabby.

### **1.3.3 Historical, terminological, and logical criticism of the wholesale virtualization thesis**

This latter claim obviously represents a strange combination of advanced technology and old thinking. It maintains that reality has to be of a single order, as was assumed in the metaphysical age, except the traditional hierarchy is now turned upside down – with the virtual being on top and the real being degraded to the lower level. The historical survey provided above, however, suggests that precisely such thinking in terms of a single feature is far too traditional to grasp the more complex modern conditions of reality. Already Bergson's conception – developed almost a hundred years ago – implied a strong warning against unilinear thinking in matters of virtuality and reality, and advised us to adopt a more complex view. And modern thinking in general recommends us to consider not just one but several types of reality, to face a plurality of different versions of 'reality' (such as everyday, realistic, artificial, virtual realities, etc.). – So, first, the wholesale virtualization thesis is to be criticized in the light of historical and modern differentiation. Secondly, this thesis is lacking in terminological distinction because it fails to distinguish the three different meanings listed above of 'virtual' within the current electronic discourse itself. It simply takes the third one, that relating to VR-environments, as an indistinct catch-all notion and extends it over the whole field of electronic communication. In this respect, the uniformization thesis is an effect of non-distinction at the terminological level. Something similar, incidentally, is often to be observed with uniformization diagnoses of various kinds: the uniformity proclaimed results in the first place from one's own strategy of levelling conceptual differentiation. It is by using 'virtual' as an indistinct catch-all term that the gloriously simplistic prophecies of current or future total virtualization come about.

Thirdly, logical criticism is called for. The electronic virtual undoubtedly affects our experience and understanding of reality today. But such influence is not automatically to be equated with absorption or throughgoing determination. The fact that probably everything is influenced and altered by the experience of the electronic virtual does not mean that everything *becomes* straightforwardly virtual. What we are in fact witnessing amidst the increase in the electronic virtual is not virtual uniformization, but rather a reconfiguration of our concept of the 'real', a reshuffling of the cards and of versions of 'reality' is taking place.

So altogether, instead of heralding a monism or overall claim that is in fact old-fashioned and merely seems novel – because it is `virtual' – we would be better off investigating with scrutiny the reshaping of the several versions of `reality' which is currently to be observed. – In order to substantiate this perspective, I will now turn to the second section of my essay and discuss a contrast which clearly cannot be reduced to a single pattern, but requires acknowledgement of different kinds of experience and reality.

## **2. Revalidation Of Non-Electronic Experiences**

The present day, it seems to me, is characterized by a *double* structure: predominantly, of course, by the fascination with electronic worlds, but, on the other hand and complementarily, also by a renewed turn to non-electronic forms of experience. This double structure has received too little attention in the discussions of recent years. – I would like to bring it to the fore.

### **2.1 Some characteristics of the fascination with electronic worlds**

Let me start out by listing some functional, aesthetic, and ontological reasons for our fascination with electronic worlds.

#### **2.1.1 Functional**

Internet communication is functionally distinguished by marvellous speed, extent, and ease. As a competent user one has quick access to all kinds of information one is personally looking for, and surfing the web can be much more adventurous and pleasurable than finding information in such traditional ways as checking books or catalogues. Email communication is not only amazingly fast but also highly considerate to one's correspondents – they are spared the terror of the phone, which demands interrupting whatever one is doing and being available on the spot. Moreover, virtual communities offer contact with just the people one wants to communicate with – whereas such people may be hard to find or hardly exist in one's everyday environment.

Virtual reality enables us to travel at ease through real world environments (say, the Loire castles) or through virtual environments (say, imaginary sites in outer space). In doing this, we are freed from the nasty bodily laboriousness connected with such travels in real life. A great deal of the electronic world's appeal results from this. Platonists – who always wanted to free man from his body – will certainly love virtual worlds. Whoever claims that VR (virtual reality) can supplant and replace RL (real life), is probably a Platonist – a novel, high-tech Platonist.

#### **2.1.2 Aesthetic**

Aesthetically, lightness and mutability prevail in electronic worlds. Bodies in the synthetic picture space have lost their inertia, they float and carry out motions and mutations at will. Electronic picture space has something of the

weightlessness of a spaceship. If there is a lightness of being anywhere, then it's in the electronic realm, a space in which everything seems possible and feasible.

### 2.1.3 Ontological

Furthermore, with electronic worlds we enter an *ontology* very different from the accustomed one. First of all, the distinction between appearance and essence (which is so crucial for the everyday world) does not apply here at all. Appearances don't lack anything, they are identical with their *essence*. Hence traditional ontology – with its deep reflections on appearance and essence – does not apply here either. Electronically, we indeed move in a different type of world. Its main axis is not vertical but horizontal and it is characterized by an unforeseeable multitude of lateral connections, extensions and hybridizations.

### 2.2 Contrasting experiences

But does all this justify the assessment that in the future good old reality will be straightforwardly replaced by virtuality?

Obviously not. Just think of Marshall McLuhan's thesis that the medium is the message. If this is true, then electronic media must, for systematic reasons, lack the forms of experience peculiar to other media. They may well be able to take hold of all *objects*, but – just as every other medium too – *only in their own, medium-specific way*. When they present objects also known through other – say everyday – modes of experience, they cannot identically reproduce those *other modes of experience*, they only can offer their own mode of presentation and experience of these objects instead. In other words, electronic media too are specific; they can present many kinds of familiar or new objects, but they cannot replicate non-media forms of experiencing these objects.

This, I think, is one of the reasons why today we pursue not only the wonderful possibilities of electronic media but, in contrast to them, also some of the forms of experience which they constitutively lack and which are specific to other forms of experience. The highly developed electronic world doesn't simply overcome or absorb traditional experience (as many media enthusiasts would have us believe), rather, in a complementary move, a revalidation of ordinary experience is to be observed, in which particular emphasis is put on those traits neither imitable nor replaceable by media-experience.

### 2.3 Counter-options

Thus we are today learning once again to esteem inertia in contrast to hyperspeed, resistibility and unchangeability as opposed to universal moveability and changeability, persistence in contrast to free play, constancy and reliability as opposed to ongoing mutability. Touch-of-a-key instantaneity revalues in contrast slow, autonomous development; arbitrary repeatability

awakens the desire for uniqueness; electronic omnipresence leads to the yearning for another presence: for the unrepeatable presence of *hic et nunc*, for the singular event.

The counter-options can be assembled under headings such as 'matter', 'singularity', 'uniqueness'. What claims its own space and time, what is not exchangeable but rather unrepeatable is becoming important to us again.

Similarly the, body – our lively body that, according to Merleau-Ponty, is the element of all our being and activity – is becoming a big issue again. Telematic and ordinary bodily experiences stand in contrast. Distances are today vanishing telematically, but this doesn't mean that our bodies are shrinking too. Processors are becoming ever faster, but not our sensory, motor, and psychic abilities (at least not to a comparable extent). The processing capacity of computers is growing exponentially, but our lifetimes, our reaction times, our comprehension times are not. To be sure, the body is not simply invariant. But the bodily changes taking place today under the influence of electronic media are at best a slow metamorphosis in comparison to the hyperspeed change in technology.

Hence, against the current virtualization of the world, a cultural turn to the body is to be observed as well. We are accepting and appreciating anew the sovereignty and the proper constitution of our bodies, which imply wonderful capacities as well as deficiencies, vulnerability, and aging. Nadolny's recognition of slowness and Handke's praise of weariness are indications of this turn (Nadolny 1983; Handke 1989).

## **2.4 Complementarity**

In order not to be misunderstood, let me clarify that I understand the counter-tendencies named not as a straightforward counter-program to the artificial paradises of electronic worlds, but rather as an initiative complementary to them. The counter-options do not deny the fascination of electronic worlds; nor is it simply a matter of returning to sensuous experience, such as this might have been in pre-electronic times. Revalidation is also tinted by the experience of electronic media; the values of matter, uniqueness, and the body are being rediscovered in contrast to virtual experience and as a counter-weight to the increasing derealization of ordinary reality that is currently proceeding under the influence of the medias.

So there is a polarity as opposed to a blunt opposition or exclusion between the two realms of experience described. There is also exchange and transition between them. Sometimes ordinary experience is just the thing lovers of virtuality are after. My favorite example is that of the electronics enthusiasts of Silicon Valley who in the evening drive to the coast to watch those truly incomparable Californian sunsets before returning to their home computers and diving into the artificial paradises of the Internet. In doing so, they complement their virtual experience with outstanding, non-virtual experiences, and switch quite naturally between the two types, enjoying their complementarity.

## 2.5 Unsubstitutability

Once again: electronic and non-electronic modes of experience are mutually unsubstitutable. One side of this – that ordinary experience cannot simply replace electronic experience – is familiar to us; the fascination with electronic worlds is obviously nourished by this fact. That, however, electronic experience cannot replace ordinary experience either, and does not simply overcome it, seems in need of emphasis and clarification – at least with respect to some propositions raised within the electronic enthusiasts' club.

But let me ask: isn't it evident that there is a blatant difference in walking through a building – say St Peter's cathedral – really or virtually? Or in seeing a statue of Buddha in front of you on the monitor, or approaching it in real life and experiencing such a 25-metre-high colossus with your entire body? Or in experiencing a sunset sitting on a clifftop in Big Sur and watching a video of it at home?

But unsubstitutability – I insist – exists in *both* directions. This is why for some people 'virtual reality' may very well be altogether more real and relevant than everyday reality. It offers these people more interesting communication, fulfills their interests better, enables them to find, think, and act more precisely than in the banal, hotchpotch everyday world. A cosmopolitically oriented person will, say, be able to pursue her wishes for transcultural communication far more easily, quickly, directly, and reliably through electronic media than in the everyday world – even if she should spend every day sitting in a jet. To be sure such an Internetizen also has and needs an everyday life – for the purposes of nutrition for instance. But it will not be very exciting for her: "Real Life is just one more window (...) and it's not usually my best one" (Turkle 1995, 13).

## 2.6 Plurality of modes of experience – contemporary cultural nomadism

So in general, it seems to me, the current transformation of our experience is of a tandem nature. On the one side, and predominantly, there is an obvious turn to virtual experience. But, on the other side, this is accompanied and complemented by a revalidation of ordinary experience. The unilinear perspective of media enthusiasts, according to which only electronic forms of experience are advanced today, with all others being merely antiquated and rightly condemned to extinction, is neither factually true nor desirable. It overlooks the fact that our experience is becoming twofold, pursuing both media-fascination and non-media experience.

And there is nothing wrong with this duality. By taking several tracks, our life becomes more contemporary and more invigorating. I think in general that people today are becoming something which traditional spirits never thought highly of and always rejected: we are becoming nomads – and I have in mind here less a geographical than a mental, psychic, so to speak everyday nomadism. We are starting to move to and fro between different forms of experience as if it were natural to do so. A person today should, I think, use

and enjoy electronic worlds, yet not *only* these but also other kinds of experiences – and should be able to wander between these different types.

### **3. Reality: Always Virtual To Some Extent**

#### **3.1 Recognizing the constructivist character of every kind of reality – an enlightening epistemological effect of the electronic virtual**

Experiencing and discussing virtual electronic worlds has, in my view, a useful and even enlightening impact on our understanding of reality. Thanks to the influence of the electronic virtual, we are becoming increasingly aware of the constructivist character of all types of reality.

Once we experience that the same objects are accessible through different modes of experience – say a standard everyday and an electronic-virtual one – then we become aware of the specificities as well as the limits of each of these modes. And if some things turn out to be accessible only through one mode or another – as one's sleepiness in the morning can be recognized only through direct, personal experience; the existence of quarks, however, only through the theory and experiments of physics; and the angelic potential of the human mind only through electronic technology – then one may begin to comprehend that no kind of reality is ever an immediate given, but is bound to a specific framework of access, conceptual means, and pragmatic features. Reality of whatever kind arises only within a related set of conditions.

#### **3.2 Nietzsche's message is becoming evident**

The epistemological impact of media experience on our understanding of reality can perhaps best be rendered by saying that the electronic virtual finally makes Nietzsche's message evident to us. In his essay *On Truth and Lies in a Nonmoral Sense* from 1873, Nietzsche showed, first, that reality is altogether *made*: facts are *fact-itious*. Secondly, he pointed out that this production of reality occurs through *fictional* means: through forms of intuition, basic images, guiding metaphors, phantasms, and so on. Thirdly, he breached the threshold of a single and common world: if reality is the result of production, then the emergence of varying worlds is to be reckoned with.

So, according to Nietzsche, we bring forth reality by fictional means and by way of metaphorical activity. `Reality' is originally the offspring of fiction, and socially established reality is the result of sharing such fictions. Such is Nietzsche's thesis of the birth of reality from fiction. To quote Nietzsche himself: "What then is truth? A movable host of metaphors, metonymics, and anthropomorphisms: in short, a sum of human relations which have been poetically and rhetorically intensified, transferred, and embellished, and which, after a long period of usage, seem to a people to be fixed, canonical, and binding. Truths are illusions which we have forgotten are illusions; they are metaphors, that are worn out and have been drained of sensuous force, like

coins which have lost their embossing and are now considered to be metal and no longer coins." (Nietzsche, 1979, 84)

Two statements are implied here: that at first reality is a product of invention; and that our later forgetting of this invented character leads to our ordinary understanding of reality. Man "forgets that the original perceptual metaphors are metaphors and takes them to be the things themselves." (Ibid. 86) This is Nietzsche's thesis about the origin of our *concept* of reality. Whereas reality is born from fiction, our concept of reality is born from oblivion.

### **3.3 From virtual, through fictional, to real (a Bergsonian account of Nietzsche's insight)**

Nietzsche puts metaphors at the beginning. But perhaps his insight could be rendered even more appropriately by using the term 'virtual' – in a sort of Bergsonian version of the term. Nietzsche's conception would then read as follows: at first our images are virtual; they are mere imagination. But when used as fictions and put to work in the constitution of reality they become real. Afterwards they will for some time still be recognizable as fictions. But in the long run – when the type of reality they shaped proves successful and is shared by a community – they will, through a process of sedimentation, come to be forgotten as images and fictions and be taken for utterly real. If anyone then called them fictions they would be considered mad. It will require specific attention – for example through historical study – to rediscover their fictional character. – From virtuality, through fictionality, to reality: this is the sequence of the constitution of what we call 'real'.

### **3.4 Examples of the fictional constitution of the real**

Historical study can teach us the extent to which perceptions and assessments of reality that today appear simply natural and self-evident in fact originated through new fictions, many of them brought forth by art or literature. Take the pioneering role played by romantic art and literature in the perception of mountains as an example: today we perceive of mountains as being beautiful – which is why they are being trampled over by masses of tourists. But they used to be perceived of as terrible. Only in the late 18th century was a new aesthetic quality discovered in mountains: that of the sublime; painting of the early 19th century then began to present the mountain world as beautiful. Thus romantic art and literature played a key role in the perception of mountains that to us today seems completely natural. Fiction became reality.

Equally, our amorous behavior and rhetoric is shaped by generations of artistic and literary examples. George Steiner has pointed out that in our acts and expressions of love we adhere to a rhetoric established by Petrarch's phrase book. To be sure, today's examples may come from elsewhere: from certain sectors of the video industry. But even then the thesis holds that our experience is never unschematized or immediate, that it always occurs under the sway of models.

Some theorists, however, want to make us consider things the other way round. They say that fiction in general and media experience in particular strictly presuppose everyday experience, that they are founded in everyday experience. Well, I admit, you wouldn't recognize a sunset as such on TV if you hadn't experienced sunsets before 'in real life'. However, this argument – which aims at marginalizing media experience and at declaring it in principle to be parasitic with respect to everyday experience – doesn't hold water in all cases. Would anyone seriously claim that we are only able to recognize an explosion in a film after and because we had at some time experienced one in real life? Most of us will have seen far more explosions in the media than in ordinary reality and will even draw our primary experience of the phenomenon from the media.

Even in relation to natural phenomena I would like to oppose the claim that we must first know these from reality and are only for this reason able to recognize them when represented in the media. It may often be this way, but it *doesn't have to be*. Think of rain. At the end of 1994 in South California it rained for the first time in five years. This means that five year old children hadn't known rain before. Yet rain wasn't unknown to them. They had often seen rainy scenes in films or videos – rainy scenes of quite variant kinds: the driving rain of the Rocky Mountains, from which one seeks protection, or the mild Californian rain, which is a boon. Hence this rain, when it then actually fell, was immediately recognizable for these children as rain, thanks to their media acquaintance with the phenomenon. And even their reaction to this rain probably followed the models of behavior (seeking shelter, enjoyment, etc.) that they had earlier witnessed on TV.

What is true for perception also applies to representation. Just as a bundle of historical and cultural conditions (previous lifeworld experience, sensory patterns, conceptual assessments, iconic models, emotional expectations) forms our perceptions, so too do these conditions play a role in our representations of what we perceive – we neither perceive nor represent things as they 'naturally' are, but as they are culturally constituted and formed. Let me refer to sunsets one more time. (Perhaps I mention this example so readily because sunsets are – as the German poet Durs Gruenbein put it – "the last ritual of Western culture".) Teachers today complain about pupils painting sunsets not according to their everyday experience, but by making use of representational patterns known through the media or advertisements. These teachers' disappointment is understandable, but untenable. It is based on the belief in an originary, direct experience of nature, one not schematized by cultural standards. But this belief is in principle mistaken. In the rendering of sunsets one previously used Claude Lorrain's representations as a model (he was the first in occidental painting to make the peculiar atmosphere of sunsets his subject); today one reaches to other, more easily available patterns. That is all.

### **3.5 Reality's complex architecture**

#### **3.5.1 Different layers – different perspectives**

One further point is in need of clarification. Does emphasizing the constructivist character of reality mean that whatever we consider real is a construction (a human creation) in all aspects? Yes and no. It is necessary to distinguish different levels. What for one perspective appears real can be revealed by another, a more elementary one, to be a construction. Nevertheless, it is important for the first perspective that its objects or points of reference in fact appear as real. To call them a construction would not make sense *at this perspective's level* – it does, however, from the more elementary perspective. Hence the double answer given above.

The relationship between reality and construction is altogether a complex one. At first they seem to be contradictory. But in fact 'reality' is connected with 'construction' in a twofold manner: it arises on a socle of constructions (and insofar as it is also distinguishable from this socle it appears as real); but at the same time its reality-character is due to its being based on previous constructions, because these guarantee the reliability of what appears real, as well as the fact that at the surface level no further construction is needed. – Following this structure, in fact, *ultimately everything* can be revealed to be a construction or to rest on constructions.

A crucial demand in this regard, however, is to distinguish the various levels. What at one level appears real is indeed real at this level, and can only be revealed to be a construction from a deeper level. Therefore it would be wrong to turn to a simple overall assessment of construction. Constructivism without distinction of levels falls short of the truth. Any advocacy of a total shift from realism to constructivism would be as one-sided as the suggestion of a total shift to virtualism that I criticized above. It would fail to account for the complex architecture of reality.

Furthermore, there is not only the one relationship between reality and construction which I have mentioned so far, but also another one where construction is not the basis of, but rather follows reality. The first feature – the standard architecture of different levels or layers – reads: what appears real is based on a variety of sediments of construction, some of them quite old and habitual and providing a safe ground for the givenness of the real. But then, once these constructivist stories of reality are guaranteed, further constructivist operations are possible: the production of new arrangements, interpretations, or creations of things (say through art, technology, science etc.), each clearly exhibiting a constructed character. So construction, on the one hand, precedes and, on the other hand, follows reality. – Therefore we had better expect a complex instead of a simplistic architecture of things.

### **3.5.2 Is reality constructed at all?**

A constructivist view of this kind meets with a lot of resistance. It seems highly implausible that not only obvious surface constructions but even the deep layers of reality are constructions. Constructivism seems to establish an overall machinery of human world-construction, denying any contribution from reality's side by translating whatever appears to be such into constructivist terms. This contradicts our everyday impression that there is a reality which is

not simply dependent on us but is hard and compelling and urges us to cope with it. I think, however, that my conception is able to provide – as is necessary – a sufficient account of this impression.

Let me try to explain this in more detail and in particular to demonstrate the constructivist character of the deep layers that according to the common view are unaffected by construction and, because of this, are considered capable of guaranteeing reality – in my view, to be sure, it is the other way round: these deep layers too are constructed, and it is the naturalness of those constructions which guarantees 'reality'.

Let me take mountains as an example again. Admitting the previously mentioned shift in their perception – from terrible and repulsive to beautiful and a place of adventure and excitement – one might say that this shift concerns only the semantic aspects of mountains, whereas it leaves the physical ones unaltered. The *same* mountains were once perceived in one way and are now perceived in another. Doesn't this show that the constructed trait concerns only the relatively superficial and not the deep layers of reality?

A closer look at those physical facts, however, which seem to remain unchanged and to be underlying any perception of those mountains, may teach us that things are a bit different. The altitude of mountains, for example, would be an element of those physical aspects. Now, is the altitude really invariant compared to semantic changes? Mount Everest, one might say, has always been 8848 meters (or, according to the most recent Survey taken in 1992, 8846 meters) in altitude, Mount McKinley 6193, and Mont Blanc 4807 meters – there is no change in altitude when changes of perception occur. However, in earlier times nobody would have made an assessment of this calculative sort. These mountains were considered 'terrifyingly high' or 'the highest'. In other words: the semantics of altitude was different. Likewise people didn't need to know that Mount Everest is higher than Nanga Parbat – both were the seats of Gods; neither was it relevant that Mont Blanc is higher than Monte Rosa – both were inaccessible, both were beyond the reach of humans. The modern measurement of altitude in meters introduces a new perspective: that of making comparisons and establishing a competitive ranking – from now on there will be an urge to climb the highest one. Put briefly, in earlier times outstanding altitude meant: it is beyond reach; in modern times, where it is measured in meters, any altitude means: it is within reach and should be reached. – This demonstrates how cultural and semantic differences reach even into that which seems to be merely physical and unaffected by culture.

Nevertheless, with respect to other aspects, like the mountains' physical mass, shape, and presence, it seems indisputable that these are objective physical facts that precede and are independent of any cultural perception. However, is the physical mass (the givenness of which nobody would deny) really totally independent of perspectives of any kind?

Consider, for example, that in the place of mountains, sophisticated scientific instruments would register something quite different: atoms and molecules

instead of the dense mass we perceive. This, it seems to me, is a revealing example. Modern physics in general has provided training in relativity: it has demonstrated the boundness of our common view of the world to our natural condition. From the Copernican Revolution to Einstein's relativity physics, and from the optical microscope to the electron microscope, we have learnt that our natural view is just one among a variety of other views – certainly one particularly relevant to us, yet just one possible view. So, in the case mentioned, investigation with an electron microscope or an assessment using tensor physics would reveal things completely different from what we perceive as mountains.

But on the other hand: would anybody advocate making the microphysical view of mountains the most elucidating or the primary one about mountains? Certainly not. But why is this? Because mountains, by their very meaning, are objects related – originally and, with good reason, permanently – to the human lifeworld perspective and not to a microphysical perspective. This, however, means that even the seemingly purely physical aspect of mountains' massiveness is – in its givenness as well as its relevance – bound to the framework of our lifeworld and to our corporal, sensory, and mental constitution. What we call 'mountains' are physically as well as semantically dependent on the human constitution, with the latter providing the framework within which such things as mountains occur the way we know them. So even the most elementary physical aspects of 'mountains' are relative to the human lifeworld.

This may finally become evident if we consider the following question: Do you think that mountains as we know them also exist for other living creatures like bees or birds? Of course not – although this fact may, at first glance, seem surprising to us. Nietzsche noted this when he said that it is "a difficult thing" for man "to admit to himself that the insect or the bird perceives an entirely different world from the one that man does" (Nietzsche 1979, 86). But once one addresses this question it becomes evident that this is the way things are (and scientific inquiry has provided much evidence of this).

Now let's consider one last thing. The difference between these world-views cannot be settled and the question of their appropriateness to the 'world as such' cannot be answered, because this would require access to a purported 'world as such'. But neither is such access possible nor – and this is the more decisive point – is the idea of such a 'world as such' sound, rather it is self-contradictory and meaningless. It is not due to our limited capacities or for contingent reasons of whatever kind that we cannot refer to a 'world as such' but rather because all such reference would have to take place within our framework and would therefore grasp *our version* of the 'world as such' instead of the 'world as such' itself. Ultimately even the idea of such a world is an idea already developed on the basis of our framework, and therefore by its very constitution it contradicts its own claim to being the idea of a world beyond this framework; hence the whole idea of the 'world as such' is *conceptually* self-contradictory and just an empty play on words.

So even what seems most unaffected by construction is in fact constructed in respect to ever more elementary frameworks. The constructivist thesis – when observing the different layers of reality – holds. And it can explain the surface impression of reality by reference to its dependence on ever deeper layers of construction.

### 3.5.3 Theoretical and pragmatic perspectives

From a theoretical perspective, then, it is possible to regress to ever more elementary levels in which the constructed character of everything that counts as 'real' can be demonstrated. This applies not only to things like mountains but to every worldly fact – 'world' always being a construction relative to human activities natural and cultural.

But practically viewed, things look different. For a photographer, a climber, a tourist, or the rescue service the mountains are simply real, and it would not make sense for their tasks and purposes to point out the constructivist layers in what we call 'mountains'. Rather, the latter are a reality they rely upon. And the fact that one can do just this (for the purposes of a certain perspective and with respect to a specific layer of the world) comprises the ordinary definition of 'reality'. Reality is what we refer to without constructivist assessments.

The constructivist character of what one perspective simply counts as real becomes an issue only from a different perspective. We can reveal the constructivist character through historical study, or profit from this insight in order to initiate a different view (for example, following the Marxist doctrine that recognizing that things have *become* how they are enables us to change them), or just to develop different, individual views (as artists do).

Nevertheless, in all procedures of this kind we will rely for our bedrock on other things we take to be real. There is no movement without a stable point of reference (stable for this purpose, perspective, or event) – it is just that this too can become the object of change in a subsequent move, taking then another hinge as its point of reference. This is the law that Wittgenstein formulated as the relationship between hinge and door: "the *questions* that we raise and our *doubts* depend on the fact that some propositions are exempt from doubt, are as it were like hinges on which those turn" (Wittgenstein 1972, 44<sup>e</sup> [341]). "If I want the door to turn, the hinges must stay put." (Ibid. [343]) He also said: "Nothing we do can be defended absolutely and finally. But only by reference to something else that is not questioned." (Wittgenstein 1984, 16)

Certainly, we usually have the impression that dealing with reality is a two-component activity: there is our attempt to cope with reality on the one side, and there is reality's answer to this attempt – validating or falsifying, aiding or opposing – on the other side. This is a quite reasonable way of putting things. However, it only holds as long as one restricts one's considerations to a certain level, referring to a certain dimension of reality without trying to get beneath it. Once, however, an attempt of this kind is made, the constructed rather than realistic character of the presumed reality may very well come to

the fore – but with an even deeper layer now being taken for granted, that is, for real. In short: `Real' and `constructed' are reflexive (perspectival not objective) terms – therefore what from one perspective appears real can quite naturally count as constructed from a different perspective.

### **3.5.4 The vast range of historical fictions and sedimentations**

Some additional clarification concerning the natural and cultural frameworks constituting the complex architecture of reality may be required. Let me start out with a remark about Nietzsche. When he says that man "forgets that the original perceptual metaphors are metaphors and takes them to be the things themselves" (Nietzsche 1979, 86), `man' is to be understood primarily in a social, not an individualistic sense. Indeed, the metaphorical (or virtual or fictional) contributions stem from the broad range of human natural and cultural history. Also the reference to natural history here is to be taken literally. Contributions from the long history of humankind are to be reckoned with, including the history of our biological evolution and of the formation of our body. Our sensory system implies age old virtual views and fictional assessments. Certainly not all of them can be attributed to acts of purposive, intentional, or conscious invention or projection; there is a great deal of unconscious activity to be taken into account. This is also the case for cultural history. In its course many features of perception, action, and understanding have been developed. Once they proved useful, however, they sedimented and became a seemingly `natural' component of human experience and behavior. Some of them persisted over time, others were improved or changed, others were disregarded (but nevertheless remained part of humankind's memory with the chance of being reactivated in one way or another).

Sedimentation is a crucial point. Nietzsche's reference to forgetfulness may appear negative, but is not to be taken this way. Forgetting the constructivist character of fictions, transforming them via sedimentation into seemingly natural features is just the way in which they live on. It also is the way in which the impression of simply dealing with reality – of the alleged self-presentation of something real – arises. And there is nothing wrong with this, because, on the one hand, this is simply the way things are, and on the other hand we must consider that for all practical purposes we must rely on something that is just accepted as real, that is not questioned, that we clearly take for granted – recall Wittgenstein's remarks about the hinge and door. Finally: without the appearance of something as `real' none of the phenomena from the palette of doubt, invention, phantasy, fiction, etc. could occur. They require a range of shared reality in order to allow some pieces of it to be questioned, attacked, or changed.

### **3.5.5 Conclusion: intertwinement between the virtual and the real**

What follows from all this? Whatever we consider real – be it ordinary or virtual reality – exhibits a complex architecture.

`Reality' – where traits like naturalness and reliability are prominent – has proven basically to be a depth effect. It implies a variety of layers, and it is the inclusion of sedimentations of various kinds (bodily, emotional, semantic, conceptual, etc.) that creates the effect `real'.

But something similar also holds for virtual phenomena – where artificiality is the prominent trait. The perception of something virtual is not independent of our capacities to experience something real. It is not only by contrast that the horizon of the latter is co-present (with the traits of artificiality taking shape in contrast to comparatively more `natural' characteristics.) But some of the features and schemes that comprise the real are also an active part of experiencing the virtual – think of such features as space, or time, or bodies.

So when dealing with things obviously virtual, where the amount of fictional input is evident, we should nevertheless avoid falling victim to the error of speaking of virtuality alone. `Realistic' layers are, as I just said, constitutively implied.

Likewise when dealing with what is obviously real, we should (at a reflective level at least) be aware of the degree of virtuality entailed by the various sedimentations on which this reality is based. We should recognize – and might even admire – that both age old as well as more recent cultural, and perhaps even specifically personal, fictions are, as it were, frozen in this reality, and that this is how the apparent solidity of this reality comes about. So there is intertwinement between the virtual and the real. They are largely coextensive. Reality is the result of the clotting of virtuality; it is frozen virtuality. If we consider the various degrees of virtuality which are built in reality of every kind, then we may very well say – and this is how I answer the question raised in the heading of this essay – that reality was already virtual to begin with.

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