

Formats

Ulrich Gehmann

Institut für Geschichte, Arbeitskreis "Formatierung sozialer Räume", Karlsruher Institut für Technologie, E-Mail: ugehm@t-online.de

Abstract

In the following, a new conceptual framework for investigating nowadays' "technical" phenomena shall be introduced, that of formats. The thesis is that processes of formatting account for our recent conditions of life, and will do so in the very next future. It are processes whose foundations have been laid in modernity and which will further unfold for the time being. These processes are embedded in the format of the value chain, a circumstance making them resilient to change. In addition, they are resilient in themselves since forming interconnected systems of reciprocal causal circuits. Which leads to an overall situation that our entire "Lebenswelt" became formatted to an extent we don't fully realize, even influencing our very perception of it.

Keywords: Formats, formatization, value chaining, colonization, technicality

Manuscript received 26 January 2012, revised 22 February 2012, accepted 14 March 2012.

Copyright note: This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided that the original work is properly cited.

What it is about

In the following, a new conceptual frame shall be proposed, to better comprehend social and cultural phenomena today in their technology-driven modalities, namely that of sociocultural formats, and of formatting, respectively.¹

Before we start to go into the matter, some preliminary remarks seem feasible. First and foremost, this is not to say that *all* sociocultural phenomena are formats, or the result of formatting processes; this would be a severe exaggeration not suited to match the issue we are confronted with. What is stated instead is that quite a majority of them became subjected under formatization, due to their deeply technological character, in peculiar phenomena concerning the forms of how the socially and culturally relevant world is organized today; and that this 'deeply technological character' can be comprehended in a most suitable way (to comprehend what it is, in its essence) by a new conceptual frame, that of formatization. The term had been chosen as an umbrella, to enclose both the structures of what it is all about here: the formats; as well as the processes we are dealing with: the formatting. Both those structures and processes have been subsumed here

under the encompassing term of *formatization*. The organization of real world-belongings through formatization, important as it is in itself, is superseded by another phenomenon probably even more severe (so the thesis): that also our entire perceiving of what *world* does embody, in its presumed essence, has been coined through such a formatization, too, and hence, our general forms of social communication (and not just of communicating), and in consequence, our sociality as such. Brought to its core, the thesis runs that formatization does not just coin the outer appearance of the phenomena in question, in fixing their structural as well as processual shapes, but also their very content. That we cannot but perceive at least many things in this world (including our own social relations and actions) through a formatted lens – and thus, perceive them in a formatted way; also those things (seldom as they are) which haven't been formatted yet, like for instance so-called 'natural' phenomena.

Second, what gets presented here is only a preliminary rough sketch, nothing more; offering the possibility for envisaging a variety of today's social phenomena, as well as their socio-technical cultural correspondants, under such a new perspective. In enlarging the above thesis by an additional one, both those outcomes and procedures are more widespread than we are aware of, since they turned out to become intrinsic factors of our daily life. And will continue to do so, due to a new wave of formatization to be expected in the very next future, when one

¹ It refers to a first attempt made in such a direction, see Ulrich Gehmann, Formatting and Loss of Space – Considerations, In: Journal of New Frontiers in Spatial Concepts 1. 2009, 60-68. (<http://ejournal.uvka.de/spatialconcepts/archives/861>).

looks at the forthcoming nano-technization of processes in daily life, accompanied by its encompassing digitalization already taking place right now. In short and summarized, these are the central theses of the sketch to follow.

The scope of habitualizing to, and through formatization is of peculiar interest, first and foremost as regards social behaviour, and social as well as individual perception. In addition, although it is triggered, nourished and enhanced in its impacts by diverse techniques, like those of nanotechnology, Smartphones, or a digitalized fully 3D-television coming up soon, the matter to be examined is not merely technical in its nature. And it is also not an issue confineable to the interpretative schemes of so-called technological assessments, i. e. to routines of estimation working under the premise of a business as usual: that the things will continue in a 'normal' way, in that the 'system' (in itself, a term quite technical) we live in will continue plus minus forever. It is the assumption that technological progress is going on like a natural force, and that we have (a), to estimate what such a progressing will make with us, and (b), that we, 'the society', have to 'decide' what we are willing to accept from that progress, and what not. As if such a thing like *the* society would really exist (who is 'the' society), and as if it would be a sole matter of decision on behalf of the affected. Although formats are working in a technological manner (which is more than a mere technical one), and although exactly this has to be assessed, it is not just about technology, and not about merely assessing it. What is needed is another look at the things instead, a one probably more radical, in a wordly sense: to look at these things in a more fundamental way. This is not to be misunderstood. Looking at formatization does not mean to condemn technique, nor technological or societal progress as such. It shall just offer some other *kind* of perspectives – the singular had been chosen to indicate another way to look at these things – perspectives very wide-ranged due to the manifold shapes and forms that formatization can adopt, in particular recently. The scope of this contribution is to outline those shapes and forms in an aggregated, rather kaleidoscopic and (necessarily) condensed manner, to offer a first approach to the theme. For doing so, we first have to look what the notions of formats and of formatting may comprise; and then, what they could mean in their actual terms.

What are formats, for an everyday understanding

When we think of formats, normally such things like a certain paper format (e. g., DIN A 4), specific operating systems (like Word, or the operating program of my iphone) or other merely 'technical things' come into our mind; it does mean that 'normally', formats are comprehended to embody (a),

devices which are (b), essentially *technical* and (c), whose purpose is to serve purposes, i.e. in final terms, to serve our needs – which are still our ones, we tend to think in that normal manner described here, and not those of the formats installed. *I* use my iphone, not my iphone uses me or I get (ab)used by it. Or expressed in traditional terms of an occidental view upon the world, when we think of formats we see them (just) as an embodiment of a mechanics² in its wider sense, as technical means helping to achieve something, in order to fulfill certain *functions* as a device – nothing else, and nothing more. It is a conceptualization of formats and of formatization in general that recurs to a likewise 'primitive' but nevertheless present conception of technique and of technicality as such, a conception not confined to laypersons: that it is a body of means designed to meet some ends, to be achieved via a certain functioning of those means; that this is technique, and nothing else. In its intuitive grip, it is an understanding not far away from the truth of real conditionings – but only as regards the technicality.

The 'designed' character of those means does indicate the idea that we have those means in our hands, that we can manage them at any time, and in any direction we want; that they are mere *instruments*. Because we were the ones who designed them, who planned them in a deliberate manner to serve our purposes. The very notion of management goes back to such an idea, indicating that we have the proverbial strings in our hands – i.e. are the masters in command at any time. Management, a neologism, originates from the Italian *maneggiare*, to keep horses at bay, to keep control over otherwise untamed forces.³ And that we use procedures of formatization in doing so, procedures ever expanding in covering ever new domains of life since those times where *maneggiare* had its origins, the Italian Renaissance as the beginning of new times leading to our ones of a so-called modernity and later, to its aftermath, a so-called post-modern and nowadays, even post-human era.⁴ But posthuman or not, we are

² Recurring to the conception of the technical to represent *machines*, a *mechane* in the Greek notion (where it first appeared explicitly, as notion), denoting *composed devices* like machines of war etc., as opposed to more *simple* technical devices which had been labelled *organon*, organ. And interesting to see with regard to that what follows, *mechane* (μηχανη) also denoted *trick*, the ruse or the *artfulness* to overcome something in order to realize one's own purposes. Jürgen Mittelstraß, *Das Wirken der Natur*, in: Friedrich Rapp (ed.), *Naturverständnis und Naturbeherrschung*, 1981, 53 f.

³ Yannis Gabriel, *The Hubris of Management*, in: *Administrative Theory & Praxis* 20(3). 1998, 266. It recurs to the Roman *manu agere* [from Friedrich A. Heinichen, *Lateinisch-deutsches Schulwörterbuch*. Leipzig–Berlin 1903, 506], to hold the things firmly in one's hands, to be the master of the things and processes in question.

⁴ To a post-human character of a modernity as it meanwhile is cf. (a), the format of *youtube* where it can be looked at live: <http://www.youtube.com/watch?v=GjpeFeWDqmU>, or (b), the

still the masters in command, despite all the problems that occurred aligned to the increasing use of formats (wherefore we need the mentioned technological assessments), since formats, and formatization in general, are a mere *technological* issue in the end. We are able to cope with this. And will keep it, due to proper management techniques whose appliance will lead to the intended results.

What are formats, and how they operate

Let's take the vignette of a few simple everyday examples to challenge such an everyday understanding. As a machine operator, I have to obey to the prescribed procedures of how to handle my machine; which, through that alone, is not 'my' machine any longer but I, like in Charly Chaplin's *Modern Times*, became actually a part of the machine. Even in cases where this becomes not apparent at first sight. My car for instance, it is my car insofar as I am its owner; but in driving it – when the car has to fulfill its destined function, a function it was *originally planned* for, namely to transport me from A to B – I have become a function of the car, it is no longer mine but I belong to 'my' car. That is, the situation for which the format was originally planned for – that I, as car-'holder', am the master in command for reaching certain ends – changed completely: the new format generated out of the old one is that I, the master in a nominal sense, became formatted to the format of driving.

Admittedly this is a very simple example of how formats work. But already such seemingly simple situations like the one sketched here reveal the entire problem. The more since it is not just about immediate functions when we look at functions. As the example shows, even not when 'only' the immediate function is considered, here: the one of 'just' driving a car. Not to speak about other formats that emerged out of the one of car-driving: that an entire car culture came into being, a format of mobility for instance, consisting in the *urge* to be mobile, a format caused and enhanced by still other ones, like those of transporting huge masses of goods and people in an ever increasing speed of circulation, and the more of that.⁵

We can take also more complex situations than driving cars, situations which in their totality make up our present life. As a clerk in an organization for instance, I have to follow the prescribed processual routines; the only alternative consists in leaving the organization. Because I am 'free' to leave the organization any time if I want to do so, because we are all liberated individuals, the latest since modern

times. But what this freedom is good for when I have to earn my living? It is a merely virtual freedom, even in case when I decide to actually leave this organization. Because then, I left only this one but have to go to another, working under the same conditions. If this is unavoidable, what to do in my longing to be a real, that is, a real liberated individual? Devote myself to work, in working for 'my' task inside the frames of 'my' organization? But opposed to a euphemism often used in management, it is not my organization and my tasks for which I work; in fact, I *belong* to the organization, because in that organization's real terms of operating, I became its *functionalized* part, in *submitting* myself under its routines. It means that I – as a Self, as an individual being – got functionalized. And hence, that I am not *myself* any more, at least not during my work time. These are important aspects for understanding the nature of formatization in its totality. Such circumstances (or better since more precise, such conditionings) hold valid also in cases where a seeming relief occurred, thanks to advances in technology and management techniques; that is, thanks to the circumstance that we nowadays live in advanced modern times. To cite other euphemisms, in times where a 'flat' or 'user friendly' hierarchy of such operations exists, or in cases of 'flexibilized work' where I can work at home, at various times, or even as a free lancer. Although they became seemingly liberal, the outlined conditionings remain the same, and our only freedom consists in choosing their respective variants; but not in choosing a real alternative. Ranging from business organizations and other institutions to computer programs and internet-based social media, systemic circumstances of such kind hold valid not just during work but are moulding entire life conditions.

In such a way, no matter how simple-structured or elaborated they are, formats embody ideas (concepts) and realities at the same time, and due to their entanglement, the problem is to distinguish one from the other. In particular when the latter case is regarded, the realization of formats, and alongside, of formatting; because the thesis is that many phenomena of formatization are not visible as such since they are not appearing in an obvious manner. In its actual terms, formatization is more than the seeming triviality that all of us 'depend on technique', and do so in an ever-increasing magnitude – the mere facticity alone of depending upon the technical is not trivial at all, nor are its consequences. Despite both were frequently described since modernities' onset and out of this, are estimated to be sufficiently clear. Although it owns a technical character, formatization is not identical with technique, or technology.⁶

more classical format in the traditional shape of a book: Chris H. Gray, *Cyborg Citizen: Politics in the Posthuman Age*, London – New York 2001.

⁵ To mobility cf. Kurt Möser, *Fahren und Fliegen in Frieden und Krieg. Kulturen individueller Mobilitätsmaschinen 1880 – 1930*, Mannheim 2009, 63 ff., where different forms of mobility in their interlinked historical making are examined.

⁶ To the non-technological moulding of technology cf. Rolf-Ulrich Kunze, *Symbiosen, Rituale, Routinen. Technik als Identität*.

Nor with the plain fact that as a zoon politikon, human beings are organized beings, living in artefacts they created for the purposes of living together – architectural ensembles called cities, other organizations of the most various kinds, and so on. That they therefore live in ‘formats’, i. e. inside the frames of functional organizations. It is not so easy, since the fact of being organized is not identical with that of being formatted. One can say that not every organization is a format, but every format is an organization; a one of a peculiar kind, as we shall see.

Sometimes, etymology might be helping to gain a deeper understanding of the phenomena in question. The notion of the format originates from the Latin *formatum*, the formed, and denotes – besides the extraordinary rank of something or somebody – a fixed entity, a normed relation according to a structure that is defined *ex ante*.⁷ And the process of formatting then consists in arranging entities in line with such a structure, that is, to norm them according to it; in one word, to align entities to a scheme. To better comprehend what formatization is about, we have to look at the notion of a *scheme*, too, at its different original connotations. Because these connotations in their interlinkedness help to reveal formatization's nature. What is a scheme, in its original terms of understanding? Derived from the Greek *schema*, figure, a scheme denotes an “illustrative”, nearly self-evident “presentation of facts that only contains the relevant and important to understand”; and at the same time, it stands for a prescribed pattern.⁸ Which then, of course, does only comprise the relevant and important – otherwise, it would be no *pattern*, and above that, not a one *prescribed*. Therefore, a scheme too denotes a cause that is “simultaneously dynamic and systematic”,⁹ an understanding that includes anticipation.

In other words, if schematizing is understood as a process of formatting, then such a process consists in the act of norming, in the standardization of formerly distinct, diverse individualities according to some program. It means the transformation of these individualities into *something other*, in making them identical, literally uni-form. The program is the format according to which something gets formatted, it is a formatting device. This is one source of its power. The other is the programs' anticipation – when we get aware that something is programmed, we expect that the program in question will not just apply for the moment but will be prolonged into the future, will virtually last forever. Once started, it will

continue without major deviations. In other words, that it can be applied repetitively, in a non-interrupted, non-changed manner, like for instance the production flow of an assembly line, a computer software, any other organizational routine, or the housing facilities below.



Figure 1. Scheme¹⁰

Metaphorically speaking, a program works like a machine – after it came to birth (as a conceptual idea) and has been put into operation (becoming a reality for the first time), it will determine everything within its reach and thus will turn into the domineering reality (thus becoming a reality for the second time), at least for the ones subjected. What goes on for the moment will go on in the future. Formats are repetitive. As long as the program obtains the inputs it needs for its operations, and unless it gets significantly disturbed, or destroyed, or unless the subjected do not leave the domain of its operations. Because all the time, the subjected are transformed into something other than they have originally been.

We can approach the phenomenon also from a more formal side. In its most general terms, a format is a fixed structure that is normed, either as result, and/or as structural pattern for further norming; e. g., when one takes the housing block in the above picture (a result), or the architectural ensemble of an assembly line in production (a result used for further norming). ‘Normed’ means here that the structure in question follows a certain scheme, a scheme installed to uni-form the entities to fall under its regime. Housing blocks like the one presented in the picture do occur everywhere, for instance, they are ‘schematic’. Referring to the relation between formatization and the technical, this is what we immediately experience when looking at them; for our intuitive impression, such blocks look technical, somehow. They need no specific locality but only certain conditions to occur (of investment, of space, etc.) – in one word, they are essentially the same, despite minor deviations. They have not to be nice or pleasant but to fulfill a function, and this is what

tätsbestandteil. Technikakzeptanz der 1920er bis 1960er Jahre, Karlsruhe 2010, 9-13.

⁷ From Duden's Etymological Lexicon, 1994, 480; and to the *norm*, also as process, Friedrich A. Heinichen (see note 3), 561.

⁸ From Johannes Hoffmeister, Wörterbuch der philosophischen Begriffe Hamburg 1953, 536.

⁹ From Georgi Schischkoff, Philosophisches Wörterbuch, Stuttgart 1991, 638.

¹⁰ Formatted housing, Karlsruhe. Photography by the author.

accounts for the technical impression: namely to house people, as many as possible for a given (pre-defined) amount of costs needed to erect and to maintain these blocks. In doing so, they could stand everywhere, they embody no individualities bound to a specific local or historical context. And in fulfilling this function, they have also to fulfill another one: to serve another format, that of profit. Since they have been planned and erected in order to be profitable; that the revenues gained out of the format *housing block* are structured (formatted) in such a way that they lead to profit. And to do so repetitively, virtually forever after the housing block has been erected and can be 'used' now until its removal or decay. Not for housing people, because this is only the minor reason why the format of the block has been installed, the derived one, it is only the function in the first instance, so to say; but for generating profit.

The example reveals that the notion of a format as a fixed and normed structure is not so clear-cut as it might seem at first sight. Apparently, a 'fixed structure' can denote not only structures in their plain sense, static entities, but also processes, dynamic entities. Moreover, it seems that many formats are not standing alone, do not lead an existence by their own but are linked to other formats, are interacting entities. In other words, an interdependence between certain formats does occur, them forming a *system* (technically speaking). That the phenomenon of formatization as such, the processes of formatting as well as the structures of formats, is closely aligned to the notion of the function. That formats are not just functioning in themselves but in addition, have to fulfill other functions, mostly for other formats. The latter circumstance enhances the impression of a teleology of formats. Behind those teleologies to be realized through the functionalities of the formats in the foreground – the function of the housing block in the first instance, the teleology of the processes in the assembly line to produce items, and so forth – it looks as if there exists an additional teleology, expressed in a hierarchical order where the different formats which make up a system are placed; a kind of meta-format, consisting of a hierarchy of functions linked to each other. And it becomes evident that the notion of a teleology of formats is as tricky as the one that formats are 'only' normed, fixed structures.

One reason for this is that as a normed, fixed structure, a format can adopt different shapes, or *Gestalten*. In recurring to the notion of a scheme and its properties, namely to embody a fixed pattern and a "simultaneously dynamic and systematic cause" at the same time (to cite its characterizations made above), the close vicinity between formats and schemes becomes apparent. Moreover, it has been said that in order to understand formatizations' nature, we have to understand what a scheme is. Albeit schemes and formats are not identical. It is true that

a format does work in a schematic way, and in that, does own a 'schematic' nature, and it is even true that formats are almost identical with schemes; but almost is not always. It is the same problem as with the relation between formats and the technical: although formats work in a technical way, they are not identical with technique. We can comprehend a format as a peculiar kind of scheme, an algorithmic one, i. e. "an exact sequence of work steps, given in a formalized language."¹¹ This is the general shape belonging to a format, its overall Gestalt, and this general shape can adopt additional shapes now, as its modifications. What is enclosed in such an understanding?

That a format is either (a), the result of an algorithmic procedure. This is an additional shape formats can adopt, next to their general, encompassing one of being algorithmic. It means that some formats can be understood as outcomes of formatting processes which lie beforehand, processes of an algorithmic nature which constituted them as these (and no other) outcomes. For example, the cars coming out of the assembly line are formats of a certain kind, or the pictures in my Smartphone, or the housing block we looked at.

Or (b), that a format embodies a blueprint (another shape formats can take) of how to process entities into further formats: the format of this assembly line here leading to the format of those cars there, in using the 'entities' of different inputs to do so. Whereby (a) and (b) can often overlap, also in an unintended way, as has been shown in the case of car driving looked at earlier. It means that formats as blueprints generate other formats which then turn into blueprints for other, additional formatting processes; and this not only willingly (intended), but also unwillingly. As regards the latter case, these 'new' formats work although nobody intended them to do so, wanted them to work as *formats* – probably one of the most important cases of formatization, in particular today; so the thesis. I do not necessarily like to become the format of 'my' car, or to live in such 'living' facilities as the housing block above is representing, and so on. The point is about a formative causality, a phenomenon to be examined later on.

Or (c), it stands for the formatting process itself (still another shape), for the actual processing of the entities in (b); e.g., when the system of the processes needed to produce exactly these cars (these formats) and no other ones is in operation, in actually producing these cars.

To recapitulate, regarding formatization as a general phenomenon, the categories (a) and (b) have been subsumed under the label of 'formats' (in a narrower sense), and (c) has been called 'formatting'. In other words, we have structural formats:

¹¹ Brockhaus Encyclopedia, 1986, 365.

formats as fixed structures, and processual formats: formats as processes. And we have seen that both kinds of formats interact, that structural formats can lead to processual ones which again lead to further formatting.

But is this enough to comprehend formatization? Surely not. Helpful as such classifications may be, in posing some landmarks of orientation into an otherwise vast space of highly diverse but nevertheless related phenomena, they are not sufficient to explain this space – of what it actually is, as a *space*: as a dispersed but at the same time consistent entity. In the beginning it was said that we are formed by formats, or formulated more cautiously, that we are influenced by them in a high degree, first of all in the direction of becoming habitualized to, and through them. If this is the case, then two dimensions of habitualization would simultaneously exercise their impact upon us: on the one hand, we habituate to existing formats, e. g., to cars, in driving them; on the other, we get habitualized through formats, i. e. format ourselves by using formats.¹² And it is easy to see that the latter dimension is by far the more dangerous one, and moreover, that these two dimensions making up habitualization cannot get explained sufficiently by just building categories of the above kind, no matter how helpful they might be for a first orientation. The more since habitualizing (to something) and getting habitualized (through something) does not equal the mere *adaptation* to something. As its two dimensions are revealing, habitualization contains more than just adaptation. Otherwise, the traditional, common-sensed perspective upon formats and formatting would be right, the perspective we looked at in the beginning, a perspective relying upon a belief in the universal *disposability* and *manageability* of formats.

Therefore, it might be of help to return to (c) again, the very process of formatting, and to examine it more closely, in peculiar as regards its supposed algorithmic nature. Again, we can approach it in a more formal manner. In its most general terms, an algorithmic procedure is a one that is fixed (according to predefined criteria) and that follows the logic “apply these steps in this sequence in the ever same manner, and you will get the ever same results”. Examples are the mentioned processes going on in a production line, or the processes of information proceeding in an organization, or [...]. The reader can imagine a lot of processes falling under this category, also comparatively simple ones, like for instance driving a car, guiding a plough, or using a hammer to nail something. Due to their rigid logic, those processes are a *technique* to achieve some-

¹² A conception of habitualization that exceeds the habitus-concept of Bourdieu, due to its *colonizing*, that is, *formatting* properties; aspects to come to.

thing, they can be trained, learned, and *repeatedly* applied, no matter the concrete circumstances (if this nail is brass or steel) since they remain always the same: irrespective of its surroundings, the process *as such* has not to be altered, at least not significantly. As long as the essential premises for its application are met, it can be applied. These consist not only in the immediate conditions which have to be met in order to ensure the respective format's performance, but too in those of the respective meta-formats (e. g., of profit generation) for which the formats in question become applied at all.¹³

As mentioned, common to all those processes is their algorithmic character, a character that can be described in its ideal form by the formula $y = f(x)$, that every y as an input to the process (which as a whole, is described by the formula) will be the function of an x behind it, so to say. And that the procedure according to which the y is processed will never change, remains always the same, like the resulting y' does after the original y has been processed. A function is a *prescription*. This algorithmic character distinguishes formats from other kinds of organizing, e. g., from those inside a biological realm.¹⁴ But first and foremost, it is this algorithmic character that makes those processes function, in making them suitable for achieving certain ends. In short, applying the same will lead to the same, no matter what the original y was, or still is. But it can have very differing outcomes, depending on the magnitude of operations and their degree of impact. This is what distinguishes modern formats from their premodern forerunners, and this is, too, what distinguishes their post-modern successors; so the thesis. To provide again a simple example: it's a big difference if the format of ploughing is applied inside the terms and conditions of a medieval society, or inside those of modern agriculture where whole square miles of *one and the same* field are ploughed by huge machines, and not by horse ploughs guided by only one man in just some acres of field. With regard to both nature and human beings affected, in the modern case, the degree of impact is simply of another dimension; despite it remained the same format that became applied, namely the ‘technique’ of (merely) ploughing.

So, expressed in its general terms, the problem of formats is not that formats exist – probably, they do so since ever, at least in human history – but (a), their range (magnitude plus impact) and (b), their intentionality of operation. Whereby the range de-

¹³ Both aspects are included in the traditional understanding of technique, Johannes Hoffmeister (see note 8), 603.

¹⁴ This is only a preliminary distinction because it remains open (for further investigation) if at least some biological processes do not obey such a logic, too; e.g., processes related to genetic coding. Or if we merely *interpret* such processes in terms of formatization since our entire conception of them became formatted, too.

depends on the intentionality, and not vice versa; and not only, but first and foremost. Since the intention in question is defining the range, either willingly or unwillingly. As regards the relation between intention and range, Spengler said in times long before our age, times labelled “the age of hard modernization”: if we want to understand the nature of the technical, it is not about a technique of machines, and surely not about the idea that the creation of machines and other utilities is the purpose of technique. Technique cannot be understood if we start with the instrument. Since what counts is not the creation of technical things but how we use them; it is not about the weapon but about the fight.¹⁵ The creation and usage of techniques, of the *mechane* we looked at, it is a question of the intentionality: what shall be achieved with them, to which intended ends I am using which means. And as regards the ‘technical’ about formats and formatting, what can be stated about technique holds valid for formatization, too.

Formats in their making

To better comprehend the technical nature of formatization and its habitualizing impacts, another example out of the midst of our life conditions shall be examined: clerks.¹⁶ The clerks of a company will not count as humans (the original *y*), but as clerks (the *y'*) – as long as they are treated as clerks and *allow for* being treated as clerks. It is easy to imagine that this has consequences for the *y* in question, and that some of the consequences, although evoked by the ‘technical’ character of formatting, are not mere technical issues any longer. A format assigns a *function* to the original *y*, and even more important with regard to the effects of habitualization mentioned, the original *y* does *behave* then as if it would be an *y'*, i. e. it acts as something different from that what it originally, and essentially, was; and in doing so, it will become another essence, namely an *y'*. This is meant by habitualization when we speak about formats: acting in formats means to become a format, too; or at least to become moulded in accordance to the format imposed. But such an ‘at least’ has to be questioned. Because what happens: standing as a *pars pro toto*, those clerks (who were originally something differing, namely humans) behave in the overall format of their business organization as if they were only instruments for performing functions, or expressed in the frames of understanding of the terminology used here, they behave as formats inside the cosmos of the overall, embracing format of their organization, devoted to their tasks (means functions) inside the single sub-formats

the overall format of that organization is composed of. That means they've got functionalized, and their as-if-character *becomes* their character then, at least as they are the ‘members’ (a management euphemism), i.e. the functionalized instruments of that organization. Since being a true member (and not a clerk) would evoke the association that I, as a clerk, am a human being still; that I stay to be myself while doing something. That my function is not me. The opposite does mean that the clerks adopt the habit of being a clerk – they not only act as a clerk in fulfilling their functions, but the longer they act, the more they become habitualized as clerks. That is, they not only adapt but turn into the ‘clerk’ format: they feel as clerks, and moreover, they perceive the whole world around them as clerks. Not *like* clerks (this would be mere adaptation) but *as* clerks. Which is definitively not a technical issue, although it too can become technicized.

Also in such a way, formats tend to generate other formats and to group the latter around them. In case of the clerks, they became colonized by formats and above that, are willingly colonizing themselves into formats; aspects we will meet again. To finalize this vignette, the clerks behave as *y'* not just during the job but also in their so-called leisure time, when for instance running through the forests to ‘recreate’ themselves with special functional clothing and other devices of an overall *performance* that turned to become a value in itself. Since the job of a format is to perform functions. And the function of a function is to perform, and in that, to serve other functions.

Let's leave the vignette with its teleological tautologies – which are coining for formats – and return to the general perspective. Both processes, that of an assignment of functions performed in an algorithmic manner and of habitualization are the core of formatization, no matter the concrete shapes it does take, and independent from its concrete (and rather diverse) domains of application. Because it should not be too hard to realize that what happens to clerks also applies to other phenomena as well. Formats, in embodying a certain kind of order, namely an algorithmic one, are widespread, as one can easily imagine, they range from the grid of a rectangular town plan to organigrammes of an enterprise or institution to computer programmes, to name just a few; altogether with the processual routines (the processual formats) they elicit and sustain, as modes of habitualization and of producing the ever same, both willingly and unwillingly.

It leads to another aspect of importance: the mentioned *technical* character of formats in general, and of formatting in peculiar, that very process of applying formats and generating further formats as well as the formatted, those differing but nevertheless same results of the ever same. The aim of the above vi-

¹⁵ After Oswald Spengler, *Der Mensch und die Technik* [man and technique]. Beitrag zu einer Philosophie des Lebens, München 1931, 6-7 f.

¹⁶ The example following is not constructed but based upon the author's experiences in work life.

nette was, inter alia, to demonstrate that technique in widest sense became the intrinsic moulding force of what is called everyday life, not at all confined to work's everyday life in whatever kind of organizations. But that the consequences are not just technical; which too means that they cannot be treated solely in a technical manner, e. g., by so-called technological assessments. Despite the respective phenomena can be looked at, *in themselves*, under a technical perspective, namely as functional systems working in a technical, or at least technique-like manner (algorithmic performance is an issue quite technical) – functionality is assigned to technicality in that it works in a technical manner but at the same time, it seems to be more than (just) this what it is all about. Instead, the famous saying of Heidegger seems to hold valid that the nature of technique is nothing technical,¹⁷ and if seen in this respect, that ‘technique’ is not to be confined to some devices, to some *usages* only. But that the usage itself does change us, the more we get used to it.

As Rammert put it, when we speak of everyday life in a technical context, it is not only about work routines but about our entire social life outside the working space, as for example household, family, leisure time, the community of neighbours, and the local public. We speak about what Sigfried Giedion called an anonymous history and what has caused a fundamental change in all our forms of living.¹⁸ The anonymous history is a one of technization, he says, and the thesis is that the phenomenon of formatization is closely linked to it. In his *Mechanization Takes Command*, Giedion states that our time – labelled ‘the time of modernity’ – is characterized by a rupture between thinking and feeling, caused by an encompassing mechanization. And he states it is this mechanization that drives our epoch, as a result of a “rationalistic attitude towards the world”. It first started with the production of items, and consisted in a fragmentation of the entire work process into its constituent sub-processes.¹⁹ What begun inside the domain of producing physical items dispersed soon into all domains of working where such modules could be built; that means, inside each domain where essentially identical items have to be produced *en*

masse, on large scale, and on the top of that, in a continuous manner – in a manner that has to go on uninterrupted, so to say forever, endlessly. No matter what the individual matter of producing is – physical products, software, clerks, or otherwise seemingly ‘individual’ products. In such a mechanizing way, Giedion says, many streams of inventing and acting in quite different domains of social, technological and economic life came concordantly together, unintended but definitive, and thus revealed the tendencies, and sometimes even the meaning of a historical epoch.²⁰ Mechanization can be seen as outcome of an embracing formatization going on beforehand (in causal terms), and all the time (in real terms); so the thesis at least.

And the meaning mentioned appears under a new light, in the meantime, since the question has been raised if it is reasonable any longer to hold up the traditional distinction between man and his techniques – not just between him and the *products* of his techniques, but between him and these techniques themselves. In other words, if that basal understanding of mechanics introduced in the foregoing, that of a means-end relation where man has the strings in his hands can be propagated any longer.²¹ An understanding that is prevalent even in up to date-approaches like for instance in the so-called SCOT (social construction of technology²²) which look at man-technique relations under the perspective that of course, technique does influence man, but that man is still able to define the ways in which it is used, even if these uses were not in the line of usage intended by the original technical devices. What if even such seemingly ‘progressive’ approaches to the technical fall too short? In that they rest upon a myth still prevalent, a myth of domination claiming that man – in the sense of management looked at earlier – is still the master in command, that he is the one who decides upon the ways we use such devices (as if they were nothing more, and nothing else), that critical factor Spengler spoke of. What if such ‘devices’ became part of our selves? If they make up our Self in a considerable degree, and are about to do so in a degree even more considerable,

¹⁷ Martin Heidegger, *Die Frage nach der Technik* [the question about technique], in: Heidegger, *Vorträge und Aufsätze*, Pfullingen 1954, 9. It was first published 1954, i. e. in a time when formatization had reached its full sway already.

¹⁸ Cited from Werner Rammert, *Technik aus soziologischer Perspektive*, Opladen 1993, 179.

¹⁹ Sigfried Giedion, *Die Herrschaft der Mechanisierung. Ein Beitrag zur anonymen Geschichte*, Hamburg 1994, 13, to the rupture and its cause, and 51, to the driving force of mechanization. The original *Mechanization Takes Command* has been published 1948, at Oxford University Press. That is, at a time when formatization had already reached its full impact upon Western societies, long before the times of a second wave of a further, and more deeply reaching formatization going on at the moment.

²⁰ Sigfried Giedion (see note 19), XIV. In this respect, he states (p.19): the meaning of history gets revealed in detecting relations; relations which are described here under the umbrella of formatization.

²¹ The discourse about that topic is widespread. One of the most thoroughful studies (in the author's eyes), also in directing at a posthuman age, is Günther Anders, *Die Antiquiertheit des Menschen* [man's being antiquated], München 1958. And for the mentioned “meantime” see W. Rammert/Ingo Schulz-Schaeffer (2002), who challenge the traditional point of view that man's intentional acting is still to be treated as being independent from the technical: http://www.ssoar.info/ssoar/files/2008/286/tuts_wp_4_2002.pdf.

²² Presented to a broader public first in Arjun Appadurai (ed.), *The Social Life of Things: commodities in cultural perspective*, Cambridge/Mass 1997.

e. g., in referring to a “cyborgization of the individual” discussed at the moment, when such devices become miniaturized parts of the human body, as is planned with nanotechnology? When they become, in other words, not just the indispensable ‘devices’ without whose we couldn't survive at all (this they are already, see Rammert) but moreover, the *intrinsic* parts of our Self.²³

Although we haven't to go such far to articulate the problem. Because it already exists, since long. It is the *technotope*²⁴ we live in, to be interpreted as a prolongation, and at the same time, as a fulfillment of a myth of domination: the plain fact that we live in a world we created by our own, a world as technicized artefact. And that in this context, we cannot speak about ‘technique’ any longer but have to deal with an encompassing technology – literally translated, a Logos, a meaning of the technical – that has superseded any singular technical approaches and the old nature-culture antagonism coining the occidental history so long. And in this respect, technology is not a body of techniques but a mindset, a general attitude towards the world that poured into an embracing societal praxis of how to shape the world.²⁵ It is a mindset the general intention of which is to dominate, following the myth of domination and by that alone (not to speak of other outcomes), defining the ranges of such an intention's applicability: that they should enstretch everywhere. Which makes the notion of a ‘range’ obsolete, since such a notion would indicate some limitations on moral or whatever grounds.

It is a mindset that has been characterized as the attempt to *objectivate nature* (in consequence, also that of humans), of abstract thinking and formal logic.²⁶ This mindset is the specifically ‘technical’ about formats, and of formatization in general. In line with a myth of domination, it consists in the will to subject everything within its reach under terms which *functionalize* (so the thesis), as an outcome of the “rationalistic attitude towards the world” Giedion spoke of. What indeed is a new historical meaning. In its final terms, it became expressed in the algorithmic logic outlined above, and as a result, in the ubiquitous itemization of its objects, i.e. of the entities to come within the reach of the respective algorithms. Because every $y = f(x)$ transforms the respective y into an item, into an identical quality. It

makes a product out of the original y , an y' ; and nothing but a product – of the x in question – even in cases where the product-character is not so obvious at first sight.

For instance, when we take the classical period of formatization in the so-called era of Fordism: the workers of the production line are formats in nearly the same degree (if one refrains from the well known ‘human factor’ being such an obstacle for management since ever) as are the products they produce; and they are so not only during work but also in their privacy, since whole life processes, alongside with the concomitant shaping of cities (the space where such processes occurred) followed the formats of mass production, mass transport, mass consumption, and mass housing, with the functional city emerging. With these formats formatting themselves again into a system of interdependent qualities – the old city core became the *mise en scène* for consumption and the posed, pre-formatted individualities²⁷ of post-modernity. Although they became ‘liberated’ in their hedonistic longing, individuals who were still an anonymous mass, also after the classical worker had turned into the status of an endangered species and Fordism was thought to have vanished and with it, the so-called mass society of those days. Expressed in general terms, the space conceived as typical for man as a cultural animal, the one of the city, it too became functionalized; or more precise with reference to formatization, even such an essential space for the human became an y' , a mere function. It became a *derived* entity serving other purposes than those of being just a city as cultural animal's space to live in.

We realize how formats tend to generate other, and additional, formats. In the case of Fordism looked at here, the old system of interacting formats turned into a new system – of ‘production on demand’ with seemingly individual products, designed for ‘individualities’ who are in search for their ‘life styles’ – it turned into something different which remained nevertheless the same, in terms of formatization. To come back to the general mechanism underlying such (and other) examples, the whole procedure gets tautological in its embracing teleology: an y is only an y if it is a function of some x , and thus turns into an y' . Such a process is completely resting in itself, from production lines to cities; in order to function, it does not need any other justification (or moral, or ethics) than just itself. It became its own ethos. This equals technicality, brought to its core. In order to function [...] the operative goal of formatization consists in functionalizing the entities, to objectivate them. In its performance, a format is

²³ See for instance Bernd Flessner (ed.), *Nach dem Menschen. Der Mythos einer zweiten Schöpfung und das Entstehen einer posthumanen Kultur*, Freiburg 2000. Or Frederic Jameson, *Postmodernism, or The Cultural Logic of Late Capitalism*, London 1991, 36.

²⁴ After Günther Ropohl, *Eine Systemtheorie der Technik. Zur Grundlegung der Allgemeinen Technologie*, München–Wien 1979, 12.

²⁵ Arno Bammé, *Homo occidentalis. Von der Anschauung zur Bemächtigung der Welt*, Weilerswist 2011, 21 f.

²⁶ *ibid.*: 26.

²⁷ Exemplified (inter alias) for a so-called postmodern era in case of the linkages between globalization, urban space, and life style: Peter Noller, *Globalisierung, Stadträume und Lebensstile*, Opladen 1999.

self-referential.²⁸ Which is only logical, one could argue, since the essence of technicality is to achieve functions (the argument runs), or in broader terms, to ensure functionality.



Figure 2. Formats, individual²⁹

How formatization works I

Taking the above picture as an extract, such an encompassing functionality gets resembled in it. In a picture which by that is not merely a picture but an image of an entire world – our one. Despite the seeming individuality of their forms, the buildings shown are of just one type: they are business palaces, building blocks like the one for housing presented in fig. 1; nothing more (despite their architectural variety), and nothing else. They have to serve a function, namely to make business. And in the adoration of this function, they became palaces. Because we became habitualized to make business, and to see the things – that means in its final, the world as such – in an effective, efficiency-driven businesslike manner. A manner which in itself alone reflects a tautology, following the saying of Henry Ford that the business of business is business.

To make it short, we can also leave the picture and formulate its image in general terms. In doing so, we have to envisage two major domains where formatization occurs in its technical terms, as way of functioning: the capitalist process, and its concomitant functionalization of life spheres; not just of some, but of all.

To begin with the first domain, if embracing functionalization in line with Giedion's saying about a “rationalistic attitude towards the world” is the magic ruse to ban the Being, then we cannot speak about formats without speaking about capitalism. Or

more precisely, about the *meta-format* of functioning inherent to the capitalist process: of grouping phenomena (people, processes, techniques, other formats) according to their *usability* for profit generation. Since as phenomena of modernity and its subsequent epochs, formats are inextricably linked with this *final* format of the capitalist process, and (so the thesis continues) can be understood only from there. Whereby (the thesis still continues) the maximization of profit generation does embody a format by its own, since triggering all the others which in their total, as a system, make up that capitalist process. Expressed in classical terms, profit generation is the *causa finalis* all those other formatted entities (as people, as processes, as iPhones, as whatever) are devoted to; it is their final *raison d' etre*. Furthermore, it is stated that in such a total, the capitalist process is a meta-format resting in itself, is in other words a self-referential entity that bears its teleology in itself, does need no other justification than just being itself – the heart of technicality, it was said earlier. What makes the capitalist process to a *technical* one, both in its ways of functioning and its consequences.

To exemplify this, the basic algorithmic procedure – the basal format underlying profit generation as well as its connected *capitalist* formatings – shall be examined, that of the so-called value chain. Next to the capitalist process as a whole, it is another meta-format, a one constitutive for that process.

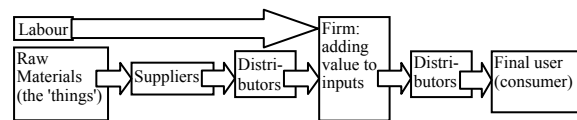


Figure 3. Value Chain, the functional cosmos of today³⁰

What gets depicted here – to recur to the beginning, a format as *idea* serving as a model to shape belongings – is the essence of today's cosmological relations, in a literal sense: it is the Logos of the world we live in, brought to its point. It resembles the essence of the essence already depicted in fig. 2. Formulated in the terms of a cosmos that from its functionality, is a closed one, a real cosmos in its classical understanding, despite it is universal in its embracement of almost everything our today's world is consisting of, in the latter realities. This scheme of how to form the world (we remember fig. 1) became encompassing, since in its reach, it is prolongeable into every direction of impact, everywhere when and where it becomes possible to turn the things in question into mere *things*. Irrespective of

²⁸ This characteristic of formats would deserve closer attention but cannot be investigated here, due to its complexity.

²⁹ The new town of La Defense, Paris; photography by the author.

³⁰ After Michael Porter, in: Ralph D. Stacey, *Strategic Management & Organisational Dynamics*, London²1996, 175. In more detail, this meta-format is explained in the author's contribution about “the capitalist cosmos as mythical longing”, in: Ulrich Gehmann (ed.), *Virtuelle und ideale Welten*, Karlsruhe 2012.



their former, and original, individuality. That is, as indicated by their naming, to envisage them as raw materials – as something which has to get transformed for having a value at all. Otherwise, the individuality in question would have no value, it only *gains* value if becoming transformed into something else, and that again means: if it can serve – in its genuine state of being, in that what it *is*, e. g. a tree in a forest, or a human being before it became a clerk or a consumer – as *input* for a technique of transformance, as raw material. Otherwise, it is completely uninteresting. It owns *no value* before it becomes formatted.

“The value chain traces the path a product or service follows right from the raw material stage through production and distribution to the final customer. As it travels along this chain, value is added at each point, accumulating into the combination of values the customer is looking for. The total value chain therefore consists of a number of firms [...] The value chain consists of primary activities and support activities that together ultimately produce the firm's profit margin.”³¹

The real individual in the above cosmos is the firm, the individual enterprise; or any other kind of organization posing as such a firm center of this cosmos. Because the latest since the sway of neoliberal privatization, any kind of how to functionally organize can be brought under the terms of this scheme. Too organizations not directly devoted to the aim of generating profits, like for instance universities, or other kinds of not for profit-organizations (so-called NPO's since coiningly for the functional cosmos presented here, it became a technical term). As well as in case of profit organizations (PO's), the center may shift in its concrete terms, depending from the individual perspective: for instance, a firm out of the group labelled ‘suppliers’ can pose itself in that center, or a one belonging to the group ‘distributors’ – the center as a concrete entity may shift (as an individual, so to say), but this doesn't affect the logic of the scheme. *As such*, i. e., as a *format*, it stays unaffected by these individual perspectives; its operating remains the same independent from the individualities participating (a supplier-firm as new center also has distributors and suppliers from whose it depends then, and so on). It means that an abstraction is the center of this cosmos, a center the other abstractions needed for its operations (symbolized by the other boxes) are congregated around. In other words, that inside the terms of this meta-format of today's functionalities represented by the value chain, a format stands in

the center of other formats. Because this entire cosmos is an abstraction, a model of how to format realities; and therefore, it *does* abstract in the word's literal meaning³² at the same time, in (a), defining the genuine individualities as mere raw materials, serving solely as inputs for (b), the processes of transforming them, i. e. of formatting them according to the modules of the above scheme.

This is such a cosmos' real value: a format as idea, in virtualizing real beings into derived ones, becomes a reality in making those derived beings real.³³ In the beginning, it has been stated that formatization does not only format existing contents, but on the top of that, is *generating* new ones through its very process, i. e. through its very fact to take place at all. The process described here, the making of derived beings to become a new reality, is the first, and most fundamental step in such a direction (so the thesis), a step the other ones to follow can settle upon: after they went through the formatting functionality of the value chain, the beings in question *are* changed, they are destined to become *other* beings than they were before, according to the processes (a) and (b) from above. A tree becomes a panel for furniture, a human a clerk, etc. – which are other *beings* then; functionalized new beings, beings formatted to serve some functions. Which particular functions these are, in the concrete case, is of minor importance when compared with the fact as such: that new beings emerged. By this, it is the perfect form a colonization can adopt, and that right from its very start. Because the beings to be colonized are not colonized in such a way that they have (just and only) to obey to some formats (merely) imposed on them – which would evoke the association that despite colonizing, they would remain more or less the same, would not change their identity but essentially stay as they are. It is more, like in case of the clerks we looked at earlier: the beings are colonized in that they are *made* to the colonized, become objects, adopting the identity of objects, and in many cases even willingly.³⁴ Colonizing and the colonized get identical. Which is the ideal colonization, in other words. And as regards those beings which are *human* ones (means us, the involved), their mentioned habitualization is coming up to be hundred percent then; it is total.

Coiningly, the process as a whole, if properly managed, does *add* value to the formatted (the colonized), and it does so the more the formatted are

³¹ Ralph Stacey (see note 30), 174f. After M. Porter, who formulated the competitive strategies for such an environment of the Hobbean fight of all against all in the 1980ties, the times of neoliberal sway to privatize anything, and anybody.

³² From Latin *ab-strahere*, to rob away (Friedrich A. Heinichen (see note 3), 7.); like the meaning of *privatization* to meet, an act of robbing.

³³ It is the real magic ruse to ban the Being, and a fulfillment of Giedion's “rationalistic attitude towards the world” we met.

³⁴ Such processes have been examined in full clarity in Günther Anders' *man being antiquated*, Günther Anders (see note 21), the start of becoming posthuman long before the *official* announcement of a posthuman era today.

further formatted, until their end use for the final user, the consumer. If they are consequently processed in such a teleology of being used. Whereby also the final user is used, namely for serving another format not depicted here, the one of profit generation. As said, it is a real cosmos; also in this sense, because the circuit of being used closes here (and a cosmos is conceived to embody a closed entity) – with us, the consuming ‘individuals’ who are used for consuming. Therefore, in order to be more precise, the box labelled ‘final user’ has to be renamed in *final used one*. Since opposed to a myth of the free market, stating that free market equals democracy equals freedom, the final freedom for all participants ist not the one of using products for those participants own sake, in satisfying the participants *needs* we met, but the one of being used. And the only democracy remaining consists in the *demos* of the products, the bulk of those value-added things to be used by the used ones. Looking at the *mechane* of such a modelled world from a different albeit related angle, every individuality participating here becomes deprived, due to the sole fact of participating in this universal, self-referential functionalization; let alone the collateral damages (a management term) caused by that – in its original meaning, *privatization* denotes an act of robbing.³⁵ With the human individual having two functions: to work (the box ‘labour’), and to consume.

All the other functions the human individual has to fulfill inside the terms of such a privatized cosmos, functions we looked at in the examples given earlier, the functions of recreating (resting from work), of housing, of taking food inputs, even of playing and other *apps* of such an individual, they exist only for one purpose: for fulfilling these both central ones, namely consuming and working – the latter to be understood as the sum of value-adding labour, plus those works needed to assist it, like for instance organizing (managing) them. Therefore, those other assisting functions are summarized under the term of *non-value adding activities* (a technical term of management) and are not depicted in the cosmos presented in fig. 3 – because they are no essential parts of it. They are needed, but only in a kind of compromise since without them (the *human factor*), the two central ones couldn't work. In addition, also they can be made *useful* in that they too can become marketed, i. e. become part of the cosmic functionality presented in the value chain; as the respective examples given should demonstrate. Formats as ideas, and formats as realities: if in its broadest terms, an artefact is understood as a constructed, functionalized entity serving other functions

(e. g., a building) – if this isn't a world as artefact, what else is?

How formatization works II

Such circuits of functionalization, following their diverse auto-logics of formatting, are the base of our technoid world, and in their consequences, generated the second domain we wanted to look at, the functionalization of life spheres. They did so although the circuits described embody processes deeply a-historical. Since they are relying upon the maxim of the creative destruction – as an explicit term, first introduced by Schumpeter but as an activity, present from the very beginning of such a cosmos – because efficiency, and its accompanying processes of constant melioration devoted to value adding are future-, and not tradition-oriented; aspects to come to. But they nevertheless have their historical roots, of course. They can be traced back until the middle ages³⁶ and in their modern shaping, they reach down to the 18th century, the time when an occidental spread-out over the globe happened on large scale. From that era of colonizing onwards, the two principal dimensions inherent to each colonization took shape: an outer, and an inner colonization. The latter refers to the habitualization, to the *content generation* (to use a term from computer language) on behalf of the colonized which equals their self-colonization; the former to its prerequisite, namely the moulding of the material and systemic conditions on the base of which a habitualization can take place then. Bayly gives examples for both dimensions in their spread-out and interaction.³⁷ As a result of their evolutionary history, such circuits turned into fixed causalities of own rank, and magnitude. In systemic terms, they embody a so-called formative causality, a one in which the dynamics of the system in question (e. g., of different formats) cause the patterns of behaviour that emerge. Which, over time, leads to the effect that “[...] a network configures itself into closely connected clusters, separated from each other to some extent, making it difficult for perturbations to cascade through it. This happens because of canalization, which means that many agents follow the same rules so that there are many chances of

³⁵ From the Latin *privare*, to deprive, to rob somebody of something (here: of its original, genuine Being). From Friedrich A. Heinichen (see note 3), 673.

³⁶ Italian town states with a capitalist economy oftenly described, but even more important as regards formats as *ideas*, that is, as explicit concept to create a world as artefact, going back to the method of Nicolas Oresme. Who tried to capture the nature of changes not just of quantities but of *qualities* also, and to model the nature of movement and velocity (and hence, of change as such) in his *Tractatus de uniformitate et difformitate intensium*. Cf. Sigfried Giedion (see note 19), 35 f.

³⁷ Christopher A. Bayly, *Die Geburt der modernen Welt* [the birth of modern world], Frankfurt 2006, 13, 18, 23, 28, 35. Due to reasons of spatial confinement, it is referred just to the respective places.

the same responses and patterns of response being reproduced.”³⁸

How deeply this works, first and foremost with regard to self-colonizing effects – summarized here under the term of *habitualization* – can only be imagined; we have no records of real evidence what happened to those affected in earlier centuries. The more since all of us have been socialized under the motto “we are not our experiences”, in line with Giedion's saying about a rupture between thinking and feeling that characterizes modernity. That is, because we have been trained in neglecting our own experiences with formatization in such a way that we do not allow ourselves to consciously feel them (despite this might sound paradoxical). For an indirect evidence, we can only look at cultures not yet affected by the mindset Giedion describes, and alongside, at people who were those happy primitives specially functionalized travel tours offer us to visit (except the primitives, for mutual profit). The Kung! people of the Kalahari desert were converted to a free-market economy, by governmental decree. Soon after this happened, their former life style, valid for thousands of years, changed in a few months time: opposed to their former habits to share everything, to have open huts and no private property, the Kung! replaced their huts in such a way that the neighbours had no sight into their inner, and inside their huts the families had special boxes, locked, to store their private property.³⁹ Normally, one should assume that formats like these would not even begin to occur in a sociocultural context not dependent from value chains, and moreover, that the tradition of living practiced over such a long time would be able to prevent outcomes like the ones described. But apparently, it seems to be *normal* that the mindset standing behind, and enabling such formats is much stronger than every historical groundedness.

What happened to the Kung! happened to us since long; the more we've got formatted since long, in more than one respect. Judged from *such* a historical perspective, the phenomenon which Habermas called a colonization of our *Lebenswelt* may reach deeper than even he had expected.⁴⁰ Coming back to the metaphor that formats work like machines, the article reporting about those convertites closes, in summarizing our experiences we don't allow to be: it

lies at hand to comprehend the whole system as one huge machine, a machine that produces things, more and more, year after year. On the one hand, this metaphor resembles our overall experiences with the ‘system’ for which it stands: the seeming inurement of its processes constituting *the machine* in its total, in its efficacy as well as efficiency taking no respect of human belongings (nor to those of other living beings); the powerlessness of such belongings in face of the machine, them being insignifacant compared to the machine's operations (that is, its functioning).⁴¹ On the other hand, the metaphor's vicinity to technology, or more general, to technical processes of the most various kinds becomes apparent. In itself and as a total, *the machine* can be seen as a kind of meta-technology, a closed (machine-like) cosmos of functionalities tuned to each other, following in its essentialities the cosmic circle of unlimited growth and functionalization pictured in fig. 3; and it is a meta-technology that in itself, as being so to say, is constituted out of technical processes, ranging from techniques in their traditional, and narrower meaning to their more refined relatives, like for instance management techniques, or those of financial markets. Whereby formatization as a *technical* issue is assisted and enhanced by those technological processes in their traditional understanding; in other words, it seems that *technology* and formatization through capitalist processes embody just the two sides of the proverbial coin.

Therefore, next to be value-chained and habitualized, an additional central perspective of colonization has to be examined, concerning the interconnectedness of *technology* in its traditional meaning – the sum of machinery, apparatuses and algorithmic procedures to use them in a given sociocultural context, included scientific experiments and comparable constructions – and formatization. It is a mutual dependency reflected in the common phrase that we all are depending from technique.⁴² It means that since the functional (and thus, formatted) cosmos depicted above became the only relevant world for us, we cannot live without technique; that technique became our very substrate for existing at all. But as mentioned, it is not about technique in its narrower meaning, in particular when we envisage the technical functionality of a value-chained world. Because plain and simple, *technique* became its intrinsic

³⁸ From Ralph D. Stacey/Douglas Griffin/Patricia Shaw, *Complexity and Management*, London–New York, 117, to formative causality, and 115, to the effect.

³⁹ ZEIT magazine 46, November 10th. 2011, 23; also the citation about the machine to come.

⁴⁰ Cited in Gunter Hofmann, *Das Soziale und der Zeitgeist. Eine Einlassung auf das letzte Jahrzehnt*, in: Wilhelm Heitmeyer (ed.), *Deutsche Zustände. Folge 10*, Berlin 2012, 42-60. Hofmann says (58): what Habermas called “colonization of the *Lebenswelt*” became everyday business, in the context of an “economy of competition” that neglects the social and markets even its critique.

⁴¹ As regards machines of management, i. e. of domination right from their start in history, see Lewis Mumford, *The Myth of the Machine*, New York 1964-66.

⁴² To the evolutionary dynamics triggered by this alone, see Friedrich Rapp, *Die Dynamik der modernen Welt*, Hamburg 1994. Who summarizes it in its major outlines existing already *before* the onset of a so-called posthuman era. As regards the related *theo-ontological* status of functionalizing the world by sciences: Wendy Wheeler (2005):<http://www.lwbooks.co.uk/register.php?r=journals/newformations/articles/50wheeler.pdf>.

sic element. In more than one direction: on the one hand, this functionality itself, in its format-generating abilities, embodies a technique of own kind; on the other, in order to work, it needs technique in its traditional meaning.

As regards the latter direction, it denotes the bare fact that in order to operate, a format constitutive for our today's *Lebenswelt* – the capitalist process expressing itself through the cosmos of the value chain – is in need of other technical formats. Formulated in the terms of a traditional understanding, it denotes that 'technological progress', the 'technologization of our world' increasingly taking place, or whichever wordings are chosen to characterize the situation that we are depending on technique, that all this has one *causa finalis*: value-adding for the sake of profit generation. And as regards colonization and habitualization, it denotes that it isn't so that we, the liberated individuals of today living in a liberated and by that alone, 'pluralistic' society, have abandoned such teleological notions and with them, the mindset that there must exist a meaning in life since metaphysics is dead. Except the one to 'realize ourselves', to lead a hedonistic life inside the *demos* of products, a life devoted to self-realization with the help of such a democracy. That we abandoned every causality except one: the *causa efficiens*, to make the hedonism becoming increasingly efficient for me, the individual, the new post-human *idiot*es of the new democratic reign.⁴³

We still have our superordinated meaning, irrespective of all such beliefs: that of the value chain and of techniques. Moreover, it is a meaning justified since the new *bonum commune* is not the community any longer but the one of consume, and eo ipso, consume is an individual matter because in its final terms, I can only consume alone. And by this alone, I am an "idiot" in an original, "old European" sense.⁴⁴ Wherefore it needs techniques. Like in every true cosmos, the circuit closes. As we have seen, it is a cosmos expanding. The more since it needs to expand in order to survive (the sayings about the necessities of economic growth, and the like), and next to fulfilling the logics of value chains, this is a question of technique.⁴⁵

⁴³ In order not to be misunderstood, this is not meant normative: in its original Greek understanding, the *idiot*es was just the lay-person not participating in public affairs. To the new democracy see Levi R. Bryant, *The Democracy of Objects*, Michigan 2011. To its cultural background and dispersion cf. Victoria de Grazia, *Irresistible Empire: America's Advance Through Twentieth-Century Europe*, Cambridge, Mass 2005.

⁴⁴ It refers to Luhmann's chapter "Self Descriptions", where he speaks about classical conceptions to conceive society, in his attempt to carve out the essential functional subsystems making up *the* today's society. Cf. Niklas Luhmann, *Die Gesellschaft der Gesellschaft*, Frankfurt, 1997, 866 ff.

⁴⁵ For an exemplary case, also with the mindset and functionalities standing behind it, see the assessment of the Washington-area 2003: http://www.technology-alliance.com/documents/benchmark_report_final.pdf. For a more general discussion, including historical development and the mindset of a new epoch to come at the turn towards a new millennium, see for instance Danny Quah (2000): <http://econ.lse.ac.uk/~dqquah/p/0010mlynch-tex.pdf>.



Figure 4. Formatted individuality ⁴⁶

Because in their final, technological and economic progress belong together, and they do so the more since we rest upon a so-called knowledge-based economy to be sustained only with the help of the Internet; that icon of the technical which of course is in itself an issue deeply technological, and does expand in considerable degree, like its related economy does. So, if all this is inevitable, why to bother about it? Because it creates its own contents, and alongside, a new world; culminating in that 'posthuman' era suspected to arrive. Which is an additional dimension of colonization and habitualization, and a dimension of a new quality. Since it embodies an additional dimension of value-chaining at the same time. The consumer (that is us) gets customized and by that, becomes a commodity in an even higher degree than it was already before. Since it was already an *it*, following the logic of the value chain, irrespective of the euphemisms used to disguise that fact. Now, it is in the danger to become an *it* even more.

How formatization works III

Because it is creatively destroyed, in successively liberating it from old European meanings towards new ones. With the help of various techniques, these new meanings settle upon a process of commodifying via content-generation, the next central perspective to be considered when we speak about formatization as a general phenomenon. To place the process as a whole into a broader historical perspective: after the loss of the pre-modern ancient world, and after the construction and universal spread out of the new world as cosmos of functionality described so far with man becoming a working consumer, now he tries, privatized as *it* has got, to create new worlds ad libitum, consequently by its own; adopting the

⁴⁶ Advertising picture, Karlsruhe. In its idealized content, it is again not just any picture but reflects an *image* of how one should be. Photography by the author.

Gestalt of an embracing *privatio* able to create its own contents in a commodified way.

In economics, a commodity is the generic term for any marketable item produced to satisfy the wants or needs of customers; that is, translated into the terms of understanding elaborated so far, any entity that became a formatted *thing* (item) to fulfill the myth of the free market (that wants and needs liberate, and that this equals democracy). You can express it also more technical: in the mindset of the value chain, a commodity is an item that can be produced as efficient as possible – means, with the lowest effort possible, whereby the effort, with a look at profit generation, gets expressed as costs – for reaching as many consumers as possible who contribute to such an items' profitable sales.⁴⁷ Revealed by the very naming, such items shall become as common as possible. Of course, only for those who can afford them, living inside their respective market segments (too, a technical term) the world got divided into.⁴⁸

And following this logic, it would be ideal if the whole world could get itemized, or at least, could be subjected to an itemization of its *contents* as wide-ranged as possible, in order to generate new contents which can be sold now, for profit; because then (and only then), the functional cosmos established by this logic would be perfect.

Necessarily, the first approaches to reach this goal were not so; in those outdated times of hard modernization and mass society populated by non-liberated individuals who lacked the possibility to construct their worlds by their own, people living without iPods, -Pads, Skype, or other *apps* to liberate themselves, the items were comparatively clumsy – mass products for masses of people who had to accept them, products all identical irrespective of the individual life styles of their customers. But a lot has changed, since those medieval days of formatization. Now, the items become adapted to the respective life style of their users; like the life style, too a beloved post-modern term to designate the illusion that the *user* (as the naming reveals) is enabled to actively make use of the items, to re-arrange the prefabricated into things of their own, things destined to serve only him or her, in fulfilling solely his or her wants

⁴⁷ The following is based on the experiences of the author who spent much time of his “work life” in marketing and consultancy, the latter to be understood as the delivery of methods of how to functionalize.

⁴⁸ To better comprehend the logic inherent to such processes of functionalization, this does not mean that in each case, the sheer amount of potential (or actual) customers is the critical factor. Also less people can buy more, as the *nouveau riche*-discussion shows. Decisive is the fact that out of a given market segment, as many as possible are buying, that the degree of market penetration (a technical term from Marketing) is as high as possible, together with the market share actually reached there. The military ductus of the language used is of interest, too.

and needs. As if there would exist no value chain any longer, no masses of an It being customer still – the used ones we met in fig. 3, inside the customer-box of the neatly defined cosmos presented there. Those masses, despite still existing (formats own the tendency to be stable) independent from their naming, they became re-named now, they've got another label; as if mere re-labelling would change the basic relationships that already existed, and continue to exist. The customer, consumer, end user, or however It is labelled (because it still is an It) got another label; a one promising Its active participation inside such a democracy of the itemized: It is user, free to use the other labels it is surrounded by. It became liberated to actively participate (like in a real democracy) in the use of Its items.⁴⁹ The only thing that changed was the *demos* of the products, the assembly of the itemized labels; it became varied, more flexible (*user-oriented*), and it created other needs and wants. That is, it created characteristics which were thought to belong exclusively to the user, to be Its (the user's) signs of individuality. But even this, the artificial creation of wants and needs for evoking the desire for things that nobody really needs, is not new; it already was present in the medieval of classical modernity and mass society.⁵⁰

So, what's new except the situation that the real *demos* of this strange democracy, the masses of products, became more varied and even exploded, thanks to new technical possibilities and ever new wants and needs? Which, we have to keep this in mind, are not the genuine wants and needs of the individual Its of the masses of users but artificial ones, generated ones. Those masses of users *are told* that they need them, and as a result, they mean to need them. Or, to illuminate the phenomenon from another perspective, this is perfect habitualization. If these new needs would be really needed – would represent needs really wanted since necessary for the existence as a human being – what the people did in former times, without iPods, -Pads, and all these things? Apparently, they did survive, also without such achievements. Achievements which are marketed to embody real *achievements* since we are told that they are necessary for individual expression. That is, for expressing ourselves as genuine persons, as true individual human beings. It means too – as long as such an habitualization works because it is firmly believed in on behalf of its habitualized users – that those things, this bulk of the achieved, became parts of ourselves. That we (the users) believe that they *intrinsically belong* to individuality. That they are inalienable for our individual ‘content generation’

⁴⁹ To the democratic aspect of the capitalist format and raised doubts, see the *Süddeutsche Zeitung*, January 12th, 2012: <http://www.sueddeutsche.de/kultur/thesen-gegen-die-auspluenderung-der-gesellschaft-kapitalismus-braucht-keine-demokratie-1.1255949>.

⁵⁰ Cf. Vance Packard, *The Hidden Persuaders*, London 1957.

– for those *contents* (as if humans would be containers to be filled up with contents) we need in order to be realized as a visible, i. e. recognizable individuum.

But even with this, the colonization via habitualization came not to its end. The entire process of formatization went still further, in several directions simultaneously.

First, not only the It (the user, that is in its final, and still: us) became perfectly commodified by the processes described, in expressing It – that is, Its individuality – also Its social relations became commodified, with far-reaching consequences. That is, the very base of what it means to be human – the Zoon politikon, the human being not only as a cultural, but first and foremost as a social animal. Although I, as a user, can consume only alone, in the final, there existed nevertheless social relations; and amongst the latter, even such ones which were not formatted into some respective functionalities of working and consuming.⁵¹ Even though I was primarily a *user* formatted to the value-chained cosmos, I still had some non-functionalized relationships; I had friends, comrades, a wife, and the like. Relations which were not technized yet, which remained free from becoming formatted into the algorithms of *technical* schemes in their direct sense and which existed not for other functionalized purposes (e. g., for profit generation) – which remained truly liberal, opposed to the liberated value-chained individual. Now, even this changed. Those last residuals of being directly, non-technized human became technized, too, with the technical help of so-called social media. On the top of it, these media didn't just remain one form of social communication existing merely in parallel, so to say in peaceful cohabitation next to others but became the domineering form. Translated into the terms of understanding formatization developed so far, it means that all social communication perceived as relevant is taking place inside the format of these media now. Opposed to former times, even to those which were *modern* already, where these last residuals of being directly human remained *human* yet, and did not become a matter of the technical, too. We needed no instruments to be human.

As regards the speed of developing into the domineering form, that is, the rapidity of change, it is comparable to the case of the Kung! people we looked at: the new media of the social became the domineering ones right after their emergence. A fact revealed by a technical term: they became the *social platform*. Translated into a non-technical diction it means that the human being, in being a Zoon politikon, can live this trait only if the latter is tied to a technical format. It again means that I can be social

only to the extent to which I am formatted. Again an example out of the midst of our contemporary Lebenswelt: Californian car users denied to accept a planned series of new cars – that is, in the terms described so far, they denied to accept items in whose design they actively participated, in being the democratized, liberated users the capitalist format in its new version succeeded to generate. The reason was: “I don't want to die when I get into my car”. Asked why they answered: because they are disconnected from FaceBook, their social platform, while driving. So the car builders had to create a new version of the classical format *car*, a one that allowed for the use of another format originally not planned for it – since colliding with it, because in former times at least, sociality took place majorly outside cars – that of the new social medium which became *the* platform for sociality as such.⁵² The example reveals that people die when they are not connected to their platform (that is, to a technical format), that their whole existence is in the danger to cease. That being social gets identical with using such technical formats.



Figure 5. New Sociality⁵³

Coming back to the *several directions* mentioned above, it is an example of interest in more than one respect, and for reasons of simplicity (formats are simple, in their essence, since they are algorithmic), we can continue with a plain enumeration of those directions.

And next to the social becoming formatted in platforms, the second direction is about creative destruction, the formatting principle of adding value in modern times (our recent one included). As revealed by the example, due to their rapidity of change, formats may collide sometimes. Because of their claiming functionality – every format wants to be all, since everything can be algorithmized under its terms – some claims begin to compete each other, and the former harmonious contingency of the functional cosmos gets disturbed. But what means *former*, in the context of value-chaining? Nothing. To cite Henry Ford, history is bullshit – also that of Henry Ford, because formatization, in being a *technical*

⁵¹ To this, see the foregoing about the users' prime reason to be at all, inside the terms of the value chain.

⁵² Rolf-Ulrich Kunze, personal communication about the problems of the R&D-department of a car manufacturer, December 11th, 2011.

⁵³ Surface of an iPad; photography by the author.

issue, does not stop, and needs no tradition to respect. Because in itself, a format is a-historical; it can be replaced by other formats fulfilling other purposes, or by other formats fulfilling the same purposes in a better, meliorated way. Whereby the meliorated way is the more efficient way, a point to come to. In its consequences, it means that any given format has no genuine right of existence, it has no value in itself existent by, and in its own –like for instance a flower has, or a wild animal, or a work of art. In that sense, formats are no genuine but *derived* entities, they have to *justify* their existence all the time, so to speak, since depending from the purposes and meta-functionalities standing behind and above them, in giving them purpose and thus, the right to exist at all. Which too is a technical aspect of formats, in addition to the one already looked at, namely the fact that formats – as algorithms – work in a *technical* manner. All that denies them the rank to have a history by their own account, opposed to flowers, animals, or works of art.⁵⁴ Which rises severe problems when ‘human’ formats like the above social media are concerned – since although they have a history and from that, are *historical* entities, they nevertheless are at the same time algorithmic, *technical* entities, and hence, in the meaning outlined here, a-historical. In sum, they embody a-historical entities genuinely historical ones like humans are relying upon; the history of those humans gets dependent, and that in an ever-increasing manner, from the a-historical of human histories’ technical substrate.⁵⁵ Metaphorically, a reversion took place: in the course of history, the a-historical became the base for further history; the real became virtualized and the virtualized turned real.

This is the center of the processes belonging to the magic ruse to ban the Being via functionalization, processes leading to an encompassing formatization and to a world as *ideal*, i. e. completely formatted artefact. One has to imagine this, in its full force of impact going on right now, with a digitalization and nano-technization of nearly everything (*nano* means, as an image: to pour into every strain of the Being), to comprehend what is formatization all about, in both its general terms and reach-out. And in both its practical and ideal terms (means: as a concept), it equals a transformation of the world on grand, not just on large scale. But of which world? Of the *old* one, of course, of that world which used to be *world* up to now, before the age of modernity and in peculiar, before the world that set its stage in

recent years, with those *technical* processes of digitalization etc.; as if those processes were mere technical ones – and hence, processes which could still get *managed*: which could still be treated in the mindset predominant for so long times, settling upon a myth of domination illuminated earlier. On the contrary, it seems that such a myth of domination led to the worlds portrayed here, and by that, led to its own dissolution caused by its consequent pursue. It dominated the old world to such a degree that the new world became a construction.

Unimpressed by all these problems, the underlying fact of creative destruction remains; as regards the formatization issues illuminated here, it is their only true historical constant, so to say. Because a new world as construction can only be erected and maintained in its being through constantly destructing it. The process as a whole owns two dimensions: it is about destruction as principle constantly applied; and settling upon it, about the ever new constructions going on, them leading to a re-moulding of the constructed world(s) that never comes to its ends. Because it has no inherent boundaries.

As a principle, creative destruction tells that in order to function at all, the value-adding cosmos of fig. 3 needs the destruction of the achieved so far, in creatively bringing forth the new, at the price of destroying the old. And all that in a constant, relentless manner.⁵⁶ That the ever better competes the better achieved thus far which becomes a *worse* now; e. g., the classical telephone became *worse* than a mobile phone, and the latter becomes *worse* compared to a SmartPhone [...] etc.: we get aware that such a process of constant melioration (believed to be value-adding) can be prolonged virtually endlessly, is to be conceived as a progress ad infinitum. To reformulate the myth of the free market we met: on the base of this, it sounds destruction = freedom = democracy (of the produced). Inherent to this logic is on the one hand: history counts nothing since the traditional – equivalent to the sum of the *bettors* of yesterday – is a worse, and not an existence of its own rights. Its only right is to become superseded, that is: not to exist, in the final, to be erased by a theoretically infinite sequence of the respective *bettors*. By that alone, the world, also the new world of the constructed, condenses into mere presence; into a point, metaphorically speaking. And a point has no extension, is ephemeral in a quite direct meaning (to be superseded by the next point coming, and so on). Inter alias reflected in a sociological phenomenon on behalf of the *users*, a so-called *presentism* embodying one more shape of an inner colonization: that only the most advanced – identical

⁵⁴ It does not mean that they have no history *of* their own – there are genealogies of formats, and formats evolving out of other ones. This is a different aspect of the historical with regard to formats.

⁵⁵ Which comprises more than *only* the problem of data conservation: that due to rapid changes in technical formats, historical essence (adopting the shape of *data sets*, technically speaking, of *contents*) gets lost.

⁵⁶ After Joseph A. Schumpeter, *Capitalism, Socialism, and Democracy*, London 1943, 83.

with the most present – is worth to exist at all.⁵⁷ The SmartPhone of the first generation counts nothing compared to the one of the second, and so forth. And I am only *I* if I own the latest point-version of such a sequential infinity. Seen in these respects, it is of little wonder that a metaphysics of the hedonistic individual could occur, an adoration of the momentaneous. *The world* then condenses into a virtually endless chain of moments which have to be consumed, and through that, it becomes continuously *value added*. Also from this side, the self-referentiality of the functional is guaranteed, and the formatted world of fig. 3 becomes once more a world really closed, a true cosmos.

On the other hand, inherent to the logic of creative destruction is a mindset of optimization, which is a mindset deeply *technical*. Because as a *technical process*, nearly everything can get optimized nearly every time; the more when it is profit-oriented, i. e. has to serve the *causa finalis* of such a cosmos. What means optimization, inside such a context? Saving costs by increasing efficiency and related, by miniaturizing the items in question (therefore nanotechnologies). Because for the logic of the value chain, profit equals revenues minus costs. So, in order to rise profits, we can either rise revenues (equalling items consumed) or diminish costs. According to the author's experiences made inside such chains, it is as easy as that, at the end of the day (a management saying). Costs we can diminish by becoming more efficient, and by technological progress again, things (no matter which ones, humans included) can become even more efficient all the time. Except certain categories of costs which eo ipso cannot get diminished, for instance taxes (but at a given locality only, wherefore we can move), or social costs, or the like. The rest can be diminished = made more efficient, in becoming even more formatted than it already is formatted = *meliorized*. Which equals creative destruction. Wherefore we need techniques, or in sum: technology. And the ongoing of further formatization of the already formatted is called *technological progress* then. At the end of such days, it is as easy as that; and destructive as that.

How formatization works IV: content generation

But creative destruction is not only a question of value chaining, nor confined to it; neither are its sole outcomes a colonization of the *users* and an annihilation of history, or more precise, of historical consciousness. Albeit closely linked to the logics of value chains described, at the top of it, creative destruction started to develop its own circuits whose emergent, unplanned functionality consists in the

⁵⁷ *Presentism* is not identical with *presenteeism*, the being present of clerks at their working places (the box “labour” in fig. 3) despite the fact that they are sick, in order not to lose their job. So far to liberated individuals.

phenomenon that the contents generated were developing their own contents. Or posed in short words: creative destruction started to perform its own constructions. A phenomenon resembling the third domain of the several directions mentioned above, and a one which deepens the outer and inner colonization already existing, by habitualizing the *users* in final terms.

It is a phenomenon whose full impact can be understood only in the entire context of formatization portrayed so far. As frequently addressed, in its close interactions with the most diverse kinds of technical formats (in a traditional, narrower understanding of the technical), it sums up to an “irresistible empire” of a self-referential systemics, as Victoria de Grazia named it,⁵⁸ or formulated in the diction used here, it constituted a meta-format constantly sustaining and re-creating itself in a probably auto-poietical manner, at each single moment of its operations.⁵⁹ It started with the processes described by Bayly, continued with getting momentum in the 19th century, in transforming a world and its perception altogether, by increasingly virtualizing it up to the present day,⁶⁰ poured into the *technotope* described and is now resembling something for which even a characterization like *technotope* appears not sufficient to explain it. It became something other than even a technotope already is, namely a world-space for which the connotation *technogene space* seems to be most suited. Such a space is a new world as artefact that superseded even the *old* artefact established in surrendering the old world of pre-modernity. It is a new self-formatting universe where space in its total, as world, became a sole function of the technological potential, as Günther Oetzel put it – of the virtual becoming the real then, in the sequence of progresses examined above – a space that needs neither individuality nor history but only submission under the primacy of technical efficacy.⁶¹ With regard to content generation, in peculiar formatted content generation, this world equals a teleonomic universe which nevertheless is aimless in itself.

⁵⁸ op. cit., also Bayly.

⁵⁹ Which alone, as a phenomenon sui generis, would require further investigations on its systemic grounds, i. e. examined from the base of its operating as a *system*.

⁶⁰ See for instance Dolf Sternberger in his portray of the 19th century, also with regard to virtualization: D. Sternberger, Panorama, oder Ansichten vom 19. Jahrhundert, Hamburg 1938: his chapter 1, dealing with the dichotomy of “natural- artificial”. Also in developing vistas of the world which come close to today's *immersive environments*, virtual worlds which cannot get perceived by the human senses in their *natural* ways of operation, e.g. the panorama of the Sedan-battle at 11-14. Similar processes are described by Kurt Möser (see note 5), 151 ff. In his chapter 3 about the human body and mobility-machines, also with regard to habitualization.

⁶¹ A conception presented in Günther Oetzel's contribution in Ulrich Gehmann, (see note 30), ‘Virtual and Ideal Worlds’.

To understand such a seeming contradiction, we have to illuminate this world's main facets one by one. Because it seems to be a contradiction – isn't efficacy the epitome for the goal-oriented? Why then should such a world embody an aimless one? And why the goal-oriented should be destructive? First, regarding all these effective, i. e. goal-driven 'technical achievements' – and their concomitant value chains, a fact not to be neglected – it is about dynamics and acceleration.⁶² An overall dynamics which in its total triggered an increasing fragmentation of the world, concomitant to such a world's ongoing refining in terms of technization and functionalization. Metaphorically spoken, although it is a functional cosmos, it is an expanding universe at the same time: meticulously planned in its details but exploding in its total. A refining that meanwhile reached even the nano-dimensions of physical reality and which – as a processual dynamics – represents a teleonomy *sui generis*. It alone led to the phenomenon that in the evolution of this world, artificially created contents tend to generate their own contents, and that in an ever-increasing manner. Since the basic logic of functionalization (and hence, of formatting) is a one of optimization, following a myth of the efficient progress not only in economic value chains: everything can be refined still even more, can be made still more efficient than it was (already) before. Of course, such a progress has physical and financial barriers, but *as such*, as processual logic, it is virtually endless. This combines the 'capitalist' with the 'technical' logic – from their *mindset*, they can be applied endlessly since they are endless in themselves. Because the logic inherent to functionalization is a technical one, in value chains and (other) technical formats alike: it never reaches its end. Everything can get colonized via formatting it, and when we reached the end of the line (a management term) in one domain, we can continue with another. As a consequence, such a logic of growth constituted also other chains of values besides the economic ones; and hence, contents.

Second and related, it is about the world-perception mentioned in the beginning, about the circumstance that a world which became increasingly technized and functionalized is increasingly *conceived* in such a manner then, as a total, as 'world' as such. What combines the two facets mentioned so far, leading to the third one: because we are conceiving the world only in such terms, we *make* the world to become like this, and as one consequence out of many others, the world *becomes* even more technized and functionalized. Now, the circle closes: the world gets other contents in a pro-

gressive manner, and the contents continue to generate their own contents. Superseding each other in a virtually endless chain of creative destructions. To provide examples for such a general way of working, see for instance the image of the human being presented in fig. 4 above. An image having a clear aim despite being part of an aimless universe, namely to represent an ideal being, that's the magic ruse inherently belonging to it; a virtualization of the human *designed* to become the human. And linked to economic value chains (otherwise, it would not be present at all), an image that has to be marketed, following the myth of the free market and its *telos* of profits. An aim owning a clear efficacy although it is aimless in itself since having no limits in itself.

In their total, processes like these have led, and do lead to a literal re-forming of the world – in its total. In other words, they generate contents, all the time.

That those ways of content generation got familiar to us does not mean that they are trivial in their influence, first and foremost upon our conception again. Since in the meantime, the proverbial whole world turned into a content-generating artefact, of living and meaning altogether. Expressed in the terms of computer language, it became our immersive environment. The only world we can conceive really, and truly, as world.



Figure 6. Content Generation⁶³

But even with this, generating contents via creative destruction through increased formatting hasn't reached its ends. It still went further. To conclude, it leads to the fourth of the several directions mentioned above. It is a direction to be illuminated just in its preliminary terms since it begun only quite recently to unfold its impacts, first of all in enhancing the phenomenon labelled *inner colonization*.

In short, it is about world-perception related to the fact that our images *of* the world tend to *become* the world; that they, in *telling us* about an *old* world mentioned, begin to tell their own stories – stories

⁶² An attempt to describe them encompassingly, also in their social dimension, is presented in Hartmut Rosa, *Beschleunigung [acceleration]. Die Veränderung der Zeitstruktur in der Moderne*, Frankfurt 2005.

⁶³ La Defense, Paris: central axis, photography by the author.

which creatively destruct it, and thus generate another kind of world. Seen in its total, it is a process that can be described as an ephemerization and virtualization of the old world, leading to a new world of icons which then is conceived to embody the relevant world for us, that is, *the* world for us. That we colonized ourselves to the icons we produced, in creating such a virtual reality which became real then; as process, analogous to the process of value-chaining described earlier, making the virtual becoming the real. To sum up the thesis presented here, as a process, it started before the Internet-age, prolonged itself into that age, unfolded there and led to a new evolutionary niveau of world-construction. It was a twofold process, covering the old world of physical reality (the 1.0-version of world) as well as the images of it. Both strains, so the thesis, triggered an increased, and still increasing *iconization* of the world until that point where the icons about (another, old) world became the new world mentioned, a one of – essentially formatted – icons.

The first strain is portrayed as a general process (also with its historical, so to say genetic development) in Henri Lefebvre's *Production of Space*, first of all with the *geometric formant* (he calls it) leading to a progressive abstraction of the spatial.⁶⁴ The endpoint of which was the generation and multiplication of so-called transit spaces described by Marc Augé's *non-places*, where we can exemplarily realize the process of iconization: the old world 1.0, the formerly real, becomes virtualized by iconizing it, and by that, turns into a new reality which then *is* the reality – at least for our world-perception mentioned. The French highways (the *autoroutes*) produce another world by signing the realities of the old world – here you can see a historically grown (and hence, valuable) thousand year-old site, a few miles later another site, and so on. It means that the iconized signs for a valuable (old) real – a real being on its spot, i. e. a place not moveable – is perceived (a), on the move, and (b), by its icon signing at it.⁶⁵

To (a): it is a world that can be perceived only if I, its visitor or *user*, am constantly on the move; the highway miles pass by, so do the signifying icons, and it is only through this act of passaging where this world can be revealed at all, in its total. The singularities inside the act of the passage are ephemeral, they pass by. To (b): whereby the icons, as signs of signification, are formatted in themselves, all of them in the same style ('design') and colour (brown) liberate themselves, like the individuals we met before, in becoming the world they are signifying. Because I, as a highway driver, have not necessarily to visit the signified places, it is *enough* that I

have been *informed* about them – I can google them for instance when arrived at home, that is, I can arrange my own world of those sites which I can compose *ad libitum* – I can construct them to make up a world designed by me, the 'user'; a seeming individual world made up of formats.

But it is another aspect of such an iconization which comes beforehand and which is probably even more decisive, so to say upfront: the *augmented reality* of the highway is in fact (for the conception) a world in its own, and hence, by its own; a closed cosmos of the move, closed not only functionally as it is the case of the value chain, but also symbolically and thus, real. Because the world of the highway is both functionally and symbolically closed. Since as a real entity, it serves for driving and sight-seeing (like the US *scenic highway*); this was its original function, a first order-functionality, so to say. But at the top of that, it serves for sign-seeing, and in that, turns into a closed functional cosmos, too: the arranged sequence of signs becoming the reality for the real sites they de-sign. Which is also real, despite it embodies another kind of reality, another *mode of being real*. But also in this latter dimension, it is as real as in the first one (the reality of the original, and primary function: transport and sight-seeing), because this functionality of the second order is also taking place in real terms – we are *actually* on the highway all the time, a real physical world by its own, and not inside another, *purely virtual* immersive environment like that of a computer game for instance. So, in fact it is an artificial world closed in itself – I have never to leave this highway if I don't want to do so, because everything I need for my sustenance I have there: food, gasoline, facilities to rest, etc. In other words: a world originally designed to augment the other world around it, the one of the original sites it signs upon, became the whole world in combining the functionalities of its first and second order; it became the *whole world* at least virtually, since I have never to leave the highway if I don't want. Literally, I can stay *on the road* all the time.



Figure 7. Augmented Reality⁶⁶

The vignette of the highway has been treated in extenso because it is significant, in a literal sense: it signifies the process of creating a world as artefact, a format which then generates its own contents, in becoming a world of its own independent from the 'old' world (of the original sites) it signs upon. Since the latter world has been functionalized to turn into

⁶⁴ Henri Lefebvre (ed.), *The Production of Space*, Malden 1991, 285 ff.

⁶⁵ Marc Augé, (ed.), *Non-places. Introduction to an anthropology of supermodernity*, London 1995, 96 ff.

⁶⁶ Mural Decor as a mixed, "augmented" reality; photography by the author.

an abstraction; an abstraction from a former real, the original sites. And this, so the thesis, is taking place not only in case of highways but appears as a general phenomenon. In its total, it formed itself into a new reality of the abstracted, a reality (here, the world of the highway) which nevertheless is quite concrete, that is, *real*. Examined from their morphology – from the basic way of how they are structured, as processes – similar processes take place in the so-called social media we met, and in other cases of an *augmented* or *mixed* reality-generation. So the thesis at least. It is a thesis to be investigated more closely, since a lot of processes of such a *world generation* are falling under this category, ranging from the mentioned *social* media to other formatted, technique-assisted creative destructions of a former real that becomes constructed into new ones.⁶⁷

To conclude with one more case study out of ‘real life’, serving as an exemplary case, as a *pars pro toto* for manifold similar processes of formatting: the Smart Window presented recently to the public; a world-formatting device created to generate worlds *ad libitum* (according to the so-named needs and wants of the individual user we met), adopting the shape of essentially ephemeral *installations* of a real.⁶⁸ To close the circle, a device to get value-chained – wherefore it was presented at all, because the public shall use it, that mass of users in the democracy of products. Besides the question of being smart for whom, in the final, the Smart Window⁶⁹ enables the user to perceive the world as a personal window. It (the user) may look out of it like in case of a classical window, presenting the scenery of an old reality before his or her eyes; the one of the respective technogene space he or she is momentarily surrounded by. At the top of it (which is the real innovation, in creating realities), the user can place extra sub-windows inside the cosmic frame of the smart window, for instance the social media-window, or any other application It wants for the moment, in order to satisfy Its momentarily needs and wants. That is, It can format the world of relevance (for It, at the moment) as an assemblage of icons that is representing *the world* – at the moment. The world of the user in question, a world which by that becomes a consequently individualized world to

be changed any time; which has not to obey to any historical, i. e. grown and continuous genesis with its confinements. It is a world that can be destructed and constructed any time, and, as mentioned, it is a world completely individual – *ad libitum* in a literal meaning, ready to be disposed and consumed.

Standing exemplarily, it is a new format to lead one's life. The former proverbial window to the world became the world, and the world became nothing but a formatted projection surface of individual needs and wants; of some images what the world is believed, and first and foremost, wanted to be. Of needs and wants which are easy to use because they can rely upon preformatted items, and which serve many processes of added values in one or another direction. If this isn't liberation, what else? Except the preformatted items we need (really need to serve our needs and wants), we are freed from any pre-given, and by that, from any confinement – free from being formatted by old inherited values, history, or other old worlds with their social, moral, and physical restrictions. With the help of new smart formats, we are free to construct what we want, and to create new chains of values.

I

⁶⁷ Due to reasons of spatial confinement, the genesis of those phenomena in the course of modernity can just be addressed: Susan Sonntag's *industrialization of the view* for instance, or Villem Flusser's genealogy of a technization of images and the cultural evolution settling upon it; and many comparable approaches not named here but all aiming in the same direction – of meaning and being altogether.

⁶⁸ The wording *installation* refers to a trend in contemporary art *industry* (because art too became part of the value chain), signing an art work to be an ephemeral expression only, an installed snap shot of a real around it; a real it has to reflect, together with the mood and world view of the artist *performing* it.

⁶⁹ <http://www.youtube.com/watch?v=m5rITrdF5Cs&feature=youtu.be>.