Digital Creativity and Dialectical Emergence.

Design-philosophical Perspectives

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*„…there is no fixed and constant authority, but a continual exchange of mutual, temporary, and above all voluntary authority and subordination."*

(Mikhail Bakunin, God and State)

## I.

### *(Un)knowledge of (Un)knowledge*

Human life, whether today or in its primeval beginnings, differs from its evolutionary ancestors by an increased ability to cooperate. People have always lived in groups, not only because they have to ensure their survival together, but also, as Aristotle already knew[1], because together they can find out first of all what a successful life means for them. Their 'natural deficiency' demands a culture of compensation in communication. Their poverty is at the same time the luxury of being able to choose how to coordinate with each other and with the environment, not once and for all, but over and over again. In this sense, man is the freest and at the same time best adapted animal. By culturally adapting to our natural environment, we have in turn adapted it more and more to us, thus considerably increasing the freedom of our and their design.

A dialectic of adaptation is at work here, which has found its tools in the most diverse media and methods to communicate knowledge which ensures survival or makes a good life possible intersubjectively and generationally. Today, under the sign of digital information technologies, there are more and more voices saying that our lives are changing once again and in a serious way. But how it will change depends not least on how we communicate about it. The media are both the object and the means of debate. The crucial question is therefore: How can knowledge be communicated to foster the development of a form of creativity which aims at knowledge building?

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[1] Cf. Aristotle: *Politics*, I 2, 1252b 29 ff.

Translation by Martin Sambauer

This question cannot be answered without at the same time raising other questions directly related to it. Is knowledge a matter of storage, application or personality? Must knowledge be possessed or only used? What is knowledge anyway? A treasure, a plan, a tool, a perspective, a practice? - Philosophically speaking, these questions seem to come down to a familiar one: How can you know anything if you don't even know what knowledge is? - If this variant of the Platonic 'Meno Paradox'[2] were an actual contradiction, we would probably never have come up with even a temporary answer, we would not even know that we know nothing. And yet this question is not just a sophism; since we have been asking it, or rather facing it, it has been asking us to think about this fundamental problem again and again, and thereby to generate new knowledge about ourselves and the world. Let us therefore formulate the question more pragmatically: What do we already know about knowledge?

Not so long ago, the answer would have been to reach for the bookshelf and find what you were looking for in the alphabetical order of an encyclopaedia. Even though it may have taken longer to find the answer than is the case today in times of search queries via smartphone, tablet or laptop, the goal was already in sight then: the encyclopaedia as a presentation format and medium of everything worth knowing was at the same time an essential expression of what was meant by "knowledge", namely a well-ordered mass of information. The bourgeois Enlightenment since the 18th century had its source of light in this and its torchbearers in the intellectual writers. Knowledge seemed to have become a (counter-)power simply by becoming available in form of a panoramic view, as a circumambulation of the modern cosmos of knowledge, in the middle of which, instead of God, man now stood as the starting point and final intention. So here, at least according to the claim, it was written what man could know, do and be, as long as he took his education as self-determination seriously.

If we want to get information today about what knowledge is or what people know about knowledge today, we use our own forms and media of presentation. What we know and what knowledge is also depends largely on how we access it. However, one already clear difference seems to be that we no longer form our own memory into a bulging store of knowledge, but prefer to learn formal learning skills. Even in the rather uneducated prairies of the Vordereifel, familiar to the author since childhood, there are said to have been history teachers who in the 2000s already claimed: 'A wise one who knows where to look. Wise is who knows where it is written.' But today, one might think, we are again merely as clever as we were at the Socratic beginnings of the Occident: We know that we know nothing - we don't even know where exactly we should search But at the same time we know that we do not need to know as long as there is

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[2] Cf. Plato, *Menon* 80d-e. See also Sang-In Lee: *Anamnesis im Menon*, Frankfurt am Main 2001, pp. 97-119.

something else that does not know that it knows, but lets us know as soon as we need to know. We know that it knows for us  - and that is enough. So which post-Freudian 'it' in our knowledge societies are we talking about? What is it that lets us know what we need to know?

## II.

### *A New Design of Reality*

If you follow Mario Carpo, one of the most well-read architectural historians and at the same time one of the most clear-sighted design theorists of the present day, then today we are living in the era of a Second Digital Turn:

> "Indeed, the keyboard (whether real or virtual, simulated by screens or tactile tools), is no longer the only human-machine interface, and soon it may no longer be the principal one. And when all script is phased out, digital tolls will have gone full circle: after demolishing–in an orderly chronological regression from the more recent to the earliest–all small-data cultural technologies invented over time, humankind will be restored to something akin to the auroral primacy of gesture and word. Digitally enhanced orality and gesture will be different from the ancestral ones, however, because voice and motion can now be recorded, notated, transmitted, processed, and searched, at will and at once; thus making all cultural technologies developed over time to handle one or the other of these specific tasks equally unnecessary."[3]

As is repeatedly and rightly emphasized, the digitalization of our culture means a kind of return to the forms of knowledge formation and knowledge transfer of archaic oral cultures[4]. What generally begins as the history of advanced civilizations with Mesopotamia, and in its beginnings stretched from Egypt and China to ancient Europe, and since then has established itself as the epitome of sophistication, is basically the success story of a medium in its most diverse forms: writing (as cuneiform, hieroglyphic, pictographic, syllabic or vocal writing). Classical advanced civilizations, and this is something on which media scientists can probably agree, are mostly script-based communication contexts with a preference for hierarchies based on the degree of literacy and the sorting of every conceivable entity into administrative lists.

Nevertheless, since the end of the Second World War, we have observed a rapidly accelerating upheaval, which Marshall McLuhan proclaimed in a prophetic tone as the end of the Gutenberg

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[3] Mario Carpo: *The Second Digital Turn : design beyond intelligence*, Cambridge, MA: MIT Press 2017, S. 23.

[4] Most prominently represented by the so-called Canadian School: Harold A. Innis, Eric A. Havelock, Walter J. Ong, Jack Goofy, Marshall McLuhan, Derrick de Kerckhove.

Galaxy. The now widely known claim that a return to tribal social structures (keyword: Global Village) is connected with electronic, especially digital media, only anticipated the developments of what has already become apparent on the horizon as our present society since Norbert Wiener's invention of 'cybernetics' at the end of the same World War: We live under conditions of a post-literacy and thus in the midst of new media, through which we would not have simply renounced writing, but in which, one could say with Nietzsche, writing, like all good things, has turned against itself in the end.

For since the first higher programming languages (Fortan, Lisp, COBOL), which for the first time represent writings that are no longer intended for the performance or recording of the human voice, but instead give instructions to machines, writing has, as it were, retreated behind the stage to make way for a new visual/performance culture that is recognizably marked by a new synthesis of orality and literacy. Since these writings, or rather those who are capable of directing them, have taken over, a hitherto unknown spectacle has been taking place before our eyes, ultimately blurring the boundaries between stage and reality.

The circle has thus been closed and it has finally become clear to recipients and users what has long been the basic conviction of daily business on the production side: we have reached a new zero level of reality design under the sign of programmed simulations, towards which the coordinate system of our living world is being readjusted[5]. What was previously distributed on different media for different senses is now converging in a universal medium with a binary universal code that merges with conventional reality to form a hybrid world of experience. Soon, the world itself could once again become the comprehensive and immediate interface that it has always been in a more modest way, before, in particular, a screen of characters came between it and us. This screen of characters is currently in the process of getting completely under the skin of nature again via the intermediate stage of the display, with the result that in the end it could seem as if everything had remained as it was, while in fact everything has changed. If we were to get that far, we would no longer have to inscribe our will and our desires into the environment in a roundabout way, but the environment would have learned to read them from our lips, our gestures and our facial expressions - thanks to its literacy.

These or similar predictions for the future are mostly like this, and at least so much is true about the fact that we will no longer use scripture in this way when it comes to sharing information, imparting knowledge or spreading convictions. Instead, the most direct means is the one that we

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[5]  Jean Baudrillard has been talking since the 1970s about the hyperreal dominance of the simulacra, whose deception consists not only in appearing as reality, but in appearing as a better reality. Cf. in detail Jean Baudrillard, *Simulacres et Simulation*, Paris 1981.

have used before all other media were invented and will continue to use after all other media have been overcome, because it is the most 'natural' thing in the world: face-to-face communication, whether in analogue or digital form. If there is a nucleus of human thought, opinion and personality formation, it is probably to be found here. The thought would therefore be taken up again where we as human beings began, and this precisely at the point where we have already created the world around us anew through a constant development of both thought and ourselves. With Hegel, we could probably speak in the present situation of a 'sublation' of this thought and thus of thinking itself in a present augmented reality, an enriched reality of undreamt-of effectiveness.

If one is willing to accept this description of the situation, however, the question immediately arises what has changed due to this return to the origins of human culture - if only because we as returnees are no longer the same. What is different about us today has already been indicated: we are different because there are other media and methods of presenting the world or even ourselves. So what has become different is the other of ourselves: technology in the broadest sense and the cultural techniques that go with it, our own nature and nature in general, to get to the bottom of it and to reveal its and our secrets. In doing so, we have already come to realize that nature itself has become another, which, by rethinking and reshaping our culture, at the same time reveals different and unknown views and insights. If we wanted to put into words what is happening before our media-sharpened eyes, we could say that the natural world has become a hyper-complex data universe that is revealed differently from one point of view to another. Or in one word or two: Big Data.

In the course of its digitization, the world has gone from being a big question mark to an unmanageable pile of possible answers to unknown questions. This change is most clearly expressed in the daily repeated gesture of calling up the search input of our Smart Devices to send a query into digital orbit, which will almost certainly bring us a related answer. However, a prerequisite for success, which is defined by the applicability of the answer, is the art of asking the right questions and the appropriate technique, not only to be able to ask the right question, but to be able to develop it first of all. For this is what everything seems to come down to today, as soon as it has become a matter of course to live in a world that no longer has too few, but too many answers to everything. Thus, not least, the status of what we call, with a peculiar emphasis since modern times, the objectivity of the world and the subjectivity of our concepts of individuality depends on this. Speaking with Gilles Deleuze, Bernard Cache and Alfred North Whitehead, we live in a (neo-Baroque) world of correlations between "objective" and "superject":

"Let us call this new object *Objectile*. As Bernard Cache shows, this is a very modern conception of the technological object: it no longer refers to the beginnings of the industrial age, when the idea of the standard still maintained a semblance of essence and imposed a law of constancy [...], but to our present situation, where the fluctuation of the standard replaces the permanence of a law as soon as the object takes its place in a continuum through variation, as soon as production technology or numerically controlled machines replace imprinting. The new status of the object no longer relates it to a spatial imprinting form, i.e. to a relationship between form and matter, but to temporal modulation, which implies a continuous variation as well as a continuous development of the form."[6]

What Deleuze describes as a new form of the object as early as 1988, starting from Cache, was to prove over time to be the most accurate characterization of objectivity in times of its digitalization. It is not only typified product design that has opened up in the course of customizing the range of modulations, but in the heart of our present-day (post-)Internet culture itself, in the thinning of our hybrid living world in search of new insights, events and entities, the "object style" proves itself to be, as it were, the prey schema of our search queries. This corresponds to what Alfred N. Whitehead first called the "super subject", a subject that is no longer "subject" to standardization, but rather constitutes itself according to a correlative "perspectivism" of "points of view":

"This [perspectivism] does not mean dependence in relation to a pre-defined subject: on the contrary, the subject will be what comes to the point of view, or rather what remains in the point of view. There is a necessary relationship between variation and the point of view: not only because of the variety of points of view [...], but primarily because each point of view is a point of view of variation. It is not the point of view that varies with the subject, at least not primarily; on the contrary, it is the condition under which a possible subject grasps a variation (metamorphosis), or something = x (anamorphosis). [...] It [perspectivism] is not a variation of truth according to the subject, but the condition under which the truth of a variation appears to the subject."[7]

The last sentence expresses the problem of today's Post-Truth Era and at the same time one of its solutions: While the proponents of the post-factual, supported by "Siren Servers"[8], carelessly produce subjects in order to vary and relativize the truth, it takes super subjects and media supporting them to make the actual "truth of a variation" visible. The small but subtle difference is that, on the one hand, more and more bubbles are formed and brazenly claimed as truth by S[earch]E[ngine]O[ptimization] agencies, while, on the other hand, 'objective' truth is revealed in its actual richness of facets, namely through the discovery of 'superject' aspects. Thus, the

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[6] Gilles Deleuze: *Die Falte. Leibniz und der Barock*, Frankfurt am Main: Suhrkamp 2000, S. 35 f.
[7] Ibid., p. 36 f.

[8] Cf. Jaron Lanier: *Who Owns the Future?*, New York 2013.

deliberate variation of 'objective' truth cannot be distinguished from the 'objective' truth of a variation and exposed as fake as long as the subject is subjected to a certain perspective and strapped to it, instead of getting involved with different points of view and first of all testing which among them open up a really different, though true perspective. Figuratively speaking, one can take up many perspectives on an anamorphosis and want to assert various points of view, but from one perspective alone, the structure is actually decoded.

In this sense, the point of view of the object should determine the superject, instead of the media-supported bubble alone determining the subject-narcissistic aspects of objects, as is primarily the case today. To counteract the latter and promote the former means to allow true diversity. For truth is not something single, already given, to which one merely has to refer (as one might misunderstand a new realism), but something unique, which must (not only can) adjust itself under certain aspects, as a constitutive event. There is truth, and for this very reason it is not already given - for it must be embraced not only accepted. However, this can only be done justice to by not denying or selectively trying to contain the specifically enlightening potentials of the new media, which are in a growing diversity compared to the centralist mass media of industrial society (and their digital descendants), but rather the other way round by fully exploiting them.

The challenge is thus to create a more mature way of dealing with today's possibilities, not by promoting a tolerance of ambiguity in which one's own identity merely endures foreign and one's own differences, but precisely the other way round, by demanding a mutual sensitivity to virtuality that understands how to affirm one's own identity as the identity of difference. Only when the appeal goes out to each individual that truth neither falls into one's lap, nor that one can either carry it out, lie to it, or even put it in order, but that one must seek it out - only then do the true and the false points of view differ: Truth is neither a merely passive nor an active dealing with facts (for example, making statements about facts), but rather a media event that reconstitutes subject and object as super subject and object - an act that one must commit in order for it to happen to one. The truth event is thus always also a creative act or it has no existence before its own future; conversely, creativity is always also a true act or it is not and will only have been seemingly. The decisive factor is not least the media's ability to grasp and reproduce a general in an individual and the special place it gives to the super project I have become in the confrontation with the object style I adapt and to which I adapt myself.

Of course, this is already happening today in every moment in which we use media in order to put 'us' in contact with 'the world', since media are essentially nothing more than a mediation of the other. What is important, however, is to find (again) an interactivity of the event from the

increasing 'interpassivity'[9] of the consumed events in the midst of a constantly increasing environment of complexity, which Big Data no longer leaves to Big Brother or the 'Circle' of the ruling tech companies. It is about the (re)conquest of one's own power of action in and through the media of alterity, it is about the emancipation of creativity itself from the clutches of our self-exploitation. Andreas Reckwitz, in particular, has repeatedly pointed out that modern and late-modern society is characterized by a ‚creativity dispositif‘[10], whose agents, initially coming from the artistic bohemian world and today already queuing up at every supermarket checkout, have increasingly dedicated their lives to a commercialized self-design, which ultimately reduces creativity to a luxurious range of goods for self-realization and self-consumption. But creativity need not be condemned to be merely the capital of capital, where capitalism, and not capitalism alone, is running out of resources.

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*III.*

*A New Creativity Design - DIVERSUS*

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The question how alternative creativity could be thought of and ultimately designed, brings us back to Mario Carpo's Second Digital Turn. Here we find a concise characterisation of the current form of knowledge creation and the design of our concept of knowledge:

> „From the beginning of time, humankind has conceived and honed classifications for two main reasons: as a way to find or to make some order in the world–an idea often cherished by philosophers, theologians, and thinkers and which some see as a universal human yearning–and, more simply, to assuage the basic human need to put things in certain places, so we know where they are when we need them. We used to think that sorting saves time. It did; but it doesn't any more, because […] searches […] now work faster and better. So taxonomies, at least in their more practical, utilitarian mode–as an information retrieval tool–are now useless."[11]

The final consequences of the triumphal procession of Search Engines in conjunction with Big Data are already becoming apparent today: Where it becomes reality, due to the almost infinite possibility of recording everything in all forms, that almost everything that happens will find its predecessor, double or even already its successor and outbidder somewhere, there are necessarily only two things needed: a good question and a suitable access medium to pursue this question.

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[9] Cf. Robert Pfaller: *Interpassivity: The Aesthetics of Delegated Enjoyment.* Edinburgh 2017.

[10] Cf. Andreas Reckwitz: *The Invention of Creativity,* Malden 2017.
[11] Carpo: *Second Digital Turn*, a.a.O., S. 25.

The answers sought will either be found in the sequence and on the basis of collective commitment, or they will already exist somewhere, because groups or individuals have already recorded them at an earlier point in time, so that they are waiting for a renewed debate.

With the motto 'Search Don't Sort', which for some time promoted the email application of the world's most successful search engine, the success concept within the digital knowledge society is pointedly expressed[12]. Whereas in the past it was not only commonplace but also vital to create taxonomies, i.e. to create hoards that made a manageable set of utensils accessible, this data compression method now seems to have become obsolete, as our storage space has become so large that it tends to absorb the entire world of knowledge and keep it available. It is therefore less important today to sort by general registers than to start individual searches that can find their exact answers. In other words: It is no longer a general rule that serves as the best approach to solving individual cases, but at best the similar, identical or even identical individual case that is already available for retrieval.

Thus singularities take the place of abstractions, which at the same time are about to revolutionize the conventional order of knowledge by means of representative writing and images. No longer general schemes and templates, but concrete events are increasingly becoming the carriers and expressions of knowledge; events that no longer have to be pressed into formulas and forms in order to be transposable, but can be linked to other events along their respective contexts to form strands of knowledge and entire patterns of knowledge. "Search Don't Sort" as a motto consistently implemented, would therefore not only mean to run through already existing chains of events, as conventional Search Engines promote, but - and this would prove to be the real 'engines' of the digital knowledge society - to form new event chains first of all, in order to proactively create new singularities for the questions of the future. Thus, creativity today proves to be more a question of a designed process, of curated engagement with others or the other, than creatio ex nihilo, genius or acte gratuit.

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[12] An objection, which at this point points out that sorting is still done today, only on a metal level, is in some respects quite correct. In Google, on the one hand, there are algorithms that pre-sort according to secret criteria, while on the other hand, SEO agencies, the resident web administrators and authors, prepare information for search engines. In this context, not throwing the baby out with the bathwater means revealing source code and parameters so that they can be searched for themselves in a kind of transcendental reflection on their own conditions of possibility. We will come back to this later.
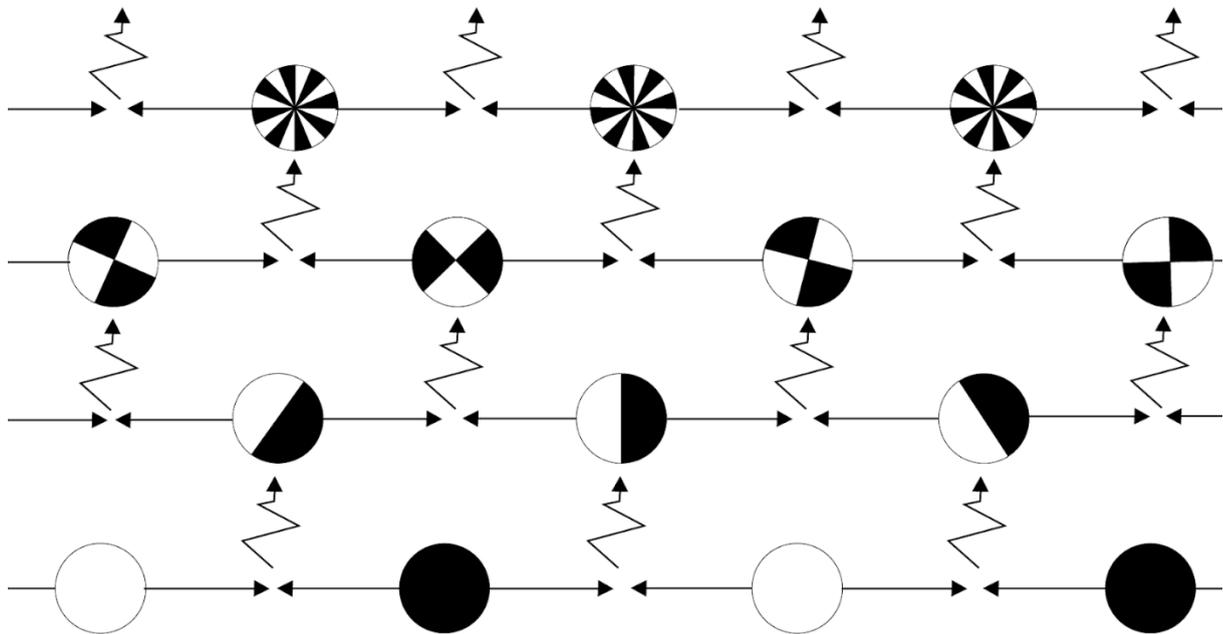
(Fig. 1 Information processing in a dialectically emergent system and iterated towards a relative utility value. Image by DIVERSUS e.V. License: CC0)

What digital creativity could mean in concrete terms is illustrated here by an example that could also be addressed as a paradigm in accordance with its own, not least ethical, demands. DIVERSUS, as the non-profit supporting association is also called, stands for a graphic search engine on an open source basis, behind which a collective cognitive system[13] is hidden, which is currently developing a new and in some respects also old or familiar form of computer-aided dialectics. The declared goal is to (re)initiate a comprehensive educational process by making this process itself transparent, decentralized and promoting the maturity of all participants in its individual moments. The basic shape of this form of 'spirit-engine' follows a dialectical method, which is infinitely interlaced in itself like a fractal, implementing Hegel's logic of the concept, its materialization in Marx and Engels and Luciano Floridi's philosophy of the infosphere[14] as essential moments of a dialectical emergence (Fig. 1). DIVERSUS now complements these considerations with explicitly dialectical technologies.

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[13] Cf. for example Pierre Lévy: *L'intelligence collective. Pour une anthropologie du cyberespace*, Paris 1994, one of the first ambitious theorists of swarm intelligence.

[14] Cf. Luciano Floridi: *The Fourth Revolution. How the Infosphere is Reshaping Human Reality*, Oxford 2014 and the major work of the current director of the Digital Ethics Lab in Oxford: *The Philosophy of Information*, Oxford 2013.

(Fig. 2 Screenshot of the DIVERSUS prototype (as of July 2019) with a "Remix-Flower", which dialectically illustrates controversies and makes different origins of the problem accessible in the deeper analysis. Image by DIVERSUS e.V. License: CC0)

As Fig. 2 shows, it is a blossom-like interface ("Flower") that can be scaled on different levels and thus allows macro-, meso- and microscopy of information clusters. Not only are analogies to the plant world intended (zooming in and out is like opening and closing a flower), but the microscopic world of atoms is also reflected in the interface concept. An exponentially growing GPU power is used to correlate semantic coherence with physical properties. The presentation of information breaks away from the scriptural list paradigm to fully exploit the available bandwidth of optical interfaces (the media used) for the first time. The user ceases to be a list object and his perceptual and processing apparatus, trained over millions of years to interpret physical conditions and events, is adequately addressed. The microscopic perspective is thus also linked to the macroscopic perspective of a (human) mind, which, through conceptual judgement, imaginary association and logical conclusion, has always "flown over" the respective time and space boundaries.[15]

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[15] Cf. Gilles Deleuze/Félix Guattari: *Was ist Philosophie?*, Frankfurt a. Main, where, for example, on the concept of the term it says: "A term is a heterogenesis, that is, an arrangement of its components by neighboring zones. It is ordinal, namely an intention that is present in all the characteristics of which it is composed. Since it continuously passes through them according to a certain order without distance, the term is in a state of overflying with respect to its components. It is immediately co-present without distance in all its components or variations, it passes them anew each time: it is a ritornello, an opus with its own number." Translation by Martin Sambauer.
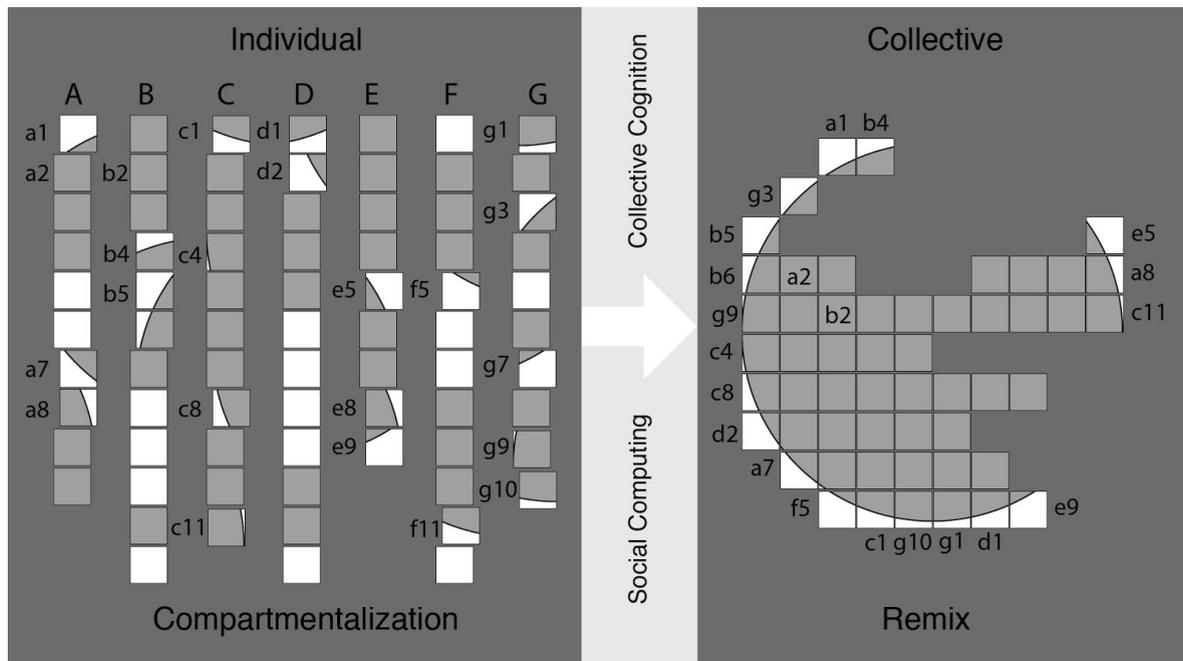
(Figure 3: The DIVERSUS principle of collective cognition. Individual cognitions and perspectives are compartmentalised, re-ordered by the collective and put into a larger context. Image by DIVERSUS e.V. License: CC0)
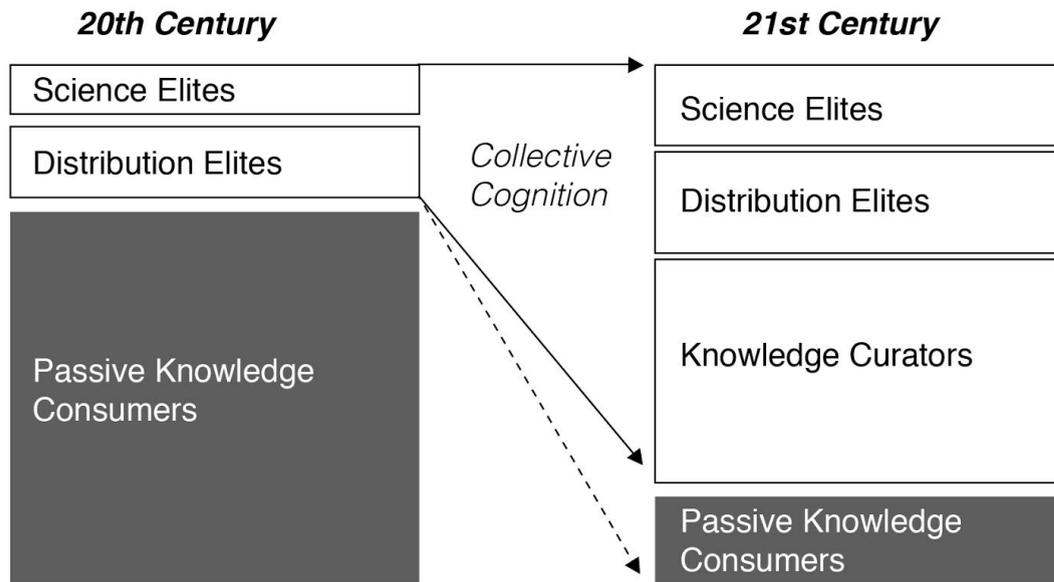
Within the framework of this creative setting, analysis and synthesis skills are enhanced by the fact that the compartmentalisation of information, the intuitive decomposition into its atoms and their arbitrary re-synthesis by human system actors occur collectively (Fig. 3). Video contributions, for example, can be commented on to the second, posts can be addressed more precisely, and yet the orienting overview is retained at every single moment of the discussion, without having to scroll through continuous lists of comments. Rather, the respective thought processes and path dependencies can be called up, split up and continued again as required by adding or subtracting completely different thought complexes with the touch of a finger, coupled with a search function defined by individual parameters and open criteria. While previous social computing projects initially increased information entropy until they were supposed to slow down the initially exponential increase due to intrinsic corruption factors (whether through design restrictions or personal interests) (Fig. 4), DIVERSUS aims at an accelerated diffusion already due to the basic operation: compartmentalisation and remix, analysis and synthesis, embedded in dialectical hyperspace and supported by the meta-intentionality of collective cognition, do not slow down the unfolding of complexity by extraneous reductions and yet allow an intuitive navigation through the data orbit.
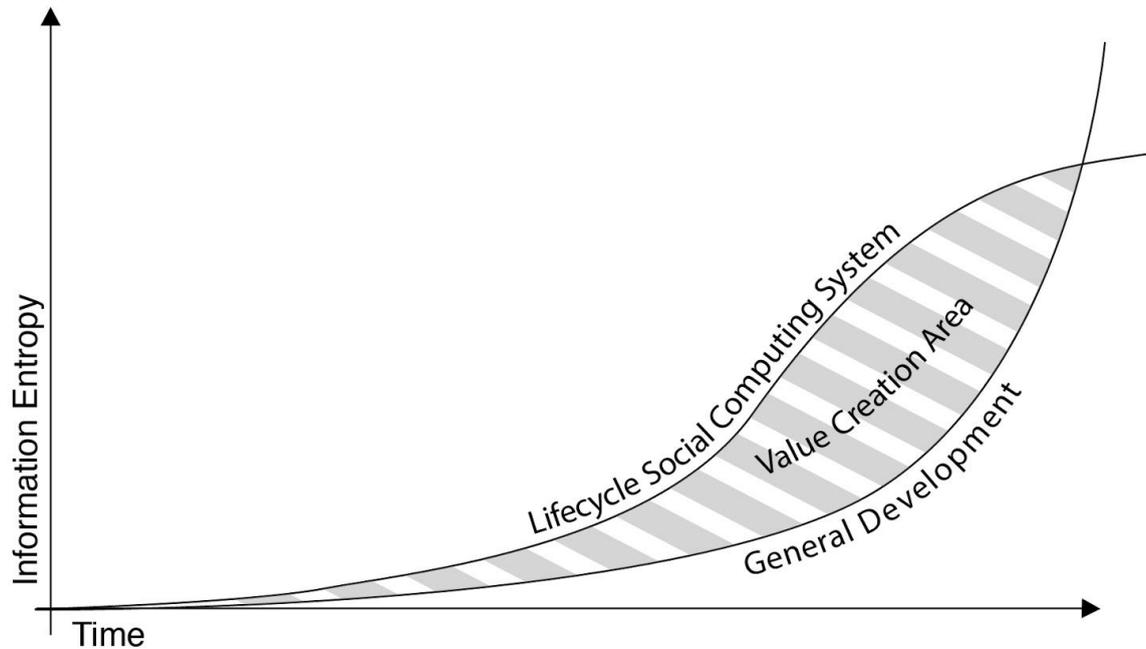
(Figure 4: Value creation area of successful social computing systems in relation to accelerate the information entropy over their life cycle for their target groups. Image by DIVERSUS e.V. License: CC0)

New, complex chains of events are thus formed, which prove to be both controllable and spontaneous to an unprecedented degree. What previously had to appear as a contradiction turns out to be the productive paradox of digital creativity, which is now able to renounce not only the mechanical inertia of following rules, but also the genius cult of impenetrable creativity. Instead of a mystification of creativity, the logic of singular chains of events and their dialectical emergence takes its place, which, on closer inspection, was not only made possible by digitalization, but merely made explicit - in order to become feedbackable with itself from then on. Even everyday life has always consisted of networked events that at any given moment complicate themselves into an unmanageable tangle and in the process continually constitute emergent phenomena[16]. What has always been important is to unfold this hyper-complex tangle as best as possible. What is important today, on the other hand, is to short-circuit the different levels and levels of complexity in order to let them unfold and illuminate each other in the autocreative medium of digital dialectics.

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[16] The best example is Gestalt research with its (already Aristotelian) basic assumption that the whole is more than the sum of its parts - (again) beginning with Christian from Ehrenfels' Essay: "Über Gestaltqualitäten", first published in: *Vierteljahrsschrift für wissenschaftliche Philosophie. XIV. 3 (1890)*. Reprinted in: *Gestaltliches Sehen. Results and tasks of morphology. For the centenary of the birth of Christian von Ehrenfels*, ed. by Ferdinand Weinhandl, Darmstadt 1960, pp. 11-43.

20th Century

| Science Elites |
| Distribution Elites |
| Passive Knowledge Consumers |

*Collective Cognition*

21st Century

| Science Elites |
| Distribution Elites |
| Knowledge Curators |
| Passive Knowledge Consumers |

(Figure 5: The democratization of collective cognition in the 21st century through curatorial systems. Social Computing Systems enable all users to curate information and thus participate in knowledge creation and value generation. Image by DIVERSUS e.V. License: CC0)

Knowledge Creation through DIVERSUS is no longer primarily used for the mere representation and reproduction of prepared, centralized and non-transparent knowledge, but carries, accelerates and documents our personal development. In this sense it would be better to speak of "Knowledge Formation" or "Knowledge Creation" through dialectical emergence, in order to exclude any misleading form of (self-)consumption from the outset. The dialectical orientation thus aims not least at the elimination of totalitarianism by making it more difficult to retreat into the personal Echo Chamber, in which, as populist phenomena today are abundantly demonstrating, a supposedly universal claim to validity can be asserted almost without resistance. Similarly, even the most social network corporations have a hegemonic way of thinking, whose claim to creative exchange under egalitarian, free and 'friendly' conditions is counteracted by an aggressive market logic: Here, DIVERSUS not only presupposes a new willingness to rethink, to redesign, but also promotes it in one, in order to initiate a transfer of knowledge that is as unbiased as possible, to which it is nevertheless personally worth exposing oneself (Fig. 5).

*Getting into Conversation*

Let's conclude, as it were, by finding our way back from the feet on the ground of materialistic facts to the idealistic minds via the digital network and its bridging technologies of the future. What at first might sound all too aloof, digital creativity in the sign of a Second Digital Turn, in concrete terms means merely the abolition of our previous media use in a more comprehensive way of (human) conversation. Dialectical knowledge in the sense of emergent chains of events arises from connections between fixed references, as they were first made possible by the medium of writing as opposed to the hard-to-memorize flow of thought and speech of pure oral cultures, and variable connections, which result from the momentum of the classical conversation situation in particular and its multimedia stimuli. It is thus a matter of informative differences through productive repetition, of unexpected mergers through mutual disclosures, of the appreciation of a singular world in the form of even singular affirmations, additions, complements, supplements, criticisms, contrasts, contradictions, mere associations, or even intentional omissions - in short: it is about diversity as the only contemporary coping strategy of a hyper-complex life world. Creativity in this sense, even with all its disruptiveness, does not mean unconditional new creation, but redesign, not world creation, but knowledge creation. So there is not only one point of view, but there is always a point of view through which something reveals itself to us - be it another, something else or we ourselves.

To the question of what knowledge is today, the logical answer would therefore be that it is less than it is becoming; that knowledge can only be found where it is searched for in an intelligent way; finally: that knowledge is not a question of theory without at the same time becoming an answer in practice, through which we constantly transform ourselves and the world anew. This process has always required mediators. But the freest and at the same time best adapted medium, which today mediates between Big Data and Homo sapiens in order to make him more mature, instead of fobbing him off with search engine optimized or bubble-shaped information - this medium exists in our thoughts or as our thoughts. It is the creativity of ideas themselves.

If one asks oneself what this thought is leading to, there is more to come than a new sorting technique of these very thoughts, including our feelings, wishes and convictions. We are looking for true ideas - trusting in their genuine creative power. With DIVERSUS itself, a discovery would be made that has been sought again and again in the history of philosophical discussion: a more suitable medium for the translation and development of ideas than previous ones. At the latest since Empedocles in the Occident declared the love-hate relationship of the elements to be the dialectical motor of his cosmogony, we have understood disputes as pros and cons of mutual

analyses and syntheses; at the latest since the advocacy of Sophism and Socrates for argumentative justification in the general formation of knowledge and lifestyle, we speak of dialectics in the emphatic sense. Hegel and Marx made their contribution to the conversation of the millennia by wanting to oblige thinking to reflect on its historical presuppositions, and Hans-Georg Gadamer and later Jürgen Habermas saw the main challenge of lived philosophy in the open exchange of words among understanding people. Other authors could be added. But the question remains the same: Why not continue this conversation at the current level of technical, media and design possibilities - apart from objections that emanate from this conversation and will be included in it again?

Imagine that the acquisition and application of knowledge could be linked via augmented reality to the facts and situations in question in real time. If we think about humanity at this point, its outstanding ability to communicate knowledge intersubjectively and intergenerationally has been demonstrated at an unprecedented level. What had to remain a venerable speculation for thousands of years would become a new 'reality' of thinking in the literal sense: the expansion of individual biological memory into a collective digitised mind. We would thus have resumed or 'sublated' more than just one thought. As it usually happens in the most precious moments of an outstanding insight, no longer would one think for all, but equally all for one - in various places, at various times for the diversity of our lives.