DIVERSUS – The Dialectical Roots

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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.

We humans, today as in our primeval beginnings, distinguish ourselves from our evolutionary ancestors in our increased ability to cooperate. People have always lived in groups, not only because we needed to ensure our survival in a collaborative effort, but also because we could only collaboratively figure out what a successful life means to us. Our biologically deficient being demands a compensative culture of communication. Our poverty is at the same time the luxury of being able to attune ourselves to each other and our surroundings; and not just once and for all, but over and over again. In this sense, man is the freest and at the same time the fittest animal. As we have culturally adapted to our natural environment, we have, reciprocally, adapted it more and more to us, thereby greatly expanding the scope of our and its design.

Here a dialectic of adaptation is at work which has found its tools and means in various media and methods to intersubjectively and intergenerationally communicate knowledge which allows to secure life or even lead a good life. It is said that digital information technologies will change our lives dramatically. But how they will change them depends on how we communicate about those very changes. Media are both the object and the means of this debate. Hence, the crucial question is: what is the best way to communicate knowledge so we can flourish in regard to knowledge building?

This question cannot be answered without raising related questions at the same time. Is knowledge a matter of storage/retention, application or personality? Do we have to possess or just use knowledge? What is knowledge anyway? A treasure, a plan, a tool, a perspective, a practice? – From a philosophical point of view these questions seem to amount to an old and familiar issue: how can we know anything if we do not even know what knowledge is? - Would that have been the end we would never had come to an answer. But this question is by no means

pointless. Since we have posed it (or rather face it) it has invited us to rethink this very fundamental issue and thereby gain new knowledge about us and the world. Let us thus – in good faith – formulate the question a bit more pragmatically: what do we already know about knowledge?

Not too long ago, the answer would have been to reach into the bookshelf to search for an answer in the alphabetical order of an encyclopedia. Even though it may have taken longer to locate an answer than might be the case with search queries via smartphone, tablet or laptop, the goal of our search was literally visible even then: the encyclopedia as a format and medium of presentation of all that was worth knowing was also an essential expression of what knowledge was taken to be. Since the eighteenth century bourgeois enlightenment found its source of light here and its torch-bearers in those intellectuals who contributed to it. Knowledge seemed to have become a (counter) power simply because it had become available at all – as a kind of panoramic view, as a circumnavigation of the modern cosmos of knowledge, in the middle of which now stood man as beginning and end, replacing God. Here was written, at least so it was claimed, what man could know, do and be, as long as he was serious about his education as self-determination.

If we want to find out what knowledge is today or what we know about knowledge today, we use our own forms and media of presentation. What we know and what knowledge is depends essentially on how we retrieve it. However, one clearly visible difference seems to be that we no longer fill our own memory up with knowledge, but prefer to acquire formal learning competences. Already in the 2000s my history teacher used to say, "He is wise who knows where to look", but today we are – again – only as smart as we were at the Socratic beginnings of the West: we know that we do not know – we do not even know where to look *exactly*. But at the same time, we know that we do not need to know, as long as there is something else that does not know it knows, but lets us know whenever we need to. We know it knows – and that's enough. Which "it" are we talking about?

II.

Following Mario Carpo, we live in the time 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."[1]

As has been repeatedly and rightly emphasized, the digitization of our culture implies a kind of return to the forms of knowledge-constitution and -tradition of archaic oral culture. What is commonly known as the history of advanced civilizations, starting with Mesopotamia, spanning Egypt, China and ancient Europe, and has been established as the epitome of sophistication, is basically the success story of a medium in its most diverse versions: writing (as cuneiform, hieroglyphic, pictogrammatic, syllabic or vocal script). Classical high cultures are mostly script-based contexts of communication with a preference for forming hierarchies along levels of literacy and for sorting all conceivable entities into administrative lists – on this at least there seems to be an agreement within media studies.

Nevertheless, since the end of the Second World War, we have witnessed a rapidly accelerating upheaval, first proclaimed by Marshall McLuhan in a prophetic tone as the end of the Gutenberg Galaxy. The now well-known claim that the return to tribal social structures is associated with electronic, especially digital media (keyword: Global Village) may have only anticipated the developments that have been on the horizon since Norbert Wiener's invention of 'cybernetics' at the end of the same war: we live under the conditions of post-literacy, and in the midst of new media, through which we have not simply renounced writing, but in which writing, in the words of Nietzsche, has – as all good things do – turned against itself.

For since the appearance of the first high-level programming languages (Fortan, Lisp, COBOL) – which constitute the first writings that are no longer intended for the recital or recording of the human voice, but instead give instructions to machines – writing has withdrawn, as it were, behind the stage, to make room for a new visual and performance culture which is

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

recognizable as a new synthesis of orality and literacy. Since these writings, or those who have mastered them, have taken charge, a hitherto unknown spectacle occurs before our eyes, which is set to obliterate the boundaries between stage and reality.

In this way we have come full circle and it has become clear to the recipient or user what has been a basic conviction of daily business on the producers' side for a long time: in the sign of programmed simulations we have reached a new zero level of reality, according to which the coordinate system of our lifeworld has readjusted itself. What used to be distributed on different media for different senses, today converges in a universal medium with a universal binary code, which merges with conventional reality to form a hybrid world of experience. Soon the world itself could again become that comprehensive and immediate interface which it has always been, although in a more modest way, before a screen full of writing had lodged itself between it and us. This screen is currently about to cross through the intermediate stage of the display to get right back under nature's skin, with the result that things will end up appearing as if everything has remained as it was, while in fact everything has changed. If that came to pass, we would no longer have to impress our will and wishes on the environment in a roundabout way, but instead it would have learned – thanks to its binary alphabetization – to read them from our lips, our gestures and our facial expressions.

This is how predictions for the future usually sound like these days, and at least that much is true: we will not stick to the cumbersome use of writing when it comes to sharing information, communicating knowledge or spreading beliefs. Instead, the most direct means are the ones that we used before the invention of all other media and which we will return to after overcoming all the other media because it is the 'most natural' thing to do: conversing face to face, be it in an analogue or digital way. If there is such a thing as a birthplace of the development of human thought, opinion and personality, then we probably ought to look for it here. Thus, DIVERSUS literally picks up where we started as human beings, and does so at the point where we have already recreated the world around us through a steady evolution of both thought and ourselves. Hegel – forgive a philosopher for his satisfaction regarding this statement – would have aptly spoken of a 'sublation' of thought in the present situation.

If one is willing to accept this description of the state of affairs, the question immediately arises as to what must have changed in spite of said return to the roots of human culture – and something must have changed, if only because we as returnees are no longer the same as before. The difference has already been hinted at: we are different because we deal with different media

and methods to inform us about the world as well as ourselves than at earlier times. What has become different, then, is the other of ourselves: technology in the broadest sense and the cultural techniques implied by it, through which we reveal our own as well as nature's secrets. As we know, nature itself has become another in the course of this process. As we rethink and transform our culture, nature itself reveals sights and insights hitherto unknown. To put into words what is going on in front of our medially sharpened eyes, it could be said that the natural world has become a hyper-complex data universe, which presents itself differently depending on the point of view. Or in short: Big Data.

In the course of its digitization the world changed from being one big question mark to being an almost unmanageable cluster of possible answers to unknown questions. This change is most clearly expressed in that everyday repeated gesture of pulling up the search input screen of our smart devices to send a request into digital orbit, which will almost certainly bring us a relevant answer. However, the prerequisite for a success – which can be identified with any actually usable answer – is the art of correct questioning and the corresponding technique of not just asking the right question, but of being able to develop it properly in the first place. After all, this is what it comes down to, as soon as it has become a matter of course to live in a world that no longer holds too few answers but provides too many. Indeed everything depends on it in the end – both the objectivity of the world as well as the subjectivity of our notions of individuality. To say it with Gilles Deleuze, Bernard Cache, and Alfred North Whitehead, we live in a (neo-baroque) world of correlations between "objectile" and "superject":

"This new object we can call objectile. As Bemard Cache has demonstrated, this is a very modem conception of the technological object: it refers neither to the beginnings of the industrial era nor to the idea of the standard that still upheld a semblance of essence and imposed a law of constancy […], but to our current state of things, where fluctuation of the norm replaces the permanence of a law; where the object assumes a place in a continuum by variation; where industrial automation or serial machineries replace stamped forms. The new status of the object no longer refers its condition to a spatial mold -in other words, to a relation of form-matter - but to a temporal modulation that implies as much the beginnings of a continuous variation of matter as a continuous development of form."[2]

What Deleuze described as a new form of object in 1988, following Cache, was to prove to be the most accurate characterization of objectivity in the age of digitization. Not only typified product design has opened itself to the range of variation of modulations in the course of customizing, but in the heart of today's (post-)internet culture the "objectile" turns out to be the structural schema of all search queries with which we trawl through our hybrid lifeworld in search of new insights, events and entities. The objectile corresponds to what Whitehead called "superject", i.e. a subject that is no longer 'subject' to normalization, but constitutes itself according to a correlative 'perspectivism' of 'points of view':

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2 Gilles Deleuze: *The Fold. Leibniz and the Baroque*, London: Athlone Press 1993, p. 19.

> "Such is the basis of perspectivism, which does not mean a dependence in respect to a pregiven or defined subject; to the contrary, a subject will be what comes to the point of view, or rather what remains in the point of view. That is why the transformation of the object refers to a correlative transformation of the subject: the subject is not a subject but, as Whitehead says, a 'superject'. Just as the object becomes objectile. the subject becomes a superject. A needed relation exists between variation and point of view; not simply because of the variety of points of view […], but in the first place because every point of view is a point of view on variation. The point of view is not what varies with the Subject, at least in the first instance; it is, to the contrary, the condition in which an eventual subject apprehends a variation (metamorphosis), or: something = x (anamorphosis). […] It is not a variation of truth according to the subject, but the condition in which the truth of a variation appears to the subject."[3]

The last sentence expresses both the problem of today's Post-Truth Era as well as its solution: While the supporters of the post-factual – supported by "Siren Servers" (Jaron Lanier) – carelessly produce subjects to vary the truth and relativize it, we need superjects and media supporting them in order to reveal the actual "truth of a variation". The small but mighty difference is that on the one hand more and more bubbles are formed by SEO agencies and brazenly proclaimed as the truth, while on the other hand the 'objectile' truth comes to the fore in its actual richness of facets through the discovery of 'superjectile' perspectives. Thus, the wanton variation of the truth can not be distinguished from the 'objectile' truth of a variation and revealed as a fake, as long as the subject is subjected to a certain perspective and lashed to it, instead of allowing different points of view and probing which open up different but equally valid perspectives. Remaining within the metaphor, one can assume many perspectives on anamorphosis and assert various points of view, but the structure will only ever be decoded from a certain perspective.

In this sense, the point of view of the objectile should determine the superject rather than what is primarily the case today: namely that the media-based bubble determines the subject-narcissistic viewpoint of given objects. Counteracting the latter and promoting the former means enabling true diversity. DIVERSUS seeks to do justice to this by, among other things, utilizing the potentials for enlightenment inherent in the new media – in contrast to the

[3] Ibd., p. 20.

centralized mass media of industrial mass society and their digital offspring. The challenge is to create a more mature interaction with today's opportunities as to not leave Big Data to Big Brother.

What this means exactly can best be described in the words of Carpo's *Second Digital Turn*, which at the same time provide us with insights pertaining to the formation and conceptualization 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."[4]

The final consequences of the triumphal march of search engines in the context of big data are already apparent today: where the nearly infinite possibility to record everything in all forms makes it a reality that almost everything that happens somewhere has its predecessor, its double or will find its successor and its replacement, we only need two things: a good question and a suitable medium of access to pursue this question. The answers sought will either result from collective engagements or they will turn out to already exist somewhere because they have already been recorded by groups or individuals at an earlier point in time.

The slogan 'search, don't sort', which for some time promoted the email-application of the world's most successful search engine, pithily captures the concept for success within the digital knowledge society. In the past it was not just a matter of habit, but almost a necessity to create taxonomies, namely as an access to a large yet manageable set of (cognitive) tools and utensils. Now this process of data compression seems to have become obsolete since our capacity to store information is powerful enough to absorb the totality of knowledge and keep it available. It is therefore less important today to sort data according to general registers than to start individual searches that can find their tailor-made answers. In other words: we no longer look for a general

[4] Carpo: *Second Digital Turn*, p. 25.

rule as the best solution for the individual case, but for a similar or even an identical individual case, already solved optimally and available for retrieval.

Singularities thus replace abstract categories; these singularities are about to revolutionize the conventional order of knowledge in the name of merely representative writing and pictoriality. No longer are general schemata and templates the carriers and expressions of knowledge, but concrete events; events that no longer need to be pressed into formulas and forms in order to be transposable, but which can be interwoven with other events into strands and whole patterns of knowledge, according to their respective contexts. Consistently implementing 'search, don't sort' as a principle would not only mean going through existing chains of events as conventional search engines would, but – and here they would prove themselves to be the actual 'motors' of the digital knowledge society – forming new chains of events to proactively create new singularities for the benefit of future questions.

This is exactly where DIVERSUS starts and, in turn, sets the entire educational process in motion in a new way, by making this process transparent even in its individual moments, by decentralizing it and by promoting the maturity of all participants. A closer look at the implicit logic of the singular chains of events quickly reveals that digitization has not made them possible, but only makes them explicit. Everyday life has always consisted of linked events, which at any moment become folded into an unmanageable cluster. Thus it has always been important to be able to untangle this hyper-complex mess as well as possible.

This is best achieved through an interplay of fixation on one side and loose linkages on the other, as specifically supported by the design of DIVERSUS. Knowledge in the sense of these chains of events arises from combinations of rigidly fixed references, as they were made possible for the first time by the medium of writing in the face of the difficult to memorize flow of thought and speech, and variable connections which result from the specific dynamics of (especially) the classic situation of conversation and its multimedia stimuli. We are thus dealing with informative differences brought about by productive repetitions, with unexpected mergings made possible by mutual explanations, with the appreciation of a singular world in the form of in itself singular affirmations, additions, complementations, supplementations, critiques, contrasts, contradictions, mere associations, or deliberate omissions. In short, we care about diversity as the only contemporary coping strategy in the face of a hyper-complex lifeworld. So there is not just one necessary point of view, but there necessarily is always some point of view through which something is revealed to us – be it someone or something else – or ourselves.

III.

Knowledge building through DIVERSUS no longer intends to serve the mere representation and reproduction of already prepared, centralized and non-transparent information. Instead, it carries, accelerates and documents at once the emergence of (new) knowledge as well as our personal development. When we ask what knowledge is, the most adequate answer would be that it *is* less rather than it *becomes*; that knowledge can only be found where it is pursued in a smart way; finally: that knowledge is no question of theory without becoming at the same time an answer in practice, through which we are constantly redesigning ourselves and the world. There was always a need for mediation in these dialectical relations. But the freest and fittest medium that mediates between Big Data and Homo sapiens in order to make us more mature, instead of using search machine-optimized or bubble-shaped information – this medium exists only in our thoughts or still only *as* our thoughts.

If one finally raises the question what these thoughts amount to, there is more in sight than a new sorting technique of these same thoughts together with our feelings, desires and convictions. DIVERSUS would constitute a find we were always looking for throughout the history of philosophical thought. Imagine knowledge acquisition and knowledge application could be connected via augmented reality with the issue in question and the current situation in real-time. Once humankind has arrived at this point, our outstanding ability to communicate knowledge inter-subjectively and inter-generationally would have reached an unprecedented level. What had to remain a venerable speculation for millennia would become a new 'reality' of thought in the literal sense: the extension of individual biological memory into a collective digitized mind. What otherwise happens only in the most precious moments of an exceptional insight: that one is thinking for all, would turn into the situation that all are thinking for one - at any place, at any time and totally in accord with the diversity of our lives.