

Philosophical digitality research: lifeworld, science, and philosophy

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1. Preliminary remarks

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When we use terms such as "the digital," "digitality" or "digitalization", their meaning and language games (think, for example, of smartphones, personal computers, social networks and search engines) seem to be immediately understandable, intuitive, and directly tangible. On the other hand (e.g. with regard to basic infrastructural conditions, algorithmic prefigurations and high-speed interactions between machines and machines), there is an "underside" of the digital, a shadowy side that is neither epistemologically nor ethically thought through in its entirety. What contribution can philosophy make to this field? And why should there be a new journal such as "Philosophy & Digitality"?

The following text is the revised transcript of an interview conducted via Zoom on May 30th, 2023 on the philosophical engagement with the digital and digitality.¹ The interview was conducted with Prof. Dr. Sybille Krämer², Prof. Dr. Gabriele Gramelsberger³ and PD Dr. Jörg Noller⁴, all members of the leadership team of the working group on philosophical research on

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digitality and philosophy of digitality of the German Philosophical Association (DGPhil).⁵ The interview was conducted, transcribed and edited by Jonathan D. Geiger and translated by Jörg Noller.⁶

2. On the (philosophical) concept of the digital

- Jonathan D. Geiger (JDG): Let us start with the basic concepts: "digitization" and "digitality" are terms that can be found in large parts of social discourse. To be sure, these terms are often used rather vaguely. The concept of digitality was made prominent by Felix Stalder in his book "The Digital Condition"⁷ (German original: "Kultur der Digitalität"⁸) in 2016 and has been taken up in various disciplines. However, the digital in itself and theories of it have of course existed for longer. In addition, Stalder's perspective on the topic is based on cultural studies rather than philosophy. The question is therefore what philosophy wants to do with this term, and why a new philosophical journal like "Philosophy & Digitality" should be devoted to this topic. What are we actually talking about when we speak or want to speak of "the digital" and "digitality" in philosophy?
- Prof. Dr. Gabriele Gramelsberger (GG): I only consider the technical i.e. the computercontrolled — to be digital. This is easier to grasp philosophically. The digital is also more than binarity. If you look at it from the tradition of Shannon⁹, the digital refers to the quantifiable. Whether this is represented in binary form is another question; it can also be represented with numbers, for example. However, the technical background is the decisive factor for me.
- Prof. Dr. Sybille Krämer (SK): Let me start historically: Etymologically, the word "digital" comes from "digitus", which means "finger". The first important thing for the digital is that something is discrete, like the fingers, which only function as part of the hand and the body. So the connection between discretization on the one hand and a functional context that is more than the sum of its parts on the other is essential. Historically, for me there exists an "embryonic digitality"¹⁰ before the computer. It is a small mission of mine to think of the concept of the digital in a computer-independent way, because, for example, the decimal position system as well as the alpha-

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^{5.} The DGPhil Working Group "Philosophy of Digitality / Philosophical Digitality Research" was founded in 2020 and sees itself as a platform for the exchange and cooperation of actors in the field of all philosophical research areas that deal with digital phenomena and digitality as an overall phenomenon. Website: https://digitale-philosophie.de/ [last accessed on June 20th 2023].

^{6.} A longer German version of this interview appeared in (Feiten and Stahlschmidt 2024, 417-440).

^{7.} See (Stalder 2018).

^{8.} See (Stalder 2016).

^{9.} Cf. (Shannon 1948)

^{10.} Cf. (Krämer 2022).

bet emerged from the discretization¹¹ of a continuum. If we consider the digital in principle as a continuum that is broken down into building blocks which can then be coded and in turn combined and recombined then digitality also exists, for example, in the form of the alphabetization of speech even before the computer.

- ⁶ PD Dr. Jörg Noller (JN): I try to take a middle ground between Sybille and Gabriele: I focus on the term "new media" when talking about digitality, but I differentiate between digitality and digitalization, i.e. technical phenomena. For me, digitality is a strongly lifeworld phenomenon, for example the use and integration of digital media in our everyday practice. The concept of virtuality is also central to this, that is the possibility of using digital media to realize conventional practices in a new way. This is what I mean by "virtualization"¹². So I come from the reality of life when I look at the concept of digitality.
- ⁷ JDG: As you can see, it's a very broad panorama. But what is especially philosophically interesting about the topic?
- ⁸ GG: I think that the philosophical is needed because the digital is now so comprehensively and pervasively embedded in the world we live in that it is part of reality. In this context, philosophers are called upon to think about the transformative forces at work here, how this affects classical categories, how subject-object relationships are changing, etc. Fifty years ago, people wouldn't have thought about this in this way, when cybernetics was the big topic.
- ⁹ SK: I would like to illustrate Jörg's idea of lifeworld change with an example: Philosophy has always thought about the categories of space and time. Just to make it selectively clear using the example of time: Bergson had distinguished between two types of time: measured or objective time and the subjective time of duration.¹³ I think that contemporary digitalization is beginning to establish a third form of time. This is popularly called "real-time", i.e. the computer works at such a speed that humans can no longer perceive time intervals, although of course within the computer every action has a time index. Time is consumed, but humans no longer perceive this as a passage of temporality. I think that this real-time phenomenon also tends to reduce the reflexive distance of slow thinking somewhere. That would be an example of where philosophical reflection could come in.
- ¹⁰ JN: I also think that we are finding new temporal and spatial forms as a result of digitality and I have also tried to define this with the term "interobjectivity"¹⁴. It is also phenomenologically interesting to see what is changing. I think we are establishing new relations. These also have an extension, but no longer spatial-physical. Especially as we are also entering into a completely new relationship with devices and machines, which then also opens up a virtual, a digital space and no longer a physical space. This virtual space can also be expanded if this media reference

^{11.} The term "discretization" comes from mathematics and means the transformation of an (uninterrupted) continuum into countable elements.

^{12.} See (Noller 2022).

^{13.} Cf. (Bergson 2016).

^{14.} See (Noller 2022), also following (Hui 2016).

makes sense, but it can also collapse (e.g. with filter bubbles) if, for example, spaces are created by artificial intelligence (AI) that only revolve around ourselves. So I think you can do quite a lot with the concept of space in relation to digitality.

- SK: However, the virtual also remains material-bound. For example, the consumption of resources in contemporary AI, but also in other forms, is an absolutely important factor. Isn't it sometimes the case that there is also a certain myth of disembodiment that makes us forget the material basis, I mean that we are all attached to the umbilical cord of electricity, as a condition of being able to say and write anything public at all nowadays? This in turn is an important problem for me, because I believe that the resource consumption of computer use is a factor that is still far too rarely considered.
- ¹² JN: I agree, but I would say that virtual reality emerges on a material basis. Just as a banknote has a virtual value that is real, even though it has a material basis. The two are not mutually exclusive. It is the contexts, the configuration, that make virtuality possible on a material basis.
- ¹³ GG: Perhaps I can take the mediating position here. I think that the Heideggerian concept of "unhiding" fits very well here in technical terms, because energy is unhidden here as a symbol. This is a phenomenon of a new quality. As a phenomenon, it is already older in the sense that we are doing this for the first time with the computer and that is where categories such as "virtuality" and emergence come into play, but they are actually technical ways of unhiding, which is why for me the digital is this technical component. Heidegger described this in terms of energy technologies, which are also very difficult to grasp, but basically energy is transformed into symbols here.¹⁵ This symbolic exploitation of energy is a way of describing computers quite well in material terms. Digitalization costs a lot of electricity and the consumption of resources will increase enormously. On the other hand, this can also save some energy, but everyone still disagrees on how sustainable or unsustainable this is or can become.

3. A philosophical enlightenment in the digital age

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- JN: I think another important point is autonomy in media use. There is a great danger that we will become dependent on digital media because they do so much underground. On the other hand, we have the opportunity to increase our autonomy because we have so many more options thanks to the digital. Sybille once talked about "digital enlightenment" and I would start here. It's about a double-edged use of media: on the one hand, the expansion of possibilities or the scope of possibilities, and on the other, paternalism through algorithms. There are many interesting things that can be worked out here from the perspective of enlightenment.
- SK: Of course, we must also see that the program of philosophical enlightenment is immensely
 - 15. A continuous current (energy) is transformed by scanning into discrete value sequences, which can be represented by symbols.

important in digital times. I'm not sure what that actually entails but it has something to do with paying attention to our ignorance and non-knowledge. As genuine part of our machine-assisted knowledge practices— an ignorance that cannot be eliminated. The ca. 175 million parameters that form *large language models* can no longer be uncovered in their inner structure. The black box character of the machine takes on a completely new quality but you can't just stand there and warn against this risk because we have to learn to live with it. It's a black box that we have to integrate as genuine part of our machine-assisted knowledge practices and very often cannot be uncovered. That would be the thesis: We have to recognize that the more powerful machines become, the less people can understand their machines if 'machine' is now a cipher including algorithms and protocols and so on. On the other hand, on the subject of enlightenment: I'm becoming increasingly concerned— and this applies to the whole concept of AI— that it's basically not recognized that what machines do, they do in a fundamentally different way to how humans do it. This applies not only to the coffee machine but also and even more so to so-called AI. We have to understand the operations of machines- even if they are similar in their results to the actions of humans— completely differently from how humans act, work and experience. Formalising, however, means that people behave as if they were machines. That's part of our creativity to behave as if we were something else. We should recognize all this, but then don't send machines and humans into a competition to replace each other. There is a co-performance between human beings and their technology. One dimension of this co-performance is what I call "epistemic intransparency": in other words, we have to recognize that dimensions in this alterity-relationship remain dark and cannot be revealed in any way. How can we then conceive of an enlightened, emancipated connection between human being and machines if the machine remains a black box? I find this a challenging question for which I am still looking for an answer.

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GG: I agree but we are confronted with the results of the machine as a black box. Where I am still very attached to Kant and his enlightenment potential is that we can still understand the methods that are used as long as the AI does not write its own algorithms. For me, a "critique of the digital" means a critique of methods. AI is problem solving. Problem solving is (problem) searching. Problem solving is narrowing down the search space and narrowing down the search space is then equated with AI and then we have the famous *general problem solver*¹⁶ with *means-ends analysis,* which is still used today. Criticizing these methods and procedures is important to me and as long as we can still do this, we can at least understand the way this lack of transparency is generated. But if this is no longer in our hands, which is also the future, as programming is increasingly being handed over to AI, then of course it can also become non-transparent and then it will actually be difficult to evaluate it. Mass data— that was already the case with simulation— is a lot of data that is simulated. You can use certain methods to assess whether it is still going in the right direction. But you have to trust the whole thing.

^{16.} See (Newell, Shaw, and Simon 1959).

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SK: This is one of the fundamental questions of digital philosophy: is there such an attitude as a "critique of digital reason" or a "critique of digitality"? If I were to say something heretical and speculative, I would ask myself— although of course Kant gave us the steep template— are we still in the metaposition in which the task of philosophy can be the critique of something? Especially if this task is complex technology? Or is it not much more elementary that we as philosophers have to enlighten— and this is what you, Gabriele, have just done with your remarks on method— , i.e. dismantle myths and ideologies by trying to describe and interpret the technological-algorithmic processes as best we can from a conceptual perspective and make machine's operations and human-maschine-relations as transparent as possible? Do we not have to free ourselves from this overpowering judge's chair or birds-eye-view of criticism as the most central task of philosophy? We have to contribute to understanding the world and our position within!

GG: Yes, but for me that is criticism. I understood Kant like this: He wanted to understand how this natural science works which starts from the given— i.e. also from 'data', by the way— and how this given can be resolved into data and how meaning can be generated at all. The Critique of Pure Reason can also be read as applied mathematical philosophy in this context. To clarify the processes that Kant naturally did introspectively which we no longer do so introspectively in this sense today— although algorithms can also be seen as externalized forms of this introspection— in order to understand how this works. I think you can understand this very well with AI. I have studied these AI algorithms a lot and they are such simple methods that are strung together and only become so powerful through the stringing together of these methods than through these different strategies that are combined— they are all modular systems. When we talk about machine learning algorithms today— that doesn't exist, they are modular systems that are put together to see what results they will produce in the end. This is also the case in the natural sciences. These are empirical methods at the moment, because everyone puts together the right kit in their own laboratory. But this is no longer comparable and reproducible in the traditional sense, not even in the natural sciences and in terms of method. That makes it super exciting at the moment. That's what I mean by criticism: understanding these strategies, i.e. intelligence as problem solving (which Descartes already did) and problem solving as a search for solutions. These strategies need to be revealed. The second point, which I also made clear in the book¹⁷, is a critique of what we take for granted, i.e. what we now take for granted on a more phenomenal level. We should also criticize that better. This is the program that Blumenberg announced for technology in general following Husserl.¹⁸ The self-evident is actually what you don't want to have. It has something to do with understanding, you want to understand it again and then it must not be taken for granted. That's where I see the major tasks in this area. That is my program.

^{17.} See (Gramelsberger 2023).

^{18.} Cf. (Blumenberg 1963).

4. The digital and philosophy

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- JDG: I would like to come back to a few points from earlier. We have already talked a lot about the philosophical program of digitization research or reflection on digitality, including digital methods. But what about philosophy itself? It was already mentioned earlier that there are still a few difficulties in getting to grips with it. I think this also has to do with black boxing— following Freud, you could perhaps also call it "the uncanny". Are these the difficulties that philosophy has with its own digital transformation here in the field or as Digital Humanity (DH) or are there other reasons for this?
- SK: I think that is an important question, namely about the relationship between philosophy and DH, which is of course a fractured relationship. I don't have to say much about this, but if you realize that DH with its data-driven, quantifying research methods only makes sense if particularly large data corpora- of whatever kind- need to be analyzed. If it is true that the empirical nature of the subject matter is the prerequisite for working meaningfully with computergenerated, research data-intensive methods, then it is clear that there are not very many questions in philosophy that can be brought into this format of research supported by empirical research. However, there are some. For example, we know that John Stuart Mill did not write his famous ethical writings alone but that his wife and partly also his daughter co-wrote them, and because we have letters from his wife and daughter, this authorship attribution can be evaluated very well today with the help of the computer, where there are passages in this work by Mill that were not written by him.¹⁹ That would, for example, be a possibly philosophically revealing subject but you have to admit that empirical questions play a small, minor role in philosophy. But- and this is very important to me- if you want to analyze the effects of digitality on the humanities and philosophy, you have to distinguish between the narrower DH on the one hand and the cultural technology of digital literacy, which none of the researchers in the humanities can actually escape- from e-mail communication to working with search engines, digital editions, and so on. It is part of scholarly practice to deal with digital resources and communication channels. Against this background, decisive changes are taking place. I've mentioned this before: we don't know at all to what extent ChatGPT changes the examination procedures because we are no longer really able to distinguish whether students have worked with the help of ChatGPT or not. In this respect, it could be that oral examinations— just as a hypothesis— are upgraded or whatever. In any case, I would like to say that the front on which we need to think about the role of the digital in philosophy is not so much "Can the DH be used?" but rather the question of what the cultural technology of digital literacy will look like in the humanities and then also in

^{19.} See (Schmidt-Petri, Schefczyk, and Osburg 2022).

philosophy.

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GG: Well, I wouldn't be quite so pessimistic because it is always said that philosophy is hermeneutic and that is opposed to the digital. But philosophy only has a fraction of hermeneutic questions. Logic is making an incredible amount of progress at the moment thanks to the digital, and the philosophy of science can also make extremely good use of the digital as an analytical tool but also as an instrument of knowledge. There are many areas that are easily forgotten. Conceptual analysis can be thought of differently today against the background of large corpora, in contrast to how it used to be done in the past, if you do it properly and have the appropriate tools. Many things can be done differently, such as the use of terms, which can now be analyzed in a completely different way. In my opinion, thinking in philosophy is still too onesided at the moment and I would like to remind you that one of the best DH works is Aristotle's Politics, in which he compares over 100 forms of government.²⁰ You would do all that digitally today and have a fantastic book and from that he generates politics with different concepts. You just have to dig a little deeper and find that it does play a role. For me, the computer comes from philosophy, not just because of Leibniz, but simply because this program of operationalizing the mind is a genuinely philosophical one. It started with people like Descartes and Leibniz and the English and Scottish empiricists, and without them the whole development would have been inconceivable. When Newell, Shaw and Simon, for example, then make the same thought movement as Descartes with the general problem solver 21 — and you can actually prove that in the texts - then I find that quite astonishing, several centuries later. We haven't made that much progress yet. You can just process a lot more data, that's the only difference but the concepts are still very classical to some extent. I believe that you can do a lot in philosophy, you just have to approach it with an open mind. For me, hermeneutics is overrated in some places, I'll say that somewhat provocatively. Nobody would make idealistic systems anymore that have no connection to reality at all. Those times are over. We just don't yet have the right patterns of action to do this well. They are still missing.

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SK: With hermeneutics, we are also pulling in the same direction. I have summarized this under the heading of the "sting of the digital"²². The methods of the digital humanities are part of a tradition in which annotating, collecting data, bibliographizing, making abstracts, excerpting, all these things that algorithms and machines can do today, have been a part of scholarly work for centuries. We should be careful not to absolutize interpretation and hermeneutics as the crown and unique hallmark of the humanities: No data without interpretation, even in the sciences. We should not forget how much the materiality of humanistic research objects determines and has always determined academic scholarship's craft of the mind. For me, the debate about the possibilities of using such digital tools for philosophical, conceptual analysis, is also an opportu-

^{20.} Cf. Aristotle 1998.

^{21.} See (Newell, Shaw, and Simon 1959).

^{22.} See (Krämer 2018).

nity to remember that the humanities have always developed material-depending activities as the condition of possibility for higher-level cognitive processes, e.g. for interpretation.

- ²³ GG: That have been some nice last words.
- ²⁴ JDG: Thank you very much for your time and the discussion!

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