

Master, Don't You See That I Am Learning?

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In his *Science of Logic*, Hegel describes how quantity changes into quality. Changes in nature have mistakenly been conceptualized merely as gradual increases or disappearances, he says, but this understanding fails to acknowledge the real breaks that actually occur. Nature works not only in continuous flows of more or less, but also in more radical shifts, where quantitative changes suddenly result in qualitative shifts. This break or rupture or instantaneous change is “ein Anderswerden, das ein Abbrechen des Allmählichen und ein Qualitativ-Anderes gegen das vorhergehende Daseyn ist [a becoming other which is a break with the gradual process and a qualitatively different being against the previous]” (Hegel HW3, p. 368).

Hegel himself offers the example of the change of water into ice: the quantitative change of temperature at some point results in the qualitative change of the state of matter. Water changes into ice at its freezing point “auf einmal,” as Hegel says, and similarly, of course, it changes into steam at the other end, at its boiling point.

“Qualitative changes” like the ones encountered in physics, chemistry, or biology, can also be observed in human societies. In anthropology, for example, it has been shown how, historically, the size of a population can affect the “quality” of its social structures: a village that has increased its population beyond a certain threshold might start functioning poorly and require either a separation into two villages or the invention of new institutions or forms of regula-

tion (Carneiro 2000, p. 12928). Political revolutions could also be seen as results of “quantitative changes” culminating in qualitative shifts. Like Bukharin wrote, they do not “fall from the sky”; “[t]hey are prepared by the entire preceding course of development, as the boiling of water is prepared by the preceding process of heating or as the explosion of a steam-boiler is prepared by the increasing pressure of the steam against its walls” (Bukharin 1969, p. 82).

I think something similar could also be said about science and education. Isn't Thomas Kuhn's description of “normal science” a description of accumulation of data, knowledge, and understanding within the framework of a paradigm, until the limits of the paradigm itself have been reached and a new conceptualization is needed? Scientific revolutions do not fall from the sky, either, although one might sometimes be forgiven for thinking so, with images of genius scientists at the receiving end of apples falling from trees, etc. Their groundwork has always been laid beforehand, and even if scientific breakthroughs in important ways happen “auf einmal,” they would not appear without meticulous, long-lasting, and patient work within the constructs of certain established sets of assumptions and ways of thinking. In effect, there are thus two kinds of scientific progress; what could be termed “knowing more” and “knowing differently,” respectively, neither of which is sufficient without the other¹. “Knowing more” means

¹ After delivering this talk at the conference in Ljubljana on 23 September 2022, I realized that the elaboration of the distinction between “knowing more” and “knowing differently” is to some extent in debt to John Caputo's *Radical Hermeneutics*, in which Caputo advocates for (maintaining) the ability of “writing differently” and “thinking differently” as opposed to standard political, social, and educational technologies. Caputo does not connect these two modes as closely as I am trying to do here, but they do resemble the pair that I am sketching (Caputo 1997, p. 233-234). I have been teaching Caputo's text for a few years and must have internalized some of its points without really noticing. When I read his text again for the autumn 2022 semester, I was surprised how similar some of his formulations were to my own – a very direct case of *Wirkungsgeschichte*, I suppose.

adding on data, information, knowledge, etc., while “knowing differently” means acquiring a new framework for understanding the meaning of the information already obtained – or indeed what counts as information in the first place.

If there is a crisis in contemporary university discourse, and I think there is, its most prevalent trait is probably the exhaustion of the ability to know differently. It follows from the preceding argument that such an ability in an important sense cannot be separated from the ability to know more (we do need to know more in order for *any* significant progress to be possible), but “knowing more” does not have much scientific value without some integrated sense of a direction towards knowing differently. So, the two are related, but they do not condition each other in the same way. Maybe an analogy can serve to illustrate the asymmetrical relation between them: Immanuel Kant said that we know of freedom, even if freedom cannot be “theoretically proven,” because we are able to imagine the moral law and the law is thereby the “ratio cognoscendi” of freedom; the moral law in turn would not really be moral at all if it were not for freedom. Freedom is thus the “ratio essendi” of morality. Similarly, “knowing more” is the way in which, or the path along which, we become able to contemplate something differently, while the potential of “knowing differently” is the essential component of knowing more, if it is to be counted as scientific knowledge. Freedom, to Kant, is a way of “breaking off” from natural determination, and similarly, science appears, in the first place, as a way of breaking off from mythological or ideological explanations, and it has continued to revolutionize its own foundation. As a scientist, you collect data, analyze, reflect, write, discuss, and so on because you want to establish some truth that you may only vaguely discern; an answer to a question that you are still not able to formulate. Or maybe more precisely: as a scientist you do ask concrete questions and expect concrete answers, you do clarify concepts and compare, measure, estimate, etc., (this is what Thomas Kuhn calls “mop-up

work”), but without the always potentially relevant question that has not yet been asked, this work would not be genuinely scientific: “What does this mean?” or “How can it be so?” In a slogan, the genuinely scientific thought is not “I understand,” but on the contrary “I do not understand” – which is of course also why, in Lacanian terms, it is the hysteric’s discourse that produces knowledge, whereas the university discourse rather circulates knowledge. When Lacan speaks of S2, the “battery of signifiers,” that is the agent in university discourse, he is talking “about those signifiers that are already there” (Lacan 1991, p. 13). Knowledge is something “given” in university discourse – it is already there, at least in its basic definitions and frames – whereas in the hysteric’s discourse nothing is really ever taken for granted. Although the hysteric is thus the agent that pushes for new knowledge, it is not necessarily the hysteric that causes or identifies actual breakthroughs. Going back to Hegel’s dictum, maybe the hysteric’s discourse is that which pushes the quantitative increase of knowledge to its limit, whereas something else is needed to execute the qualitative change. For this to happen, something like an intervention is required, which maybe enables a certain reformulation à la “Is this what you are saying?” (for example: What if it is not just an anomaly or imprecision in our measurements that electrons seem to be able to appear as particles *and* waves at the same time? What if it is an ontological question about the “nature” of matter?). The analyst’s discourse produces master signifiers, not because it produces new knowledge, but because it enables a certain recognition of what has been produced, almost a reconciliation: “Maybe this is it?”

The university discourse in its pure form, without hysteria, without masters and without interventions, could be said to be the one in which the change from quantity to quality does not occur or does so only rarely. Instead, scientific production tends to remain within more or less established frames, where conceptual shifts are no longer necessarily the aim. This is what

I am afraid, we are beginning to see in academia. We get loads of knowledge, but nothing really happens. We could almost call this a shift from quality to quantity or to quantification without the essential ingredient of the absolute. To be precise: quantification itself is not the problem, certainly not in the natural and mathematical sciences, but not in a broader sense either. We quantify whenever we repeat certain figures, define, infer, and conclude. A literary analysis might for example consist of quantifications to a significant degree: why is this string of signifiers repeated several times in the poem; why do the sentences become shorter in this chapter; how many inclinations of this verb are possible, etc.? The problem is rather a kind of meta-quantification, if you will: a quantification of results as products that can be counted, controlled, and compared, which effectively encourages, if not even forces, scientists to remain at the level of the gradual changes that characterize the moderate state of affairs between extremities, like lukewarm water that never becomes too hot or too cold. In other words, the problem is that academics are rarely given time and incentive to pursue a track unto its ultimate conclusions. Instead, they try to stay on ground that is more likely to ensure objective outputs (a testament to this effect was given by British physicist Peter Higgs, the Nobel Prize-winning discoverer of the “Higgs boson,” who in a 2013 interview with *The Guardian* said that he would probably not qualify for a job like his own today, because he wouldn’t be considered productive enough (Aitkenhead 2013).).

One of the most important engines driving this process is the funding mechanism that has infiltrated more or less the entire academic world in recent decades. In order to obtain funding for your research, you need to apply for research donations from public or private foundations, and in such applications, you must outline the benchmarks, timelines, work packages, partial results, and plans for publications three or more years ahead of the actual research. This is not *necessarily* invalidating for the research that

will eventually be conducted, but it is nonetheless striking how elaborately a project must be rolled out along the lines of the language of the contemporary situation. In a way, this language is even doubly restricted, for the objectives of your project must also be formulated in ways that are understandable to peers that are not necessarily up to date on exactly those theories that you want to employ in your problem solving (paradoxically, researchers are therefore required to present themselves as both *more* insightful than they really are, like agents of a certain *tout-savoir* (Lacan 1991, p. 31) – being able to overview detailed elements of a comprehensive, future research process, and simultaneously making themselves more *stupid* than they really are, because they must refrain from telling everything they know, which, I think, resembles what Aleš Bunta has called artificial stupidity of the first order (Bunta 2017)). Admittedly, some of these processes in the funding procedure are to a certain extent meaningful, just like the peer review processes in most journals and the presentations and exchanges at conferences. Sharpening your point, clarifying your aims, and structuring your work are not bad ways of spending time. In a specific sense I would actually say that many of these mechanisms probably do improve the projects and papers that are produced, seen in isolation, but they also – by definition – involve a change of focus from, let us say, truth to output. A specific aspect of this problem is the endless amounts of hours spent for drafts and applications that end up not being funded – with success rates usually lingering around 5–10%. An early study from the *Economics of Education Review* showed that US academics spend more than 4 hours per week on average on grant writing (Link et al. 2008, p. 365). A study from Australia from 2013 showed that an estimated 550 years of work was put into a call from the National Health and Medicine Research Council (Herbert DL, Coveney J, Clarke P, et al. (2013, p. 2)). This particular call had a “high” success rate of 21%, but the amount of fruitless efforts is nonetheless overwhelming. In a rather concrete sense, most of

such work is unpaid labor: research foundations need unsuccessful applications to justify awarding their preferred choices with significant capital.

The “meta-quantification” is a pseudo-commodification. Academic achievements have become commodities, or more precisely (what, on an earlier occasion (Bjerre 2017), I have called) pseudo-commodities: they are counted, compared, and rewarded as if they were commodities, although we know very well that they are not. A paper in a highly rated journal is not something a scientist produces with the literal aim of selling it, and even if some journals are in fact retrieving their contents for free and selling the access rights to the eventual publications back to the institutions at high prices, this is not exactly the same like a system of production in which capitalists are extracting surplus value from poor workers that are not paid for the full value of that which they produce (the authors are not employed by the journals at all, but (generally) by universities). To a large degree, however, internally at the academic institutions, we behave *as if our products were commodities*. They are defined and assessed in quantitative terms that assign value to them – not exactly monetary value, but sometimes something that comes very close: papers are quantified in relation to national indexes, conferences are entire little enterprises of their own with an elaborate economy of funding, renting facilities, accommodation; researchers get awards or bonuses for outstanding achievements, etc. Everything has a prize, even though it is never sold. The pseudo-commodification of the university system thus has the subtle implication that we are encouraged to think of our products *like* commodities, but are also constantly reminded that they are of course not commodities, and so we should simultaneously maintain a sense of loyalty towards colleagues and attend their lectures, peer review papers for free, and be ready to help students with special needs, etc. At the end of the day, the pseudo-commodified university entails that academics are spending an increasing amount of their

time and focus for collecting points of various kinds, which will increase their chances of promotion or at least decrease the risk of being made redundant. Their being-scientist in its everyday practices (partly, but not at all only because of the funding processes described above) has become increasingly bureaucratized, and bureaucracy doesn't think; it merely administers the law of the prevailing order.

There is a one more point in bringing up Hegel's analysis of the shift from quantity to quality, namely that what he describes are events in nature. Nature itself is a system of transitions from state to state, where the gradual increase or decrease in quantity inevitably leads to changes in quality. If we apply this understanding directly to science, in a naïve, "naturalist" reading, it becomes evident that a significant effort is in fact needed if one wants to *prevent* science from transgressing its own boundaries. It is against its nature, so to say, to be polite, pragmatic, and sensible, and therefore "artificial" measures must be invented and installed to *stop scientists* from aiming at objectives beyond what is realistic and understandable. Such a naturalist reading could of course be refined quite a bit by more precise definitions of science as not simply natural occurrences like running water or ant colonies, but rather a deviation from nature, or nature's own deviation from itself (to echo Alenka Zupančič' description in *What is Sex?* (Zupančič 2017)), but the point would basically be the same: scientists must become "artificially stupid" in order to restrict themselves from approaching their work with the drive that characterizes science. (I use the phrase "artificial stupidity" here in a Kierkegaardian sense. Kierkegaard has a number of wonderful passages on stupidity. In one of them he, like Bunta, uses the formulation "artificial stupidity," by which he means the kind of stupidity that can only be acquired after elaborate studies and a stern belief in the perfectibility of the prevailing understanding. In another, he parodies the often heard, common praise of especially talented or outstanding people – "who would have known that

this little child possessed such excellence?” – to say instead, and this is a quote from Kierkegaard, “No one knew, who could have thought of it, that in this child, who was very much like others, there was such a resource of stupidity, which we now in the course of the years witness unfolding in ever richer ways” (Kierkegaard 2008, p. 332, my translation).) Overall, stupidity is the product of what we might call “pascalian measures” of everyday, academic bureaucracy in which academics gradually unlearn their incentives to be creative and persistent. How do you learn to believe in the organizational philosophy of postmodern university systems? You kneel in front of your computer, open your spreadsheet, and dutifully fill in the register of your time spent on various tasks. Universities have become enterprises with their own administrative logic of operation, which increasingly works on the level of meta-quantification, and thereby they import tendencies of what Alvesson and Spicer have called “functional stupidity” from other kinds of organizations: functional stupidity, they write, “entails a refusal to use intellectual resources outside a narrow and ‘safe’ terrain. It can provide a sense of certainty that allows organizations to function smoothly. This can save the organization and its members from the frictions provoked by doubt and reflection” (Alvesson and Spicer 2012, p. 1196).

In education, we see similar trends to those in research, although they play out somewhat differently. If research establishes new master signifiers, education generally rather engages with already established discourses and concepts. The “normal-neurotic” student is the hysteric, who bombards their professors with questions and thereby contributes to the production of knowledge, but usually not as the one who defines the “analytic intervention” itself (even when students have original ideas, they are often consciously or unconsciously stolen by their professors). However, there is also a certain passage in academic education, ideally at least, in which you pass from the position of the hysteric to something that resembles that of the analyst, i.e. from questioning, but also acquiring

the received, prevailing knowledge, to being able to identify when something new is appearing. In order to pass through this passage, you need to change your relation to the master signifier.

One way of describing this passage, although not in Lacanian terms, has been elaborated by Ray Land (who is a professor of higher education at the University of Durham in England). Land and some of his colleagues have identified a number of what they call “threshold concepts” that they find to be essential to various academic disciplines. Such concepts

can be considered akin to a portal, opening up a new and previously inaccessible way of thinking about something. It [the threshold concept] represents a transformed way of understanding, without which the learner cannot progress, and invariably involves a shift in the learner’s subjectivity, or sense of self. As a consequence of comprehending a threshold concept, there is a transformed internal view of subject matter, subject landscape, or even world view. (Land 2015, p. 17)

The metaphor of the threshold has something in common with the view of a passage that I mentioned: You pass to “the other side” and, upon passing, you see the world differently. Like what I described as “knowing differently” in relation to research, this transformation, according to Land, “may be sudden or protracted, with the transition to understanding often involving ‘troublesome knowledge’” (Land 2015, p. 18). Simplifying a little bit, maybe we could call “knowing differently” in relation to research its phylogenetic dimension (we all, as humanity, know differently, when some scientific breakthrough has occurred), while the student’s way of knowing differently could be called the ontogenetic dimension.

As a student, you pass a threshold as the conclusion of a lengthy engagement with difficult material. Each discipline has its own threshold concept or concepts. Land offers examples like “Evolution” in Biology, “Gravity,” or “Uncertainty in Measure-

ment” in Physics, “Precedent” in Law, and “Deconstruction” in Literature. The point being that when and only when you have really grasped these concepts are you able to understand the fundamental questions of the discipline². Clearly, these concepts are historically and contextually variable, such that not only do they change the “learner’s subjectivity,” but they are themselves the result of a subjective effort. Nonetheless, they represent something of essential importance to academic education, I would claim: the prolonged effort to grasp something that initially transcends the horizon of one’s understanding. Threshold concepts change “the learner’s subjectivity,” because they require what one might even call a traversing of an entire field of knowledge. Grasping a threshold concept therefore also has implications for how you understand a host of other concepts and questions. After you have grasped the concept of evolution, for example, there are certain beliefs, even systems of beliefs, that you can no longer uphold.

This is all well and good. The problem with threshold concepts, however, is, as already indicated, that they demand consistent effort and time to be grasped. Students may get the gist to some extent without really “getting it,” and there is an unavoidable period of what Land describes as “liminality” connected to these efforts. You start seeing that there is something new or other that you might want to learn, and maybe you lose a little bit of confidence in your former ways of seeing things. The danger is that without the proper guidance, effort, and time spent, the student risks never exiting this state again: “Difficulty in understanding threshold concepts may leave the learner in a state of ‘liminality’, a suspended state or ‘stuck place’ in which understanding approximates to a kind of ‘mimicry’ or lack of authenticity” (Land 2015, p. 18).

² In psychoanalysis, the threshold concept would of course be “The Unconscious,” and in philosophy, we would probably find a host of different such concepts depending on the school of thought.

As a teacher, in a state of liminality is generally where you would not like to leave your students, but it is nevertheless where more and more students risk ending up, the more their education is gutted of its extended and in-depth studies of difficult texts and problems. Except for the personal unease this might leave the student in, it also contributes to the dissemination of half-baked theories about topics they might have studied but never completely grasped (maybe this is part of the explanation of the so called “culture wars” between proponents of very strongly held, but not very well-founded positions on gender, culture, science, etc.). In the teaching process itself, and especially on exams, the state of liminality also complicates things. Like Land says, “It can be hard to know whether they have ‘got it’ or not” (Land 2015, p. 25) when assessing students who are still in the phase of liminality. They might be able to say some of the right things, but do they know their implications? Students on the other hand might feel misunderstood or even disrespected when they are not given credit for the work they have actually done and the progress they have actually made. The title of this paper, “Master, Don’t You See That I Am Learning?,” in this context represents a cry from the student that is left alone without the appropriate amount of feedback and is frustrated that they cannot really advance further, even if they are really trying their best. The product of the university discourse is the split subject.

So, who is to blame for this development? The shortest answer to that question is probably that it is *someone else*. In university discourse, as Lacan defined it, the master is hiding under the bar. He is present as absent, in the sense that he can be invoked, when there is a need of legitimization, but the master is rarely issuing direct orders. Rather, and more precisely, the master is a signifier, a referral, an explanation of the need for doing like the neutral agents in university discourse must do. Like the “boss of it all” in Lars von Trier’s film, the master in university discourse is an evasive figure that always seems to be managing things from a distance.

Teachers must adhere to the curricula, the guidelines from the study board, the administrative limitations on the time spent on actual teaching and supervision, public and political demands for the students' future employability, and, indeed, in the broadest sense, systems, such as Bologna, that seek widespread standardization through universal credits, while emphasizing explicit skills and competences. The combined pressures of these various factors are gradually turning many universities into vocational schools, in which the primary aim is to prepare students for occupations of almost any kind. Or, in the words of Geoff Boucher: "the university discourse is a discourse of interpellation, that is, of the formation of subjects to serve a social order" (Boucher 2006, p. 277). The second interpretation of my title would therefore be even worse: "Master, Don't You See That I am Learning?" would mean that the student is actually *acquiring* the skills and competences that the system is designed to teach her. In this scenario, the state of liminality is not a passage: it is the desired outcome of the student's training. She is supposed to be flexible, adaptable, and creative, and able to engage with more or less any field without aiming for any kind of fundamental change, neither of herself, nor of the context she is engaging with, let alone of course society at large³. In the worst case, we might end up with candidates that would really have been better off *without* a higher education at all.

There is just one more thing, like detective Columbo would say: the master signifier. I have been handling it more or less as if it was something that someone (the scientists) produced and others (the students) needed to grasp, but this story should be elaborated a little bit in at least a couple of respects. First of all,

³ Just one symptomatic example of this tendency – from a reliable source: In literature studies at Copenhagen University a couple of years ago, the lecturers were required to present their readings in a "tapas course," where students could read a little bit of this and a little bit of that, but without being expected to really engage profoundly with any of it. Maybe this is what we can expect from the future: The Tapas University.

we certainly do not understand master signifiers in the same way that we understand knowledge in the broad sense (S2). For example, we do not understand the concept of the unconscious in the same way that we understand that Foucault was born in 1926 or that Aristotle operates with four different concepts of causality. Indeed, master signifiers are, strictly speaking, “nonsensical signifiers with no rhyme or reason” (Fink 1995, p. 131), and it might therefore even seem appropriate to divorce the concept of the master signifier from Land’s threshold concepts altogether. Nonetheless, although the two concepts are certainly different, I think it does make sense to emphasize some of the traits of the master signifier a bit more than Land does, when talking about threshold concepts, even in his own examples. One reason is the effect of retroactivity that I have already touched upon: the master signifier is not so much a new insight or understanding as it is the acknowledgement of an insight which is already there. It adds the dot upon the i, so to say. And so, the master signifier is (merely) a name for the entire process of understanding that someone has undergone, when it can finally be concluded⁴. Another reason, however, is that the inscrutability of the master signifier is maybe not that far away from Land’s concept as it might at first appear. Do we really understand Heisenberg’s Uncertainty Principle, for example? I admit that physicists of course understand much more precise and specific things than I do in their engagement with this principle. But even they reach certain limits. Let us say that the big bang is a threshold concept in astronomy. Let us say that you are the leading scientist in the field: is it even possible that you understand all the theory’s implications? What was in

⁴ Mladen Dolar has explained the concept of “absolute knowledge” in Hegel’s *Phenomenology* in a similar way: the culmination of the experience of consciousness is the mere “Punkt” (in Slovene and German) or “full stop,” where it retroactively becomes clear that the truth was there all along, being produced on the way (Center for Vild Analyse, Radio24syv, originally broadcast on 5 August 2012).

the beginning? What was before the beginning? In other words, don't fundamental concepts like these necessarily contain a dimension of the inconceivable as well? Without becoming entirely Heideggerian, couldn't we say that there is only understanding, when something eludes us as well?

If there is a modest political lesson from all this, maybe it is that science does not work, and thus does not create the progress that society expects from it if it is commodified and turned into ready-made digestibles. Further, the lesson is that education urgently needs to be defended and maybe even redesigned to avoid permanent states of liminality with forced expressions of apparent understanding. Instead, it would be much more productive to educate students with a firm grasp of that which they do not understand.

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