



Learning – a starting point

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Abstract: Pedagogical and didactic efforts are usually based on the premise that learning takes place under favourable conditions. However, these conditions already presuppose what is supposed to take place: learning. This article deals with the basic mechanisms of learning, identifying, so to speak, the foundation of any pedagogical endeavour. For this, one of the earliest texts in pedagogy is used, Plato's Allegory of the Cave. On top of the philosophical reflection, consequences for pedagogical practice are drawn.

Keywords: Learning, theory of learning, philosophy of learning, beginning of learning, fundamentals of learning, hermeneutics of learning

Long before constructivism was spoken of, even long before God set his guiding distinctions in the world, difference-theoretical thinking could be found. It seems that this is constitutive of human cognition, but also for learning in general; learning something "new" is seen here as separating something, making a mental distinction that makes a difference.

1. Starting point

All pedagogical activities have an inescapable basic premise that is too rarely addressed or reflected upon. The structure and planning of a teaching unit, didactic models, the selection and use of methods and social forms, the modes of performance measurement and individual support of students - not to forget the discussion about standards - all this and much more always already presuppose that students are capable of learning. If that were not the case, all pedagogical efforts would be self-referential. Pedagogy is built on people's ability to learn. Prange refers to learning as the "operating premise of all measures of educating." (Prange, 2002, p. 12)

The widespread assumption - especially in the school context - that teaching is constitutive for learning is rejected here. On the other hand, the assumption that learning can be inspired and promoted by teaching is not rejected; but the claim to totality of the teaching action vis-à-vis learning is relativized. Learning can elude teaching. The frequent simultaneous mention of teaching and learning obscures the structural difference between the two processes; this implies the general uncertainty of the effect of teaching actions (cf. Prange, 2005, among others).

In order to trace the basic mechanism of learning, Plato's allegory of the cave will be used.² The metaphor of the cave is not interpreted here in the context of the doctrine of ideas or Plato's doctrine of the state. On the one hand, this may be an unforgivable decontextualization, but at the same time it frees us from the elitist - or crassly anti-liberal, as Karl Popper or Isaiah Berlin saw it, strata anthropology of Plato's (Platon, 2000) theory of education. The phenomenon to be interpreted here is understood in general, as the basis of any pedagogical action, regardless of the lifeworld contexts of the persons, regardless of their (philosophers') standing or a particular method (dialectics). A rather high abstractness is assumed, which in turn can easily become a target of criticism; the foundation of learning to be sketched here will be (almost) devoid of concrete / material content, but can later be applied to any (educational or learning) content.

The Allegory of the Cave can be seen as a classic of educational literature, even though Plato's understanding of the state was subjected to radical criticism and was suspected of being absolute (cf. Popper, 2003). Nevertheless, the remarks on education scattered in Plato's work represent a first real concept of education (cf. Jaeger, 1959; Gaus, 2012), which was handed down in writing and stimulated interpretations early on. Micha Brumlik (2016, p. 21) cites the humanist Marsilio Ficino (1433-1499) as the first interpreter with pedagogical intent. In the postwar period, the Allegory of the Cave was interpreted by different political camps (Heinz-Joachim Heydorn; Theodor Ballauf; detailed in Gaus 2012, p. 16ff). Especially the Allegory of the Cave in the 7th book of the *Politeia* is seen as a key scene of Plato's theory of education. No compilation of classics in pedagogy (Prange, 2008) or philosophy, if interpreted pedagogically (cf. among others Dammer, 2015; Reichenbach, 2007), can do without the Greek master thinker (Szelezák, 2021). Most interpretations deal with phenomena subsequent to learning, such as education, upbringing, or didactics. One is content with an "as if" (cf. Vaihinger, 1986, first 1911), more precisely: as if learning does not have to be determined by itself first, but is always already ready (exceptions: Meyer-Drawe, 2005, 2008; Mitgusch, 2008). Modern interpretations of the Allegory of the Cave are dominated by Enlightenment interpretive patterns and often obscure alternative interpretations. This begins with the terms: Captive, Bound, Shadow. Even if the cave dwellers knew what it means to be a prisoner, that already presupposes knowledge of freedom, which can hardly be assumed. Also, the cave dwellers do not know about their shackles until they are un-shackled. Our perception of the shadows is already pre-interpreted as a kind of deception. We assume, the bound only wait for their release from this shadow world; nothing speaks for it! Even the meaning of the cave is not accessible to the inhabitants as long as nobody leads them out of the cave by coercion. The concept of the cave cannot be represented in the cave (see: Blumenberg, 1996). If you will, the shadow-seeing inhabitants are guiltlessly incapable in their comfort. Except for the humanistically educated reading observers of the parable, nobody has the need to want to free the prisoners and to lead them to a higher knowledge.

Plato's Allegory of the Cave is highly arranged and yet conspicuous for its omission of important information: How did the inhabitants get into the cave? Did they have a "previous life, and what did it look like (what previous knowledge did they bring with them into the cave;

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² Plato discussed people living in a cave who, instead of seeing the real world, saw the shadows on the cave walls that the fire in the cave created. He meant that people's knowledge is just a reflection of their perception of the world, it is not directly received from the world.



closely connected to this: How elaborated was their articulation)? Who is the “third” hand that compels an inhabitant to leave his place? Why is this one person chosen? Why does the inhabitant who was led into the open go back into the cave? Why does the “freed” person believe that the outside of the cave is the final “deception”?³ These omissions are problematic, yet they do not prevent us from interpreting the cave in terms of learning theory; obviously, Plato was less concerned with consistency and completeness of the arrangement than with the underlying process of ascending to the light.

2. Beginning of learning

The basic situation in the cave has often been interpreted as a relational seeing: that between uneducation and education (Benner, 2011; in Jaeger, 1959 “paideia vs. apaideusie”). Gruschka/Heinrich (1998) rightly contradict by pointing out that the prisoners are not uneducated but, on the contrary, are engaged in various things, thus, very well possessing a kind of pre-education, better, perhaps, pre-knowledge. This foreknowledge consists of notions, it is not conceptual, but pre-reflexive knowledge. If we claim in the sequel that learning consists of acts of distinction, the objection is obvious that also the cave-dwellers are able to distinguish different things: “image-columns and other stone and wooden images and of all kinds of work”. However, this is only a differentiation in form, it is external and concerns only the shape of things, not their essence. Therefore, such differences in the form are not meant, if in the following of distinction/ differentiation is spoken⁴. Perhaps the best-known difference theorists, Heidegger and Luhmann, have made distinctions central to their work. The distinction between ontic and ontological, and that between system and environment, remain important points of reference in philosophical and sociological theorizing to this day. The salience of distinctions has been emphasized before, especially by Gabriel Tarde, in whose work it is said that “difference is in some sense the essence of things, what is at once wholly proper and common to them”⁵ (2008a, p. 72). Luhmann also stands on the shoulders of giants, his conversion from unity to difference (“In the beginning there is not identity, but difference”) is based on the reception of Spencer Brown’s (1969) “Law of Forms” (as cited by Schönwälder-Kuntze, 2012). Other well-known theorists of difference, such as those of poststructural (Gilles Deleuze, Jacques Derrida), psychoanalytically oriented (Jacques Lacan), or existentialist provenance (Jacques Hyppolite, Alexander Kojève, Maurice Merleau-Ponty) are only mentioned here.

The initial situation in the cave is not a static one, but the inhabitants themselves are not the source of the dynamics. Everything that happens is brought to the inhabitants from the outside, both the visual and the acoustic impulses⁶. The residents react like classic stimulus-response machines; they do what is expected. Therefore, the impulse to break open this hermetic situation can only come from the outside. The “liberated” person, who is actually not liberated at all, since the person concerned does not know any state of freedom, therefore cannot be brought back anywhere, is, and this has already been frequently pointed out (e.g. Meyer-Drawe, 2005; Mitgusch, 2008; Benner/Stepkowski, 2011; Gaus, 2012), put on the “educational path” (“reversal” or “redirection”) or better learning path by force and coercion. The beginning of the learning process can be seen as a process of enduring, of bearing, it is triggered from the outside and would flag if left to itself too early.

Three learning-related experiences (in German: *Widerfahrnis*)⁷ are presented in the cave allegory: two light sources, an artificial light inside the cave, a natural light outside the cave, and the attempt to pass on the acquired knowledge. At the forced sight of these light sources there is a retardation at the beginning, the glare prevents an immediate awareness of the new situation. At first, therefore, there is a forced pause; the liberated person must slowly become accustomed to the brightness and at first sees only blurred outlines that gain sharpness with time. Only after this re-acclimation of vision is he able to recognize the situation inside the cave. He realizes that the shadows are only a reflection of something happening behind the visible world of the prisoners⁸. This experience of difference, this expansion and transgression of his previous experiences (knowledge), automatically and unintentionally lead to the comparison of the before - after and is already the beginning of the learning process - without the previous experiences (knowledge) being overwritten or replaced by it; however, they take on a completely different quality, they turn from absolutes into relativities. The act of differentiation, accompanied by the comparison of before - after, shadow - cave reality, opens the learning valence. Only now is it logically possible to think conceptually. Only now would the liberated person be able to “grasp” at all what shadows are, and also, later, what a cave is, which cannot be represented without counter-concepts. The *Be-greifen* of the situation seems inevitable. As soon as the liberated person recognizes the situation (here meant purely sensually), it is also understood. The transition from sensory perception to cognitive representation seems to fall into one⁹. Leaving the cave must be imagined dramatically: a completely unknown environment spreads in front of the prisoner; the unleashed was not led outside in daylight, but at dusk, so the change of vision is less painful, though not painless. Presumably, the freed man first

3 For a list of open questions, see Kauder (2001)

4 Analogous to this is the discussion of so-called “knowledge bubbles” in social media. There, too, only already existing distinction regimes are “fed” with further information without affecting the guiding distinction.

5 It is therefore surprising that Tarde does not take this consideration further. After all, his law of imitation (cf. 2008b) is precisely about these guiding distinctions, which are then individually “refined” or even abandoned in favor of “better” distinctions. Tarde thus limits himself only to the process of passing on guiding distinctions (imitation and counter-imitation), but not to their grounding.

6 Only the third “redirection” starts from the liberated, the decision to go back to the cave.

7 Or (existential) encounters, as Otto Friedlich Bollnow (1977) would have called them. It seems to me that Hartmut Rosa’s somewhat woolly concept of resonance pedagogy also goes in this direction, even if in my opinion it does not provide any new impulses for the (school) pedagogical discussion. (Rosa / Endres, 2016)

8 One can call the different light conditions, the interplay between light and dark, the basic rhythm of height. However, it must be noted restrictively that our own literal version of this occurrence cannot be that of the unleashed. The categorial semantics “image”, “shadow,” etc., which we take for granted, could not be available to the liberated.

9 At least one could critically ask whether these transitions on the ladder of cognition can really be described in such a trouble-free way.



perceives things that have similarities with his cave experience: objects are reflected in a lake, later the moon itself¹⁰. Later, when the sun illuminates the surroundings, the impression must be overwhelming to perceive, besides strong colors (in his/her eyes, this must be a difficult experience to surpass, since in the cave, hardly or only faintly colors can be perceived), also (natural) sounds and smells, which are hardly connectable to his previous experiences¹¹. Whether he/she met other people is not reported. It is also not known how long the liberated man was outside the cave. However, it can be assumed that - also like in the cave - it took a while until the eyes got used to the new light conditions¹².

As soon as the height has been left, the occupant perceives the difference between inside and outside; at the same time, the comparison between before and after sets in. His/her understanding of the world changes instantly with the realized experience of distinction. The shift from a sensual to an intelligible world also becomes clear; if the world before liberation was the one in which visual and, to a lesser extent, sonic impulses were dominant, sensual impressions are intensified by liberation, but at the same time intelligible impressions push to the fore, the world is now not only perceived sensually, but also processed cognitively; the experiences of difference must be represented and reflected upon; there is a building up and hierarchization of bodies of knowledge. The liberated person experiences a rapid change from seeing to (mental) inferring. A cognitive space of possibilities opens up.

The third learning valence appears as the most radical "periagogy" (redirection); biographically, because it changes from freedom to obligation, educationally, because it changes from individualization to socialization, as well as educationally, because it changes from compulsion to voluntariness (cf. Gaus, 2012, p. 362). Nevertheless, we are again dealing with an experience of difference. The returnee experiences that knowledge cannot simply be passed on; this contradicts his/her experience as an inhabitant of the cave. The distinction lies between knowledge that can be easily passed on and knowledge with which this is not possible.

Learning as it is postulated here consists of at least two entities that enable discrimination and automatically lead to the comparison of the two experiences. This is the starting point of learning. To learn something does not mean to add new facts additively to old ones, but to differentiate. Learning, thus, does not follow the inductive principle of building a whole from individual entities ("building" world-knowledge), but from a given, undifferentiated whole - the world we encounter - in which orientation is gained through differentiation. Diversity is not given *per se*, we do not confront a heterogeneity that has always been, but through acts of differentiation we cognitively produce this diverse world.

William James (1966) already saw in the act of discrimination the constitutive of perceiving; learning to see means perceiving differences; the same applies to learning: learning means having a discrimination experience (Waldenfels, 2018, p. 68)¹³. In addition to James, Roman Jakobson provides evidence that the learning of perceptual structures is due to acts of discrimination. For example, the development of color learning consists of making essential distinctions: between 'colored' and 'colorless'; between 'warm' colors (red, yellow) and 'cold' colors (blue, green), later further differentiation is made even within 'warm' colors (red, orange) (ibid, p. 172). Waldenfels sums up with regard to the construction of perceptive structures: "The differences multiply. Learning itself does not consist of seeing and identifying individual colors; the point here is not to pick up details, but to build up contrasts" (2018: 172).

Käte Meyer-Drawe (2005), in her attempt to fathom the beginnings of learning, speaks of a "disturbance of an accomplishment that is reliable under other circumstances" (p. 32). It is true, as she continues, that this disruption is an experience and not the result of an autonomous decision. However, she does not elaborate on what these disturbances actually are. This disturbance, i.e. the basic principle of the learner, is the experience of difference that the disengaged person experiences when he/she recognizes the fire and subsequently grasps that the fire and the objects placed behind it cast shadows. An experience (Widerfahrnis) that leads to a difference experience can be called learning. But not every experience (Widerfahrnis) leads to a distinction; conversely, however, every distinction is based on an experience (Widerfahrnis). With Bernhard Waldenfels (cf. 2018), it can be said that every learning-valued distinction is a response to an experience (Widerfahrnis), no matter whether this is self-induced or externally induced.

It has become clear that acts of discrimination do not initially occur of their own accord; they must be stimulated. Above it was stated that learning must be endured, endured at the beginning. In the cave, the liberated person was made to learn by force, but this does not describe the mode of pointing that entails learning, that is, discerning. It is the pointing gesture that, though initially against the will of the learner, but later voluntarily, makes distinctions possible. Klaus Prange (2006) has argued this convincingly. Nevertheless, he is mistaken when he thinks that through "maeutics" the hidden is un-hidden and thus new contexts open up (Prange, 1986, p. 28f). New contexts open up where new distinctions are made; these are not hidden, but simply not yet accomplished.

Meyer-Drawe (2005) sees in the limbo of not-more (trust in the old) and not-yet (understanding of the new) the beginning of learning (p. 32), but this is not precise enough. Trust does not play the decisive role here; it is precisely the experience of diversity (uncertainty) made possible by differentiation that makes real trust (absolute security) a matter of impossibility. Fundamental trust is replaced by a permanent attitude of ambivalence, things could always turn out differently. Why should the liberated person outside the cave be convinced that there are not other "shells"? (an interesting perspective is offered by the movies "Matrix" or "The Truman Show"). To speak generally of truth already presupposes the differentiation of truth and non-truth.

For Konstantin Mitgusch (2008), the beginning of learning in the cave is the following: "Learning is an accomplishment of turning back from

10 This would be a connecting point for so-called connection learning; content that is connectable to existing knowledge stocks is particularly easily absorbed (Siebert, 2019, among others).

11 Kauder (2001) differentiates five stages of guided perception outside the cave: shadow, night, earth, sky, and twilight (p. 65).

12 Here one can illustrate in analogy becoming aware of problems: often these do not appear immediately clear, but it requires some distance, temporally, mentally, sometimes also spatially, in order to make out the core of the problem, and thus also the possibility of the solution, and to grasp it exactly mentally.

13 The same mechanism is the basis of de Saussur's sound discrimination. Different sounds exist only because sounds differ from each other. A is only A because it is not B or C.



the familiar, a pathic act of confrontation, a new beginning, a becoming different and foreign" (p. 42). All of this can hardly be disputed; however, it misses the actual basic mechanism of learning, which is the act of discernment. The reversal of the familiar happens when a new thing has been distinguished, subsequently, the world presents itself as a different one, the reorientation of content through distinction is accompanied by the learning process itself becoming reflexive, and it follows that new distinctions are always to be expected. The truth is always a relative one.

Not every irritation and not every experience leads to learning, they become learning experiences only when substantial distinctions are accomplished. Accomplishing, or better comprehending, means that distinctions cannot be acquired vicariously, that enumerating or reporting differences does not replace comprehending. This is perhaps the greatest misunderstanding in the so-called teaching acts: there, distinctions are simply presented, distinctions in fields of knowledge, in school subjects (thus, curricula and syllabi are highly complex catalogs of distinctions), which, however, are often only memorized by the learners, but too seldom really comprehended. Even rarer is the situation where other, divergent distinctions are made¹⁴. The progress of the cave story shows this impressively: the returnee is not able to "convey" his/her knowledge, even if he/she has not had bad preconditions: he/she is an intimate connoisseur of the people to be "taught", he/she knows their previous knowledge, their life world, he/she can "tie in" with it like no other (an ideal situation in adult education), however, his/her failure is a complete one.

It is not surprising, therefore, that Dietrich Benner and Dariusz Stepkowski (2011) have the final phase of their five-part educational process in Plato's Allegory of the Cave end with the discouraging realization that the liberated person "cannot conserve his new experiences for himself, nor can he pass them on to those with whom he has previously shared common experiences" (p. 95).¹⁵ It is questionable why the liberated person cannot conserve his/her insights; it may be that the new experiences have shaken him/her to the core, but that he/she cannot conserve them, as it is difficult to comprehend¹⁶. New insights do not require social validation to lead to cognitive restructuring or to be remembered. On the contrary, he/she cannot undo these differential experiences; he/she is no longer able to regain his/her old position in the primary group, the naive comfort of the shadow seers is only a memory.

Experiences of difference are existential in the sense that they transform old patterns of interpretation or prejudices (but do not annul them or make them forgotten; on the contrary, they only lead to becoming aware of them). Now, Plato should not be accused of interpreting the human learning process as a purely intra-individual, autopoietic event, which has only indirect contact with its fellow human beings and which makes communal learning impossible; this makes it possible to connect to constructivist concepts, but it also imposes all the limitations of this view (cf. e.g. Pongratz, 2009). Teaching and learning are very well possible, but not in a naive way, understood as a teaching-learning connection, based on a reductionist-technical learning assumption.

3. Derivations for the educational process

Coercion is at the beginning of the "paideia" (and threatened coercion at the end) because the Platonic goal, the world of ideas, the highest happiness (the idea of the good), is not cognitively accessible in the cave. There are views, but no concepts, therefore, also no concept of happiness. It can only be abstracted from its opposite, and this already requires the ability to make distinctions.

For educators, the conclusion that learning can only be initiated through the use of coercion is difficult to digest. It is also counterintuitive; after all, children learn even before entering educational institutions, the example of color perception mentioned above shows this impressively. Children learn to distinguish very early: mother, father, and strangers, etc. If this learning is still pre-reflexive, it changes with increasing age. Learning does not necessarily require coercion, even if pedagogical institutions can be interpreted in this way. For the interpretation of the parable proposed here, coercion is dispensable, it is not constitutive for the learning process, but it is certainly not denied that learning can be unpleasant and painful.

Learning experiences before, after, and beyond the organized learning arrangements often have a more lasting impact than rule-based learning in school. The so-called "educational experiences" are of such eminent importance that they are deeply etched in the memory (instructive Gruschka, 2020). This form of learning (discernment) is so significant that one not only remembers the contents, but also becomes aware of its mechanisms, i.e., one acts as an observer of one's own learning. Andreas Gruschka (ibid.) bears eloquent witness to this in his self-assurance. He shows that existential learning experiences (distinctions) cannot be planned, that they are not decided by the person, they are almost exclusively experiences, which are experienced as so significant, that afterwards one continues to learn in a conscious and planned way. But the beginning of learning is based on the experience of a fundamental act of discrimination, afterwards further data and information about it are collected and systematized (among other things by reading, also organized educational offers)¹⁷. With Käte Meyer-Drawe (2005), it can be said that in such an act of learning "a possibility is realized without being preceded by a decision" (p. 31). If distinctions are the foundation of learning, the question inevitably arises whether distinctions are teachable. Plato himself denies this. The returning inhabitant shows this clearly. Teaching itself is meaningless in Plato; acts of distinction cannot be performed vicariously. The task of educators is a methodical one, a support in self-learning. This is not a new insight, but it must not be understood in such a way that the pedagogue helps the learner to collect and assimilate data or information by him/herself and to acquire it (very popular in teaching situations). Thus, it is not a matter of creating a whole from many individual parts, but of creating one's own structure on a given whole through acts of discernment.

¹⁴ The much-invoked creativity is constituted precisely on the surprising, precisely not expectable moment.

¹⁵ The five phases include 1) already acquired ideas, 2) unexpected event/ irritation, 3) process of readjustment/ relearning, 4) return to the initial situation, 5) experience of the non-mediatedness of the experience made (Benner/ Stepkowski 2011, p. 95).

¹⁶ Unless he/she was an early proponent of the theory of communicative action, which understands truth only as an intersubjective practice of negotiation. Although the cave situation could hardly be further from a domination-free dialogue space. At the same time, this is not an argument against cognitive diversity; on the contrary, it provides durational spaces of possibility for distinction.

¹⁷ Perhaps the insight that learning is based on discernment is particularly well exemplified in non-organized learning settings. Often the pathic element, the adversity, is more clearly felt and remembered than in highly-didacticized learning environments.



It is interesting to note that there are two levels of teaching in Plato: first, the situation in the cave where the attempt to “teach” fails unconditionally; at the same time, Plato’s dialogue itself is a didactic situation where teaching is evident. Little doubt is left that this is precisely what Socrates intends. Acts of discernment are again not directly provoked by lecturing or teaching, but by a dialogic (but not egalitarian) conversational situation. It is not knowledge that is produced by maieutics, but acts of discernment. The attempt to teach fails in the cave, but not in the dialogue. This suggests that the freed man has chosen a different form of conversation and thus fails; here again we see a distinction (in execution) that suggests to the reader that there are different forms of teaching conversation, with different learning outcomes.

How can experiential spaces be created within which learners can experience discernment? One condition is a certain degree of freedom. Determinate learning opportunities, typical of many school contexts, offer only small or no degrees of freedom. Independent discernment experiences are unlikely here. Here, structures of distinction (bodies of knowledge) are to be absorbed and adopted. However, this misses the fact that distinctions have to be experienced by a person to really become of a learning valence. Meaningful learning situations must not take a dualistic form (‘yes’ / ‘no’), but must give the learner him/herself the opportunity to make his/her own distinctions, a setting is needed in which the learner can reshape and restructure a situation him/herself. Freedom, then, means that already existing structures can be transcended and new structures can be created. Didactical hints how this could be realized or supported would again be pre-structuring (and thus restricted to certain learning actions), which are meant from teaching, not from learning.

This should not lead to the hasty conclusion that learning should be understood as a purely self-organized process¹⁸, with teachers being granted no role other than that of a process facilitator, at most an advisor. Reform pedagogical concepts that focus on freedom and self-decision-making also miss the idea of learning addressed here. It is not enough to simply provide unstructured time, but pedagogically thought-out experiential spaces must be arranged in which students can independently perform acts of discernment (but not in the Rousseauian sense of a total situation completely pre-structured by the educator, in which the learner “learns” step by step the applied learning experiences).

Traditional teaching (here no particular method is meant) is not dispensable, it has to ensure, besides the possibility to enable distinctions, that such basic guiding distinctions are elaborated with data and information. For example, when learners have distinguished the distinction between idealist and realist theories of philosophy, additional information is to be “conveyed.” Of course, learners will also make further distinctions within each side of the guiding distinction. It needs such a jump-start distinction that leads to further distinctions. Perhaps such guiding distinction, these relapses, can be called pathic experiences followed by logos (from pathos to logos, cf. Waldenfels, 2017). A fundamental distinction is thus the beginning of learning, which subsequently becomes independent. The educational process can be understood as a continuous refinement of distinctions. With it also comes to the knowledge that no distinction (state of knowledge) can be ultimately justified. One must always reckon with new possibilities of distinction.

This possibility of being able to be always-also-other is treated as ambiguity tolerance and denotes the ability to let a certain degree of ambiguity appear as bearable, as normal. The resulting space of possibility or sense of possibility (see Robert Musil: the man without qualities) creates space for new distinctions and thus possibilities to deviate from existing structures¹⁹. It prevents the emergence of an overly fixed and closed view of the world; one could say that it cultivates a certain basic hermeneutic attitude, which consists in the fact that one must always reckon with the fact that someone else is right (cf. Gadamer, 1990). This sense of possibility alone has something liberating about it. Pedagogical spaces of possibility already possess a pedagogical valence; they are not simply unstructured spaces, but should contain a potency, a pedagogical valence, which stimulate their own distinctions without being pre-determined (see also: Böhm, 2010). They must contain the possibility of re-experiences, re-experiences that affect the learner, to which the learner can respond with a differentiation. Such a re-experience cannot always be understood as a placid letting grow, but a re-experience and the responding reaction to it can also be of an unpleasant kind (see on this: Mitgusch, 2009). Pedagogical spaces of possibility should be tuned to allow the learner the possibility of responsivity (cf. Waldenfels, 2018), the possibility of responding with a new distinction. In Plato, philosophy begins with the gesture of wonder, wonder at something that irritates, that disturbs, that disquiets. Teaching (whether at schools or universities) must allow itself to be asked whether possibilities for genuine amazement are available there or even cultivated; scientific, rational explanations of all subjects taught are in this respect rather to be understood as a trivialization process (cf. *ibid.*, p. 369) that systematically suspends amazement.

IV. Application example

How can these insights now be practically implemented pedagogically? It has already been pointed out that the contents of institutional pedagogical bodies do not proceed haphazardly, but, on the contrary, use highly systematized and highly elaborated templates. Above, all forms of curricula or syllabi were referred to as distinguishing catalogs²⁰. This is in no way meant to be disparaging, but reflects the position taken here. However, the danger inherent in simply repeating given guiding distinctions is made clear by such content lists (or, turned to competency-oriented terms: skill catalogs).

18 The logical impossibility of “self-learning” without beginning, end, and counterpart has been pointed out by Käthe Meyer-Drawe (2005, p. 28).

19 Analogous to the idea of “degrees of freedom” in Christoph Möllers (2020).

20 Today, these are consistently formulated in terms of competencies. Thus, the change of primacy from teaching to learning has taken place. Not what is to be taught, but what the educand is to have learned at the end of the pedagogical process is presented to both teachers and learners before the pedagogical process begins (surprising, therefore, that so few students are interested in their curriculum). The actual pedagogical (didactic) problem is thus made to disappear. The frequently problematized point that students are not able to do what they should be able to do according to the curriculum could be trivialized with the linguistic guiding distinction competence - performance: that one can potentially do something (competence) does not mean that one also uses it (performance).



One method illustrates both sides like hardly any other: that of practicing or exercise²¹. Practicing is a basic pattern of action and begins at birth. Almost everything is practiced until it reaches a certain level of proficiency; a good example is grasping an object or learning to walk upright. This example is a good illustration of the transition from practice to exercise: practice up to a "normal" level of skill is learned more or less individually and is not "improved" after a certain point; this changes when, for example, an athletic performance is to be achieved. Then running is practiced, it is then transferred into exercises and trained under the guidance of a trainer. If practicing is pre-reflexive in this example, running exercises are no longer: here the practice of running as well as the method are made reflexive.

Malte Brinkmann (cf. 2008, 2012, 2021) has elaborated the pedagogical side of the exercise in numerous works. Classically, the function of the exercise consists in the consolidation of a learned content and is treated as a "secondary form of learning" pedagogically stepmotherly (Brinkmann 2021, p. 29). This truncated view of exercise unspokenly assumes that no further pedagogical valence is embedded in pedagogical practice (cf. Böhm, 2010); exercise is perceived as "not creative, not developmental and progress-oriented" (ibid., p. 21). The aim is to consolidate exactly what was previously worked on in class. Exercise as repetition of exactly the same. Deviations are just to be avoided. This would be one view of this method. It corresponds to the above-mentioned "internalization" of given distinctions (bodies of knowledge).

The learning pedagogical valence of the exercise, however, lies precisely in the execution of deviations. The exact reproduction does not allow for new distinctions; it is supposed to prevent exactly this. In this way, however, the "opening" function of the exercise is given away: the variation, i.e., the self-made and self-performed distinction; it constitutes the pedagogical valence of the exercise. "In repetition, the same thing does not return, but it is the return of something similar to itself, otherwise variation and creativity in exercise would not be possible" (Brinkmann, 2021, p. 31). The cause of this variation is the temporal difference of repetition. Each repetition is temporally displaced: "Exercises use the temporal difference to extend the old to the new in repetition and to achieve changes, changes of view and perspective, that is, they can also have a transformational effect." (ibid.)

This applies to cognitive, bodily-practical as well as moral/ethical aspects. The example of table tennis illustrates this mechanism very well: the always same exact repetition of a stroke (position of the trowel, speed, position at the table, etc.) does not lead to mastery (or to any progression at all), but the consistent deviation from the given pattern stroke does. The self-performed distinction makes the player a good player, at the same time the player him/herself becomes aware that the variation, the deviation from the pattern, makes progress possible. Practice directs the view on the own execution and opens a reflexive access to the self²². "The pedagogical valences of exercise, or performative exercise, as Brinkmann calls it, must be recognized by teachers. Only then [...] do [they] open up new horizons in reflexive relation to what has been learned, in that only on the ground of what has been learned and learned does it become clear what has not yet been learned and known, and in the variation new questions and problems become apparent. The exercise can be both a transition and a beginning of learning" (Brinkmann, 2008, p. 290).

V. Conclusion

In the interpretation of the Allegory of the Cave proposed here as the beginning of learning through differentiation, it has been argued that differentiation is the path to new knowledge. The basic assumption is that the world as a world event, as a whole, confronts the individual. It is not through the random or systematic gathering of information that man gains access to the world, but, on the contrary, through differentiating and discerning. Further, it was assumed that while access to the surrounding world increases, or becomes more complex, more distinctions are made. Differentiations and knowledge are not separated. They fall into one. This can be well illustrated by the example of "learning": the reflected knowledge about learning starts only when one fails at a learning task (Widerfahrnis), only then one becomes aware that there is non-learning (first difference; called here as a starting or guiding difference), if one continues to deal with the subject, further distinctions are quickly added: formal learning, informal learning, different learning theories (pedagogical, psychological, sociological, which in turn are strongly differentiated, etc.). The more differences are experienced, the more elaborated the knowledge of the subject.

If differentiation, i.e. heterogeneity, is crucial for learning and cognition, then we should live in a differentiation-friendly time (Wolfgang Streeck: "exuberant rhetoric of colorfulness"). Hardly any term, in science, but also in everyday language, has a greater boom. School, teaching or classroom is hardly conceivable without reference to heterogeneity. If one examines curricula for student teachers with regard to this term, one will hardly be disappointed. Yet, it is precisely the conjuncture of this term that seems to be its greatest weakness: "The conjuncture of heterogeneity undoubtedly represents a trivialization and an instrumentalization of radical, incommensurable difference, of irreducible alterity, which is turned into an innocuous resource" (Casale, 2016, p. 29).

The problem, besides the trivialization, is that heterogeneity itself is again assumed to be an undifferentiated entity. The heterogeneous becomes a self-evident social fact; heterogeneity itself is essentialized. Moreover, the path to difference is not taken into account. Precisely this is crucial for the pedagogical perspective. It is not enough to propagate heterogeneity as an affirmative good; differences cannot be taught or mediated, at least not if they are really to be (re)accomplished. And this is where the didactic enterprise (cf. Gruschka, 2002, among others) reaches its limits: here, one still assumes in the rule that knowledge can be imparted, that knowledge can be taught in a methodically guided way; the self-image of an entire professional group depends on this.

But, ultimately, the goal of pedagogical efforts is not that learning depends on teaching, but that learning takes place at all. In adult didactics, this attitude has already become commonplace due to the recourse to constructivist assumptions (cf. Siebert, 2019, among others); in the school sector, it is somewhat more restrained (cf. Reich, 2012). But constructivist-oriented methodologies or didactics do not start from the experience of difference, but from the human being (better: brain) as an autopoietic system. That people perceive the same envi-

21 Brinkmann (2008) distinguishes "between practicing "as an individual, unjustifiable accomplishment" and practicing as a "pedagogical enactment" of practicing (p. 280). The text follows this pedagogical distinction.

22 According to Brinkmann (2008), in practicing the thing, the method, and the self become entangled (p. 280).



ronment differently seems undisputed, but the reference to different biographical backgrounds is not sufficient.

The quality of teaching can only be tapped indirectly. The direct connection of good learning outcomes (at least as far as the learning content is concerned, which is "examined" in some form) to successful teaching and thus to quality of teaching, is obstructed²³. Perhaps the discussion about the quality of teaching in general is wrongly posed, since it presupposes, unstated after all, what has been critically discussed here, that teaching and learning are strictly coupled. That teaching can lead to learning, that is, to independent acts of discernment, is undeniable. But this is not a constraint, and it cannot be organized in group lockstep. Good teaching would be the one that leaves learners free to build structures themselves through acts of discernment. Good teaching would be the one that helps to obtain information that invites further thinking and differentiation, and that always assumes that things could be different.

References:

- Ballauf, T. (1952). *Die Idee der Paideia. Eine Studie zu Platons Höhlengleichnis und Permenides Lehrgedicht*. [In German: *The idea of paideia. A study of Plato's allegory of the cave and Permenides' didactic poem*]. Meisenheim/ Glan: Westkulturverlag A. Hain.
- Benner, D. / Stepkowski, D. (2011). Die Höhle als Metapher zur Beschreibung von Bildungsprozessen – eine Studie zur Transformation von Platons Höhlengleichnis in bildungstheoretisch relevanten Diskursen [In German: The cave as a metaphor for describing educational processes - a study on the transformation of Plato's allegory of the cave in discourses relevant to educational theory]. In Zlatkin-Troitschanskaia (Hrsg.). *Stationen Empirischer Bildungsforschung* [In German: *Stations of empirical educational research*]. Wiesbaden: Springer, pp. 91-104.
- Blumenberg, H. (1996). *Höhlenausgänge* [In German: *Cave exits*]. Frankfurt a.M: Suhrkamp.
- Böhm, J. (2010). *Pädagogische Valenzen schulspezifischen Geschehens im Umfeld des Unterrichts*. [In German: *Pedagogical valences of school-specific events in the classroom environment*]. Hamburg: Kovac.
- Bollnow, O.F. (1977). *Existenzphilosophie und Pädagogik* [In German: *Existential philosophy and pedagogy*]. Stuttgart: Kohlhammer.
- Brumlik, M. (2016). Ausgänge aus dem Höhlengleichnis? Hans Blumenberg gegenüber einem, nein: dem klassischen pädagogischen Bild [Exits from the cave allegory? Hans Blumenberg vis-à-vis one, no: The classical pedagogical image]. In F. Ragutt & T. Zumhof (Hrsg.). *Hans Blumenberg: Pädagogische Lektüren* [Hans Blumenberg: *Pedagogical readings*], pp. 21-34. Wiesbaden: Springer.
- Brinkmann, M. (2021). *Die Wiederkehr des Übens: Praxis und Theorie eines pädagogischen Grundphänomens* [In German: *The Return of Practising: Practice and Theory of a Basic Pedagogical Phenomenon*]. Stuttgart: Kohlhammer.
- Brinkmann, M. (2012). *Pädagogische Übung: Praxis und Theorie einer elementaren Lernform* [In German: *Pedagogical practice: Practice and theory of an elementary form of learning*]. Paderborn: Schöningh.
- Brinkmann, M. (2008). Üben – elementares Lernen. Überlegungen zur Phänomenologie, Theorie und Didaktik der pädagogischen Übung [In German: Practicing-elementary learning. Reflections on the phenomenology, theory and didactics of pedagogical practice]. In: Breinbauer, Ines/Mitgusch, Konstantin/Sattler, Elisabeth/Westphal, Kristin (Hrsg.). *Dem Lernen auf der Spur. Die pädagogische Perspektive* [On the track of learning The pedagogical perspective]. Stuttgart: Klett-Cotta, pp. 278-294.
- Casale, R. (2016). Der begriffsgeschichtliche Unterschied von Bildung und Differenz [The conceptual-historical difference of education and difference]. In Groppe, C./ Kluchert, G./ Matthes, E. (Hrsg.). *Bildung und Differenz. Historische Analysen zu einem aktuellen Problem* [Education and difference. Historical analyses of a current problem]. Wiesbaden: Springer, pp. 21-38.
- Dammer, H.-H. (2015). *Philosophen als Pädagogen. Band 1: Von der Antike bis zur Aufklärung* [Philosophers as educators. Volume 1: From antiquity to the Enlightenment]. Opladen/ Toronto/ Berlin: UTB.
- Gadamer, H.G. (1990). *Wahrheit und Methode. Band 1* [In German: *Truth and method. Vol. 1*]. Tübingen: Mohr Siebeck.
- Gaus, D. (2012). *Platon als Theoretiker des Pädagogischen: Eine Erörterung erziehungs- und bildungstheoretisch relevanter Aspekte seines Denkens*. [Plato as theorist of the pedagogical: A discussion of aspects of his thought relevant to educational theory.] Frankfurt/ Main: Peter Lang.
- Gruschka, A. (2020). *Bildungserlebnisse. Eine systematische Selbstvergewisserung* [In German: *Educational experiences. A systematic self-assurance*]. Opladem, Berlin, Toronto: Verlag Barbara Budrich.
- Gruschka, A. (2002). *Didaktik. Das Kreuz mit der Vermittlung. Elf Einsprüche gegen den didaktischen Betrieb* [In German: *Didactics. The cross with mediation. Eleven objections to the didactic enterprise*]. Wetzlar: Büchse der Pandora.
- Gruschka, A. / Heinrich, M. (1998). Platons vergessene Kinder. Zur Differenz von Didaktik, Erziehung und Bildung in Platons Höhlengleichnis [In German: Plato's forgotten children. On the difference between didactics, upbringing and education in Plato's Allegory of the Cave]. In *Pädagogische Korrespondenz*, 23, 60-75.
- Jaeger, W. (1959). *Paideia. Die Formung des griechischen Menschen. 3 Bände*. [In German: *Paideia. The formation of Greek man. 3 Volumes*]. Berlin: Walter de Gruyter.
- Kauder, P. (2001). *Der Gedanke der Bildung in Platons Höhlengleichnis* [In German: *The idea of education in Plato's allegory of the cave*]. Hohengehren: Schneider: Beltz.
- Meyer-Drawe, K. (2005). Anfänge des Lernens [In German: Beginning of Learning]. In: Benner, D. (Hrsg.). *Erziehung – Bildung – Negativität* [In German: *Education - Bildung - Negativity*]. Weinheim und Basel: Beltz, pp. 24-37.
- Meyer-Drawe, K. (2008). *Diskurse des Lernens* [In German: *Discourses of learning*]. Munich: Finck.
- Mitgusch, K. (2008). Schatten des Lernens. Die Höhle als Metapher der Unbildung [In German: Shadows of learning. The cave as a metaphor of uneducation]. In Dzierzbicka, A./ Bakic, J./ Horvath, W. (Hrsg.). *In bester Gesellschaft. Einführung in philosophische Klassiker der Pädagogik von Diogenes bis Baudrillard* [In German: *In best company. Introduction to philosophical classics of pedagogy from Diogenes to Baudrillard*]. Wien: Loecker.

²³ In general, it is critical to ask whether what is defined as an outcome in student achievement studies includes a pedagogical valence. The same is true of standards.



- Mitgusch, K. (2009). *Lernen durch Enttäuschung: Eine pädagogische Skizze* [In German: *Learning through disappointment: a pedagogical sketch*]. Wien: Braumüller.
- Möllers, C. (2020). *Freiheitsgrade. Elemente einer liberalen politischen Mechanik* [In German: *Degrees of freedom. Elements of a liberal political mechanics*]. Berlin: Suhrkamp.
- Platon (2000). *Politeia, Siebtes Buch* [In German: *Platon. Sämtliche Werke [Politeia, seventh book]. Herausgegeben von Ursula Wolf. Band 2. Übersetzt von Friedrich Schleiermacher [Complete Works. Edited by Ursula Wolf. Volume 2. Translated by Friedrich Schleiermacher]. Reinbek bei Hamburg: Rowohlt.*
- Pongratz, L. (2009). *Untiefen im Mainstream. Zur Kritik konstruktivistisch-systemtheoretischer Pädagogik* [In German: *Shoals in the mainstream. On the critique of constructivist systems theory pedagogy*]. Paderborn: Schöningh.
- Popper, K. (2003). *Die offene Gesellschaft und ihre Feinde, Band 1: Der Zauber Platons* [In German: *The open society and its enemies, Volume 1: The spell of Plato*]. Tübingen: Mohr Siebeck.
- Prange, K. (2008). *Schlüsselwerke der Pädagogik. Band 1: Von Plato bis Hegel* [In German: *Key works in pedagogy. Volume 1: From Plato to Hegel*]. Stuttgart: Kohlhammer.
- Prange, K. (2006). *Die Zeigestruktur der Erziehung. Grundriss der Operativen Pädagogik*. [In German: *The pointing structure of education. Outline of Operational Pedagogy*]. Paderborn: Schöningh.
- Prange, K. (2002). Was bedeutet eigentlich „Lernen“? [In German: What does “learning” actually mean?] In: *Praxis Schule 5 – 10*, Jg. 13, pp. 6–8.
- Prange, K. (1986). *Bauformen des Unterrichts. Eine Didaktik für Lehrer* [Structural forms of teaching. A didactics for teachers]. Bad Heilbrunn: Klinkhart.
- Reich, K. (2012). *Konstruktivistische Didaktik: Das Lehr- und Studienbuch mit Online-Methodenpool* [In German: *Constructivist didactics: the textbook and study book with online method pool*]. Weinheim und Basel: Beltz.
- Reichenbach, R. (2007). *Philosophie der Bildung und Erziehung* [In German: *Philosophy of education and upbringing*]. Stuttgart: Kohlhammer.
- Rosa, H. / Endres, W. (2016). *Resonanzpädagogik. Wenn es im Klassenzimmer knistert* [In German: *Resonance pedagogy. When it crackles in the classroom*]. Weinheim und Basel: Beltz.
- Schönwälder-Kuntze, T. (2012). *Luhmann und Spencer-Brown* [Luhmann and Spencer-Brown]. In: Jahraus, O./ Nassehi, A. (Hrsg.). *Luhmann Handbuch. Leben – Wirken – Wirkung* [In German: *Luhmann Handbook. Life - Work - Impact*]. Stuttgart und Weimar: J.B. Metzler, pp. 34–39.
- Siebert, H. (2019). *Didaktisches Handeln in der Erwachsenenbildung: Didaktik aus konstruktivistischer Sicht*. [In German: *Didactic action in adult education: Didactics from a constructivist perspective*]. Augsburg: Ziel.
- Szlezák, T.A. (2021). *Platon. Meisterdenker der Antike* [In German: *Plato. Master thinkers of antique*]. München: C.H. Beck.
- Tarde, G. (2008a). *Monadologie und Soziologie* [In German: *Monadology and sociology*]. Frankfurt/ Main: Suhrkamp.
- Tarde, G. (2008b). *Die Gesetze der Nachahmung* [In German: *The laws of imitation*]. Frankfurt/ Main: Suhrkamp.
- Vaihinger, H. (1986/ 1911). *Die Philosophie des Als Ob. System der theoretischen, praktischen und religiösen Fiktionen der Menschheit auf Grund eines idealistischen Positivismus* [In German: *The Philosophy of As if. System of the theoretical, practical and religious fictions of mankind on the basis of an idealistic positivism*]. Berlin: Verlag von Reuther & Reichard.
- Waldenfels, B. (2018). *Das leibliche Selbst. Vorlesungen zur Phänomenologie des Leibes* [In German: *The bodily self. Lectures on the phenomenology of the body*]. Frankfurt/ Main: Suhrkamp.
- Waldenfels, B. (2017). *Platon. Zwischen Logos und Pathos* [In German: *Plato. Between logos and pathos*]. Berlin: Suhrkamp.