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The orientation on absolute infinity and the openness of worldviews as the necessary foundation for models of developmental psychology

Cordelia Mühlenbeck
Medizinische Hochschule Brandenburg – Theodor Fontane

Abstract

In many contemporary models of adult development an end state of self-development is assumed, which is related to a specific worldview and concept of the absolute. In the present text these development models and their worldview are analyzed and contrasted with Karl Jaspers' psychology of worldviews and, what he described, the process of differentiation during development. In addition, findings from contemporary philosophy, mathematics and the natural sciences are given as examples to show how our world knowledge is constantly expanding and developing. Comparing these findings suggests that any unification or ultimate structure generates a limitation to the development of the self and new world knowledge and therefore can not be ultimate. Thus, it is shown that only an orientation towards absolute infinity as the horizon of unfinished and fluid worldviews, as described by Jaspers, can include newly acquired knowledge of the world, the self and its interdependence, which is not satisfied by any closed worldview with corresponding end state of development.

Keywords: psychology of worldviews; the absolute; self-development; self-transcendence; ontology and metaphysics

1. Introduction

Contemporary theories of ego-development (in psychology equivalent to 'self-development') that are build upon the Piagetian model (Piaget 1964) include the whole lifespan of human development into a spectrum of increasing complexity regarding the human meaning making of the surrounding world. Examples of these models are Loevinger's theory of nine stages (Hy and Loevinger 2014), Cook-Greuter's extension to ten stages (Susanne Regina Cook-Greuter 1999), Alexander's

studies on higher states of consciousness (Alexander, Boyer, and Alexander 1987), Kegan's model of six stages (Kegan 1982), but also Jung's studies on parallels between western psychology and eastern meditation practices and the body system of chakras (Jung 1999). The models are used in psychological therapy, counseling and coaching. All these stage theories have the idea in common that meaning making functions in a constructing way, not in the sense that the construct of reality is an artificial image of it, but that the construct is the extent of awareness of reality, i.d. that our notion of reality is the number of dimensions we take into account and that this number is variable. Robert Kegan describes the functioning of the single stages and the development throughout the whole life span as a process of separation and integration within a relation between the self as subject and the outside world as an object. Kegan indicated that the "deep structure of any principle of mental organization is the subject-object relationship" (Kegan 1994, 32). Whereby those things are considered as 'object' that people can "reflect on, handle, look at, be responsible for, relate to each other, take control of, internalize, assimilate, or otherwise operate on" (Kegan 1994, 32). The things that people are "identified with, tied to, fused with, or embedded in" (ibid., 32) are considered as 'subject'. They behave automatically in relation to these subject-parts and lack awareness of them. It is important to mention that the characteristic of these stage models is that the subject parts are in fact a form of identification. Though they are regarded as unconscious, there needs to be some kind of vague conceptual knowledge of them, otherwise identification with these parts would not be possible. Conceptual knowledge means in this regard that the cognitive formation of this concept is a composition of a coherent figure based on properties, because it is a concept that is used for identification, which would not be possible without properties (Mühlenbeck and Jacobsen 2020; Mühlenbeck et al. 2017). Hence, in this text the object-parts will be named as object-separation and the subject-parts will be named as object-identification, because the subject-parts of the background are also a formalized object-like condensation of properties in which the individual feels embedded. The object-

separation and object-identification starts with the beginning of the conceptual ability, i.e. with the first object-relation of the new born and his/her caregiver. The characteristics of the single stages are very similar in the different models. Kegan's stages, for example, correspond to the first six stages of Jane Loevinger's model (for an overview see: Kegan 1982, 86-87). In the beginning, the incorporating stage of the new born, the self is only subject. In the course of development the self separates incorporated aspects of his/herself (here starts the conceptual ability) and puts him/herself in relation to these aspects, which is the start of concept formation (Mühlenbeck and Jacobsen 2020; Mühlenbeck et al. 2017; Mühlenbeck et al. 2016). This means, an outside object is formed, to which the relation is established, whereby in the course of development the self is assumed to become smaller, according to these models. The outside object is assumed to become bigger or more complex. The question that arise in regard to these stage models are: where is the final point of development in the individual's relation to his/her environment? Which role does knowledge about the environment or the complexity of the world play in regard to the development? Any conscious being is confronted with a flood of information from its environment, where necessary and helpful information has to be filtered out. This filtering functions through the formation of concepts, which are becoming increasingly complex the more knowledge about the environment is processed. This applies not only to humans, but to all conscious species from the beginning of episodic and phenomenological memory (for an overview of the evolution of consciousness and concept formation see: Donald 1991, 2001). In addition, during cultural evolution humans were enabled to store information in material symbols (Donald 1991; Mühlenbeck and Jacobsen 2020; Mühlenbeck et al. 2017), i.e. to form higher-order concepts that take part in semantic memory and material symbols, and to transfer this knowledge to others and to future generations and, thus, to cumulate knowledge. This cumulated knowledge allowed worldviews and the idea of an absolute to emerge, because knowledge about the surrounding world and the functioning of the environment was collected, stored, refined and deepened, and structured in

knowledge systems, which function on the same conceptional basis as any symbolic knowledge. Therefore, the complexity of individual development and the complexity of one's worldview can be put in relation to each other, where the knowledge of the self and the world are interrelated. But, the question is, whether an end state of development can be assumed or whether any higher form of development is rather characterized by its openness due to the knowledge about the complexity of the world, which deletes any hierarchical stages and puts developmental growth in horizontal complexity, as Jaspers described in his *Psychologie der Weltanschauungen* (psychology of worldviews) (Jaspers 1919). Thus, in this text, on the one hand the assumed end state of the stage theories named above are analyzed in regard to the assumed end state of development and the assumed worldview that determines the background for and the direction of further development in these models. In contrast to this, on the other hand, Jaspers' psychology of worldviews and the process of differentiation during development is analyzed and it is shown that only the orientation on absolute infinity with an openness of worldviews, as described by him, can include newly acquired, contemporary knowledge of the world, the self and its interdependence, which is not satisfied by any closed worldview with corresponding ego end state.

2. The underlying end state in stage models of self-development

In stage models of self-development, mental growth is organized by a fixed sequence of stages (M.L. Commons, Richards, Francis A 1984; M.L. Commons, Trudeau, Edward, Richards, Francis 1994; M.L. Commons, Armon, Cheryl, Kohlberg, Lawrence 1989; Erikson 1982, 2007; Gebser 1985; Loevinger 1966; Piaget 1964, 2013), with the growing complexity in the relationship between an individual and his or her environment. While Loevinger never assumed an end state, Cook-Greuter, who explicitly analyzed this assumed end state (Susanne R Cook-Greuter 2000), describes that this sequence of stages can be divided into four levels. Her model is a continuation of Jane Loevinger's model. Loevinger's research

(Loevinger 1966), as well as that of most developmental psychologists like Kegan (Kegan 1982), Kohlberg (Kohlberg 1985), Erikson (Erikson 2007) etc., dealt with the first two or three levels. The first two – the preconventional and conventional level – mirror the mental development from childhood to early adulthood. Over 90% of the general population function within these first two levels (Susanne R Cook-Greuter 2000; Kegan 1982; Loevinger 1966). The developmental goal of the second level is the development of an identity considered permanent and independent but also separate from the outside world. At the third, postconventional level, the goal is the dissolution of these divisions and the identification with the world. In the stage models that have dealt with higher development, and an end state, after level three (e.g.: Alexander, Boyer, and Alexander 1987; Alexander and Langer 1990; Susanne Regina Cook-Greuter 1999; Susanne R Cook-Greuter 2000; Jung 1999), it is assumed that on an additional fourth level the ego transcends and unites with the absolute (consciousness), i.e. a unifying concept of an absolute is assumed. This level is considered the highest and final stage of self-development. Jean Gebser, a philosopher rather than a psychologist, saw the end state of the development of consciousness already on level three (Gebser 1985). Two examples of the psychological development theories that deal with the final stage of personal development on level four and that compare the psychology of human development in the Western tradition with two different Indian psychological traditions, are, first, Charles Alexander's comparison with Vedic psychology (Alexander, Boyer, and Alexander 1987) and, second, Carl Gustav Jung's comparison with the levels of awareness of Kundalini Yoga (Jung 1999), which partly goes back to Sikhism. To identify the end state of development and the underlying concept of the world and the absolute in these models, we can take these two texts as an example and extract the main ideas that mirror the underlying worldviews and find common aspects that both share. In the following table, the individual ideas extracted from the texts and the common aspects formed out of them, are listed.

	Ideas in Alexander's description (Alexander, Boyer, and Alexander 1987)	Ideas in Jung's description (Jung 1999)
1	Transcendental consciousness: wholeness – beyond the division of subject and object	6th state of Kundalini Yoga: ājñā: there is still the experience of the self that is apparently different from the object, God. the 7th and last state of Kundalini Yoga (Sahasrāra) in comparison to the 6th state: nonduality of union → it is not different and the next conclusion is that there is no object, no God, only brahman = it is one, it is without second
	unified field - self is unbounded unified field of pure consciousness at the basis of the individual psyche	brahman, an existing nonexisting oneness
2	transcendental, absolute being, unchanging pure consciousness	
	absolute being, that never changes	
3	state of perfect order: - matrix from which all the laws of nature emerge (compared to quantum field theories → these two traditions of knowledge ultimately identify the same unified field) - source of creative intelligence - unified field of consciousness underlies both objective and subjective existence	"This world in the beginning was brahman solely; since brahman was alone it was not unfolded. It knew itself only, and it realized: I am brahman. In this way it became the universe." (p. 65)

4	unbounded self: the experiencer and the object of experience have both been brought to the same level of infinite value	The knower becomes brahman.
Common aspects: - wholeness, oneness, nonduality - static, unchanging - ultimate ground - experiencer / knower and object of experience become the same		

Table 1: **Main ideas and common aspects** extracted from the two analyzed texts by Charles Alexander (Alexander, Boyer, and Alexander 1987) and C.G. Jung (Jung 1999).

The common aspects are: oneness, ultimate ground, identification of experiencer and experienced object. In Alexander's comparison an additional attribute is specified, which is immutability. Though it is not explicitly described, this immutability is also implicated in Jung's description of the ultimate ground. The common picture of the absolute can thus be summarized as: (1) fixed or static positions of foreground and background, i.e. the world is defined by the in the background lying absolute, and not vice versa; (2) the ultimate ground is a wholeness and a closed object, which means that it is by itself not part of a higher object, but it is the last object; the inner parts are by themselves just parts of the higher absolute and not a closed object of further parts; (3) one unifying principle, structure or substance. The common aspects of Alexander's and Jung's investigations have the fundamental commonality that there is a concept of unity that underlies everything, both subject and object. In Jung's description this concept is called Brahman, in Alexander's it is called 'unified field', and it has, on the one hand, religious characteristics, but, on the other hand, also naturalistic characteristics in the comparison to quantum field theory. At the highest stage of development, it is assumed that all self-identifications and self-limitations are abandoned and the individual fully agrees with this absolute

consciousness, what is commonly known as 'enlightenment' from eastern religions such as Hinduism and Buddhism. Cook-Greuter describes this as: „In fact, they [eastern psychologies] consider our addiction to language-mediated, discursive thought as a major hurdle in realizing the true or divine Self, or union with the Ground.“ (Susanne R Cook-Greuter 2000, 230). When we relate this to Robert Kegan's developmental theory, it becomes apparent that there is still a final, all-defining object, with which the last identification can be fulfilled. Kegan's theory describes development as a process within a holding outside element that stays effective throughout life (Kegan 1982, 257). He claims that in every developmental stage we are held or borne by a concept we have of the outside world, and in each stage in a qualitatively new way. The situation of being held is not a characteristic of the child's condition only, but it is a situation which is characteristic of all developmental stages throughout life, where we are always integrated in something (Kegan 1982, 257). He describes a regularity of belonging and independence that alternately characterizes each stage. Both mechanisms, detachment and reintegration, always take place in relation to a defining background, from which one has to delineate or to which a new affiliation is recognized. Therefore, it is not surprising that even the supposed end state in Alexander's and Jung's descriptions still has a final object-like concept, into which the integration can be fulfilled.

Table 2 presents an overview of the different developmental levels, their developmental goals and the relation between self, world and absolute that is characteristic of the respective level. For a comparison, the development of consciousness and it's corresponding worldview described by Jean Gebser (Gebser 1985) is also presented.

Developmental levels	Level I preconventional - egocentric	Level II conventional - ethnocentric	Level III Post-conventional - worldcentric, transpersonal	Level IV ego-transcendence
Developmental goals of the different levels	Subject-object differentiation / forming the **self** **rudimentary worldview**	The self being involved in **culture** **systemic worldview**	Identification with / integration into the **world** (cosmos) **pluralistic systemic worldview**	Identification with the **absolute** **concept of the absolute as a unifying field**
Relation between self, world and absolute	affiliation between self and caregiver ↔ ego-object separation	affiliation between self and culture ↔ separation from the outside world no concept of the absolute	affiliation between self and world ↔ separation from the absolute individual concept of the absolute	affiliation between self, world and absolute individual concept of the absolute
Structures of consciousness and worldview according to Jean Gebser	archaic magic (animistic)	mythic mental	integral	

Table 2: **Overview of the different levels in contemporary models**: The developmental goals and their relationship to the world and the absolute are presented. Level I-IV are composed according to (Alexander, Boyer, and Alexander 1987; Susanne R Cook-Greuter 2000; Gebser 1985; Kegan 1982). The regularity of the developmental affiliation and separation, as described by Kegan, is fulfilled within

the levels. The developmental goals of the levels characterize the superior subject-background relationship, that is, the object-environment to which one refers to. The described worldviews of the different levels fit very much into the worldviews that Jean Gebser described in *The ever-present origin* (Gebser 1985, Part I., chap.3) for the structural development of consciousness, as listed in the last row.

As we can see, one worldview is assumed that develops correspondingly to the levels of overall cognitive development, as also Gebser supposed. The level of ego-transcendence (the last level with the assumed end state) has a unifying concept of the absolute, as described above as the 'true' or 'devine self' or 'the ultimate ground of being'. This unifying concept of the absolute, and the respective worldview, correspond to the *analogism* as named by Philippe Descola (Descola 2013) in his anthropological research on worldviews in different cultures, as we will see below. The concept of the absolute corresponds to an object-identification in the same way as it does in level one in relation to the caregiver, in level two in relation to the culture, and in level three in relation to the world. After each ego-object-separation follows an ego-object-identification (integration), as fulfilled in level four through the integration into the concept of the absolute, where the end state then shall arise from the fact that the object-separation and -identification become the same, i.e., the unconscious part of identification becomes conscious. Descola has created a widespread system of worldviews and their commonalities, from smaller groups of indigenous peoples to the great world religions, not only as a current inventory, but also in their historical course. He found out that all worldviews can be characterized according to two aspects, namely their physicality and their interiority, with interiority referring to the assumptions about mental life and physicality to the assumptions about the external substantial structure or condition. The assumptions are divided into distinctness and identity. Table 3 gives an overview of this anthropological system in comparison with philosophical results and the characteristics of contemporary development models.

Ontology Interiority - Physicality	Worldview / Religion	Idealism ⇒ everything is subordinate to the ideal Materialism ⇒ everything is subordinate to matter / fundamental particles	Can be regarded as Monism and Dualism - Dualism is subordinate to Monism	Orientation (Fixation)
Analogism distinct - distinct	• Platonism (ideal forms) • Monotheism (Judaism, Christianity, Islam etc.) • Buddhism (alteration of substances) - common principle is Nirvana • Daoism • Hinduism • New Age • Naturalism (quantum field)			main principle / common structure or substance
Totemism identical - identical	• Totemism (identification between group an totem, but world consists of many totems → ancestry to dream-beings)			identification with totem → ancestry to dream-beings
Naturalism distinct - identical	• Naturalism (separation between nature and culture / mind and matter) • Monotheism (separation between world and God) • Platonism / mathematical universe (separation between ideal structure and			physicality: interiority is subordinate to physicality

	particular instances → idealism) • Quantum field / elementary particles → materialism			
Animism identical - distinct	• Hinduism (Atman inside, Brahman outside → same substance) • Shamanism • New Age • Naturalism (quantum field common in physicality and interiority)			interiority: physicality is subordinate to interiority

Table 3: Column one and two are adapted from Philippe Descola's anthropological description and classification of worldviews in different cultural groups all over the world (Descola 2013), although the multiple mentions in column two have been adjusted by the author. For example, in Descola's description naturalism found a stricter classification and was not viewed with a different ontological focus.

The worldviews appear several times in the lines because they can be viewed with a different focus, i.e. they show aspects of more than one ontology. The three ontologies - totemism, naturalism, animism - are subordinate to analogism, because for the connection between self and world there is an identification or fixation in each that can be traced back to analogism. In analogism, outside and inside or macrocosm and microcosm (physicality and interiority) are equalized by a connecting principle, by a common order or substance. In naturalism and animism, the focus on this connection is only shifted outwards or inwards, but the connection remains. In the case of totemism, a direct identity between outside and inside is

assumed, which, however, has for all different totems an analog in the dream world and, thus, also represents a kind of Platonism. The personal fixation/orientation takes place on the connecting principle (analogism), identity (totemism), the outer world (naturalism), or the inner world (animism). But since in animism, naturalism and totemism there is a subordination to a connecting principle between outside and inside, all three ontologies are subordinate to analogism and the fixation lies ultimately, despite different emphases, on the connection between self and world. The main characteristics of the four types of ontologies can be summarized to materialism and/or idealism, which in turn can be viewed both dualistically and monistically. However, dualism can be regarded as a subordination to monism, since in dualism there is a hierarchy, a superordinate principle that determines everything, here namely the ideal or matter.

3. Jaspers' psychology of worldviews and the process of differentiation

Jaspers, in contrast to the above described stage models, describes development as a process of differentiation in different dimensions, but he also describes the subject-object separation as fundamental for the formation of the self and of worldviews: "[thus] the psychological view sees attitudes from the perspective of the subject and worldviews from the perspective of the object"[1] (Jaspers 1919, 122). In this regard worldviews are "the totality of the objective content that a person has"[2] (Jaspers 1919, 122). It must be noted that Jaspers' concept of 'separation' should be understood differently from that in contemporary development models. Since he uses the concept of differentiation, it means more a splitting off of new relationships rather than the separation between subjective identification and objective possession (object-identification and object-separation). The human being grows into an autonomous world of the general through which the worldview shows its objective quality:

> "We see the human being, as the center, in a circumference. In the attitudes we see functions that take possession of the objective, the periphery (of the circular) is this world of the objective, in which the

> human being is included in the subject-object separation. [...] we can call the worldview the shell in which the psychological life is partly captured, but which partly is able to create it itself and to expose it to the outside world."[3] (Jaspers 1919, 122)

This shows the interdependence, the relationship between self and world. He goes on to explain that we always live in such a shell and involuntarily consider the outer horizon of our worldview to be an absolute one. During the development, however, a differentiation takes place in relation to this outer horizon and beyond. Jaspers distinguishes three types of worldviews, which in the human being are always existing together and pervading one another (Jaspers 1919, 126-127): (1) the experienced world, fused with the soul, which is not formulated or objectively known, but which is highly effective. It can be observed and described from the outside, but the experiencer does not know anything about it. (2) The objectified, known world, which is placed in front of the individual and about which information can be provided. This world can still fuse with our soul, but it is consciously perceived as being outside of us. Through an infinite process, a growing world emerges from this fusion in the outside and inside. As if on the edge of the known world there is an infinity, which, although unknown, shows its effect and allows the objectification process to continue. (3) The world which is known but not experienced, which is psychologically not effective. Thereby, worldviews are externally adopted without the soul being grown together with them. They are known but not experienced. These three types of worldviews always shape one another. That is, even if they exist simultaneously, they influence and change one another (Jaspers 1919, 128). According to Jaspers, this is what defines the development. He characterizes four different processes of differentiation, i.e. the ways in which development takes place. (1) The objectification from the inside, i.e. something that has been experienced is objectified. This progresses in an infinite process. (2) The expansion of the ability to comprehend and experience in a broader perspective, which means that new approaches arise. (3) The fluctuation between the development of a directed, ordered worldview and the chaotic flowing of new content which

is not directly incorporated into the system. Only through the synthesis the process of differentiation arises. (4) Perhaps the most important process of differentiation is that of the unfolding of the worldviews themselves, since it affects all worldviews. The first three processes describe the way in which the worldview develops. The fourth describes the series of worldviews that follow each other. Jaspers characterizes this series of worldviews as an unfolding "from the immediate horizon of the individually centered world to absolute infinity"[4] (Jaspers 1919, 129). He also describes this as an order of worldviews, in which the starting point is the immediate, that lies before the subject-object-differentiation (S-O-differentiation) of self-awareness. Then the S-O-differentiation takes place and we are surrounded by the concrete, tangible world. The S-O-differentiation continues in a long series, in which further reference objects are formed in the course of development. During this series of S-O-differentiation, a first leap behind the concrete things takes place, in which times and possibilities are included, and then a second leap to the infinite, in which the worldview no longer has any limits in its expansion and the individual things themselves become limitless and infinite. In the end, the S-O-differentiation closes again, which he describes as a "function of the infinite moving mind"[5] (Jaspers 1919, 129). With this S-O-closure, the absolute infinity in the expansion of the world and in the individual things is recognized. In the psychological observation there is no specific worldview found anymore, but the worldview becomes pointless, i.e. non-representational, and blurred in infinite possibilities (Jaspers 1919, 128-129). Since in Jaspers' description the absolute infinity is always in the background as a fundamental direction of orientation, which is always perceived either unconsciously or consciously, the S-O-differentiation must here be understood more as the establishment of new relationships than as a division between object-identification and object-separation (or object-possession). In the case of the latter, orientation is only directed towards these two objects, whereas in Jaspers' description, due to the absolute infinity in the background, there can be no

fixation on this S-O-separation, since the fundamental orientation is on absolute infinity.

Jaspers describes this infinity of the S-O-closure even more precisely: it is significant that it cannot be grasped "conceptually" (Jaspers 1919, 130). But, it is important to distinguish that conceptualization does not necessarily mean limitation, since we can also have concepts of openness or chaos. We can have a concept of absolute infinity by describing it as open, unstructured and without limitations in the quantity and nature of properties, for example. The conceptualization Jaspers is referring to is a structured, formalized one that leads to some form of limitation (in any way) and thereby creates a kind of object, as described above in relation to the object-identification, in which the individual identifies with properties of the background. That is why he deliberately chooses the expression of *absolute infinity*, as it has no formalization or structuring, since every infinity that is structured or put into a (formalized) concept has itself become finite as an object (Jaspers 1919, 130). This specific characteristic of absolute infinity is recognized in the last step. But the infinity itself does not become a worldview, it is rather recognized as a necessary presence of orientation, and "the worldview in infinity cannot be crystallized as a shell"[6] (Jaspers 1919, 130). This means, worldviews are still there, but they are unfinished and fluid. The individual is aware that every concept of the self and the world is aligned with absolute infinity (Jaspers 1919, 129). This characterizes the S-O-closure.

When we now consider contemporary knowledge about the world from different areas of science, it turns out that only this openness of worldviews and the orientation towards absolute infinity in Jaspers' description can satisfy the addition of new knowledge, and that every development model that contains a closed worldview has to fail, because of new evolving worldviews and knowledge. Let us first consider the results from philosophy and mathematics. In contemporary ontology (for example: Badiou 2019; Gabriel 2015b, 2015a; Meillassoux 2010), the world is increasingly identified with infinity, and closed worldviews are repressed. These theoretical insights are found, for example, in the New Realism (Gabriel 2015b, 2015a)

or the Speculative Realism (Meillassoux 2010) and have shown that the concepts of the world and the absolute must be abandoned for a constitutively open infinity of substantial and systemic plurality, where also time and contingency are included. This core idea is not new. It can already be found in Spinoza's metaphysics, which is based on an absolutely infinite substance that consists of an infinite number of attributes, each with an eternal and infinite being (de Spinoza 1976, 4). Or, in Martin Heidegger's *Being and Time* (Heidegger 2010, 1967) in the *ontological difference* between entities and their *being*, in which the *being* (we can say the constitutive background of each entity) determines entities as entities. At the basis of this argument lies the characteristic of any form of unity: a unity should embrace everything completely, but it does not include itself as an element (Badiou 2019; Gabriel 2015b; Meillassoux 2010). This argument can also be described mathematically, because it is a fundamental problem in set theory. It describes that the set of all sets (Cantor's theorem) can never be formed, since every set contains its elements, but not itself. Hence, ever larger sets are formed, which can be transferred even to infinite sets. This means that through exponentiation, infinitely many levels of differently powerful infinities can be created (for an overview see: Rucker 2005). There is no largest infinity. This is what Jaspers identified as structured infinities that are no real infinities (Jaspers 1919, 130). When we build systems of infinities of different cardinality, we create new objects that can be separated from a higher cardinality. Cantor has shown that every actual infinity or system of infinities, no matter how complex, necessarily requires a larger background to define it:

> "In order to utilize a variable factor in a mathematical consideration, the 'area' of its variability must, strictly speaking, be known beforehand through a definition; this 'area' cannot itself be something changeable again, because otherwise there would be no fixed basis for consideration; so this 'area' is a certain actual infinite set of values."[7] (Cantor 1932, 410-411)

That is why Jaspers purposely referred to absolute infinity and described any other infinity as not sufficient. In addition, Jaspers had described the series of S-O-differentiations as

interdependent. That is, every newly recognized feature to which an object relationship is established is part of its relationship to the background (Jaspers 1919, 128), as also Heidegger described the *ontological difference* as the necessary connection between every entity and it's *being* (Heidegger 1975, 2010).

But, not only in philosophy and mathematics, also in cosmology, where the radius of our knowledge has been more and more extended in the last hundred years, the newly acquired knowledge resulted in seeing our cosmos as just one part of a larger 'multiverse', i.e. considering infinitely many possible world realizations, as well as seeing the natural constants as being variable (Barrow 2005; Barrow and Webb 2005; Guth 2000; Linde 1983, 1986; Vilenkin 2007).

The achievements of modern philosophy, set theory (e.g. Cantor's theorem) and the advances in the cosmological sciences are only examples of how the human mind has broadened its horizons in all areas of science and cultural development. They show that the newly obtained knowledge is becoming more and more complex and diverse. A development model that wants to endure over time must be open to new knowledge. Development models that contain a specific worldview are static and will be overtaken by changes. In addition, they imply another problem: as described in the introduction, they assume an identification with the integrating background. In Jaspers' description, on the other hand, the relationship to the background remains open. In his psychology, the individual always moves at the interface between inner experience and the surrounding, objective world. If an identification occurs with content (or images) of the unconscious, or later in the (supposed) end state with the conscious, structured concept of the absolute, as in the stage models assumed, it harbors the risk of ego inflation, as described by C.G. Jung (Jaffé 1983, 91; Jung 1999, 27-29). Altogether, an orientation towards the foreground, to the parts of object-separation, as well as towards the background, to the parts of object-identification, and also a fixation on the connecting principle between self and world, in which the goal is to pull the ego out of the world (to transcend the world and

the self) and at the same time to identify with an object-like concept of the absolute, cause an imbalance in the self. As Jung wrote: "That idea, that we can sublimate ourselves and become entirely spiritual and no hair left, is an inflation. I am sorry, that is impossible; it makes no sense. Therefore we must invent a new scheme, and we speak of the impersonal. Other times may invent other terms for the same thing." (Jung 1999, 29) As we have seen, instead, recognizing the orientation on absolute infinity as our natural alignment (with an openness of worldviews inside), as described by Jaspers, can on the one hand explain the unfolding of new knowledge, but it is on the other hand also a fundamental part of psychology: absolute infinity is not a final point in the development, it is the necessary component towards which development and the formation of the self are oriented (Jaspers 1919, 129), without limitations and, hence, identifications. Through the orientation towards absolute infinity, the self is thrown back to its own existence and *lives* the relationship between inner abilities and external requirements instead of identifying with it or one part of it.

NOTES

[1] Translation by the author. Quote in the original language: "[so] sieht die psychologische Betrachtung vom Subjekt her Einstellungen und vom Objekt her Weltbilder".

[2] Translation by the author. Quote in the original language: "die Gesamtheit der gegenständlichen Inhalte, die ein Mensch hat".

[3] Translation by the author. Quote in the original language: "Den Menschen als das Zentrum sehen wir gleichsam in einer Kreisperipherie. Vom Menschen sehen wir in den Einstellungen Funktionen, die sich des Gegenständlichen bemächtigen, die Peripherie ist diese Welt des Gegenständlichen, in die der Mensch in der Subjekt-Objekt-Spaltung eingeschlossen ist. [...] wir können das Weltbild das Gehäuse nennen, in das das seelische Leben teils eingefangen ist, das es teils auch selbst aus sich zu schaffen und nach außen zu setzen vermag."

[4] Translation by the author. Quote in the original language: "vom unmittelbaren Horizont individuell zentrierter Welt bis zur absoluten Unendlichkeit".

[5] Translation by the author. Quote in the original language: "Funktion des unendlichen bewegten Geistes".

[6] Translation by the author. Quote in the original language: "das Weltbild im Unendlichen ist als Gehäuse nicht kristallisierbar".
[7] Translation by the author. Quote in the original language: „Damit eine [...] veränderliche Größe in einer mathematischen Betrachtung verwertbar sei, muss strenggenommen das ‚Gebiet' ihrer Veränderlichkeit durch eine Definition vorher bekannt sein; dieses ‚Gebiet' kann aber nicht selbst wieder etwas Veränderliches sein, da sonst jede feste Unterlage der Betrachtung fehlen würde; also ist dieses ‚Gebiet' eine bestimmte aktual unendliche Wertmenge."

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Cordelia Mühlenbeck's research interests lie in the combination of phenomenology, meta-theory of psychology, philosophy of mathematics, metaphysics, ontology and the psychology of world views. Thus, she published articles in the fields of metaphysics and philosophy of mathematics, phenomenology and the psychology of symbolic cognition and world views. Her recent publications are: Mühlenbeck, C., Pritsch, C., Wartenburger, I., Telkemeyer, S. and Liebal, K. (2020) "Attentional Bias to Facial Expressions of Different Emotions – A Cross-Cultural Comparison of ≠Akhoe Hai||om and German Children and Adolescents". Front. Psychol. 11:795. doi: 10.3389/fpsyg.2020.00795; Mühlenbeck, C. (2018). "Gabriels Sinnfeldontologie: Konsequenzen für Raum und Zeit und die Perspektiven der Mathematik". In: Georges Goedert und Martina Scherbel (Hrsg.). Perspektiven der Philosophie. Neues Jahrbuch, 44, S. 220-241.

Address:
Cordelia Mühlenbeck
Medizinische Hochschule Brandenburg – Theodor Fontane
Department Psychologie, Qualitative Forschungsmethoden
Fehrbelliner Str. 38, 16816 Neuruppin, Deutschland
Email: cordelia.muehlenbeck@gmail.com