Sinnkritisches Philosophieren

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Einleitung

In den vergangenen Jahrzehnten ist es still geworden um das Projekt philosophischer Sinnkritik. Schien es doch, als sei dieses Projekt zu sehr gebunden an die Sprachphilosophie des Wiener Kreises und des Logischen Empirismus. Sinnkritik war die spezielle Wendung, welche die Sprachphilosophie des 20. Jahrhunderts dem modernen Projekt der Metaphysikkritik gegeben hatte. Eine entsprechende Dringlichkeit konnte hier die Aufgabe gewinnen, Sinnkriterien zu fixieren, mit deren Hilfe sich sinnvolle von sinnlosen Aussagen unterscheiden lassen sollten. Rudolf Carnap etwa glaubte bekanntlich, auf diese Weise metaphysische Rede insgesamt als sinnlos ausweisen und so Metaphysik überwinden zu können (Carnap 1932). Für dieses Projekt spielte die Formalisierung und Mathematisierung der Logik durch Frege und Russell eine wichtige Rolle. Fast noch wichtiger aber waren bestimmte Vorstellungen davon, welchen Kriterien die Bedeutungsfestlegungen für das nichtlogische Vokabular genügen sollten, mit dem den logischen Formeln Gehalt, Bedeutung und Weltbezug zu sichern war. Wie mussten die Definitionen akzeptabler Begriffe aussehen, damit sie der sprachphilosophischen Sinnkritik standhalten konnten? Klar schien zu sein, dass die Kriterien schärfer sein mussten als in der traditionellen Definitionslehre, z. B. in der aristotelischen Logik. Dem Wiener Kreis und dem Logischen Empirismus schien eine Einschränkung zulässiger nichtlogischer Termini auf empirische, d. h. empirisch kontrollierbare Bedeutungen sinnvoll.

Aus der historischen Distanz zeigt sich deutlich das Eigentümliche dieses Projekts der Sprach- und Sinnkritik. Manche Autoren haben versucht, eine Verwurzelung des Logischen Empirismus in der klassischen Philosophie der Neuzeit, vor allem der Aufklärung nachzuweisen. Farhang Zabeeh (1960) und Barry Stroud (1981) wollten zeigen, dass David Hume ein Wegbereiter der metaphysikkritischen Sprachphilosophie ist; Peter Strawson (1966) unternahm einen analogen Versuch mit der theoretischen Philosophie Kants. Und zweifellos gibt es Parallelen zwischen der metaphysikkritischen Haltung Humes und Kants einerseits, der Ablehnung von Metaphysik im Logischen Empirismus andererseits. Aber weder Hume noch Kant wäre es eingefallen, metaphysische Rede als sinnlos und sprachwidrig zu kritisieren. Es ist eine Sache, der Metaphysik die Überschreitung von Erkenntnisgrenzen vorzuhalten, wie es Hume und Kant tun. Eine ganz andere Sache ist es, ihr Sinnwidrigkeit vorzuwerfen. Humes und Kants Kritik respektiert zumindest das metaphysische Anliegen; der Logische Empirismus leugnet dessen Berechtigung im Ansatz. Vorläufer einer derart radikalisierten Metaphysikkritik finden sich weniger in der klassischen neuzeitlichen Philosophie als vielmehr im radikalen Nominalismus des 19. Jahrhunderts, bei Max Stirner, Friedrich Nietz-

Henrike Moll

Ontogenetic precursors of assertion and denial

> Der Mensch ist nicht ein Tier, das sprechen kann, sondern seine Sprache ist die Manifestation einer von der des Tieres unterschiedenen Seinsweise.
>
> F. J. J. Buytendijk, 1958, S. 84

A common idea among philosophers and linguists is that the critical difference between human and animal cognition lies in the ability to state and negate propositions. One variant of this idea was recently posited by Reinhard Brandt in his book "Können Tiere denken?". What I will argue and provide evidence for in this paper, is that there are many dramatic differences between human and animal cognition beyond and *prior to* making judgments. Long before children have refined their conceptual capacities to a degree that allows them to state explicitly or deny propositions, their cognition differs drastically in all kinds of ways from that of animals. The ability to string conventional symbols together with the intent to claim that things are thus-and-so probably does not emerge before toddlerhood, and a full apprehension of the predicates "true" and "false" is not in place before school-age (Olson, 1999). But even infants perform various early linguistic, but also quasi- and pre-linguistic acts that can be seen as precursors to judgments for which there are no analogs in animals. Judgments are thus only the tip (or some other part) of the iceberg of unique human cognition.

First, I will take a look at pointing gestures and early verbal productions dubbed "holophrases", both of which emerge during infancy. These referential acts, which are often used in combination, can be regarded as "proto-declaratives" (Bates, 1976) because the child points out something for us to attend to as a topic. Even though subject and predicate are not yet differentiated, it is here that the stage for predication is set. These efforts to engage other people in joint attention are just as peculiar to humans as are fully developed, structured propositions.

Second, I will trace the development of proto-negations such as rejections, refusals, prohibitions, references to disappeared or missing objects ("All gone!" in English, "Alle-alle" or "Weg!" in German) and lack of success ("Doesn't work!", "Doesn't fit!" in English; "Geht nicht!", "Passt nicht!" in German). Even though animals reject things and can refuse actions, there are marked differences in how rejection and refusal is expressed in humans compared to animals. It is here that I will also disagree with a common claim that negation is beyond the scope of what can be achieved by pointing. As will be shown, young children

often point to locations to communicate what has disappeared, is currently absent, or expected to appear there in the near future.

Finally, I will suggest that one begins to appreciate the whole panoply of differences in cognition and perception between humans and animals, which reflect distinctive ways of viewing the world or environment and acting in it. In line with the quote from Buytendijk, we might be well-advised to stop looking at humans as animals with language, concepts, judgment or negation, and instead conceive of the ability to use concepts and affirm or deny propositions as manifestations of the human mode of "operating", or, less mechanistically put, form of life. It might thus be time to give up the quest for the one unique feature of human cognition, and instead try to get a handle on the *distinct ways* in which members of the various species navigate the social and physical world.

1 Declarative pointing and holophrases

Years before children explicitly state positive or negative propositions (S is (not) P), and linguistically express various attitudes towards them ("I believe that" or "I deny that"), they display a range of "objectifying" behaviors by which they invite others to share attention. At around one year, infants begin to point out and show objects (i.e., things, events, situations) to people in their vicinity. Some, but not all instances of pointing are imperatively motivated, i.e., to get the adult to fetch the indicated object for the child or perform some other instrumental action with it.

But infants often make use of this gesture simply to initiate a joint attentional episode. A proto-declarative motivation is particularly evident when, e.g., not a thing, but an *event* is pointed out, when the object is well outside of everyone's potential reach (the plane in the sky) or in the child's possession already (e.g., something she holds in the other hand). But even if the referent is at short or mid-distance, thereby making imperatives at least possible, declarative points are easily recognized. As opposed to imperatively motivated gestures, proto-declarative ones tend to be vocally accompanied by one prolonged sound with rising pitch instead of a series of short vocalisations (Tomasello, 2008), and by a "sharing look" or smile towards the co-attender (Carpenter, Nagell, & Tomasello, 1998) compared to a plaintive expression in the imperative case.

Animals, including the great apes, do not spontaneously show this kind of referential behavior. Human-raised apes can learn to point imperatively in order to get their cooperative human addressee to provide them with things they desire (Moll & Tomasello, 2007), but have not been reliably observed to use the pointing gesture proto-declaratively—neither for conspecifics nor for humans (but see Leavens, 2012).

Subject and predicate are undifferentiated in the pointing gesture, it lacks propositional structure and is clearly not declarative in any full sense. In contradistinction to a declarative statement, a gesture must be produced within the visual field of the addressee and has to be spatially (but not necessarily temporal, as will be shown below) contiguous with the referent. Neither the presence of any recipient nor spatial contiguity with the referent is required for sentences. For these and other reasons, such as the fact that the pointing gesture cannot be right or wrong in the way a sentence can—even though it can be misleading or lack the common ground that needs to be shared by producer and recipient in order for the point to be meaningful—there is no denying of the qualitative differences between gestures and assertions.

However, pointing and equivalent ways of establishing joint attention set the stage or provide "the context for the development of explicit predication" (Bruner, 1977, p. 287). More than just highlighting a tempo-spatial position like a flashlight, pointing is a "quintessential act of reference, that is, an act by which one human being singles out an object of contemplation and offers it for another human being to consider" (Bates, O'Connell, & Shore, 1987, p. 161). Through pointing, I identify something for us to attend to. My pointing thus presents us with a topic, an object of predication. In fact, infants get impatient and fussy when their points are not taken up by others and fail to be followed by a joint attentional episode (see Liszkowski, Carpenter, Henning, Striano, & Tomasello, 2004). When pointed out, a 'thing', i.e., something that is fully tangled up in the infants' individual activities and explorations, is transformed into an object of joint contemplation or attention (Werner & Kaplan, 1963). Animals perceive and act on things, and primates as well as some species of bird know how to use material in order to access other, desired out-of-reach things or to bring about certain effects. But only humans perceive and attend to objects qua entities to which they can jointly relate with others in triangulation.

Something similar is achieved when infants and toddlers produce single-word utterances. They may say "Truck!", "Off!", or "There!" when, e.g., a lorry is driving by, her parent just took off their shoe, or the family dog comes running into the room. These one-word utterances (as well as combinations of such utterances with simultaneous manual gestures) have been termed holophrases because they capture the entire situation or scene at once, which would usually afford a whole sentence (Nelson, 2007). The child does not use the expression as a simple label for a particular object or relation, but refers to the whole scene by naming an important part or aspect of it. As in the gesture, subject and predicate are not differentiated. The *deixis* that is achieved manually via the gesture is ach-

ieved vocally with the word. As Heal (2005, p. 39) notes, "Words are,..., an immensely delicate and useful way of pointing". But unlike gestural references, verbal expressions construe the situation under a particular conceptual perspective. One-word utterances thus in addition show the advent of the child's conceptual abilities. One should not to "adultomorphize" these expressions by elaborating them and putting into the child's mouth full sentences that mature language-users would utter, e.g., "A truck is suddenly driving by", "The shoe just came off my foot" or "Jack, the dog, just entered the room". But irrespective of which interpretations seem justified and age-appropriate, it is obvious that the child communicates changes in or aspects of the environment that she considers worthy of joint attention.

Holophrases are not limited to one-word-utterances. Toddlers sometimes utter entire sentences without uniting independent segments in grammatical order. Instead, the child reproduces unparsed adult expressions that she heard others use in previous instances of the same kind—situations which the child perceives as similar to the one that she currently finds herself in. For example, when a 2-year-old hears a car pulling up the driveway, followed by the sound of a door opening, she may exclaim "Mommy's home!", echoing a speech act she has heard her father use in prior cases. She may still be unable to modify the constituents separately, and say for instance, "Mommy is returning" or "My mother is home". So even though the child applies the sentence appropriately (under the right circumstances), she does not manifest the combinatorial skill of logically connecting discrete units. This is particularly evident when, e.g., the child fails to replace the second or third person pronoun with the first person pronoun when speaking of herself.

But despite the inflexibility and rigidity of these "frozen phrases" (Tomasello, 2003), they do not compare to, for example, the vocalizations one can train a parrot to produce. While parrots typically mimick sound with no referential intent or relation to what is currently going on around him (though note that Irene Pepperberg's (2000) grey parrot Alex was able to "report" features of objects presented to him), children spontaneously make use of expressions to draw attention to objects and salient changes in their surroundings that they consider relevant to be shared with others. In a process involving both the breaking-down of longer holophrases as well as the synthesis of words to form entire sentences, the child gradually learns how to make full-fledged assertions or judgments. This developmental progression is very much in line with Pirmin Stekeler-Weithofer's idea that "reproduction precedes representation" (personal communication).

The proto-declarative performances we have looked at clearly show that full-blown judgments do not emerge ex nihilo and are not the first actualizations of human-specific cognition. Many months before children make assertions with subject-predicate distinction and are conscious of the possibility for propositions to be true or false, infants and toddlers place objects in the focus of joint attention, express a desire to share them with other persons, and produce holophrases which, despite their lack of propositional structure, are early imitations of more mature, yet-to-be developed, competences essential for thinking with propositions.

2 Forms of negation prior to denial

Negation is just as central to language as it is absent from nature. It is found in all human communication systems (Horn, 1989), and has been suggested to be "the defining characteristic of the human species" (Horn & Kato, 2000, p. 1). While animals depend on what is presented to them in their perceptual field, humans can use language to say *what is not.*

Truth-functional denial of propositions is surprisingly difficult for children to master and only marks the final step in a sequence of various "families of meaning" (Pea, 1980, p. 161) of children's early productions of negatives such as "no" and "not". Different taxonomies have been proposed, but there seems to be agreement that children progress from an understanding and use of negatives as expressions for rejections, refusals, and prohibitions to disappearances and unfulfilled expectations (e.g., failures), and finally truth-functional negation or denial.

The first acts of negation or proto-negation are affective and volitional: The child expresses a negative attitude to an object she is offered or an action she is expected to perform (see Dimroth, 2010, for a review). Before they speak, infants push undesired objects out of the way, turn their heads away, and actively protest as a way of demonstrating their unwillingness. At around one year of age, they shake their heads to express rejection and refusal. The first verbal negations follow soon thereafter, when infants say "No!" to reject objects and refuse or prohibit acts, followed by negative holophrases such as "Don't want to!". Unlike, e.g., domesticated animals such as dogs, which may also reject their food or refuse to show responses they were trained to perform (e.g., when commanded to "sit" or "stay") human infants express indignation and a sense of being wronged by the one imposing a demand or making a request. They take offense and act as victims. Pouting, crying, stamping one's feet and folding one's arms in front of one's chest, throwing oneself on the floor, and giving a parent "the evil eye" are all communicative ways of expressing that the expectation towards the child is considered mean or unjust. They also convey that the offer or request shall not

be repeated. Compared to those of animals, human rejections and refusals are thus communicative and confrontational. We see here early manifestations of what Strawson (1962) called reactive attitudes.

The second kind of proto-negation that surfaces at around 1.5 years of age, are references to disappearances. Disappearance and reappearance are among the first things that parents and infants pick up in their "early conversations". An object's disappearance is exciting and constitutes a salient change in the environment, even when the disappearance was highly predictable and expected, as in peekaboo and other "hiding" games. Imagine an infant looking at a water fountain in a park. As it turns 5 pm, the fountain is shut off and the water goes down in the basin. The child points to where the fountain was and says "Gone!" In contrast to rejections and refusals, in which the child reacts negatively to the immediate presence of something, she has to hold the object in mind to refer to its disappearance. A sense of object permanence is thus a prerequisite for this kind of proto-negation.

These behaviors also show that there is some room for negation, or at least proto-negation, in pointing. The child points to the sky where the fountain no longer is. At around the same time, infants point to places from which objects are missing. For instance, an infant might point to the empty cookie jar to indicate the absence of cookies—maybe exclaiming "All gone" as she points. In contrast to the fountain example, the child did not witness anything disappear. It is thus not the change from presence to absence that captures her attention. In both cases, the referent is not the locus to which the child points (the sky or the cookie jar) but the object that disappeared or is absent from it. There is at least one further type of situation in which children point to what is not there. Let us take another look at the example cited above with the child's mother returning home. In anticipation of her mother appearing there in a few moments, the child may already point to the door as she hears the car pulling up the driveway. Here also, the referent is not the door, but the expected near future event of her mother coming in.

We have thus identified three different kinds of scenarios in which children point to absent objects: a) disappearance, in which children point to something that is no longer present, b) typical location: the child points to something that is usually located at the indicated place but currently absent, and c) anticipated future events. I would therefore argue that it is possible to point to things and events that are currently absent, as long as the gesture is spatially contiguous with an object's past, typical, or future location.

Also in the second year of life, infants begin to verbalize failures. For example, a 15-month-old might attempt to push a wooden block through a hole that is cut out for a different geometrical shape, thus resulting in a failed attempt. The infant then raises her arms to her shoulders, with the palms of her hands facing up and outward, exclaiming with a tone of (feigned) disappointment: "Doesn't-fit!" These combinations of gestures and verbalizations are produced when, despite all efforts, an intention remains unfulfilled and a problem unsolved. Just as early utterances like "Mommy's home" are frozen phrases instead of full-blown positive assertions, utterances like "Doesn't fit" or "Doesn't work" are not full-blown negative assertions either, but unparsed negative expressions.

At around 2 years, children use negative particles when they disagree with what has been said. For example, when a person says "This is an apple!" while pointing at a car, children will protest and exclaim "No!" (Pea, 1980). Elliptical negations like these show that the child rejects her interlocutor's misuse of language. (They will do the same when presented with simple yes-no-questions that afford a negative answer: "Is this an apple?" "No.") These early forms of denial are thus expressions of a negative attitude towards preceding statements, but they do not yet allow for truth-functional negation. In fact, it has been demonstrated that children below the age of 6 years make wrong judgments when they are asked to evaluate the truth of negative propositions (Olson, 1999). For instance, when presented with a picture showing a man wearing a hat, 5-year-olds judge the sentence "The man has no hat" as true (or correct, or ok). When shown a picture of a cat, they judge the sentence "This is not a dog" as false (incorrect, or not ok). It seems that rather than assessing the truth or falsity of the proposition, these younger children express their disagreement or agreement with the speaker ("YES, the man DOES wear a hat" and "NO, it's NOT a dog") or their approval or disapproval of the positive predication (the hat-wearing or dog-being). At any rate, the findings suggest that truth evaluations of statements are a fairly late achievement in conceptual-linguistic development.

3 Concluding remarks

What I hope to have shown is that many behaviors that ontogenetically precede full-fledged assertions and their negations are just as specific to humans as these manifestations of mature thought. Not only judgments and denials are absent in the animal kingdom, but so are proto-declarative gestures and holophrases, as well as refusals, rejections or prohibitions that are brought forth with indignation and protest. Dogs certainly do not affirm or deny propositions, but they also do not shake their heads and pout at their owner when he puts them on the leash.

The multitude of differences suggests that it might be time to terminate the anthropological quest for the one missing link between animals and humans, as

elegant as such a 'solution' might appear. As Ryle (1962/2009) says, it seems "over-stingy" (p. 432) to equate the critical difference with the ability to deal with propositions. Importantly, the reason why one should stop trying to extract the *differentia specifica* is not the same as the assimialionist's who sees human and animal cognition as lying on a continuum. Instead, my goal was to point out drastic differences that one finds from the very beginning in ontogeny.

In psychology, it was Vygotsky who showed how a child, because she is human, does not develop her perceptual and attentional capacities in direct continuation of those found in apes because her dawning conceptual understanding alters everything else along with it. In philosophy, Herder (1772/1966) made a similar point when he stated that "Der Unterschied ist *nicht in Stufen oder Zugabe von Kräften*, sondern in einer *ganz verschiedenartigen Richtung* und *Auswickelung aller Kräfte*" (pp. 26/27). Philosophical anthropology and comparative psychology today should press further in the direction outlined here.

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