DEVELOPING *ANSCHAUUNG* AND LOGICAL FORM IN KANT'S TRANSCENDENTAL ANALYSIS OF OBJECT-RELATED EXPERIENCE

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Abstract: It is often overlooked that Kant's *Critique of Pure Reason* is not just an enterprise to understand the transcendental function of synthetic a priori truths, but to give an analysis of propositions with empirical content, too. This means, that Kant's enterprise is a *semantical* one in a much more challenging sense than the pure formal semantics after Tarski, Carnap, and Davidson, where the whole issue was a formal concept of truth as we use it already inside pure mathematics. Therefore, and only therefore, writers in this tradition can withdraw into different forms of (semantical) deflationism and merely pro-sentential theories of truth. The task of a full fledged semantics is, however, the clarification of the relation between language and the world. Kant's semantical analysis of this relation starts with a reflection on *Anschauung*. I propose to reconstruct the object of such an *Anschauung* as *the present field of observable things and movements*. Kant then turns to the *forms of judgements* (as we know them more or less from traditional logic), and develops *semantical categories* and *basic principles of pure understanding*. They explicate, so to speak, how the categories are applied to the specific domain of the objective empirical world, mediated by possible *Anschauung*.

As I have shown in my *Sinnkriterien* (PADERBORN, 1995), Kant's logic does not focus on recursive definitions of truth-conditions for the sentential operators, quantifiers, and logically complex predicates. He only uses the traditional disambiguations of the different quantificational readings of the noun phrase ("the/a lion" can mean all lions: generality, some lions: particularity, or a specific lion: singularity), the different negations of the verb phrase (4 is no prime-number vs. 4 is not beautiful), different relations in a sentence (expressed by the copula) or between propositions (like implication or disjunction) and different modalities (necessity, possibility, contingency). Kant seems to realize the importance of the contrast of tense or grammatical time attributed to the different *copulae* that connect noun-phrases ('subjects') with verb-phrases ('predicates'). That is, the *different copulae* or *tenses* as 'is' and 'was' or 'is doing' and 'will be done' make the (modal) *time-relation* between the speech act and the situation of reference explicit including the time-structure of processes referred to, especially in view of their (expected or actual) results. In fact, Sebastian Rödl shows in his important book *Kategorien des Zeitlichen* (Frankfurt 2005), that Frege's logic is purely formal because it lacks any such contrast and can serve, therefore only in an analysis of mathematical, as such time-independent or 'eternal' sentences. As such, it is totally inapt to articulate (the logical form of) empirical statements properly. The result is a too narrow notion of (formal) semantics altogether, as we find it throughout Analytic Philosophy in the 20th century.

Keywords: Kant; semantic; *Anschauung*.

0. Introduction

It is often overlooked that Kant's *Critique of Pure Reason* is not just an enterprise to understand the transcendental function of synthetic a priori truths, but to give an analysis of propositions with empirical content, too. This means, that Kant's enterprise is a *semantical* one in a much more challenging sense than the pure formal semantics after Tarski, Carnap, and Davidson, where the whole issue was a formal concept of truth as we use it already inside pure mathematics. Therefore, and only therefore, writers in this tradition can withdraw into different

forms of (semantical) deflationism and merely pro-sentential theories of truth. The task of a full fledged semantics is, however, the clarification of the relation between language and the world. Kant's semantical analysis of this relation starts with a reflection on *Anschauung*. I propose to reconstruct the object of such an *Anschauung* as *the present field of observable things and movements*. Kant then turns to the *forms of judgements* (as we know them more or less from traditional logic), and develops *semantical categories* and *basic principles of pure understanding*. They explicate, so to speak, how the categories are applied to the specific domain of the objective empirical world, mediated by possible *Anschauung*.

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1. On the practical form of perceptual reference to objects
1.1 Sensation, perception, intuition

Let me begin with some terminological remarks; for Kant develops a whole system of distinctions in the realm of sensuality (*Sinnlichkeit*). This sensuality or sensualness is not just *animal sensitivity*. It is, rather, the whole faculty of *human sensual experience*. *Animal sensitivity* is *irritability*. Hegel uses this word already explicitly. *Irritability* is the faculty of an organism, or

some of its parts, to react in a certain way on *stimuli* from outside or inside. Kant talks also of (inner) *sensation* (*Empfindung*).

There are some widespread misreadings of Kant's terminology, especially in Anglophone philosophy. Therefore we need an explicit, and radical, reconstruction, for example for Kant's differentiation between perception (*Wahrnehmung*) and apperception (*Apperzeption*). *Apperception* traditionally means that, what is perceived, is already brought under concepts. I.e. the perceiver already actively brings concepts to (*ad*) his perceptions. When he realizes this conscious activity, he does so self-consciously.

The German word "*Anschauung*" then stands for *objective intuition*, i.e. for the general form of all kinds of *observations*. In fact "*observation*" expresses the relation of the subject to moving and changing objects rather better than "intuition" since the latter has too many merely subjective connotations.

Altogether, we should neither underestimate Kant's terminological consciousness nor overestimate the sometimes time-bound, sometimes idiosyncratic ways in which Kant tried to articulate the things he wanted to say. Instead of complaining about possibly misleading connotations and perhaps still vague metaphors in Kant's writings, we must use the principle of charity, which, in fact, is a principle of understanding. It asks us to give texts the best interpretation *de re* possible. The expression "*de re*" means here that we as the readers are responsible for sticking to the *relevant topic*. Or rather, whoever says that it is X that an author talks about, it is already he, the interpreter, not the author, who has to decide about the topic X and the (presupposed) identity conditions for subjects or objects that are talked about, as R.B. Brandom famously has shown (in his *opus magnum*, i.e. in *Making It Explicit*). I.e. we have to reconstruct the relevant 'ideas' and arguments and then stick to the thoughts thus reconstructed rather than to mere 'letters'.[1]

According to my reconstruction, (inner) sensations contain all kinds of 'feelings', from pain to pleasure, even moods, not only impressions that come form outside. As such, they are often not yet distinct feelings. Only in the whole context of making distinction, we also distinguish inner sensations. Unfortunately, Kant does not make this issue too clear. But if we would identify *Sinnlichkeit* with sensitivity and sensitivity with *Empfindung* (inner sensation), as

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[1] I.e. we must judge about topically and thematic equivalent but possibly different ways of articulating what we count or should count as essentially the same thoughts and arguments. For doing so, we need not only translations from German to English, but from Kant's language into our new and different, somehow often more developed, ways of articulating our logical analysis. In other words, we better postpone the usual student-like inclination to premature criticism to a stage after we have understood what is at issue. According to my judgement, this maxim was hitherto all too rarely followed in Anglophone discussions of Kant's philosophy in general, of his *Critique of Pure Reason* in particular, as Alberto Coffa's book on the *Semantic Tradition From Kant to Carnap* shows as well as a closure look on Strawson's *Bounds of Sense* and his misreadings of Kant's alleged psychology or on Patrica Kitcher's psychological readings, just to name a few.

some readers seem to do, we already would miss the crucial points in Kant's talk about *inner and outer forms* of our *Sinnlichkeit* as our particularly human faculty of sensual experience. These forms are essentially, as it were, forms of *Anschauung*, i.e. forms of *objective experience based on an actual use of our senses*. Such objective experience is, in turn, an experience *of objects*.[2]

John McDowell uses the word "perception" for *normal human perception*. Therefore he seems to identify *perception* with *apperception*, and sometimes even with *Anschauung* or *apperceptive observation*.[3] In fact, McDowell finds it helpful to say that our perceiving is always already conceptually informed (T. Pinkard). What is perceived is always already brought under the norms or rules of thought. Human perception is always already perception of conceptually determined things.[4] In a sense, there is nothing wrong with this way of putting things. On the contrary; McDowell's attitude to perception makes a very important insight explicit, namely that all the differentiations between 'merely inner' sensations and 'full' perception must be understood as reflective reconstructions *of different aspects* in our *full human experience* of things in the world.

Hegel proposes, accordingly, to talk about different 'moments' of one complex faculty or competence.[5] But precisely this move allows us, somehow pace McDowell, to distinguish between perception in the sense of 'animal perception' and conceptually determined object-related present experience. 'Animal perception' is the way animal behaviour and 'doings' (or mere movements) are guided by their senses. Animals get informed about the world around them in a different way than humans insofar, as human perception always already takes place in a domain of conceptually determined *possibilities*, not only in a realm of *present actualities*. In other words, what I or you perceive is not just a datum that triggers more or less 'dispositionally' (causally, behaviourally) determined reactions. It already stands in a whole order of *possible* things (objects), of *possible* movements (events, states of affairs) of things in the past, at present and in the future, and most importantly, of *possible* individual or joint (cooperative) actions. These possibilities rest on the fact that human perceptions stand, as such, already in a '*conceptual*' relation to 'actual objects' and 'actual facts'. And there is already a relation

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[2] Even though Kant's basic question concerns the limitations of meaningful claims altogether, he also considers, at least in a sideway view, on what structural grounds it is a distinctive feature of us humans to have the competence of taking part in joint objective experience. Kant himself does not say so explicitly. But he silently presupposes that objective experience is a joint human practice, not just a series of episodes in the life of individuals. Hegel fills this important lacuna in Kant's exposition.

[3] Kant's German translation of the word "*intuitio*" is "*Anschauung*". Unfortunately, the word "intuition" has changed its meaning and use in our vernaculars. The Latin "*intuitio*" refers to any kind of objective perception, i.e. to perceptions and observations of things as they presently are there, not to a kind of inner sense. But later, the word "intuitive" refers to some kind of arbitrary and vague decisions made on the ground of some inner feelings.

[4] In the following, I use the word "thing" most of the time for "bodily object of experience".

[5] If we do not like the word "experience", as, for example R.B. Brandom does, we could speak as well of *full knowledge based on perception*.

between *my* perception to *our* (possibly joint) *Anschauung* involved. I.e. each of us already know, first, the *contrast* between *actual* existence to merely *possible* objects or states of affairs, and second, the contrast between '*me*' and '*us*' or, for that matter, between '*the I*' and '*the We*', referring to different 'forms' of our relation to the world. Raimo Tuomela has nicely coined the phrases I-mode and we-mode for these forms. Both contrasts are obviously lacking in animal perception.

But why do I talk about animals at all and claim that they do not have access to mere possibilities? The answer lies in the following claim: An analysis of cognition on the line of thought of Hume's empircism (which is the same as that of modern cognitive theory) is, in the end, limited to *animal cognition*. Our human access to the world in present *Anschauung* already takes place in the *we-mode*. The same holds for our implicit references to possibilities and for the very concept of (conceptual) necessity. All this is not properly understood in any 'Humean' approach to cognition. But precisely joint present *Anschauung* and our access to modalities creates the crucial differences between animal and human cognition.[6]

When we now look at the satisfaction or success conditions presupposed in McDowell's analysis, we see that his concept of perception already contains much more than animal perception; it is even more demanding than Kant's notions of apperception, i.e. a perception accompanied by some conceptual determination of what is perceived (like something of the shape of a cigar or something red). It is (already) *conceptualized Anschauung*. In fact, McDowell already presupposes full blown truth conditions for judgement. Hence, conceptually determined or propositionally explicated human perception is 'true' of X only if X really (i.e. actually) *is there*, not if I just believe it or if it merely seems to me that X is there. As we all know, I can subjectively be happy with believing, on the ground of my sensations, that X is there, without my belief being true. On the other hand, if the success condition were only satisfaction of animal desire (actual fulfilment of actual 'needs'), animal perception would already succeed if the resulting behaviour leads to this satisfaction. There would be no further point of talking about truth and falsehood, at best about survival of the individual or the species.

When we use the word "perception" as a title or label for animal perception, it is at best a kind of moment in full empirical experience. Hence, in this use it is not just a nominalization of the phrase "X perceives Y" applied to humans in its factive or perfective use. According to this use, X can perceive Y only if there is a (or the) Y to be perceived. Therefore, ordinary language analysis shows that, and why, I can justify a judgement that there is a Y by the judgement that I perceive Y. We can also infer from the statement that I (or another person P) perceives that p,

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[6] Insofar as Brandom says this also, and develops modality from conceptual normativity, I could not agree more. I also agree by and large to Brandom's interpretation of Kant and Hegel. I only depart in some details, especially when it comes to the role of a generic *we* or the *jointness* of rationality and reason, or to the role of formal logics in making material inferences explicit.

that 'p' holds (is true) or, in short, that p. I.e. it is totally safe to say that if I (or you, or P, or Q) perceive that p, then I (or you or X,Z) know that p.

But there can go something wrong in all actual uses of factive verbs If this happens, we have to withdraw a claim. We might only have thought that (or it only might have seemed to us such as if) we perceived Y. The drastic paradigm is that somebody assumes that he has killed someone but the victim is, by chance, not dead. In the same way, perceiving something in the full sense is an act of knowing something, even though any singular performance is fallible.

I depart now from McDowell in some aspects; for there are some limitations of ordinary language use analysis, when it comes to understand title-words in our reflections on different aspects of human competence. Kant's terminological distinctions between sensations, perceptions and object-related observation distinguish such aspects. These aspects can be separated from each other only in a special practice of reflection. I.e. we focus on some particular 'moments' of our full human knowledge of empirical objects and do not just use some usual rules governing assertions like "X perceives Y" as guiding orientations. A similar remark holds for the distinction between the receptivity of our sensitivity (perception, *Anschauung*) and the spontaneity of conceptual thinking. If we follow Hegel's proposal to read all these distinctions as applying to aspects or 'moments' of full blown experience, we do not have to and therefore should not understand Kant as a 'constructivist idealist'. I.e. Kant makes such 'moments' explicit, rather than constructing objects out of a manifold of sense-data. Accordingly, we can leave it to mere philology if this is in the spirit of Kant himself or if we have to defend this reading against some of Kant's own remarks about what he is doing. In our reading, at least, Kant does not claim things about some alleged innate forms of inner sensitivity or intuition.

With respect to some fulfilment conditions, an animal can also *err*. Assume that a cat's desire (appetite) is directed to catching a mouse. And assume that the animal misses it. The result is a certain dissatisfaction. At least its reaction is astonishment. But an animal cannot err in the same way as we can do. We can make the target or object of our attention or intention explicit beforehand. And we can discern between merely *subjective feelings of satisfaction* and a *correct fulfilment of conceptually pre-determined conditions*. These conditions distinguish between more or less arbitrary feelings of satisfaction and correct fulfilments. We need such a distinction also when we want to distinguish between states of beliefs (or convictions about states of affairs in the past, at presence, or in the future) and *true* convictions. And we need it when we distinguish real facts from merely seeming, possible, probable or apparent states of affairs. I can err in believing that what I perceive is a violin, not a viola. But there is no question that nothing like this can happen to an animal, as Wittgenstein has pointed out at several places.

Even though the meaning of "*Anschauung*" starts form visual experience, it is clear (to me at least) that Kant also uses it for other object-related present perceptions also, especially

tactile ('*haptic*') or acustic. Smell can be included only if it is object-related. Taste is (usually) not objective enough. In any case, I take it that the difference between mere perception (or *apperception*, for that matter) and *Anschauung* lies in the *objectivity* of the latter. This objectivity presupposes a certain situation-covariance of *deictical reference to present objects and object-related processes* like movements, but also to qualities and changes of qualities. The word "situation-covariance" stands for a whole practice of anaphoric identification and the corresponding inferential norms of proprieties, by which we define the identity of reference form different perspectives.

Kant talks about two classes of forms of *Anschauung*, *space* and *time*. The first one refers to the *spatial ordering of objects* in present *Anschauung*. This means, as I add explicitly to what Kant says, that something is an object of my *Anschauung* if and only if it can (or could) be an object of *your Anschauung* as well. I.e. an object of my observing intuition already lies in the realm of possible access by present *Anschauung*, which is something like *our present perceptual space*.[7] The abstract subject of joint *Anschauung*, the I in the we-mode, is, in a sense, Heidegger's *Dasein*.

Anschauung, as I understand it, is a practical form of identifying real objects in actual experience. This practical form is narrowly connected with practical forms of changes of perspective. It is not easy to describe what we do when we take part in such a practice.[8] But we might find a first hint in Donald Davidson`s talk about "triangulations". The term already makes clear that referring to an object objectively is not just a two-place relation between me and the object. It rather involves a change of perspective between me and you. That is, referring to an object is a three-place relation between me, you, and the object, to which *we both refer*. Unfortunately, Davidson does not say more to this.

In a sense, I cannot refer objectively to an object alone; for I always must be conscious of my subjective perspective, and, hence, of the possible needs of changing perspectives from me to us, from subjectivity to intersubjectivity. This is one of the reasons why Hegel can say that the truth of any conscious relation to an object is self-consciousness: I become aware of my perspectival position. Be that as it may, in order to understand the relevant ideas in Kant's distinction between his Transcendental Aesthetics and Transcendental Analytics, we should carefully distinguish between *being an object of our Anschauung* and being able to *talk or think about* these objects. We can talk or think about an object of *Anschauung* only when we already have words to talk with and symbolic representations to think with. And these representations

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[7] This perceptual space is not just identical with our *visual field*, even though starting the analysis *pars pro toto* with vision might be helpful; for vision is the sense in which we can relatively immediately perceive distances and movements. But we should also include into this fields what we presently (can or could) hear and smell or taste etc.

[8] Our usual metaphorical expressions *empathizing* or *getting into the spirit of somebody* (*or of something*) are not too helpful here; they just rephrase the phenomenon of changing perspectives and do not give a satisfying account.

must refer somehow to the objects. The symbolic representations can be deictical and/or anaphorical like "this stone", they can be already name-like expressions like "the Eiffel tower", they can be real pictures (actually seen), or they can be images in my inner imagination. Such an 'inner' imagination of pictures (or sounds) relates to actualized pictures (or actual sounds) in much the same way as silent talk (in verbal planning) to actual speaking. This relation is, in turn, analogous to the relation between some silent reading to reading the same thing aloud. Of course there are differences between drawing or painting pictures, composing music or writing texts with respect to the time and craftsmanship needed. In fact, the importance of verbal language lies in the fact that we do not need further means when we produce verbal utterances and we can do so fairly fast.

I take it that Kant separates his reflective considerations about what I would like to call *forms of practical reference to objects in the actual perceptual field without language* from his *logical considerations* on *linguistic reference to such objects*. The considerations on our spatial and chronological order of our perceptual field are roughly outlined in Kant's *Transcendental Aesthetics*, the reflections on a transcendental logic of objective reference are developed in much more detail in Kant's *Transcendental Analytics*.

According to my judgements about what is (and remains) relevant in Kant's approach, despite all possible shortcomings of his often not too clear exposition, Kant's deep insight amounts to this: The comprehensive form of *Anschauung* is a form of *our practical attitude* with respect to *objects in our perceptual field*. It presupposes, as Hegel will make clear, that *we together* can refer to *the same object* from different positions of perspectives – if we take these differences of perspectives properly into account. This 'proper account' defines the forms and norms of *one common spatial order*. This order is *space*. I.e. space is the *comprehensive spatial order of all things*. Things 'in space' are always things in this order. And all things are things in space. This is already an analytic statement, if we assume the following verbal definition: A thing is a *res extensa in space*. That is, it is a spatially extended object with a spatial position in the system of all such objects, including our bodies.

It is crucial to see that we cannot abstract here from the perspectival position of me or you as possible observers. This means, in particular, that we must distinguish movement from mirroring. Movements lead to changes of perspectives that keep our orientation in space 'co-variant'. This is a very deep a priori feature of movement and spatial orientation. For example we cannot fit, just by movement, the left hand into a right glove (if we are not allowed or able to turn its inside out). No empirical (i.e. singular or frequent) observation can 'falsify' this most general experience: It lies below or behind our successful spatial orientations.

Brandom seems to think that the mastery of our game of changing spatial perspectives merely presupposes knowledge of thing-constancy. I claim that we need much more. Animals

have some cognition of thing-constancy. But in controlling joint reference, we must not only keep track of the things observed. We must control also of the *directed attention* of our fellow observers. This is the crucial condition for living together in one and only one space of (joint) *Anschauung*. I.e. the idea of the unity of space turns out, amazingly perhaps, as a *form of human practice*, i.e. a social form of human life. It rests on a kind of *cooperation* already in our perceptival relations to things. It is not just an innate hereditary form of our perceptive apparatus. In short, *Anschauung* presupposes *triangulation*. As such it is (*actualising*) *a form of cooperation.*

We need an analysis of the practical form of this cooperation. Unfortunately, this is not the place and time to develop such an analysis further. Only this much can be said already here. The practice, and individual competence, of *speaking* already presupposes some more basic practices and faculties, namely the faculty and practice of *joint reference to things* and *salient objects* in our *joint perceptual field*, including shapes, noises, even smells and, in the end, tastes. This faculty and practice already include some joint orientation of our doings. The complex form of these orientations might be brought under the title 'change of perspective in present joint *Anschauung*'.

As I understand it, Michael Tomasello's outstanding approaches and results in his differential analysis of basic faculties of animals (primates, dogs) and small children show convincingly at least this much[9]: we have to look in much more details into the 'methodological order' of faculties, especially into genetically conditioned possibilities to take part in more and more complicated forms of social behaviour (coordination) and joint practices (cooperation). That is, there are quite some steps that lead us from individual doings to sayings. A first step leads from merely subjective dealings with things and noises around us to the constitution of a joint perceptual field. Only thus, a practice of *pointing* becomes possible. I.e. already highly complex social structure of *deixis* is a systematic precondition for language acquisition. In fact, *we* have to *show* our children the things. And we have to show how to 'play' with the things *and with us*.

In the process of language acquisition, we show how to discern passively and to produce spontaneously the linguistic gestalts of words. We show how these words are used in *language games* (Wittgenstein) and in many other games we play with the things. Showing things always is a part of these games. Of course, when we describe man as *homo ludens* (Johan Huizinga, but also already Heraclitus) we use an analogy. But it is a deep and fitting analogy. It already lies at the ground of the very concept of a *person*, i.e. of a human being that *can play social roles*.

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[9] Cf. M. Tomasello, The Cultural Origins of Human Cognition, Harvard University Press 1999; Constructing a Language: A Use-Based Theory of Language Acquisition. Harvard University Press 2003.

As a result, any methodologically self-conscious empirical psychology, which is interested in human mental capacities, not just in animal perception, must turn somehow into a kind micro-sociology. Focussing on mere preconditions of 'higher rational faculties', for example on behavioural reactions to things and events around us, is by far not enough.

The metaphor of games is important because our usual, superficial, reflection on how we refer to things around us is much too narrow and static. I.e., we tend to overlook the fact that things always play some possible roles in possible games on the side of our practice, in the corresponding contexts of natural processes and events on the side of the world. Only via these 'holistic' contexts things are identified.

In a most general way we might try to express some of these features of things in a statement like the following: All things change some properties and move with respect to each other, including ourselves and 'our bodies'. This is an a priori statement, which is, as we shall see, not analytic. It says that any identification of a thing always already takes place in a world of moving things. This means that we have to trace the path of the movement of the thing if we want to identify it as time goes by. And this means, in turn: We need an order of time as an order of movements when we identify things. We need such an order when we want to talk about things and attribute properties to them. Therefore, Kant's claim that time is the inner form of *Anschauung*, obscure as it may sound at first, can, and should, be read like this: Time is the order of movements from the perspective of a real or possible observer (for example me). I might compare 'inner' sequences of already distinct sensations, like for example, the beats of my heart or, much better, the time beats of a good clock, which I am watching, with the positions of moved bodies (for example relative to my perspectival position). To do this, we usually *count* the beats. We count years, months, days, hours. And we use the numbers in calendars, for dating, and for measuring durations. This is the reason why we need *arithmetic* for 'making time objective', as I would like to put it.

Time is a form of 'inner' *Anschauung*. It is such a form in the following, double, sense: We can start with subjective ways of comparing outer movement with a series of inner events. Or we can say that time is an internal form of change and movement that cannot be viewed as an outer property of things.

Kant develops here some important insights with respect to space and time that go back to Leibniz's criticism, and improvement, of Newton's ideas. The major step of the development consists in the observation that we always need a 'zero-place' of perspective such that we cannot detach time and space from a possible observer. The form of objectivity in our spatial and chronological order of movements and events is *co-variance*; the relevant equivalence relation is *change of perspective.* In precisely this sense, time and space are forms of *our Anschauung*,

neither just properties of *things* nor just properties of *my* subjective inner life of sensations and ideas.[10]

Our spatial and chronological ordering of movement and events in *our* actual (or 'really possible') *Anschauung* is, at the same token, the real practical form of identifying real objects in joint experience. This practical form consists, as we now see, of a whole system of 'moments', i.e. partial forms. There is, for example, a system of practical forms, in which changes of perspective manifest themselves. Its conceptual and empirical investigation in detail has barely begun yet.

In the end, we need *language* in order to make all these forms explicit. With language we can *re-present* forms and things that are not here. But such a representation is, as such, only a representation of a *possible* thing. With the help of language we can *articulate* possible properties of things and possible relations between things. As a result, empirical predicates always 'refer' merely to 'typical', recurrent, possible, qualities, properties and relations of things. In other words, the empirical meaning of predicates is always generic. This is already the deep insight of Plato's widely misunderstood theory of ideas. The same holds for *typical changes and movements*.

Now we can understand Kant's analysis as an attempt to *conjoin* the faculty of thinking (or silently speaking) about *merely possible* things, properties, states of affairs with *Anschauung*. We need actual *Anschauung* in order to distinguish between mere possibilities and actual existence. This is the true essence of empiricism, which has to be saved, whereas we should discard all sweeping subjectivisms, scepticisms and the whole erroneous quest for certainty from Descartes to Hume.

This shows that we have to *connect* Kant's Transcendental Aesthetics properly with his Transcendental Analytics. The form of this connection is analysed by Kant himself under the heading "System of all Basic Laws (Grundsätze) of Pure Understanding". They form the core of Kant's critique, as Heidegger also see in his very good book "Die Frage nach dem Ding". And they articulate how the general statements about the inner and outer form of human intuition or *Anschauung*, i.e. about the chronological and spatial order of things starting with our present perceptual field, relate to logical forms in statements about objective things. Kant himself names the crucial link: It is the time- and tense-structure of predication, as we shall see in some more detail below.

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[10] Of course, we could widen the use of the word "property" in such a way as to include all statements about the spatial and chronological relation between things and events. But then we should remain aware that these properties go far beyond the qualities we can check more or less at present from a local point of view without taking other things and processes in the past and the future into account.

1.2 Apprehension and spontaneity

With respect to conceptually or propositionally contentful human perception (in the full sense of John McDowell), we can, and often should, distinguish between two aspects, the moment of *receptivity*, and the moment of *spontaneity*. Receptivity is somehow passive, spontaneity is somehow active. My sensations are given to me. I do not produce them. Spontaneity is a title for what I do. In the course of perceiving I might do the following. I might say, or just think, that what I perceive is an X, say a violin, not a viola, a rat, not a mouse, an image or a picture, not a real landscape.

"Apprehension" is (the actualisation of) our capacity to grasp or apprehend qualitative empirical distinctions 'empractically'. In a sense, apprehension relates to practically recognizable qualities or properties in present perception. Observing intuition relates to identifiable bodily objects in the present perceptual field. It is the faculty of (somehow joint) distinctions and identifications of qualities (in their relevant respects). This faculty turns into apperception or apperceptive apprehension when it is accompanied or stabilized by explicit conceptual (e.g. verbal) distinctions. The use of such quality words (at first perhaps only as labels, later as predicates) presupposes already the practical recognition of the qualities in question and the 'spontaneous' use of representations (words, symbols, pictures, inner images of imagination). I.e. this use presupposes the capacity of reproducing the correspondent representations at will. Therefore, apperceptive apprehension already presupposes or contains a certain comprehension of conceptual (e.g. verbal) distinctions and of conceptual (verbal) inferential commitments resp. entitlements. This includes the faculty of producing (inferred or presupposed) sentences (propositions) at will. The basic principle of apperception says therefore, that I must be able to accompany any (sufficiently well determined) (re-)presentation by "I think (that it is an X)". In other words, there is always an implicit or possible judgment involved. Therefore, a full analysis of human perception (in McDowell's full sense of already object-realted experience) presupposes the possibility to make the content (referent and property) of what is perceived or imagined (represented in imagination) at least somehow explicit. Without this possibility, the (re)presentation would not be determined (distinct).

The usual use of the word "spontaneous" is ambivalent (in English as in German), just as the word "doing". Sometimes we say that I do something spontaneously in cases when I *just do it.* If I do so without further reasons and plans, we could view it as a result of an *absolutely arbitrary choice.* But such cases of *absolute Willkür* are rare. Usually, we should distinguish between two aspects or moments of spontaneity, a more arbitrary, even somehow passive one, and a more actively controlled one. What I mean is this: When I do something spontaneously, I always do it without being forced from outside to do it. Nevertheless, the very idea or possible

option to do X may somehow come from outside. Think, for example, of cases in which I have seen some advertising and now I make my choice under this influence. But usually I choose a possible option under other possible options. In do not react like a robot, with or without an inbuilt 'mechanical' generator of 'chances'. I usually choose freely between different options, ideas or possibilities. No animal can do that. It is not the place here to show why robots cannot evaluate possibilities. If they 'make choices', they do so on the basis of calculatory schemes or of arbitrary choices we have put into them. In contrast we humans can, and do, reason about content. And we already must do so, when we judge that what we perceive is, indeed, an X, not a Y.

In other words, the *spontaneity of thinking* (for example of thinking that something is an X) has the passive moment that *it might just occur* to me, passively, that what I perceive might be an X. But there is also an active moment of ruling out alternative possibilities, especially the possibility of being a non-X. I.e., in a spontaneous judgement, I rule out the possibility that what I perceive has any incompatible properties to X, i.e. a property Y of a sort that having it contradicts that, what I perceive or what I count as the object perceived, has the property X.

This very distinction between the two aspects of spontaneity is lacking in usual accounts of perception, judgements and actions. This lack of distinction misleads many authors into so called *causal theories of human perception, judgement, and action.* When we perceive something, *a causal force* allegedly produces a *sensation* or *impression* as an *effect* in my body, which, in turn, allegedly produces a kind of 'thought' that the sensed effect *was in fact* causally produced by the object perceived. In such a way, the conceptualization of what is perceived is understood *as a causal process.* The formation of my linguistic behaviour and the tradition of linguistic behaviour in a group of people is seen, then, as a cause of the antecedents.

But in such a causal analysis, the fact is overlooked that we still can, and do, *control* our 'immediate' reactions on what we perceive. These reactions might be causally informed 'dispositions' (e.g. to make this or that conceptual judgment about what I perceive). But then, we often, at least sometimes, control the possibility that, what we perceive, might be really *not an X.* When we decide (judge) that it is an X, we presuppose some such control. And precisely this means that we are *responsible* for the judgment. Only now we can talk of our commitment, which we undertake by making the judgement. This commitment is determined by default inference licenses. Such licenses determine inferential entitlements of a possible hearer (which can turn out to be identical with myself in some silent considerations). The commitment says that we can reasonably, i.e. with good reasons, deal with what I perceive inferentially *as an X.*

This shows, why to perceive something *as an X* is not just determined by a causal process, as it certainly would be in the case of robots and of other automata of information processing. It is determined by some *spontaneous decisions* for undertaking commitments that

take place in a domain of *possibilities,* containing of *alternatives*, including the corresponding structures of default inferences (material inferences) and default incompatibilities and compatibilities (material modalities like *compossibility* and *counterfactually stable necessity*, in contrast to merely factual contingency). This insight of R.B. Brandom is invaluable not only for any reading of Kant and Hegel, but for any semantic analysis of statements and their relations to the real, perceptible world.[11]

But we see now something more: Spontaneity is a form of controlled, in most cases even planned action. It presupposes repeatable actions. We can perform them at will. Thinking is in this sense, like speaking, spontaneous with respect to its *performance*. But, of course, thought in the sense of the *generic content of what is thought* is not something which can be produced spontaneously. In this sense, only thinking, not thought, is spontaneous. The same holds for performances of generic actions or action schemes. It also holds for intentional actions and their 'content' in the sense of the relevant generic action performed.

A known, well-determined, generic action may *occur* to me by chance. I may think of it by chance in the sense that an image or label or verbal description of the possible generic action occurs to me. This might even happen during some verbal planning with respect to some particular speech acts. Then I choose to perform the possible act – or I refrain from doing so. In other words, not the ideas or thoughts as such, but the choice between ideas constitutes the freedom of individual actions. It is this free choice that lies at the ground of all responsibility for our actions. And this free choice turns into free will when it already includes the power of doing what I am committed to do, for example because I promised or intended to do it. In precisely this sense, weakness of the will consists in a lack of power to do what one should do. Most often it is the consequence of a lack of self-discipline, which is needed in all 'practical inferences' that lead us from intending (for example as an act of expressing an intention) to doing. Kant sees with Aristotle that there is a general commitment to develop the *hexis* or *habitus* of being capable to do what I should do (in whatever sense of this 'should'). These philosophers also see the difference between a merely behavioral disposition, as animals have, and the human faculty to act according to one's own judgement or to one's own approved maxims. Whoever is lacking this faculty falls behind the possibility of personal freedom. But this usually does not already mean that he is not responsible for this deficiency, for it may be a result of earlier 'wrong' judgements or decisions in his life.

Only in a less 'thick' sense we may talk about animal spontaneity. Animals do things. But they do not really make choices. If we nevertheless talk that way, we should be aware that they

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[11] Already the sage Bias is told to have said that we should first think, i.e. control our possible speech acts with respect to their expected consequences and possible (mis)understandings, i.e. inferences and commitments, before we speak (or even write). In other words, spontaneity in its full sense leads to consciousness and self control, not to immediate and arbitrary actions or choices.

are only so called choices. It is only us who attribute choices to them. We do so by placing their actual doings into a realm of possibilities. But these possibilities are made up by us. We 'invent' them, so to speak. As such, these possibilities lie far beyond the reach of the animals themselves. This is so because the animals cannot *re-present* or *make present* merely possible alternatives to actual presence. Whoever would claim that they could would have to carry the burden of proof. And this commitment seems much too heavy, for all we know about real human language and the logical structure of reference in distinction to the mere faculty of using signs in present situations as some animals might do, too. In other words, there is no defence for the claim above in sight, at least not in a responsible way.

But if this is so, we can say that animals cannot make choices in our full and thick sense. They cannot choose between symbolically represented possibilities. Such representations might be verbal descriptions or mere labels or titles X. In either case, we must be capable to use them for differentiating between different possibilities, especially between the possibility with label X and the possibilities Y that are incompatible with X. This very fact defines the peculiar *modality* of human spontaneity.

1.3 From apperception to (self-)conscious knowledge

Now we also see why and how apperception and empirical knowledge goes far beyond merely animal sensitivity in the form of bodily movements oriented by actual sensations on the one hand, the desire to fulfil certain relatively immediate (present) satisfaction conditions (like getting something to eat) on the other. That is, hunger and thirst must, as present desires or appetites, be sharply enough distinguished from conceptually and propositionally determined intentions like going tomorrow to the zoo or writing a book. Obviously, the time-structure of fulfilling present desires by present reactions is fairly different from the time-structure of fulfilling intentions by planned actions and by repeating such attempts in different ways and forms if they fail. In the latter case, we invest fairly complicated generic and modal knowledge about possible instrumental means for achieving pre-determined goals.

It is true, (some) animals tend to repeat failed attempts to fulfil their desire by 'animal action' or behaviour also. But there is, as far as we know, no practice of controlling the fulfilment of pre-formulated intentions, for there is no way of re-presenting a content in such a way now that it can be correctly or incorrectly satisfied later. In other words, animal desires are fulfilled precisely when the desire or appetite disappears. An animal cannot distinguish if such a desire is fulfilled in the right or in a wrong way; it cannot, because all its satisfactions and dissatisfactions are merely present states of the animal. Notice, however that this presence has a

duration which depends on relevant processes. It is not just momentary or 'point-like'. It already includes present (perception of) events. Hence, it has a certain 'present past' and a certain 'present future'.

We humans can distinguish cases in which we do not feel any (immediate) desire anymore even though we also know that our earlier intentions were not fulfilled.

Our maxim of reconstructive charity is needed especially when we focus upon the traditional way of talking about consciousness and self-consciousness, as if it were a kind of psychological container for sense-data and content. The metaphorical way of saying that we find such data in our consciousness goes back to Hume and British empiricism, together with a silent identification or non-distinction between *vigilance,* as opposed to different grades of 'unconsciousness', from coma to sleep, *awareness* and *attention* of present events as opposed to distractedness and inattention, and consciousness as a state or attitude of conceptually controlled, intentionally focused and, hence, in some sense *always already self-conscious* directedness of attention. In fact, Locke and Hume replaced the traditional ways of reflecting on the human 'soul', the 'mind' or 'the I' as the (formal) subject of mental competence, or 'the will' as a kind of causal subject of intentional acts by using the metaphor of *consciousness* as a bag for all kinds of mental impressions, recollections and reflections, either induced by my own body or somehow from outside. Until today, this notion, or rather, image or model of consciousness prevails in Anglophone Empiricism or so called Analytical Philosophy. The real notion of consciousness, however, as it can be traced back to the Latin *conscientia*, parallel to the notion of conscience, thematizes the ability, competence and performance of taking part in a joint practice of *controlling* one's own judgements and actions on the ground of conceptual norms that define which judgements are reasonable, are grounded on good reasons.

In empiricism, consciousness is not a name for the actualisation of our competence to control the application of conceptual and other norms of correctness in judgements and inferences, but for an alleged kind of inner life. No wonder that modern cognitive theory stands in this tradition, even when it identifies consciousness with a certain brain-state. A vague talk about the 'biological functions' of the brain replaces then the reflection on the particular use of norms and forms in judgements and actions that define sapience (Brandom) or human reason, in contradistinction to mere sentience (Brandom) as the behavioural form of animal movements guided by animal perception.

Whereas Hume's critique of traditional metaphysics is directed against ontic hypostizations of mental 'entities' like 'the I', 'the free will', 'the immortal soul', it throws out the child with the bathwater. In fact, this is the central insight of Kant's philosophy and, for that matter, of Hegel's development of it. What we need is an understanding of the role such expressions play in reflective analysis on human competence and sapience. On the ofter hand, errors of

traditional *metaphysica specialis* in branches like *rational psychology* (concerning the existence of the soul) and *theology* (concerning the mode of being of absolute truth, the absolute good and absolute beauty) are caused by the fact that we use name-like expressions in such reflections. This fact is misunderstood in naïve psychology and theology. This misunderstanding results from the assumption that these words refer to entities in a transcendent world of things beyond experience.

Our access to transcendent things or *noumena* in a transcendent *mundus intelligibilis* is, allegedly, mediated by pure thinking. Kant's central insight is here this: Pure thinking constructs abstracts domains of discourse that have meaning only in their use as forms of reflection on forms of experience. This still has to be understood properly in Analytic Philosophy. Just as we cannot always prove a claim p just by showing that something is wrong with the claim non-p, it may be that two seemingly contradicting positions *both* are wrong, rational psychology as well as materialistic psychology, rational theology as well as naturalism. In fact, this is the very insight of Kant's and Hegel's philosophy.

Kant agrees with Hume that a major goal of philosophy is criticism of traditional *metaphysica specialis* or dogmatic rationalism, especially with respect to the usual (religious, i.e. Christian and Islamic) understanding of the human soul. But Kant sees that we nevertheless may and must use a 'referential' language in reflecting on the forms and norms of sapience, the competence of the individual person to act according these forms and norms and the different 'moments' or functional aspects (metaphorically: parts) of the 'soul' understood as the unity of a person that can judge and act accordingly.

Hegel later 'solves' the traditional mind-body problem by talking about the *embodiment* of mental competences in the process of person-formation or *Bildung*. His talk about the (objective) 'spirit' of laws or of an epoch, of a nation or of humankind always refers to the underlying (ideas of) corresponding institutions like the state and law, arts and sciences, religions and ethics, whereas the expression "absolute spirit" refers to our stance to objective spirit, and to the *form how we develop* the institutional systems of objective spirit, or rather how we should develop them if we want to do so reasonably. In precisely this sense, the idea of absolute spirit and the idea of reason (*Vernunft*) as the form of developing our institutions with good reasons coincides. Rationality as the mere competence of understanding (*Verstand*) already presupposes the actual norms and forms, criteria and rules of 'correct' judgements and actions. Rationality (*Verstand*) is a merely synchronic and conservative way of judgement and action, of following pre-given norms and rules of formal correctness. Reason is taking part in a joint and free development of our general human affairs, i.e. the institutions of objective spirit.

In other words, whereas empiricism starts its philosophical analysis, like Descartes, with subjective reflections of the individual on seeming immediacies and certainties, Hegel, the great

foe of immediacy (Wilfrid Sellars), detects the presuppositions and mediations in this approach and hence the naïvety of both, empiricism and rationalism. He does so by continuing the founding work of Kant.

Unfortunately, the key word "transcendental" in Kant's analysis is widely misunderstood. The same holds for the key word "speculative" in Hegel's Philosophy. Kant uses his word in order to save the *reflective* meaning of seemingly transcendent words and sentences against all too sweeping criticisms by the empiricist tradition. This 'speculative meaning' does not have anything to do with speculation in the sense of knowledge claims about some *hinterwelt*, as Anglophone empiricists and some Analytic Philosophers still presume. It is rather a linguistic vocabulary and idiom, in which we reflect on the forms and norms that underlie empirical content. In other words, Hegel's speculative analysis (logic) and Kant's transcendental analysis (logic) are more or less the same. They are an enterprise to make forms and norms explicit that already 'exist' implicitly in the way we act together; or rather in the way we take part in a joint practice or system of social institutions. Karl Bühler, the phenomenological psychologist and linguist, has proposed already in 1932 to call this form of implicit norms "empractical" in his defence of the priority of our *knowing how* with respect to making the corresponding empractical forms and norms explicit. By articulating rules and sentences, we make them explicit and turn some moments in our *know-how* into the form of *knowing that*. Bühler sees this long before Gilbert Ryle – who has famously introduced corresponding insights into Anglophone philosophy. The empractical forms and norms are *presupposed* as known and mastered, even after parts of them are made explicit. This holds especially for the semantical norms that are involved when we make empirical claims.

1.4 Analysis and a priori validity

Analysis seems to be possible only after we presuppose some form of synthesis. But this does not mean that the unity of objective experience, the unity of a bodily referent or of a property, is synthesized 'by me' out of a manifold of my inner sensations or sense data. It rather means that a constitution according to a certain form ('of synthesis') is always already presupposed in the unity of generic human experience. I.e., we all already take part in a practice of joint distinctions and identifications of things and properties, especially by using reproducible words and representations. In analysis, we make constitutive 'parts' explicit. But these 'parts' do not exist independently from the whole. They are mere 'moments' of the whole and exist only as such. Insofar, it is sometimes better to say that the analysis defines the parts from which the whole is synthesized. Kant wants to emphasize, however, that the analysis is not arbitrary. It

makes relevant and relatively independent parts explicit. In this sense, analysis leads to a reconstruction of a presupposed synthesis. But we should not view sensations (sense data) as basic atoms for such a synthesis, as if we could build up on their grounding perceptions, apperception, intuitions, and, finally, objective referents for names and predicates. We rather should turn things around and understand human sensations and perception in our analysis always already as a constitutive part of or necessary moment in full-blown objective experience. An this consists in taking always already part in a possible or real joint enterprise. This social practice defines the truth individual cognition. That this would be the right reading of Kant's ideas has already been Hegel's claim against the Kantians of his day. Therefore, we better should not alienate Hegel from Kant, even though Hegel is much more explicit with respect to the social structure of reason and the generic status of the transcendental *I*, which refers, in the end to *us*. At least we should share with Hegel his way of saving the content and importance of Kant's insights against Kant's own letters and self-comments.

Usually, Kant's philosophy is described as an attempt to give an account for what he calls synthetic a priori statements. It is said that Kant presupposes dogmatically that there are such statements. Many readers claim that he fails to show that this presupposition is really true. The problem of this reading is that it misses the point of Kant's approach from the very beginning: Even though it is true that Kant indeed assumes that there are synthetic judgements a priori, his focus is on showing the peculiar forms of validity and function of these judgments, instead of dogmatically denying, or, for that matter, claiming their existence. In fact, it is not important at all how we distinguish in detail between the classes of *analytic* and *synthetic* (i.e. non-analytic) truth or validity of sentences or rules of inferences. The same holds for the *a posteriori* truth of sentences (or validity of inferences) 'ex post' or *after* their empirical content is well determined and the *a priori* truth of sentences (or validity of forms of inferences). The latter belong somehow to the very definition or determination of the empirical content in question. It suffices to see that there may be sentences and rules of inferences that are true or valid on *a priori grounds without being analytic*, if analyticity means that the validity in question goes back to merely *conventional* rules of terminology and logic. Such rules are, for example: "a bachelor is an unmarried man" or "non-p" is true if and only if p is meaningful but false, "p & q" is true if and only if both, p and q, are true, and "for all x P(x)" is true if and only if P(N) holds for any (meaningful and relevant) proper name N. If we enlarge the realm of sentences to possible propositions (i.e. speech acts), we might also think of any possible act of naming N. Kant observes, then, that we cannot settle by mere terminological rules or 'conventional definitions' that the straight line is the *shortest* line between two points. This statement lies at the ground of all measurements of lengths and all mathematical calculations (as, for example, in our differential and integral calculus). In other words, the 'triangle-inequality' is valid by *synthetic*

reasons; not just ex post or a posteriori; for we would not know what a length is if we did not presuppose this inequality in one way or another. Moreover, no particular empirical knowledge can disprove the statement, even though we might have problems to 'realize' straight lines in the 'empty' space of relatively moved bodies. I.e. the 'shortest' lines realizable in macroscopic physical space might not be straight in the sense of Euclidean Geometry. But this is no argument against the a priori status of the truths and rules of inference of Euclidean Geometry, if we only keep in mind that we have to use a relevance filter of good judgment and some methods of de-idealization or finitization anyway when we project these mathematical truths and rules onto the real, empirical, world.

In fact, Kant asks us to think about the peculiar status of mathematical statements and rules. It is not helpful to avoid this reflection by the mere claim that mathematics allegedly is altogether analytic. It is wrong to assume that the mathematically true statements are just consequences of merely *conventional* definitions of verbal (formal) axioms and rules of inference. I.e. mathematical axioms are no merely verbal stipulations. And they are no mere empirical truths post hoc either.

True sentences can (and must) always be viewed as articulations of valid inferences. I.e. a sentence makes a possible norm of inference explicit. We always can view rules as norms articulated by (conditioned) sentences. This is clear for sentences that already have an implicative form. But it is true for other sentences, too, as one can see if we just look at any rule-theoretical or inferentialist approach to formal logic (Gentzen, Prawitz, Dummett, Brandom). Even the so called material implication can be used as an explications of a rule, namely in the form of the *modus ponens*. This inferential norm or form of modus ponens is made explicit by the following rule or implication: (*) 'if: if p then q and if p, then q'. But, of course, the application of this rule must be already practically understood. We must practically know how to apply it correctly.

Be that as it may, Kant is right to claim that non-analytic validity goes beyond the realm of the merely empirical, if the latter is reduced to statements about empirically observed singular cases. That is, we have to distinguish between generic and singular truth. And if some singular cases do not fall under generic norms of default expectations or default norms of inference and incompatibilities, it does not always mean that we have to re-organize or 'falsify' our system of generic truths or inferences. If we find a cat with three legs, we do not feel the need to redefine the classes of animals and distinguish a species of cats with four legs from a 'class' of cats that lost a leg. We rather say that there are singular cases that *do not* falsify default inferences and generic truths for cats, as a species. Or rather, we acknowledge that there are generic truths that are (counted as) valid in a relatively a priori way, i.e. that they are not falsified by singular empirical counter-examples. However, we always look for particular reasons why the singular

cases do not fall under the default norms of generic knowledge or its corresponding forms of conceptual default-inferences. Moreover, we use dialogical rules of responsibility: If you know that something is wrong with an exemplar of a species, for example that it is mutilated, sick or even dead, and if this information is relevant, you must tell me that. This fact shows in a nice way that generic expectations and conceptual *truths a priori* have a peculiar function in our cooperative way of informing each other. They are expressed in systems containing situation-independent sentences.

If modern readers would like to say that it is an empirical fact that a cat has four legs, they use the word "empirical" in a much broader sense than Kant uses his term "a posteriori". And if we would say that it is a 'conceptual', hence, analytic truth that a straight line is the shortest possible line between two points, we would use the word "analytic" in a broader sense than Kant did.

A priori statements explicate implicit presuppositions in our conceptual understanding of empirical claims. When I, for example, say that there is a cat over there, you are entitled to suppose that it is a real cat and not a toy cat. Only under some such presuppositions I would err or lie about what I perceive over there, if it is in fact just a toy cat. In a similar vein, it seems at first that I could withdraw any further commitments about what I see or perceive and say that I am immediately sure and certain that what I perceive appears to me as a cat (you may say about this, whatever you want). But if this really were the case, I would not even know what it means that what I perceive appears to me as a cat. I should at least stick to some presupposed inferences about what cats are and how cats appear in situation in which I am in. And this means that I myself already presuppose and rely on presupposed forms of inferences that hold not just a posteriori in the sense that the singular situation decides by chance and in a merely contingent way if the inference really holds or not. In other words, without any a priori commitment to some form of reliable inference, my assumtion that what I perceive seems to be an X (a cat) would be totally empty. It could not be true nor could it be wrong to say or think something like this. It would be totally arbitrary. It would be void of any sense. It could not articulate a difference, and not give any orientation.

Moreover, in any meaningful empirical claim there are also structural presuppositions involved, as we shall see. Kant makes them, or at least some of them, perhaps the most important ones, explicit under the heading 'transcendental principles' or *Grundsätze des reinen Verstandes*.

A priori statements that are not analytic can make implicit presuppositions explicit. That is, they articulate empractically acknowledged norms for proprieties. These norms can be of fairly different sorts. In any case, they belong to the deep structure of verbally articulated objective, i.e. object-related experience. We use, and need, sentences with synthetic a priori status in our meta-level reflections on the presuppositions of empirical statements. They make

logical forms explicit, which go, as we shall see, far beyond the logical forms of a mere system of formal deduction, of mere syllogistics or of mere propositional and predicate logic (of first order quantifications).

If I make a statement that should have (according to the intention of my speech act) objective empirical content, and should, moreover, be true, I must presuppose that the words I use have the appropriate meaning and reference, that they fit to each other in my sentences such that no nonsensical statements result (as in the case of infinite negation) and that we know what it would mean to assume that the statement be empirically true or empirically false. This presupposes that the statement is not conceptually true (or false), neither on merely analytic (terminological, verbally conventional) nor on synthetic a priori grounds. That is, empirical statements about singular things (even if they talk about 'all' such things) must be contingent, i.e. it must be empirically possible that they are true and it must be empirically possible that they are false. This condition was, famously, elaborated by Wittgenstein in his 'Tractatus logico-philosophicus'.

1.5 Imagination and intellectual intuition

In his *Treatise* and his *Enquiry*, Hume had already put some stress on the importance of phantasy and imagination (*Einbildungskraft*). It is a spontaneous power in the ambivalent sense of spontaneity; i.e. we are not just receptive to inner occurrences when we use it, but can and do control them actively, just as in silent verbal planning or in silent or open plannings of actions. We do so by making choices, not just by producing the 'idea' (*Einfall*) arbitrarily or totally at will. Hume is right to say that we do not create totally new things by our imaginations and ideas. On the other hand, the romantic notion of *genius* stresses the active part of imaginations, but also sees in it a kind of mixture between receptivity and spontaneity: ideas come passively, if the person is receptive to them, but they must be actively developed; and this requires what we call talent. Talent involves diligence.

Hume certainly overestimates the role of merely subjective phantasy and immediate moral sentiment of co-passion or compassion, in his analysis of the change of perspective from me to you and others. He is right, though, that something like this is needed and plays a major role in moral judgments. But Hume seems to underestimate the general and publicly controlled linguistic forms of representing possibilities for these changes of perspective. Hence, Hume sounds as if already animals, caring for their offspring, would have some similar faculty. But in this reading, Hume's analysis overlooks how complicated a symbolic representation of other perspectives, of past and future and other possibilities really is. It presupposes logically already

very challenging forms of using (linguistic) signs and symbols. It presupposes the corresponding practice of control. We control normative proprieties like the correctness of the expressions, the truth of claims, the validity or reliability of inferencess and so on.

When we come to the relation between thinking and intuition, i.e. spontaneously producing sentences and actual or possible *Anschauung* of real objects (things, states of affairs or events) in our world of actual and possible experience, Kant's negative claims about the non-existence of so called *intellectual intuition* (*intellektuelle Anschauung*) helps us to clarify his terminology considerably. According to Kant, the power of the intellect reduces to the spontaneous production of possible thoughts or sentences. But since we produce such sentences at our will, there is no guarantee at all that such a sentence is true. If any being would have the power of *intellectual intuition*, it could produce a world by mere words. I.e. such a being could produce, by mere thinking, causes for receptive perceptions. This comes already very near to the insight that the abstract notions of 'force' and 'inertia' cannot be 'causes' for movements of bodies. A being with intellectual intuition obviously would be god. Hence, in the real world there is no intellectual intuition.

In other words, all the 'entities' or 'logical objects' that can be produced by our thinking or our ways of using language alone can be only *abstract* objects or *noumena* in a realm of objects produced by mere thinking, a *mundus intelligibilis*. Examples of such entities are numbers and pure sets, but also the soul or the will if we understand them in Kant's way: The soul is the *homo noumenon* or abstract person. Talking about the soul is talking about the 'subject' as an abstract possessor of properties, faculties, and competences and as an abstract 'producer' of thoughts or actions. In other words, terms like "the soul" or "the will" are only names in a context of reflecting on ways and forms of human actions and practices. They are no direct objects of experience, just as pure numbers and pure sets or forces or inertial lines are not. We use these abstract or pure entities however in real experience. But then they are no pure entities anymore: Just as we use numbers in counting, for example, apples, we use the word "my will" when we talk about performing intentional acts. As a result, Kant sees that talking about pure entities is talking about forms of our practices. In the same way, pure arithmetical and geometrical truths make forms of our practice of counting and of our practice of geometrical orientation in an abstract way explicit. The same holds for the basis principles of classical mechanics.

In other words, when it comes to 'real' existence, noumena or merely intellectual entities exist only in their use in the context of making empirical knowledge explicit, i.e. in the context of objective or object-related experience. This holds good when we count things, or times, or when we talk about geometrical forms of bodies. But it is also true when we distinguish between free actions and causally (mechanically) determined movement of dead bodies; or when we

contrast conceptually determined intentions in planned human actions to the motivations of animal movements: to animal desires, animal perception and animal instincts.

When Fichte, Schelling and Hegel attack Kant's statement that there is no intellectual intuition in the real world, they already have changed the understanding of this expression. They claim, like Descartes, that from the very act of thinking and acting the existence of the subject, the actor, follows. And this is true, in a sense. But this sense is not Kant's sense. Kant denies only the *separate existence* of pure entities like the soul or a pure will. He would not have objected against Hegel's analysis. For Hegel says, in effect, something like this: In performing acts we perform the role of a free actor and thinker. These roles exist as moments in the forms of our actions. And these forms must be embodied by formation (*Bildung*) of the person. In consequence, when Kant denies that there can be intellectual intuition, he talks about the reality of *objects* of experience: Their existence presupposes the possibility of being perceived and experienced in some present *Anschauung*. Mere consistent 'thinkability' is by far not enough. When Schelling and Hegel claim that there can be intellectual intuition, they do not talk about possible objects of experience but about the real form of existence of *subjects* or *persons*. This form is not just experienced passively or empirically by observation or intuition, but can be made explicit only by *active and reflective speculation*, i.e. by *thinking about ourselves* and by developing '*self-consciousness*'.

The active part of speculation consists in developing a language (vocabularies, idioms) that make the distinctive forms of human sapience explicit. What the corresponding speculative sentences 'refer' to can only by 'shown' by appeal to our active experience in our own life, not by mere appeal to what we can *perceive and observe 'empirically'*, i.e. only in singular cases. Any such 'empirical' observation or *Anschauung* already *presupposes* the forms of human sapience that make empirical knowledge possible: In this insight, Fichte, Schelling, and Hegel absolutely agree with Kant.

2. Articulated experience
2.1 From doings to sayings

After we can speak and verbally think, there is an interesting gap *between saying and doing*, as Robert Brandom shows in his new book with this title. This gap is bridged by commitments. I can, for example, undertake a commitment freely by making a promise, or, with some weaker bonds, by expressing my intention to do something. Or I can claim that something is true. In consequence, you can ask me for reasons or even challenge my claim, at least if you are not sure if my judgment is reliable or responsible enough, or even after it turns out that the

information I gave was somehow wrong and you ask for a justification on my part. This already shows that I often have to do something later in order to comply with the commitments I have undertaken at present. Sometimes I have to fulfil corresponding conditions by doing something, i.e. by acting in a certain way. Sometimes I just have to give reasons for my judgements. The degree of compliance with my 'duties' (and not only to your accidental satisfaction or to the satisfaction of some *accidental* score-keeping) is controlled in a neutral way: we must appeal to the fulfilments of *general* normative conditions, not just to the contingent satisfaction of individuals around us. In other words, we need an appeal to some general *score-keeping function* (known *by us*), not just to the individual and arbitrary decisions of an arbitrary judge. The generic function or norm of correct score-keeping, 'decides' about the fulfilment of my or your or our commitments and about the (relative) entitlements to say or do certain things. Therefore, it seems to me, that Brandom cannot just do away with appeals to *our* norms or to *us* or even to *the idea of humankind*.

Brandom prefers on focussing on dialogues between *two* persons. That is, he focuses on *applications* of norms. By doing so, the problem of *generic* norms, *generic* truths etc. (of science générale) falls out of his picture. Brandom is right, however that only in actualisations, score-keeping becomes real or actual. But the individuals in a dialogue already areas *persons*. As such, they already must be understood as members of *us*, of *humankind*. And the norms of rationality that bind them in their sayings and doings are *generic*. They do not just show up in singular dialogues or in the verbal and non-verbal behaviour of the participants. They are known, partially by knowing how to do things correctly, partially because we already have made them explicit and learned the basic maxims, principles and *Grundsätze*. In any case, they guide *our* judgements and actions, or should guide them, for that matter.

On the other hand, there are not only gaps between saying and doing on the higher level of action planning and action performation *after* we already can speak and think. There are also gaps between doing and saying on the lower level *before* we have full competence of using and understanding language. The gaps of this second sort are most often underestimated and overlooked. But they are most interesting and important; for on this lower level, we *start with doings* and *end up with sayings*.

The claim is that object-related knowledge is grounded in *Anschauung*. That is, any knowledge-claim about the real world must somehow refer to actual or really possible trans-subjective perceptive experience, not just to subjective 'feelings'. Such feelings may include merely inner sensations, even moods, spontaneous imaginations and arbitrary judgements.

If we want to develop the idea of enlightenment, namely to criticize arbitrary judgments by controlling objective criteria of meaning and validity, we therefore better do not turn to materialist empiricism or idealist solipsism, as Locke and Berkeley did respectively. For this

leads, somehow consequently, to Hume's scepticism. This scepticism is, in the end, a disaster for any critical philosophy. The crucial, and wrong, step in this development of empiricist 'epistemology' is the idea that our access to the real world must be founded in some kind of immediate 'sense experience' or sensation, not in an already pragmatically formed, even socially structured, joint, but present *Anschauung*. Hume can, as a result, only appeal to some 'need' of belief into laws of constancy of events, perhaps as a necessary condition for survival. In the end, this belief is not much more than an animal instinct. But such a subjective form of causation is much too weak if we want to understand empirically objective knowledge claims, as Kant realises. The principle of sufficient reasons (or rather: causes) resp. the idea of a causal connectedness of all events according to generic laws cannot be the result of some set of singular empirical knowledge. It rather is a general form of objective empirical knowledge. It is a constitutive moment in our very project of generic science or science générale. Only in this, not in Hume's psychological sense, causation is 'subjective'.

Kant's central move consists in discharging the quest for certainty. This quest for certainty has mislead Descartes and Berkeley to some radical subjectivities. It has mislead and Hume into his scepticism and utilitarian pragmatism, his will to believe. Hume's attempts to criticize mere beliefs collapses, in the end, into this 'will to believe'. This collapse is the paradox of Enlightenment. Kant's analysis focuses, instead, on the very constitution of truth and knowledge, i.e. the 'definitional' or better: 'conceptual' side of validity and objectivity. I.e. Kant turns away from mere epistemology. He turns to ontology. I.e. he turns from the question what we know by chance and what we can know by chance to the question *what empirical knowledge is*. That is, Kant asks what criteria of possible empirical knowledge-claims and sufficient fulfilments of the corresponding commitments are and how we work with them in the real, actual, word. Unfortunately, Kant still does not address the crucial difference between the following two readings of the question "what can we know?" radically enough: According to the first reading, the merely epistemological reading, the question asks what we as a special group of people or we as human beings can know, in distinction to what future people or other beings like angels or gods could know. According to the second, the task is not to delimit the borderlines of our actual knowledge from within, but to analyse the very concept of (empirical) knowledge, and to delimit meaningful empirical statements (that might be true) from statements that cannot be understood as empirical claims but must be understood in a different way. (Other sentences may be totally meaningless. For them, there is no possible way to understand them appropriately, except, perhaps, as merely arbitrary human fictions without any reasonnable and defensible function in our real life. In such a case it is just nonsense to believe in their possible truth, as we are inclined to say.)

But how do we arrive at meaningful sayings on the basis of correct 'doings'? As I take it, Kant already stresses the importance of *deictical Anschauung* and *joint present reference to things* and their movements *around us* for grounding the *reference of thing-names* or thing-descriptions, including all qualitative properties of things. In fact, we can understand Kant's enterprise as an attempt to develop answers to the following two classes of questions: What do we need in order to make explicit the present objects and present processes, presented in joint *Anschauung*t? How can we articulate their generic differences, and their 'content'? That is, how do we distinguish them from each other? And what do we need in order to refer by situation-invariant, spontaneously producible, words to things? How do our sentences refer to states of affairs or events? And what role does actual *Anschauung* play in assessing the questions if a possible state of affairs is a fact, if a possible event really happens or if it has happened or if it will happen (with some necessity or merely actually)?

An answer to these questions is, at the same token, an answer to the relation between concept and intuition, *Begriff und Anschauung*: Concepts exist only on the ground of their possible representations. Such representations are words and sentences. As such they, or rather their actualisations, belong to the realm of reproducible doings and, hence, to spontaneity. Intuition belongs to receptivity. We cannot produce intuition (in the correct sense of actual *Anschauung*) at will. What we can produce, however, are sounds, images and pictures, e.g. sentences and utterances, that can be listened to, looked at or read. Then we can *understand* the symbols and signs as representing general or rather generic forms. If we overlook this genericity of our thinking in our use of languages and symbols, we miss the very notion of "thinking".

The deepest problem of naturalism consists in its lack of distinction between objects produced by us and natural things and events that exist and grow without our active intervention. As a result, it misses the notion of generic thinking and, hence, the notion of a human person.

2.2 On the relative immediacy of present experience

Especially in view of merely verbal claims and their arbitrariness, we have to defend a certain (relative) immediacy of present perceptual experience (*Anschauung*) without collapsing into Berkeley's all to sagacious solipsism and Hume's all too smart scepticism or radical sensationalism. Empiricism goes much too far when it wants to say that the only real thing is what I perceive. My access to the world is mediated somehow by my sensations and impressions, but not in the way empiricism has it. That is, there is nothing wrong in saying that perception always mediates in some way or other what I know, even when I know something from hearsay. But the unfounded and immodest quest for immediacy and certainty collapses into solipsism,

hence into a scepticism that cannot be healed at all. This critical judgment about empiricism agrees in some sense with Wilfrid Sellars' general critique of empiricism, which leads, in the end, to McDowell's idea of a more brute and coarse realism with respect to objects of perceptions. These objects are already the things and their properties, not the mere 'appearances' or 'phenomena' (or even 'gestalts'). There is no world of pure phenomena that could be basic in a kind of 'construction' of objects. But Kant may nevertheless say that the objects lie 'behind' their appearances and 'produce' the appearances as impressions in us by causal forces.[12] Hence they have a *constitution*. This means that we already speak in a way *about* these objects and their 'causal powers' that is 'instituted' in our language game. In short: The *constitution* of things consists in the institution of thing-talk.

Language-use belongs to the realm of free actions and spontaneity. Therefore we cannot judge merely on the ground of words if these words refer to something real or not. and we need some control of knowledge-claims or hearsay. Knowledge by hearsay does not distinguish as such between merely possible objects of experiences and real objects of experience, between cognition and mere imaginations. Therefore, we also need a distinction between real things and merely theoretical entities. Altogether, we have to distinguish between pure forms that we talk about when reflecting on formal conditions that must be fulfilled if a term (word or sentence) should have a possible empirical reference and the actual fulfilment of conditions that give the term real empirical reference.

2.3 Making experience explicit

There always is huge realm of 'empractical' and, a such, implicit and 'subjective' experience that is not already made conceptually explicit in some way or other. But if we use the word "experience", as Kant does, for conceptually determined object-related empirical knowledge, it is clear that experience is to be taken as the empirical content of empirically meaningful statements or propositions. In other words, objective experience is always already of such a form that its content can be expressed by words and sentences, at least with respect to the most relevant distinctions and determinations of this content.

This is the very reason why any analysis of the form of objective or object-related experience must be an analysis of the truth conditions for corresponding empirical sentences. If we have to take the situation and context of the speech act into account, we have to speak, of

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[12] Of course, there are causal preconditions that play crucial roles for sound perception. But this is something else than assuming that the whole process of perceptual knowledge can be viewed as caused in the sense of a pre-determing causa efficiens.

course, about propositions in the sense of possible assertions of the relevant sentences in typical speech acts. These acts must be reproducible. The relevant features of the generic situation must be recognizable. Moreover, the analysis of a thing g as an object of objective experience must be (re)presented as an analysis of how a word turns into a name with the thing g as its referent, or rather, how a name-like expression N_g becomes a designator of the object g. This insight, precisely, guides Kant's methodical procedure. In fact, he asks what we must presuppose when we assume that an expression N_g refers to (or should refer to) a real object g in the empirical world. And he shows that this is indeed the most crucial question of his critical analysis.[13] If we have an answer to it, everything else is easy: Then we also know what it means to claim something about *all things*, or to say, for example, that *some thing exists* with the property P(x). Hence, we want to know what it means to refer to a singular empirical object (thing) g and what it means to say something about such things g.

The conditions of possible experience articulated by sentences are sufficiently clarified if and only if we have a sufficient account for the conditions of possible objects of experience.

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[13] It is to be acknowledged, however, that Frege's additional analysis of logical elementary and quantificationally complex predicates P(x) and relations like R(x,y) or Q(x,y,z) helps us a lot today.

2.4 On the very idea of transcendental deductions

Kant presents a kind of justification that certain principles (axioms or *Grundsätze*) articulate 'the' presupposed structure for empirically possible, hence contingent, (true) statements about facts.

Whereas the metaphysical exposition and deduction start with forms of judgements (i.e. of assertive statements) and lead to categories like generality, particularity, and singularity as modes to interprete a noun phrase like "the lion": as referring to all lions, some lions or a singular lion, transcendental deduction shows how projections of these categories onto a domain of things are presupposed in object-related empirical statements or thoughts. The projection rules are presupposed conditions of empirically meaningful propositions. As such they are 'necessarily true'.

The basic claim is simply this: We cannot make an empirical claim without presupposing certain projective norms, articulated on the meta-level by projection-rules. These norms 'define' in a non-verbal (but empractical) way how names refer to objects of experience and how predicates articulate qualities that can in some way or other be perceived, either directly or via a standard canon of non-verbal inference, as doctors use when they 'see' the tumor in my head on a screen.

Without a presupposed form of projecting sentences onto objects and qualities that are or can be presented in actual or really possible joint *Anschauung*, the sentences lack objective empirical content. This is, I take it, Kant's absolutely basic insight, which goes far beyond what we find in Locke, Berkeley, or Hume, since these British empiricists did not really do semantic analysis.

Of course, logically complex predicates must be defined by propositional and quantificational rules (for 'not', 'and' and 'all') on the ground of more basic predicates. How this is done is not our issue here. Frege has shown how logical complex predicates or sentences get their meaning (sense) in the form of truth conditions from the truth conditions of logically less complex sentences or statements. But complex truth conditions must be grounded upon the truth conditions of elementary sentences that do not yet contain logical signs. Hence, the basic problem of determining empirical meaning (sense) and truth is independent from all achievements made by Frege. Freges achievements concern only the logical form of defining complex predicates and complex singular terms that can contain relations, functions and nested quantifiers. Therefore, we better forget all claims that Frege's new logic could outdate Kant's considerations in any relevant aspect. This is indeed not so. In fact, the crucial difference between Fregean semantics and Kant's transcendental analysis is this: Kant asks, in a sense, how logically *elementary* empirical sentences get their meaning, how the names get their empirical

reference and what role *Anschauung* plays in this context. Nothing likes this was the topic of formal semantics from Frege to Tarski, Kripke, David Lewis, or Davidson. And perhaps even Brandom remains too much occupied by *formal* semantics. Kant uses the very abstract and general logical form 'N is P' in his analysis of elementary empirical sentences. And then he asks how the names N gets their reference, if N is a logically basic singular term, i.e. not yet a definite description or quantified expression that contains some bounded variables.

2.5 Processes, time and the copulae

When we talk about things, we talk about processes and resulting states of affairs. And we use time-independent generic knowledge. We say that swans in Europe are white. And we say that copper melts at 1024 degrees Celsius. We say that something is a property of something or that something or somebody is doing something or will be doing something. We say that something has been achieved. Something changes, or has changed. Something moves or has (been) moved.

Whereas the logical copula "ε" (for 'esti' or is) is a timeless sign which is used in generic laws or in mathematics, where we attribute timeless or eternal properties (like being a prime number) to timeless or eternal logical objects like pure numbers (for example 7), Paul Lorenzen already considered to use a copula like "π" (from Greek 'prattein', to do) in order to express something like "X does Y", such that a sentence like "Peter runs" would get the form "Peter π running". But, of course, this does not help if we do not analyse the logical relations between "Peter is running now" and "Peter was running", i.e. "Peter π_{is} running", "Peter π_{was} running" and "Peter π_{will} running". Moreover, we have to consider achievements and failures to achieve the goal, as in "Peter π_{is} finishing his book" and (*) "Peter π_{has} finished his book". If there is no time in which "Peter π_{has} finished his book" is correct, then we usually say that Peter only *tried* to finish his book. (This is clear in cases when someone tried to kill someone.) As Sebastian Rödl has shown, it is an absolutely crucial insight of Aristotle that we have to analyse the logical grammar of tense and time of verbs in general, of the copula 'to do' in particular, if we want to understand empirical predications. And Kant sees that we do not name things-at-a-certain-time but things as substances. As such, things 'contain' different times, as we might say metaphorically in order to express the fact that a thing already is a unity, which is in a certain degree independent from time. In the same vein, we do not know what a quality-at-a-certain-time would be if we did not know the quality as such, i.e. independent from the singular situations in which we can apprehend or perceive it. If this were not so, we could not say that a thing moves relatively to some other thing or that some of its properties changes while it moves, i.e. in time.

In other words, we first have to understand the unity of a thing 'over time' before we can understand what we might mean by a 'thing-at-a-certain-time'. The same holds for predicates and verbs. We must already know what it means to run at whatever time before we can know what it means to be running at a certain time t.

But now it follows that we cannot make the time structure of empirical statements explicit in the noun-phrase, nor in the verb-phrase. We can make it explicit only in the π-copula, the availing verb 'to do'. The tense of the copula 'to do' or π makes explicit in which relation the time of uttering the assertive speech act stands not just to the truth of the whole sentence, but to the time in which the thing we refer to fulfils the 'predicative condition' explicated by the verb. The π-copula expresses a 'tensed' synthesis of the noun phrase and the verb phrase. In other words, the copula says if the condition is still fulfilled, or was fulfilled or will be fulfilled. This internal temporal structure of statements, as traditional grammar describes it, is not just a grammatical convention. It is a logical form. In any logic of empirical statements it has to be taken into account. Only then we can express time changes. In a similar way, we can make spatial movement explicit only by reference to a possible speaker and his perspectival position, and be it a merely imaged subject on the sun.

3. From judgement to reference
3.1 Relations and modalities in possible judgment

Semantic relations in judgments according to traditional logic are
i.) *Predication* as the *categorical* synthesis of noun phrase and verb phrase,
ii.) *Disjunction* (and *conjunction*) as a relation between two propositions (i.e. judgments, statements or sentences, whatever applies).
iii.) *Hypothetical judgments* expressing inferential or implicational relations between propositions.

Predication is traditionally expressed by a categorical *copula* like the words "is" or "is element of" or "falls under" or "has the property" or, if we turn the focus from the noun phrase to the verb phrase: "applies". As we have seen, we need a tensed *copula*.

A *hypothetical judgment* is of the form: "s holds under condition of s^*". Corresponding *implication rules* express general relations of *consequence* of the form: *(always) if $S_1,...,S_n$ hold, them S^* holds, too*. S refers somehow to s, the sequence $S_1,...,S_n$ to s^*.

The relations of *conjunction* or *disjunction* of propositions $s_1,...,s_n$ express different cases of *joint validity*. We may think of expressions like: "at least/exactly one of the propositions $s, s^*,$ s^{**} ... hold" or "all propositions s, s^*, s^{**} ... hold simultaneously". Such judgments are not

treated by Kant as ('object level') truth functional *sentence* operators, but as (meta-level) *relations* between corresponding propositions or judgments. That is, a relation between judgments or propositions, as Kant understands it, is always a *meta-level judgment*. Sentences or propositions of *object level* are characterized by the fact that they are presented in the basic form *N is/was/will be P*.

There are three possible modalities in making a statement. The *problematic*, *assertive*, and *apodeictic* mode correspond to claims of (tensed) possibility, claims of (tensed) existence or truth, and claims of (provable) necessity. If someone claims that the judgment or proposition p is true, the proposition must already be understood as a *possible* judgment. When someone asserts it, it is used in the assertive mode. Necessity is expressed by a special speech act that says that the sentence or proposition in question does not hold by merely contingent or singular empirical reasons with respect to special situations, but can be proved as a generic truth.

Possibility is expressed by a special speech act of contemplation that says that the proposition in question *may be correct or true* – either in particular situations or perhaps even in general.

3.2 From the tableau of judgments to transcendental deduction

In a certain sense, Kant's table of judgment is complete even from the perspective of modern logic. Quantificational operators express the quantity of a judgment on verb phrases, like 'all x' or 'many x' or 'some x.' As Richard Montague was the first to notice, if we use λ-notation for complex predicates, we can even treat a singular term *N* as a form of quantificational operator. Under the title *quality*, Kant distinguishes between the affirmative (tensed) copula, the finite negation of the predicate and an infinite negation. A finitely negated predicate P^C is always just the same as the predicate $\lambda_x \neg P(x)$. This shows that modern sentence negation and traditional finite negation amount fairly much to the same.[14] Infinite negation is a different and more difficult meta-level affair. It says that something is *categorically wrong* with the judgment or sentence.

The *relations* between judgments can be reduced to functions in judgments that result in logically complex sentences. The meta-level relations of conjunction, disjunction and (material) implication between two sentences p and q lead to corresponding sentence operators *p&q, pvq* –

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[14] But then we should not treat complex singular terms in the way of Russell's '*On denoting*' but must respect Strawson's presuppositions for meaningful designations. Moreover, there is a problem of representing negation of complex sentences p. Technically it could be solved by using the following identity $\neg p \leftrightarrow N\varepsilon(\lambda_x((x=x)\&p))^C$, which amounts to a reduction of sentence negation to predicate negation (somehow 'by brute force').

or, to be more precise, *pvq&¬(p&q)* − and *p→q*. Seen in this light, the expressive power of Kant's logic would correspond to modern propositional and predicate logic, if he had some means to turn meta-level statements into object level sentences, as Frege has on the ground of his use of variables and recursive definitions of the quantifier, the negation and the material implication.[15]

With respect to *modality* we distinguish between the performative mode of saying that *p* expresses a possibility, asserting that *p* is true, and claiming that *p* provably holds with necessity. In the first case we say that we have to count with the possibility that p. In the second we assert that we can and have to count with the contingent truth of p. In the third case we claim that we can always use p for example as expressing reliable inferences.

Stefan Körner has claimed that there cannot be a transcendental deduction of categories and principles presupposed in empirical statements.[16] This claim has triggered a flood of publications pro and contra transcendental deduction. But the 'deduced' categories are just defining features of a genus, i.e. of a domain of possible discourse, for example the domain of things. If we do not know how to turn a variable of some domain into a name of the domain (singularity) and what all the 'entities' of the domain are (generality), we do not know what it means to say that there exist some entities of the domain with a certain property (particularity). Hence, we need such a domain. One of its main features is expressed by the category *quantity*. We need this category especially in order to interpret the noun-phrases (and variables) in our judgments. The domain defines what possible names, singular terms or situation-dependent singular descriptions in the domain are. Of course, this form of definition cannot be reduced to the definitions of predicates in such domains.

Moreover, we need well defined predicates in the domain, in contradistinction to infinite negations. I.e. we need the 'predicative' category *quality*. In the case of qualities of things this amounts to an answer to the question what a *real*, well defined, empirical property *P* is. For such a property, an internal or finite *negation P^C* must be defined in the realm of empirical objects − in contradistinction to infinite negation that only expresses the *limitation* of empirical properties. To be a prime number, for example, is no empirical property at all.

The category of *relation* concerns question like these: What are the empirical truth conditions of empirical 'predication' of the form *N is P*? This is the same question as asking

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[15] Since we can interpret the 'grammatical' relation of subject and predicate as a 'logical' relation of argument and function, Frege's logic is much closer to Kant's elementary and general logic than Michael Wolff (and by the way, Frege himself) says (cf. Wolff 1995 pp. 218 ff, 227, 255, but also 275ff.). The completeness proofs for Aristotelian mereology in the first part of my book *Grundprobleme der Logik*, Berlin 1986 show, however, why a syllogistics for merely monadic predicates are hopelessly incomplete with respect to any relevant analysis of the inferential behavior of complex predicates defined on the ground of relations or many-place predicates.

[16] S. Körner, "The Impossibility of Transcendental Deductions", in: Beck 1969, 230-244. Cf. also K. Westphal, op. cit. 59.

what it means to say that a *substance* or *substantive object* and an *accidental property* stands in the relation of *inherence*.

What are the truth conditions of empirical *hypothetical judgments* of the form: "*s* holds under condition of *s**"? This leads to the most difficult but central question of Kant's first critique, the question of an adequate understanding of *causality and dependence*, *cause and effect*.

What are the truth conditions of empirical *disjunctive or conjunctive judgments* of the form: "either *s* holds or *s**" or "*s* and *s** hold 'at the same time'"? This leads to another difficult question, the question of an adequate understanding of *simultaneous community* or *interaction between agent and patient*.

The category of *modality leads to question like:* What are the truth conditions of claims of empirical *possibility* or *impossibility*, of empirical *existence* or *reality* (German: *Dasein*), and of empirical *contingency* in contradistinction to a special *empirical* notion of *necessity*, which is not only concerned with merely analytical or even merely mathematical necessity?

With respect to the domain of things, the basic principles of pure understanding tell us how these categories apply to object in possible *Anschauung*.

The whole analysis rests on the *basic principle of apperception* or of semantically self-conscious perception insofar, as this principle says: Any presentation or re-presentation of something must be thus that we can or could understand this 'thing' or 'object', to which we refer, to as the referent of a name such that its properties correspond to predicates. That is, I must be able to think about what I refer to. This principle shows why we need a *logical* analysis of the very content of (ap)perception and observation. We need it, because a (re)presentation does not have (a well determined) reference on the ground of the mere fact that my eyes are not shut or, more generally, my senses and reflexes are working normally. We rather have to make clear how I can control the truth of empirical judgments and reference of singular terms on the ground of perception in observation sentences.

The enterprise of transcendental deduction can now be understood as an analysis of the norms and rules that make linguistic representations of empirical facts possible. Part of this enterprise is to show how observations of empirical objects in a full-fledged sense (i.e. together with an evaluation of the truth of observation sentences) are possible. Observation and observation sentences are crucial moments. They explicate the criteria of judgment in the 'projective' relation between propositions that claim to have empirical content and the empirical world.

The question is now how sentences, i.e. noun phrases and verb phrases can get empirical content. This question splits up into parts according to the distinction in understanding's functions in judgment. This shows that we have to answer the following basic questions:

3.3 Axioms of objective observation ('Anschauung')

Kant discusses the basic principles that determine the sense and reference of singular terms under the title *axioms of observation*. The basic principles for the determination of the empirical meaning (i.e. of sense) of an elementary (i.e. logically not reducible) predicate is discussed under the heading *anticipation of perception*. The basic principles for the determination of the empirical truth of categorical statements and causal explanations are discussed under the heading of *analogies of experience*. The *postulates of empirical thinking* combine the analyzed truth or commitment conditions in claims about empirical reality, possibility and necessity.[17]

The basic law of any interpretation of the quantificational form of noun phrases in objective propositions or judgments is the axiom of observation (of outer and inner intuition). It says that the objects of empirical discourse, the subjects of the propositions, must exist in *space and time*. This means that it must be possible – at least in principle under appropriate conditions – that the objects are given in spatially and temporally determined observation, here or there, now or then. And this means, in turn, that the objects can be situated in a space of possible observation. They are bodily objects that can be identified in space and time. I.e. they exist in a system of spatial relations to other objects, including the observing subject. As objects of observation, these objects are extensive magnitudes. They are, as we say, extended in space and time. They are determined in their very identity by their 'kinematic' space-time-properties.

The category of *existence* of such an object is a kind of title for any *objective* use of the phrase "there is". Kant used the word "*subsistence*". The existence of an objective thing is determined by the requirement that it must be possible in principle to situate the thing in the spatial and chronological system of all (moving) things. To be a little more precise: At least for some of its consequences there should be some control of existence in observation (if we do not only contemplate merely abstract empirical possibilities yet).

3.4 Anticipations of possible perceptions

Since any predicate or sentence with empirical sense involves inferences that make a difference with respect to possible perceptions, they must come together with an anticipation of some such possible perceptions. If you say that there is something red over there, I am entitled to

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[17] Cf. CPR/KrV B 187 – 294, A 148-235; Ak III, 140-202.

expect to see it if I go there and look. The same holds for objects that are said to exist. More precisely, the rule of possible anticipation of a perception to at least *some degree* is a precondition for understanding the content of non-empty objective predicates expressing qualities and of the referential meaning (according to Frege rather: the sense) of an empirical name.

The most important connection is the 'function of unity' expressed by the copula in *N is P*. Such a proposition is true relative to the situations of observation it refers to if and only if in the corresponding deixis in a proper judgment of the form "this thing is called *N* and it is *P*" is true. With quite some grains of salt we could say that *N is P* is true if and only if in any proper situation in which 'this is called *N*' is true 'this is *P*' is true, too.

The rule or norm says that for any meaningful objective predicate $\lambda_x S(x)$ there must be general criteria that can be controlled by suitable perception when we want to tell if a certain object *N* has the property $\lambda_x S(x)$ or not. It is a minimal requirement to know which perceptions would at least in principle corroborate or refute such a judgment.[18] Whoever claims that an object has a property expressed by $\lambda_x S(x)$ is committed to tell us how we can possibly refer to the object and what possible sensations and perceptions are to be expected when we observe it and test if the judgment that attaches the property to it should be true. If the expected perceptions do not occur, we have at least *prima facie* a well-established reason for doubting the truth of the claim or even for disproving it. Perceptibility belongs to the criteria of observational content in empirical claims. Its most general form is this: The truth of a claim must prove to be in a definite way effective and successful in our life and overall experience if it should have empirical content or sense. How this works in details is not the topic of Kant's investigations, since his enterprise is limited to most general questions of form.[19]

Kant calls the basic laws considered so far "mathematical". It is not clear to me, however, why it should be a 'mathematical' principle that any perception of a real thing comes in *degrees*.

3.5 Analogies of experience

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[18] Any qualitative distinction by our senses has a degree: "In all appearances the real that is an object of sensation has intensive magnitude, i.e. a degree" CPR/KrV B208, Pluhar/Kitcher p. 238.

[19] Just because of the fact that we have to account for the degrees of sensations we should not tighten up nor loosen the postulate of perceptibility. We rather need good judgment in dealing with it properly. Many complex predicates $\lambda_x S(x)$ that are defined on the ground of predicates that can be more or less directly controlled by observation are not decidable in a straightforward way. Truth does not reduce to *effective verifiability*. But we do not have to consider here all the ways of reductive definitions in more detail since we are only interested in the general idea, not on particular problems. The principle of anticipation of sensation corresponds in a way to Hume's *empiricist criteria of sense* but it does so in the context of other synthetic principles.

Analogies of experience are, roughly, the rules that tell us how we have to project verbal forms of inference analogically, i.e. in a weak form of isomorphism, onto forms of processes in which things are involved. When we *identify bodies* and when we want to make *prognostic predictions* about expected changes in (their) states of affairs,[20] we need these analogies. They function as basic criteria or maxims for meaningful relations between objective judgments. They are called "dynamical" postulates, because they refer essentially to lawful changes of properties and relative movements of objective things or physical bodies.

The most general principle is this:

«Experience is possible only through the presentation of a necessary connection of perception.» (B 218, Pluhar/Kitcher 247).

I read the three analogies of experience, roughly, in the following way:

1. The *first analogy* says that the very concept of an empirical object of an empirical judgment presupposes the identity of the object at different times and from different spatial perspectives. I.e. the empirical object must *be* a *substance* – which means that the category of substance and the corresponding presuppositions of space- and time-invariance apply in a sufficiently good way:

«In all variations on the part of appearance, substance is permanent and its quantum in nature is neither increased nor decreased.» (Pluhar/Kitcher 252.)

2. The *second analogy* runs as follows:

«All changes occur according to the law of the connection of cause and effect.» (Pluhar/Kitcher 259.)

This principle tells us this: When we say that an *empirical event e* occurs or would occur under the condition that another event *e** should occur, we presuppose certain *natural laws* that regulate the relation of *cause and effect*. The lawful relation of causation is, in a sense, constitutive for an objective ordering of the time at which the events occur – in contradistinction to a mere subjective ordering of our individual sensations. It is also constitutive for the very possibility to identify a body that leaves the realm of our observation and returns later back into this realm. But it is nevertheless only a regulative principle. The constitutive definition of the identity of the body is ideal, mathematical. This means that whatever actual laws say about how to *identify* a substantial empirical object or thing in time, its *identity* is already defined be the mathematical principle of continuity according to the axioms of observation and the anticipation of sensation – and *not* by the dynamical laws of cause and effect.

3. The *third analogy* says:

«All substances, insofar as they can be perceived in space as simultaneous, are in thoroughgoing interaction.» (Pluhar/Kitcher 276.)

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[20] Cf. CPR/KrV B 218-265, Ak III, 158-185.

When we say that an empirical state of affair *s* hold or would hold *at the same time* when another state of affair *s** holds or should hold, we presuppose a certain order of *spatial coexistence*, called "community". Kant's expression "thoroughgoing interaction" refers to a general rule like the following: No two physical objects can occupy at the same time the same place. This is a fairly general idealization of the (empirical?) fact that physical objects always show *some* resistance, for example when we want to remove them or when we just touch them.

We comprehend the maxim of the sequence of time (2. analogy) only in narrow connection with the maxim of reciprocal interaction or simultaneity (3. analogy). In fact, I propose to read the third analogy as an explanation of the fact that the statement that *every bodily thing is heavy* is synthetic a priori. Kant counts the extension in three dimension as part of the definition of being a bodily thing.[21] The sentence that *every bodily thing is extended* is, therefore, true for analytical reasons. But there does not seem to be a merely logical reason why there could not be bodies in space and time without having weight or 'mass'. Having weight means to be subject to *gravitational forces* and having mass means to be subject to the rule of *inertia*. And this means that the object is a part in a whole dynamical system of our representations and explanations of the movements of bodies. Since any body moves with a certain velocity and acceleration if we compare it with other bodies, and since we use the concepts of mass and weight in describing these relative movements, every body has mass and weight. This is *not* an *empirical* property of bodies. It is part of our very apprehension of the system of movement of bodies relative to each other. There is no non-moved body at all. This is so because spatial movement is always relative to other things. Therefore there cannot be a body without mass. Having mass is no 'local' or 'individual' property of a body.[22] Causation, too, is no local affair. Strictly speaking, the whole distribution of material substance in space, together with at least some parts of a preceding history, makes up 'the' cause for any 'effect'. We are interested, of course, in local relations of cause and effect. But in reality, causation is always global. It always refers to a whole state of affairs of the world. This already follows from the fact that the state of movement of a body is not defined independently from a reference system, which was already clear to Galilei.[23] 4. The *postulates of empirical thinking* are the combined conditions of meaningful empirical knowledge-claims. They are a kind of summary of the general conditions

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[21] Cf. Newton Garver, "Analyticity and Grammar", in Beck 1969, p. 254.

[22] When Hegel claims that light is weightless, he does not only say that the propagation of light does not fall under the concepts of inertia and gravitation (which we today consider as false). He claims that electricity., magnetism and light are physical phenomena that cannot be described in the Kant-Newton-system of moving particles.

[23] This insight is important for any proper understanding of the laws, by which we try to describe the results of the reciprocal forces of heavenly bodies, for example. I agree in this respect with *Wolfgang Stegmüller's "Gedanken über eine mögliche rationale Rekonstruktion von Kants Metaphysik der Erfahrung (in zwei Teilen)"*, in: *Ratio 9*, 1967, 1-30, *Ratio 10*, 1968, 1-31; also in: *Aufsätze zu Kant und Wittgenstein*. Darmstadt (1970), 1-61.

of meaning and truth and the more particular conditions of justification for object-related empirical judgments. Such a judgment can be a reasonable contemplation of an empirical possibility, an assertion of an empirical reality or a claim of a necessary or universal empirical truth. In the same way we distinguish between the concept of a possible state of affairs or a possible world, the concept of the actual states of affairs or the real world, and the necessary conditions of referring to a possible or to the actual world of objective things and facts.

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