

Kant's Analytic-Synthetic Dichotomy.

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Kant's dichotomy between the world apparent to us and some unknowable more really real world beyond is based on and buttressed by his **peculiar theory of logic**. I refer especially to his analytic-synthetic dichotomy.

According to his view, a proposition like "all bachelors are unmarried men" is analytic, meaning that it can be known to be true merely by examining the terms or concepts involved¹. Thus, "analytic" refers to purely rational knowledge, which does not need to appeal to experience. This implies that all analytic propositions are "a priori". Moreover, all of them are (logically) "necessary", since their truth is not open to debate. To deny them would be to commit an antinomy².

Thus, a proposition like "all bachelors are unmarried men" is at once **analytic, a priori and necessary** (and thus universal, certain and fixed). By way of contrast, a proposition like "all bachelors are happy" is **synthetic, a posteriori and contingent** (and thus particular, uncertain and variable)– because we cannot determine just by rational means alone whether it is true or false, but must look into the matter empirically without any certainty of success³.

(The above used examples, on the subject of bachelors, are those most commonly used nowadays by commentators. Kant's actual favorite examples were "all bodies are extended" and "all bodies are heavy", respectively. These are for the moment ignored here, because they involve complications irrelevant to the issues at hand. They will be given some consideration further on.)

¹ Kant would also regard the negative sentence "bachelors are not married men" as analytic, since it is deducible (by obversion) from "bachelors are unmarried men".

² This sounds impressive; but upon reflection we realize analytic statements are mere tautologies, they just repeat the same thing in other words. So they do not contain much information, if any (at least this is the conclusion commentators often draw, but see further on). For this reason, the analytic-synthetic dichotomy bears some analogy to the transcendental-immanent dichotomy. Kant's analytic statements seem to exist in some ideal plane divorced from synthetic ones, just as transcendental reality is set apart from everyday immanent appearances.

³ Kant speculated about the possibility of propositions that would be both *synthetic and necessary*. Hume had previously denied such possibility, e.g. in his rejection of necessary connection in causal relations. In my view, this simply refers to what is properly termed 'natural law' or *natural necessity* (as against logical necessity). As I show in my work *Future Logic*, such propositions can indeed be validated by induction; natural necessity is knowable by generalization from actuality.

Now, this logic theory of Kant's is simply balderdash. It is a very superficial and illogical construction. As we shall show, analytic propositions are misnamed; they have nothing to do with analysis – and they are neither purely a priori nor logically necessary.

Meaning. When we say that a bachelor is an unmarried man, we are not analyzing some pre-ordained truth, nor are we engaged in a wholly arbitrary declaration (as later commentators have countered). In this precise instance, we are voluntarily introducing, for the purpose of economy, a new word “bachelor” to use in place of the phrase “unmarried man” used until now. This is on the surface an equation of words, a “definition” of the word bachelor by the words unmarried man, a mere tautology.

But at a deeper level, what are we doing? We are deliberately *transferring the meaning of the words* “unmarried man” to the newly coined word “bachelor”. This implicit ‘meaning’ is not yet-another verbal definition, but ultimately refers us to something outside the cycle of words – in experience (and abstractions from it). The meaning of a word is what we *intend* by the word, i.e. what experience (and more broadly abstraction) the word has been invented by us to stand for in our verbal thoughts. The intention of a word is what it is designed by us *to point our attention to*.

The word serves as a mnemonic or reminder of something that is ultimately wordless. Thus, when we say: “bachelors are unmarried men”, we are not merely juggling with meaningless symbols. The words “unmarried men” must first jointly mean something to us – they must refer us to some meaning *beyond words*. The definition of “bachelors” as “unmarried men” is then simply a conveying, a passing over of meaning, i.e. a redirection of intention. The defining phrase draws our attention to certain objects or contents of consciousness; and then, the defined word is attributed to the exact same objects or contents of consciousness.

When we look up a word we do not know in a dictionary, we are not merely looking for words to equate to it. We are hoping the dictionary definition will point our attention (approximately, if not precisely) in the direction of the meaning of the word. The words in the definition are means to that end; they are not the end itself. They are mere conduits.

The process involved here is very similar to what occurs in translation from one language to another. For instance, the proposition “un célibataire \equiv a bachelor” signifies equivalence between the word in French and that in English. Such equation is not merely verbal, but semantic; i.e. not only are the words equated, but their meanings. Given the meanings, such equation is therefore a statement of objective fact. One cannot equate just any word in one language to just any in the other, and often such equations must be carefully qualified because identical words are unavailable.

It follows that even though our choice of the word “bachelor” as a substitute for “unmarried man” is conventional, and more or less arbitrary, though we often prefer to refer to etymology in coining new words⁴, the proposition still ultimately relies on experienced data for its meaningfulness. In our example, the meaning depends on our existing in a society where men and women can engage in a contractual agreement called marriage, with certain rights and obligations on each side. An unmarried man is then a man who has not entered into such an agreement. And a “bachelor” is then declared short for “unmarried man”.

⁴ Note well: what is conventional here is simply what linguistic *sounds* (and their corresponding written letters) we select for the job at hand. It is a very superficial freedom of choice.

The meaning of the word bachelor, then, is certainly *not the words* unmarried man, as some logicians mistakenly think. Rather, the meaning of both the word bachelor and the phrase unmarried man is *the apparent fact(s)* that these words all point us to. They are interchangeable because we have voluntarily assigned them a common (wholly real or somewhat imagined) factual meaning. We do not always need words to understand meaning; but words do facilitate more complex thought processes and communication, so such transfers of meaning are usually useful. Although they increase the number of words in our language, the use of shorter verbal formulae permits us longer thoughts.

Clearly, all this implies specific empirical content, and usually also some abstract content (which is derived from other experiences, but has received some rational processing). It is not something as divorced from experience as Kant makes it seem. If I tell you “all shworgers are lkitzerlo abcumskil” – you would say “whaaaaaat?” This would be an example of a definition independent of experience, i.e. devoid of any meaning (other than the meanings of the sentence structure and the words “all” and “are”, which I have deliberately kept to make my point⁵) “All bachelors are unmarried men” is obviously not such a fanciful definition.

It should be added in passing, without here getting into a full theory of definition, that the example of “bachelors” (commonly used in the present context) represents only one type of defining act. In this case, we start off with a defining description, viz. “unmarried men”, and then simply assign a name to the thing concerned (I call this deductive definition). However, in many if not most cases, we proceed in the opposite direction, *more inductively*.

We start with a vague notion that there is something there that we ought to name and study. We give the vague thing a name. This name is effectively all that “defines” it for us for now; it serves as a handle on the phenomenon, or as the memory box we will collect and store information about it in. Then we study the matter, empirically and rationally, describing it in various ways.

Gradually, we select one aspect of the phenomenon under study as its definition. This may be a categorical or conditional predicate, or conjunction of predicates, of any sort. For examples: (all and only) X are Y, or Xs do Y under conditions Z. We may later decide that choice was inappropriate for some reason (for example, the proposed definition may turn out not to be universal or unconditional, or not exclusive), and choose another part of the thing’s description as its definition.⁶

If we examine this process more closely, we find it to function essentially *by analogy*. The importance of analogy in human knowledge cannot be overstated and yet is rarely mentioned. When we classify two or more things under a common concept or name, or otherwise relate them theoretically, we imply them to be analogous in some respect(s). New ideas and theories are formulated by successive analogies; they cannot be invented *ex nihilo*, without remodeling some

⁵ If I had said: “shbam lkitzerlo abcumskil shworgers lik” you would have been even more confused. Logicians who lay claim to artificial languages, or purely symbolic constructs, are stupid or dishonest, because they forget or conceal the fact they need existing language (plain English, or whatever) to communicate what they mean by them, with themselves and with the rest of us. To ignore this “little detail” is intellectually criminal.

⁶ For example, we had a word for “men” (i.e. human beings) long before we were able to define them. Aristotle proposed “rational animals” late in human history, and modern biology has proposed its own definition(s) long after. People were till then, and also today, still quite able to use and understand the word “mankind”, on the basis of perceived similarities despite perceived differences, even though they did not have a verbal definition for it, or even think to define it.

preexisting experiential (and usually partly rational) material. In the case of inductive definition, a vague resemblance between certain phenomena serves as the motive force of our research.

With this alternative act of “definition” in mind, we can see the inadequacy of Kant’s theory⁷. He just focused on just one process of definition, which superficially seemed “analytical”, and ignored the more significant process just described, which is clearly inductive, i.e. manifestly “synthetic”⁸.

Truth. It follows from such analysis – and here use the term “analysis” in a more reputable sense – that the proposition “all bachelors are unmarried men” is in fact, beneath the surface, as synthetic, a posteriori and contingent as the proposition “all bachelors are happy”. To claim “all bachelors are unmarried men” *is true*, we must believe that *there exists* something we previously called unmarried men. Even though the word bachelor is arbitrarily equated to the previous words, the underlying meaning is still called for to give it meaning in turn. If (and only if) the intended object seems to exist, is it reasonable to call such a proposition true.

At this stage, we have to ask: what of imaginary terms? For instance, in what sense is “unicorns are horses with a horn on their forehead” empirically based? Here, relation between the defined term and the defining term is the same as before, but the latter term refers to something imaginary. Nevertheless, such imagination is just a reshuffling of previous experiences. We have seen horses and have seen horns, and we put their memories together in a certain way in our minds eye (similarly with non-visual memories, of course). Had we not had physical or mental experiences (or abstractions from them) to ultimately refer to, we would have been hard put to give any meaning to the word unicorn. Our minds would remain blank with nowhere to go.

The word is thus meaningful to us, even though we do not claim it to be truthful, i.e. we do not claim it to refer to actual physical unicorns, note well. Thus, we can say that the definition of unicorns is superficially ‘true’ with regard to its equation of two sets of words, since it is entirely up to us to invent what word we choose as equivalent to the phrase horses with a horn. But the proposition is decidedly materially *false* as a whole, since horned horses do not (to our knowledge so far, at least) exist outside our imagination. If one day such an animal is found in nature, or produced artificially, the proposition might then become true. Therefore, here again, we have a clearly synthetic, a posteriori and contingent proposition.

The word ‘unicorn’ refers to a relatively concrete imaginary phenomenon. There are of course more abstract imaginations. The word ‘bachelor’ would be an abstract imagination in a society where all men were in fact married. Nevertheless, when we examine more closely the terms

⁷ And of certain related theories by some of his successors, notably the “logical positivists” in the 20th century. It is interesting to note the reflection of a prominent scientist in this regard: “extreme precision of definition is often not worthwhile, and... mostly it is not possible ” (Feynman, p. 20). The reason it is “often not worthwhile” is because fixed definition would freeze our knowledge in a premature position: knowledge must be given the space and time to develop.

⁸ It should be pointed out that when we have a vague, not yet defined word of this sort, it cannot be said that we are referring to its objects instead. This is said to avoid confusion with the later distinction (after Frege) between sense and reference. In actual practice, **the inductively developed word is vague both in its reference (we do not yet know all its objects) and in its sense (we are not yet sure which part of its eventual description will become the defining part)**. All we have to get hold of is a vague notion of some kind of resemblance between certain things so far encountered. It is important to keep this remark in mind.

‘men’ and ‘married’, we still find some traces of visual and other sensory phenomena⁹. These traces come to mind and give some concrete meaning to the abstraction. The same can be said of an abstract term like ‘noumenon’; it is not entirely devoid of empirical content¹⁰.

It should be added that the empirical traces underlying abstract concepts may be intuitive (in my sense of the term - i.e. non-phenomenal), as well as or in addition to perceptual (i.e. phenomenal, in a mental or physical sense). For example, the concept of ‘field of force’ is essentially a construct that refers to experienced physical events like the motions of certain bodies in relation to each other, and we may use pictures with arrows to visually symbolize it. But it cannot be fully *understood* without referring to our own inner experience of volitional ‘force’ (our will), and to our mental sense of effort and to our various bodily sensations when we push or pull things or are shoved around by things.¹¹

All propositions relating to meaningful abstractions, be they simple or complex, physical, mental or spiritual, are therefore also synthetic, a posteriori and contingent.

A true statement is necessarily meaningful – but so is a false statement. Note this well: a false statement is still meaningful; it is precisely because it is meaningful that it can at all be characterized as false. In such cases, the various words it contains are *separately* meaningful, but their *conflation* in a certain sentence (structure) is contrary to fact. If a statement is totally meaningless, it is neither true nor false, because it is saying nothing at all to us.

For example: “today’s king of France is a monarchist” is false because there is no present king of France (since it is a republic), even though all the words involved in this sentence are meaningful and its structure is grammatically and logically adequate, and even though the predication of monarchism to the putative king makes sense in abstraction (though not inevitable, since a republican potential king is also conceivable). The truth involved could be expressed by transforming the categorical statement into a conditional one, saying “if France had a king today, he would most likely be a monarchist”.

Because I am writing for modern readers, I should here note in passing that the modern logician Gottlob Frege would have regarded a sentence like “today’s king of France is a monarchist” as involving an empty term, a term *with sense but without reference*, i.e. with a descriptive meaning (an intension or connotation), but without an actual object to which the meaning applies (an extension or denotation). But it is inaccurate in my view to present the case in point in that manner.

The ‘sense’ is (only) part of the description, and the ‘reference’ is also (only) part of the description. For, note well, *we cannot indicate or visualize a particular object without*

⁹ For instance, marriage involves a certain public ceremony, a physical (verbal or oral) agreement, an exchange of gifts, and so on. These images & sounds come to mind to some extent whenever we evoke the concept, giving it some concrete ground. However, it does not follow that *only* such obvious memories are involved, note well.

¹⁰ If we carefully examine how we actually in practice picture that concept, we find that we project some vague images labeling them as outside or above or behind or beyond ordinary reality, i.e. as ‘transcendental’. In other words, ‘noumenon’ depends on a certain amount of geometrical imagination to be intelligible.

¹¹ In some cases, our personal valuations, like liking or disliking, or desire or aversion, are used as empirical undercurrents in the understanding of more abstract concepts. For instance, the value concepts of beautiful and ugly (aesthetics), good and bad (ethics) would not be fully intelligible without such subjective notions.

awareness of some of its descriptive elements; and in either approach, we never recall, imagine or point to more than part of the whole. For example, whether we imagine a king in power in today's France, or recall or see an actual such person, the mental content is almost the same.

If we are alert to what actually comes to mind when we evoke the things defined or their definition, we see that there is no essential difference between the two mental events; either way, we think of *a few cases and a few of their characters* to direct our attention where intended. Whether they are real or imaginary, there are no characters without cases and no cases without characters. The difference between sense and reference is thus at most one of emphasis; very often the mental content is identical either way.

Frege's doctrine of sense vs. reference, one of the basic premises of modern logic, is therefore misconceived, because insufficiently attentive to our actual processes of thought. No wonder it led to the Russell paradox, which stumped Frege. The correct alternative is the understanding that meaning may be real or illusory, and must be one or the other, and that even the illusory is somewhat based on some reality (since it at all appears). With this understanding, one sees that one cannot string words together just any way, however one likes.¹²

As regards 'purely formal' abstracts, like the symbols X or Y used in logic or in mathematics for variables, although they are the nearest conceivable thing we know to analytic, a priori and necessary constructs, it is clear that *even they* depend on some experience, since if we could not instantiate them with some example(s), they would be quite meaningless to us. Logic deals with assertoric statements, or at the very least with wordless intentions. If nothing is explicitly said or implicitly intended, no judgment needs or can be made.

It is absurd the way some formal logicians or mathematicians ignore how their abstract constructs historically evolved, and what is required to make them intelligible in every new human being in every new generation. It is important for these people to keep in mind the distinction between the verbal level of thought and the underlying intentions and volitional processes it involves. It is important for them to focus on the deeper goings on (and their respective geneses), and not get dimwittedly stuck in superficial matters.¹³

For example, the form "S is P" (subject is predicate) is a convention, in the sense that the order of the symbols or words "S", "is", "P" is not very important, what counts is their meanings. We could (in English, and no doubt in other natural languages) place them differently, as "P is S" or "P S is" or what have you. Such changes of position are found in poetry and especially in old English (for example "blessed are the meek"). We convene "S is P" as the standard order, so as not to have to keep explaining what role each of the words is meant to have¹⁴. Such formal rules are practical, rather than theoretically significant or merely (as some moderns contend) arbitrary.

In sum, it is doubtful that *any* propositions can be characterized as analytic, a priori and necessary in the precise sense Kant intended. All human knowledge needs have and does have some empirical basis, however indirect. Otherwise, it is not true knowledge, or even false knowledge,

¹² See my *Future Logic*, chapter 45, on this topic.

¹³ This remark corresponds to the distinction between "surface" and "deep" grammar by Noam Chomsky. The surface may change, but the deep stuff stays the same.

¹⁴ Similarly, the order of antecedent and consequent is conventional; i.e. it could be, and in practice often is, reversed (though the underlying intention remains the same).

but merely meaningless noises or doodles. It is “idealistic” in the worst sense of the term, i.e. divorced from any and all reality. Certainly, almost all knowledge is rationally processed to some extent, but *it is impossible to entirely separate the purely rational elements from the purely empirical elements* as Kant attempts.

***A priori* forms.** Now let us consider an actual example of Kant’s: “all bodies are extended”. The reason I left it till last is because it involves more complex issues.

What is evident and sure is that we would not be able to formulate such a proposition if we had no experience of a world with bodies extended in a space, or at least of an imaginary such world. For we could well have been born in a world where we experience only one thing, viz. just light (or even, just darkness or a dimensionless point); we would still be conscious in that context, but would have no experience or imagination of extended bodies. It follows that this proposition of Kant’s is in fact quite synthetic, a posteriori and contingent.

Here we touch upon Kant’s theory of (imposed) “forms” of sensibility and understanding, according to which our cognitive faculties supply certain non-empirical factors of knowledge (notably space and time, and causality, among others). These components of knowledge are, according to him, *both a priori and synthetic* – that is to say, they are purely ‘rational’, in the sense of ‘known independently of any experience’, and yet *somehow* give us true information about the world, the immanent world.

In truth, we cannot rationally predict experience without any appeal to experience. Space (in at least two dimensions) and time, and likewise causality (i.e. causation, in this context) and many other abstractions, which Kant regards as categorizations imposed on experience by us, are all based on some experience and never on reason alone. Reason cannot function without some experience.

For (to repeat) we might well have existed in and experienced a unitary world without shapes and sizes or distances, without movements or other changes, and without concatenation of events (and a fortiori, without the negations of such things and events) – and then we would never have been able to understand such concepts.

Therefore, such categories are not mental formats that somehow impinge on and structure experience *before* we actually take cognizance of it. They are rather *given in experience and taken from it*. They are ways we mentally order experience *after* the fact, i.e. after we have already experienced it (and we so order it so as to more efficiently think about it and deal with it in action). They are a posteriori, not a priori.

Moreover, space, time and causation are not only applicable to sensory experiences. They are also applicable to mental experiences. It is true that apparently material bodies are visibly extended in ‘space’, go through visible changes in ‘time’ and often occur in visible conjunctions, i.e. with ‘causation’. But these visual properties are not reserved to the seemingly material domain. They are also applicable in the mental domain. The images we imagine (while awake or in dreams) are also evidently extended and changing, and sometimes conjoined and sometimes not.

We should also keep in mind that the seemingly ‘external’ and ‘internal’ spaces, times and causal chains might or might not be the same or interactive. It follows that if Kant’s motive in proposing these forms was to differentiate sensory experience from imaginary experience, he failed –

because there is no differentia in their use in either domain. It follows too that these forms cannot be used to explain how or why ‘physical’ experiences are transformed into ‘mental’ ones – because if this were the purpose of such forms, why would they also be used on mental experiences?

Thus, “bodies are extended” cannot be proposed as a complete definition of seemingly material bodies, as against mental images, with reference to the visual experience of extension *alone*. It may suffice for mathematicians, but it does not for phenomenology-inclined philosophers. To define such bodies, we *also* have to refer to touch sensations, especially the experience we have of resistance to pressure by apparently material bodies. Mental images of such bodies do not have this tactile aspect, because (it seems to me) we are unable to concretely imagine touch.¹⁵

Another point worth making here in rebuttal of Kant is the very fact of his communicating with us through his writing. When he says: “bodies are extended”, he is assuming these words mean something to us, and moreover the same as they mean to him. He claims this something is purely rational (i.e. “analytic”); but as indicated above such claim is logically untenable, because words must ultimately (if not directly) at least refer to an imagined experience, if they do not refer to a physical one. Words without *any* experience whatever anywhere behind them are meaningless, i.e. devoid of content.

Both he and we must refer to common experiences to understand the words, and to share them. Whether these experiences are of a physical world or a merely mental one makes no difference, provided we have a domain in common. If he was (as logically he may be taken to imply) fundamentally isolated from us, both physically and mentally, in that “bodies”, “are” and “extended” were purely rational terms, he couldn’t communicate with us on this issue. We would have no shared ground, no channel of communication.¹⁶

Conclusion. The analytic/synthetic and a-priori/a-posteriori dichotomies have some traces of truth in them, in the sense that human knowledge is formed by both reason and experience. It contains both deductive and inductive components. But these components cannot readily be separated; they are too intertwined, too mutually dependent. Some partial separation is of course possible, but not a thorough separation such as Kant attempts. Nothing is purely deductive or purely inductive.

Even the laws of thought, the principle of induction, and various other generalities of formal logic, depend on experience for their meaning and for our understanding of them. Before we can say “A is A”, or find a statement to be paradoxical, or differentiate between truth and falsehood, or make a syllogistic inference, or understand what any of the preceding means, we need to have some experiences¹⁷. Our cognitive faculties cannot function without content, just as our hands cannot manipulate anything if they are empty.

¹⁵ Kant would presumably add substance (in the sense of subsistence) as an essential attribute of bodies. But I leave this complex issue out of the present discussion, since I deal with it in other contexts (notably, with reference to Buddhist doctrines).

¹⁶ Of course, I could argue that Kant is a mere figment of my imagination. This is the solipsist hypothesis, which is not easy to disprove deductively, but which may reasonably be considered unconvincing given the degree and richness of imaginative power it presupposes one to have.

¹⁷ I am always amused and amazed by logicians or mathematicians who think that they can manipulate “pure” symbols independently of all experience. They ought to stop and consider, for a start, their own experience of those symbols and of the actions they personally perform with them. They are

The logic proposed by Kant *does not correspond to the logic of actual human discourse*; it is a mere incoherent invention of his. He may have pretentiously called it a critique of pure reason, but I would call it an impure critique devoid of reason. If he describes reason erroneously, he is logically bound to end up with absurdities like the unbridgeable gulf between things-in-themselves and things-as-they-appear. But such difficulties are not the fault of reason; they are the fault of (his own) *unreason*.

Nevertheless, Kant has been hugely influential on modern logic. The pursuit by many modern logicians of “formal systems” that are freely developed independent of experience may be regarded as an enterprise inspired by Kant.

The logical-positivists¹⁸ were mostly German logicians, functioning under Kantian premises. It is not therefore surprising that most of them (with the notable exception of Kurt Gödel, who was their nemesis from the inside¹⁹) adhered to a philosophy paradoxically composed of both extreme rationalism and extreme empiricism at once; that is, a philosophy upholding reason apart from experience and empiricism apart from logic, “and ne’er the twain shall meet”²⁰.

Addendum (2009).

Amplifying the above conclusion.

Kant defined an **analytic** proposition as one whose predicate is “contained” (i.e. immediately given and manifest) in the subject. This meant that the subject-concept was to us unthinkable without the predicate-concept, so that we could readily mentally extract the latter from the former both a priori (i.e. without recourse to experience) and necessarily (i.e. with utter certainty). My contention is that there is no such mental process as Kant's analytic. Kant and indeed many people do believe that they can extract certain predicates from certain subjects without recourse to experience and with utter certainty; but this is an error on their part due to insufficient introspection and reflection. Such extraction does occur - but it is not a priori or logically

writing on paper (or on a computer), are they not? They are hoping other people will read their stuff (and agree with them), are they not? All that is experience, too, and cannot be dismissed as irrelevant.

¹⁸ Including here (for the sake of argument) members of the Vienna Circle and the likes of David Hilbert, Ernst Mach and Ludwig Wittgenstein.

¹⁹ I must here give thanks to Yourgrau’s account of Gödel’s work, which (partly because of its semi-biographical format) has considerably changed my opinion of Gödel’s importance in the history of logic. My few past comments on this logician, in my *Future Logic*, might have seemed disparaging, because I assumed him to be essentially an ally of the formalist Hilbert. Yourgrau’s book has taught me that Gödel was consciously critical; i.e. that he did not merely stumble on his anti-formalist theorems, but purposely pursued them on principle. I see now that he was indeed a great logician, because he permanently defeated the modern proponents of a purely deductive logic on their own terms.

²⁰ To be more precise, they sought to adhere to logic, which they essentially understood as *deductive* logic, and they largely ignored *inductive* logic, which is precisely the tool through which reason assimilates experience. So-called formal systems are artificial concoctions, in that they arbitrarily simplify the complexity of logic (i.e. human discourse), by attempting to reduce it all to a manageable number of axioms and rules from which all theorems can be proved. This abstract and mechanical approach to logic may seem interesting to some people, but it is in fact just narrow and rigid in its mentality. It prematurely blocks research into all the manifold aspects and dimensions of our natural logical discourse, just so as to satisfy a penchant for order and finality.

necessary deduction: it depends on experience and it can result from erroneous processing of information. It does not tell us how the predicate concerned originally *came to be known*, but is just an ex post facto recall of an already formed opinion or decision. Thus, the very concept of analysis as proposed by Kant is wrong - and *all* propositions must be regarded as essentially synthetic in his sense of the term. Even the four laws of thought and the formal logic derived from them are synthetic, note well.

Underlying the wrong belief in Kantian analytic propositions is the Kantian belief in **a priori** knowledge. My contention, here again, is that no human knowledge is purely a priori - all human knowledge is to various degrees a posteriori. As I have argued, even Aristotle's three laws of thought and the principle of induction depend on some experience to at all come to mind and be understood and believed. They cannot exist in a vacuum, as a thought thoroughly devoid of all content. They are the closest we can get to a priori thought - but they cannot conceivably be 100% a priori. Thus, the Kantian idea of a priori is a mere figment of his imagination, too. We can use the term to refer to involvement of rational acts (in contrast to pure experience) in the formation of judgments - but we may not conclude from such use that there are judgments that are entirely rational (i.e. devoid of any experiential content whatsoever).

It follows from these considerations that Kant's search for "synthetic a priori" propositions is a red herring. All propositions are synthetic - even those that seemed to him to be analytic. And no propositions are purely a priori - they are all to some extent a posteriori, i.e. dependent on experience at some stage. In other words, all propositions are synthetic a posteriori (whether they be logically necessary or logically contingent).

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