

## Reviews – Etudes critiques – Buchbesprechung

Wojciech Zelaniec, *The Recalcitrant Synthetic A Priori*.  
ArTom, Lublin (Poland), 1996, 70p.

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A defence of the synthetic a priori in the analytic vein, after Quine's "Two Dogmas of Empiricism", deserves attention. Zelaniec's short but detailed book is a deep and painstaking defence of that now widely despised category of sentences. The book breaks with the tradition which attempted to define the category before any serious scrutiny of what its alleged members have in common, in particular with the trend which defined the synthetic a priori as 'neither analytic nor empirical'.

As Barry Smith puts it in his foreword to the book, Zelaniec studies the synthetic a priori in some sense 'empirically'. His method is this (§§3-5): single out a sample of putative synthetic a priori sentences – '*synap sentences*': sentences quoted as examples of the synthetic a priori by some philosopher – and then try to identify features they jointly share in opposition to the other sentences, like undoubtedly empirical ones and tautologies. The list of synap sentences given in the book (§6) is open, and Zelaniec admits himself (§5) that for some of its members the final characterization may not hold. This however is not crucial. The worth of Zelaniec's work does not depend on whether it identifies features common to *all* synap sentences or not: it is enough that features which set *some* sentences apart from others are uncovered. Zelaniec's methodological choice protects his venture from Quine's alleged kanticide: arguments for the undefinability of the analytic count as arguments for the undefinability of the synthetic a priori only if the latter category cannot be defined except by contrasting it with the former.

At first sight, a feature common to all synap sentences – e.g. every colour is extended, everything red is coloured, man acts – is that *they seem obviously true* (§7). Here two questions arise (§8). What distinguishes synap sentences from other seemingly obvious ones such as tautologies and well confirmed empirical hypotheses? This is '*the problem of the synthetic a priori*'. What is the epistemological value of that seeming obviousness? This is '*the concomitant question*'.

A preliminary empirical investigation reveals that some apparently healthy subjects do not find every synap sentence obviously true (§11). They divide into three categories: those who cannot justify their claim, those who accept only tautologies as obviously true, and those who possess some 'special information' (information supplied by a specialized area of study, scientific or other) related to what some synap sentence is about. Zelaniec calls a subject who finds some synap sentence obviously true a 'normal subject' (with regard to that sentence). In regard to 'special information', a synap sentence can lose its grip on a subject if this subject is provided with, and accepts, some suitable 'special information' (§15). If I understand the author correctly, one example of such a change is the following (§15). If you are not acquainted with the theory of relativity, then you probably find it obviously true that velocities are additive. But, after a painstaking study of Einstein's physics, either you accept that velocities are *not* additive, or at least you do not find the sentence 'velocities are additive' *obviously* true anymore.

In discussing the problem of the synthetic a priori, Zelaniec points out (§12) that for 'normal subjects', synap sentences contrast (i) with tautologies, (ii and iii) with sentences which can be turned into tautologies by replacing some of their constituent expressions by perfect or partial synonyms, (iv) with sentences believed to be true either on authority of 'specialists' or on the basis of appeal to some 'special information', (v and vi) with sentences whose counterinstances can be imagined, whether they are considered as highly contingent or highly probable, and finally (vii) with sentences whose counterinstances cannot be imagined but still conceived of. Point (vii) provides one with a positive and specific feature of synap sentences: their counterinstances cannot be conceived of. As Zelaniec understands it, to conceive of something is to be able to tell a coherent story about it. What characterizes a synap sentence is that a 'normal subject', trying to conceive of its counterinstance, arrives at a contradiction. Conceiving of a situation presupposes accepting as respectively valid, correct and true a bag of inference rules, definitions and sentences. One then understands what happens when a 'normal subject' tries to conceive of the counterinstance of a synap sentence: as a 'normal subject', his bag is furnished with materials which entail the synap sentence. Incidentally, as Zelaniec shows, the bag may contain other synap sentences: the synthetic a priori proves recalcitrant! One also understands what happens when a subject gets some 'special information' which makes some synap sentence lose its grip on him: the 'special information' substantially modifies the content of his bag.

All this leads to an answer to the concomitant question (§16): the epistemological value of the seeming obviousness of a synap sentence depends on whether the inference rules, definitions and sentences used at trying to give descriptions of a counterinstance of that synap sentence are respectively valid, correct and true, or if they just seem to be. This is to be examined through specialized areas of study, and does not concern philosophy, unless the sentences to be examined are in turn synap sentences or if the process of examination itself makes use of synap sentences (Zelaniec labels this situation 'the strange difficulty'); in these cases, philosophy has to prevent one from concluding to truth straight off from mere apparent obviousness.

Here I briefly advance two remarks, without pretending they contain serious arguments against the main claims of the book. The first expresses two minor worries of mine pertaining to the way 'special information' can turn synap sentences from seeming obvious to appearing dubious or false, and to the very characterization of synap sentences. The second is about the 'strange difficulty'.

(1) One of Zelaniec's claim is that (i) the grip a synap sentence has on a subject depends in particular on what this subject believes are *correct definitions* and *valid inference rules*, and (ii) some 'special information' may induce changes in these beliefs, thereby making the subject no longer find the synap sentence obvious. This point about definitions and inference rules seems odd to me.

Let's start with inference rules. Zelaniec is thinking in particular about deductive rules such as 'from p and q, infer p&q' (§14). But how could any 'special information' make a subject reject such a rule? This would be to reject 'standard logic' in favour of a 'non-standard logic'. Of course, there are several logics, but no one will pretend they compete with, and could replace, the 'usual logic' with regard to the description of how we should think. Another point about inference rules which worries me is the following. If all that sets synap sentences apart from other sentences is that (1) they seem obviously true to 'normal subjects', (2) such subjects cannot conceive of plausible counterinstances, and (3) a change in what is considered by them as valid inference rules, correct definitions and true sentences may make synap sentences no longer appear obvi-

ously true to them, then tautologies are synap sentences: for a tautology seems obviously true, its counterinstance cannot be conceived of, and if inference rules change, some tautologies change too.

Let's turn to definitions. As we saw, Zelaniec claims that some 'special information' may induce changes in what a subject considers as correct definitions, thereby providing this subject with good reasons to think that some synap sentence is dubious or even false. My worry about this claim is this: if you change the definition of some of the constituent expressions of a sentence, you are likely to change the meaning of this sentence, and then it will not be surprising that your opinion about its truth is thereby modified. To illustrate the point, take the sentence "no infinity is greater than another infinity". A brief investigation proves that a 'normal subject' (e.g. a child) finds it obviously true (it seems to me that Zelaniec takes it as a synap sentence (§15)). But whoever knows Cantor's work has good reasons to think that this is false: using Zelaniec's words, Cantor has furnished him with appropriate 'special information'. But a closer look at the story reveals that this 'special information' consists first of all in providing a definition of 'larger than' and 'as large as' applicable to finite as well as to infinite sets, a definition which 'normal subjects' certainly do not have in mind when they consider the sentence about infinities. Indeed, experience shows that one who finds this sentence obvious either does not really understand what is being said, or uses another definition of 'larger than', inapplicable to infinite sets (like e.g.:  $a$  is larger than  $b =_{df}$  there is some positive real number  $c$  such that  $a = b + c$ ). Cantor's 'special information' induces a change in definitions, which makes the meaning of the sentence "no infinity is greater than another infinity" change too. Thus, it is not surprising that to change from being a 'normal subject' to being a mathematician makes you change your mind about the truth of such a sentence.

(2) Examining the epistemological value of some synap sentence such a reduces to checking respectively the validity, correctness and truth of the inference rules, definitions and sentences used at trying to give descriptions of the counterinstance of that synap sentence. As we saw, possibly some of the sentences to be examined or used during the examination are in turn synap sentences. This is the 'strange difficulty'. Is the 'strange difficulty' unavoidable? In some cases, there appears to me to be a way of dissolving it. Consider for example the synap sentence "everything red is coloured". Intending to check its epistemological value (§19), Zelaniec accepts 'for the sake of the argument' that it is obviously true by virtue of the definition 'coloured =<sub>df</sub> red or blue or green or ....'. Zelaniec then remarks that in order to justify the correctness of this definition, one will end up saying that the definition is not arbitrary because it is based on the fact that red things, blue things, green things, etc. have something in common, which sets them apart from transparent glass or clear water. But that 'fact', Zelaniec notices, is expressed by a synap sentence. We are confronted with the 'strange difficulty'. While attempting to justify the sentence "red things, blue things, green things, etc. have something in common, which sets them apart from transparent glass or clear water", will we not meet the 'strange difficulty' once again? If we endorse the claim that when A justifies B, A is some sentence, then maybe we will keep on meeting the 'strange difficulty'. But if we are friends of *prima facie* perceptual justification, then the spell of the 'strange difficulty' quickly vanishes: we could say that the sentence "red things, blue things, green things, etc. have something in common, which sets them apart from transparent glass or clear water" – a synap sentence – is *prima facie* (here: perceptually) justified. The 'strange difficulty' concerns only justification by sentences or other truth-bearers.