IIγ: Metaphysics Z4-9: the essence

IIγ1b: Z4-5: why things said per accidens do not have essences

Having seen the argument in Z6 which Z4-5 are designed to support, we can go back to see the main lines of how Aristotle argues in these earlier chapters, and why.

The beginning of Z4 picks up the mention of the essence of X, as one of the things that is said to be the οὐσία of X, in the first sentence of Z3. At the beginning of Z4 Aristotle can presuppose nothing about essences beyond what is given in the Academic practice of searching for definitions, or in what he himself has said about this practice in the Topics and Posterior Analytics. His task in Z4-5 is to start from the initial vague conception of essence as it emerges from this dialectical practice, and to make it precise enough to derive the conclusion he needs, namely that concrete accidents and substance-accident composites do not have essences, or do not have essences in the primary sense, and that if they do have essences in some extended and derivative sense, then this is not enough to support the Z6 argument for Platonic forms of accidents.

Logically, Z4 is sufficient to reach this conclusion, without needing Z5; Z5 provides a supplementary argument for the same conclusion, which could be left out in a shorter version of Z. So Z4 concludes that "essence belongs primarily and without qualification [ἀπλῶς] to οὐσία [alone], and afterwards to the other [categories]" (1030a29-30), and goes on to express indifference about the qualified senses of essences that non-οὐσια may have (1030b3-6); and then Z5 adds more arguments to the same effect, and concludes again that "essence belongs either to οὐσία alone, or [to οὐσία] most of all and primarily and without qualification" (1031a12-14). Aristotle in fact distinguishes three cases in Z4-5, the case of οὐσια, the case of accidents (that is, as Z6 will make clear, of abstract accidents) and the case of substance-accident composites (and, as Z6 will add, concrete accidents). At least in Z4, the main thrust of Aristotle's argument is directed against substance-accident composites, to show that these do not have essences in as strong a sense as οὐσια and even accidents do: "there will be a λόγος and definition even of white man, but in a different way from white and from οὐσία" (1020b12-13), so that οὐσία have essences primarily, accidents secondarily, and substance-accident composites only tertiarily.

I will break Aristotle's argument into three sections. In a short introduction which I have labeled Z4α (1029b13-22), Aristotle gives a progressive clarification and demarcation of the concept of essence. Then, in the remainder of the chapter, Z4β (1029b22-1030b13) he argues that non-οὐσια do not have essences except in a qualified sense; and then Z5 (1030b14-1031a14) uses another strategy to argue again for the same conclusion. But, as we will see, while the conclusions of Z4 and Z5 are formally identical, Z5 establishes a stronger sense of this conclusion, and one more damaging to the Platonists.

Demarcating essences

Aristotle starts by noting, as the most obvious reflection on dialectical practice, that the essence of X (τὸ Χ+dative εἶναι, what-it-is-to-be-X or what-it-is-for-X-to-be) is what is said of

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1for the breakdown of Z4, and of Z4-9 generally, see the introduction to IIγ1 above
X καθ' αὐτό rather than κατὰ συμβεβηκός (1029b13-14). Of course this would apply, not only to the whole definition of X, but also to parts of the definition, such as the genera; so perhaps we should take Aristotle to mean "the essence of X is the totality of what is said of X καθ' αὐτό". In any case, as Aristotle immediately says, this characterization of the essence of X is insufficient: we must add that the essence is "not καθ' αὐτό in the way that white [belongs καθ' αὐτό] to surface, since to-be-[a]-surface is not to-be-white" (1029b16-18). Here Aristotle is referring to two kinds of predication καθ' αὐτό that he had distinguished in Posterior Analytics I,4 and then again (in the more immediate context) in Metaphysics Δ18:

Καθ' αὐτά are (1) such things as belong [to something] in the τί ἐστι, as line belongs to triangle and point to line (for the οὐσία of those [triangle, resp. line] is out-of these [line, resp. point], and these are present in the λόγος that saying what the thing is) and (2) [such things as belong] to such things as are themselves present in the λόγος expressing τί ἐστι for the things that belong to them, as straight and round belong to line, and as odd and even, prime and composite, square and nonsquare belong to number; where line or number belongs in the λόγος saying τί ἐστι for all of these [attributes]. (Posterior Analytics I,4 73a34-b3)

So, to use the example that Aristotle gives in Metaphysics Δ18, a surface is white καθ' αὐτό in the second of these ways, since surface is the primary ύποκείμενον of white (Δ18 1022a30-31):2 that is, anything that is white other than a surface is white only by having a surface that is white, as anything that is straight other than a line is straight only by containing a line that is straight. But, while everything that is primarily white is a surface, not every surface is white, and so white belongs to surface καθ' αὐτό only in the second way. At Z4 1029b16-18 Aristotle is drawing on his example from Δ18, and his point in saying that the essence is "not καθ' αὐτό in the way that white [belongs καθ' αὐτό] to surface" is simply to restrict the essence of X to what is said of X καθ' αὐτό in the first of the two ways.

Thus far what Aristotle has said in Z4 is straightforward and obvious. What he says after this makes a more specific point toward the argument he is developing; and there is a dispute about the construal, and mild textual trouble as well. But when the passage is read in its full context its meaning becomes clearer. The present passage, including a bit of context, says literally:

[The essence is] not [what is said of a thing] καθ' αὐτό in the way that white [belongs καθ' αὐτό] to surface, since to-be-[a]-surface is not to-be-white. But also not the composite [τὸ ἔξ ἁμοιοῖν], to-be-a-white-surface, because it is itself present-in-addition [ὅτι πρόσεστιν αὐτό or αὐτό or αὐτή or αὐτη or αὐτῆ]. So the λόγος in which the thing is not itself present, but which expresses [λέγει] the thing, this is the λόγος of the essence of each thing, so that if to-be-a-white-surface [= for-a-surface-to-be-white] is to-be-a-smooth-surface [= for-a-surface-to-be-smooth], then to-be-white and to-be-smooth would be one and the same. (1029b16-22)

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2 cite, from the καθ' αὐτό part and the earlier καθ' ὁ part, noting the close parallel with the two senses from Posterior Analytics I,4
The construal problems are in the sentence "but also not the composite, to-be-a-white-surface, because it is itself present-in-addition [ότι πρόσεστιν αὐτό (?)]," which I have translated neutrally. Grammatically, Aristotle might be saying either that to-be-a-white-surface is not the same as to-be-a-surface (and is therefore not the essence of surface) or that to-be-a-white-surface is not the same as to-be-white (and is therefore not the essence of white); and the meaning of πρόσεστιν is not clear, and αὐτό (or its variants) might be either the surface or the white. 3 Ross takes Aristotle to mean that "such a statement of the essence of surface as 'to be a white surface' is wrong because it is tautologous." But this would be a very odd thing for Aristotle to say: such a statement of the essence of surface would be not tautologous but false, and Aristotle's objection to it would be just the same as his objection to saying that the essence of surface is to be white: namely, that this is predicated of the surface καθ’ αὐτό in the second way, so that the subject is contained in the λόγος of the predicate but not vice versa. But if Aristotle is instead responding to the suggestion that to-be-a-white-surface is the same as to-be-white, then he does need a new objection; and the one he gives, "ότι πρόσεστιν αὐτό", is in fact an important objection which he will develop in the rest of Z4-5. 4 For Aristotle goes on to say that a formula like "white man" or "white surface", given in an attempt to state the essence of white, is a λόγος ἐκ προσθέσεως, and he explains this by saying that "the thing which is being defined [αὐτό ... ὁ ὀρίζων] προσκείται to something else, e.g. if someone, in defining to-be-white, said the λόγος of white man" (Z4 1029b31-3), 5 which would therefore fail to be properly καθ’ αὐτό of the white. Here when Aristotle says αὐτό ἄλλῳ προσκείται he means that the definitiendum, white, is "attached" to a ύποκείμενον, man, in the alleged definitory formula, which therefore fails to be a definition of white; and ὁ πρόσεστιν αὐτό at 1029b19 is parallel: since αὐτό, the white, is "attached" to a ύποκείμενον, surface, in the alleged definitory formula "white surface," this formula fails to express the essence of white. 6 This will be important for Aristotle's argument, since, as he will argue in Z5, there can be no λόγος of an accidental term except ἐκ προσθέσεως, so that if a λόγος ἐκ προσθέσεως is not a definition ἀπλῶς, then no accidental term can be defined ἀπλῶς; and this is not simply a fact about language, but reflects the deeper fact that no non-οὐσία has an essence except in a secondary and derivative way.

Is there an essence of white man? (Z4β)

For now, in the remainder of Z4, Aristotle does not make the deep and possibly controversial

3 if the pronoun is feminine, it forces the subject of πρόσεστιν to be the surface, unless it is a feminine dative, in which case the subject of πρόσεστιν is the white; if the pronoun is neuter, it might more easily refer back to the white, but Aristotle is perfectly capable of using a neuter pronoun to refer back to something named by a feminine noun in the previous sentence
4 another advantage of this interpretation is that it explains why in the next sentence Aristotle is worrying about to-be-white and to-be-white-surface, but not about to-be-surface, thus far I agree with FP. but their suggestion to read Δβ's ὁς ἐπιφάνεια λευκῶν (with λευκῶν as subject) instead of ὁς ἐπιφανεία λευκῶν is just hopeless in face of Posterior Analytics 1,4 and especially of the Δ18 parallel; and they are wrong to think that this is necessary in order for the definitiendum in the next sentence to be whiteness instead of surface (they give no argument at all, and the grammar certainly admits the possibility I am endorsing). I also think they are wrong about what the readings ὁπρόσεστιν αὐτό vs. ὁπρόσεστιν αὐτή (or αὐτή) would imply; see below; but this is less important
5 so esp. Z5 1030b14ff, where it is argued that there is no way to define a term like "snub" except by giving such a λόγος ἐκ προσθέσεως; cp. Z4 1029b30--and thus that "snub" cannot be defined, or cannot be defined ἀπλῶς.
6 note construal dispute, from phone conversation with Alan
7 perhaps note on other possible interpretations of πρόσεστιν (i.e. attempts to detach it from πρόσθεσις- προσκείσθαι, or to give it a "symmetrical" meaning not distinguishing the roles of the attribute and the subject)
claim that no λόγος can be given of an accident except ἐκ προσθέσεως. But he still wants to argue, without relying on this premiss, that non-οὐσία do not have essences or λόγοι τῆς οὐσίας except in a secondary way; he takes, as paradigm cases for such non-οὐσία, substance-accident composites (κατὰ τὰς ἄλλας κατηγορίας σύνθεσα, Z 1029b23) such as white man. It is only by following through his argument that we can see, either what scope he is giving to the class of "non-οὐσία", or what the difference is between the primary kind of essences that these things cannot have and the secondary kind of essences that they can have.

Aristotle starts by taking white man as an example of a substance-accident composite, and asks whether he (ὁ λευκὸς ἄνθρωπος) has an essence or a λόγος τῆς οὐσίας; for purposes of the argument, Aristotle says "let his name be 'cloak'; then what is to-be-[a]-cloak?" (1029b27-8). The phrase "let his name be 'cloak'" [ἐστι δὴ ὄνομα αὐτῷ ἴματιον] is clearly marked as an ἐκθεσις of white man; Aristotle's point will be that this ἐκθεσις, by treating white man as if he were a this, leads to absurdity--as Aristotle says below, "white man is not ὑπὲρ τὸ δέ τι" (1030a4-5), so that "to-be-[a]-cloak is not to-be-something at all" (paraphrasing 1030a2-3).

The way we discover that the ἐκθεσις is illegitimate is by asking "what is to-be-[a]-cloak" and seeing that every possible answer leads to absurdity. As Aristotle immediately says, "this too is not one of the things said καθ' αὐτό" (1029b28-9). To claim that cloak does not exist καθ' αὐτό is to imply that there is no cause of being καθ' αὐτό to cloak, and thus that there is no essence of cloak: cloak belongs to the domain of beings per accidens which Aristotle had discussed in Metaphysics E2-3 precisely in order to conclude that they have no determinate causes of being, and thus to exclude them from the investigation of Metaphysics Z. But Aristotle does not simply refer back to the E2-3 discussion of being per accidens and declare that the question of the essence of cloak is out of order; instead, he argues afresh that cloak is not said καθ' αὐτό and so does not have an essence, using what he has said in the first part of Z4 about the different ways in which Y can fail to be said of X καθ' αὐτό and so can fail to be the essence of X.

Aristotle argues that cloak is not said καθ' αὐτό, or, rather, secures premisses toward the claim that cloak is not said καθ' αὐτό, as follows:

Not-καθ'-αὐτό is said in two ways, one of which is from προσθέσεις and one of which is not. The first [kind of not-καθ' -αὐτό] is said through the thing-which-is-being-defined's being attached [προσκεῖσθαι] to something else, for example, if someone in defining to-be-white gives the λόγος of white man; whereas the second [kind of not-καθ' -αὐτό is said through] something else's [being attached] to [the thing which is being defined], for example if "cloak" signifies white man and someone defines "cloak" as white. For white man is white, but it is not the essence of white. (1029b29-1030a2)

Ross comments, bizarrely, on ἄλλα μὴν οὐδὲ τῶν καθ' αὐτό λεγομένων οὐδὲ τοῦτο: "Aristotle here anticipates an objection. Some one may say 'it is no use asking what τὸ ἴματιο ἐἶναι is. The thing denoted is not καθ' αὐτό λεγομένων--white is not καθ' αὐτό to man--and therefore cannot be the essence of white man'. The objection assumes, arbitrarily enough, that only what is internally καθ' αὐτό can be a καθ' αὐτό predicate to something else. But Aristotle takes it seriously and shows that 'white man' may have something said of it which is not τὸ καθ' αὐτό in either of the senses in which a definition should not be τὸ καθ' αὐτό to its subject" (AM II,169). [Ross is here just following Bonitz pp.306-7, who is just following the ps-Alexander p.470. Bostock tries his best to follow Ross, and manages only to reveal the hopelessness of the case--this is funny in a sad way, and should maybe be quoted.] This is diametrically opposite to what Aristotle is actually doing in the text, which is to use the analysis of ways in which Y can fail to be καθ' αὐτό of X to argue that to-be-[a]-white-man is not some essence that would be predicated of white man καθ' αὐτό (white man is indeed man καθ' αὐτό, but he is not white καθ' αὐτό and therefore he is not
This is telegraphic, but it is not too difficult to unpack Aristotle's meaning. The first way that Y can fail to be said καθ' αὐτό of X is for X to be "attached" to something else--that is, predicated of some other underlying nature--in the λόγος Y; this is the case we saw at the beginning of Z4, where someone in defining "white" says "white surface" (or, in the present example, "white man") or gives some expression equivalent to these. Aristotle now adds that there is a second plausible way for the λόγος Y to fail to be said καθ' αὐτό of X, namely when X has some other underlying nature to which Y is "attached," as where X is "white man" (or "cloak") and Y is "white."

It is at first blush surprising that Aristotle says that white is not said καθ' αὐτό of white man, since it is an analytic truth that white man is white; white is of course not the essence of white man, since the essence of white man must also include being man, but Aristotle is claiming something stronger than this, namely that white is not said καθ' αὐτό of white man, and so cannot be even part of the essence of white man. But it is not hard to see Aristotle's point. When Aristotle says that "white man is white, but it is not the essence of white [τὸ λευκός ἄνθρωπος ἐστὶ μὲν λευκόν, οὐ μέντοι τί ἣν λευκό ἐίναι]," he is alluding to the point he has made in the Categories, that although the name λευκόν is in some cases said of the ύποκείμενα in which τὸ λευκόν is present (namely, when the ύποκείμενον is neuter and so is called λευκόν rather than λευκός or λευκή), nonetheless the λόγος of λευκόν (which expresses the essence of white) is never predicated of these ύποκείμενα (Categories 2a27-34). And this is correct: the λόγος of λευκόν is χρώμα διακριτικόν τῆς ὄντος, and since a white body is not a color, the λόγος of the essence of white can never apply to the white body. So the essence of white is not predicated of white man at all, and so white is not said of white man καθ' αὐτό.9 We can reformulate

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9In the last line I am following the text of Bonitz and Jaeger and FP (which deletes an είναι from the manuscripts; quite plausible that the scribe, after writing τί ἣν, should automatically follow it by είναι). But Ross' alternative, οὐ μέντοι τὸ τί ἣν είναι λευκό είναι, might be right; it has the advantage of giving a nice flow in the following lines: "white-man is white, but its essence is not the essence of white; but is the essence of cloak an essence at all?" etc.
10by καθ' αὐτό here (and in the rest of this paragraph) I mean καθ' αὐτό-in-the-first-way, which is the way that Y must be predicated of X in order to be the essence, or part of the essence, of X (Aristotle too very often says "καθ' αὐτό" for what should strictly be "καθ' αὐτό in the first way")
Aristotle's point by saying that although "white" is predicated καθ' αὐτό de dicto of the white man, it is not predicated καθ' αὐτό de re of him, since he can continue to exist while ceasing to be white; he is merely something that happens to be white, and being-white is not (all or part of) what it is for him to be.\(^{11}\)

However, the conclusion Aristotle wants is not just that white is not said καθ' αὐτό of white man, or that white is not (part of) the essence of white man, but that white man is not said καθ' αὐτό at all, and that there is no essence of white man. But this follows readily enough from the points Aristotle has secured. As he puts it here, "But is being-a-cloak an essence [τί ἦν εἶναι τι, i.e. is it being-something] at all, or not? For the essence is ὅπερ τι;\(^{12}\) but whenever one thing is said of another thing [ἀλλὰ καὶ ἀλλὰ λέγεται], it is not ὅπερ τὸδε τι--for instance, white man is not ὅπερ τὸδε τι--since [ἕπερ] 'τὸδε' belongs only to ὀὐσίατι" (1030a2-6). That is: if Y is the essence of white man, then the thing of which Y is predicated (namely, white man) would have to be ὅπερ Y (this is equivalent to saying that Y would have to be predicated of it καθ' αὐτό, which is a condition of Y's being the essence). But white man is not ὅπερ τὸδε τι--that is, although there may be values of Y such that white man is ὅπερ Y, it will not be true that for white man to be white man is to be ὅπερ Y. To put it another way, white man is not ὅπερ white man. This is because he is not ὅπερ white, since he can cease to be white without ceasing to exist; and so, also, he can cease to be white man without ceasing to exist.\(^{13}\) We can, if we like, collect predicates Y such that white man is ὅπερ Y, or such that white man is Y καθ' αὐτό--there is, as far as I can see, no objection to saying that white man is ὅπερ man, and man καθ' αὐτό--but the conjunction of all such predicates will still not give the essence of white man, since it will not include the predicate "white" and so will not be ἵδιον to white man. An essence of white man must both be ἵδιον to white man and be said καθ' αὐτό of white man, and there is nothing that meets both of these conditions. As Aristotle says, in "white man" ἄλλο κατ' ἄλλου λέγεται, namely white man, and so for the thing to be white is not for it to be τὸδε (since something is τὸδε only if it exists καθ' αὐτό, not if it exists as a predicate of some other underlying nature) but rather to be τοιόνδε; the composite, white man, is not τὸδε or even properly τοιόνδε, but τοιόνδε τὸδε.\(^{14}\) So we can say that being-white-man is not τι ἦν εἶναι τι, i.e. that being-white-man is not being-something, since it is not being-this, or even properly being-such, but only being-this-and-also-being-such.\(^{15,\dagger}\)

\(^{11}\) ὁ: τοῦτον δὲ διαφιλοσοφοῦνθαν φανερὸν ὅτι τὸ ἁίμα ὁδῇ μὲν ἐστὶ θερμόν, οἷον τι ἦν αὐτῷ τὸ ἄίματι εἶναι, καθάπερ εἰ ὄνοματι <ἐνί> σημαίνομεν, τὸ ἄρχον ὑδρῷ ὀυτῷ λέγεται, τὸ δὲ ὑποκείμενον καὶ ὁ ποτὲ ὁν ἁίμα ἐστιν, οὐ θερμόν καὶ καθ' αὐτῷ ἐστὶ μὲν ὡς θερμόν ἐστιν, ἐστι δ' ὡς οὐ̣, ἐν μὲν γὰρ τῷ λόγῳ ὑπάρχει αὐτοῦ ἡ θερμότης, ὅπερ ἐν τῷ λευκῷ ἀνθρώπου τῷ λευκών· ἤ δὲ κατὰ πάθος τὸ ἁίμα, οὐ καθ' αὐτῷ θερμόν. (De Partibus Animalium II,3 949b21-7)

\(^{12}\) Bonitz' emendation to ὅπερ τὸδε τι, adopted by Jaeger, might be right, but I am not convinced that it is necessary; Ross and FP keep the transmitted text

\(^{13}\) note Ockham's insistence that connotative terms (such as "white man" or λευκός) have nominal definitions (such as "man [or thing] in which there is whiteness") but not real definitions (on nominal vs. real definitions, see below); while I am not sure exactly why Ockham thinks they can't have real definitions, I think part of the point is that when the definition "man in whom there is whiteness" ceases to hold, the term "white man" ceases to apply to the thing, but the thing may continue to exist, whereas when a real definition ceases to hold, the thing ceases to exist

\(^{14}\) in fact, even man is not properly τὸδε, because it is a universal; but Aristotle scrupulously avoids arguments about universality in Z4-6

\(^{15}\) So on my view the obstacle to white man's being ὅπερ τὸδε τι is not that he is not ὅπερ man (which, as far as I can see, he is), but that he is not ὅπερ white and is therefore not ὅπερ white man. Some people find this reading of the argument implausible, because white and white man are not τὸδε, so failing to be ὅπερ them should not be failing to be ὅπερ τὸδε τι [this form of argument may seem especially objectionable because nothing is ὅπερ white
All this implies that terms like "cloak" cannot, properly speaking, be defined, since if "cloak" had a definition the content of that definition would be the essence of cloak. But there is obviously something like a definition of "cloak," namely "white man," since the term "cloak" was originally introduced by ἐκθεσίας as a name for white man. Aristotle tries to explain the difference by referring back to Posterior Analytics II.7-10, which distinguishes two kinds of definitions, only one of which is properly a definition and expresses the essence of a thing, while the looser kind of definition is for what a name means but does not properly express what the thing is that bears that name. The Posterior Analytics does not make the distinction between the two kinds of definition as clear as Aristotle seems to think; but clearly at least one reason that the looser kind of definition, "α λόγος meaning the same as a name" (Post. An. II,7 92b27-8, cp. II,10 93b30-32), fails to be a proper definition is that it does not give us knowledge that the definiendum really exists; and indeed we can give this kind of definition even of a chimera (so II,7 92b28-30). Aristotle thinks we do need such "nominal definitions," since when we begin looking for X we do not yet know that X exists (and so we cannot yet have more than a nominal definition of X), and yet we must already have some description of X in order to look for X and to recognize it when we find it. But since we will typically "find" the object of a science, not by

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man, although τὸ λευκὸν in the sense of the πάθος is ὀπερ λευκόν]. But the point of saying that X is not ὀπερ τὸδε τι is that for something to be X (or, for X to be X) is not for it to be ὀπερ τὸδε τι. Compare the passage we have cited from Topics III: "[a good which is] ὀπερ τὸδε τι [is better] that one which is not in [the good as] a genus, e.g. justice [is better] than the just [man]: for the former is in the good as in a genus, and the latter is not, and the former is ὀπερ good and the latter is not; for nothing is called ὀπερ the genus which is not in the genus, e.g. the white man is not ὀπερ [a] color" (116a23-7). Here the reason that ὀ δίκαιος is not ὀπερ τὸδε τι is for ὀ δίκαιος to be δίκαιος is not for him to be ὀπερ τὸδε τι [perhaps Aristotle means "is not for him to be ὀπερ any τοῦδε"; perhaps he means "is not for him to be ὀπερ the τοῦδε in question, namely justice, or the good"] but merely for him to be τοιοῦδε (just), or for him to have τοῦδε (justice) present within him. If X is a τοῦδε and X is predicated of Y, then it is a sign that, in this predication, Y is not being said to be ὀπερ τὸδε if X is predicated of Y paronymously; it is a sign that, in this predication, Y is being said to be ὀπερ τὸδε if X is predicated of Y not paronymously [although this sign is not infallible, since X might be predicated of Y homonymously, as Y = σώμα, X = λευκόν]. In any case, in determining whether ὀ δίκαιος is ὀπερ τὸδε τι, the relevant question is how δίκαιος, or δικαιοσύνη, is said of him; and likewise in Z4 with ὀ λευκός ἄνθρωπος (or ὀ λευκός, for the issue is much the same), the issue is how λευκός or λευκόν, or the compound λευκός ἄνθρωπος, is said of him. Perhaps add a note on what I take the point to be of the clause "since τοῦδε belongs only to οὐσία": this is of course a standard linguistic test in Aristotle for when something is an οὐσία, but it is a mistake to see this as especially about οὐσία-absolute rather than οὐσία-with-genitive (cf. B#12 1001b29-32, where it is inferred that if X is not τοῦδε τι, X cannot be the οὐσία of anything). We can paraphrase Aristotle's point by saying that, when X is predicated of Y, Y is not being said, in this predication, to be τοῦδε unless X is the οὐσία of Y; so, when X is said of Y not as its οὐσία, but ἀλλο κατ' ἄλλον, as a thing which exists by being predicated of some other underlying nature, then Y, in being said to be X, is not being said to be τοῦδε}

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10contrast FP's close-to-unintelligible reconstruction of the argument of 1030a2-6, their II,64-5. FP seem to think that Aristotle's objection to "white man"'s being a statement of an essence is that it involves reference to two different things; whereas, they say, an οὐσία should not presuppose anything else prior to it. (of course, even if this were Aristotle's reason for thinking that "white man" could not be the statement of the essence of an οὐσία, it would still not be a reason for thinking that only οὐσία have essences, which is what Aristotle is supposed to be proving; as FP admit, the argument as they reconstruct it "näher sich bedenklich einem Zirkelschluß"); but Aristotle is not thinking of anything so abstract as the alleged independence- or priority-criterion of οὐσία: what is wrong with "white man" is that white is being said of some other underlying nature, and therefore is not being predicated of the thing καθ' οὐτό, so cannot be part of its essence
11this phrase arises from what is apparently a misunderstanding of the opening of Posterior Analytics II,10, but it does not involve any distortion of Aristotle's thought; on this I agree with Barnes ad loc. (note on the three-vs.-four question; I still incline to three)
12cp. the discussion in 1α2 of ἰδια as "the darkest man in the marketplace" or "the best disposition of the soul"
physically encountering a sensible individual, but by giving a λόγος of what X is, we must be seeking to replace the nominal definition of X by another kind of definition of X which will give us knowledge that its object exists, and will explain why this thing satisfies the initial nominal definition. So the definition proper, in saying τι ἐστι X, will thereby also give the cause of ἐστι X, explaining why X exists by explaining why there is something that satisfies the nominal definition of X. Aristotle also gives another reason why nominal definitions are not properly definitions, namely that a definition must be "one ... by manifesting one [predicate] of one [subject] not per accidens" (Post. An. II,10 93b35-7). This contrasts with a λόγος which is "one ... [merely] by being strung together, like the Iliad" (Post. An. II,10 93b35-6, cp. II,7 92b30-32): this twenty-four-book λόγος could be given as a nominal definition of the word "Iliad," as long as we use the word "Iliad" (as is legitimate in Greek) as a name not for the book but for the sequence of events it describes, but Aristotle insists that because this long λόγος asserts many different things, it cannot be properly a definition. The demand that a definition of X should "manifest one [predicate] of one [subject] not per accidens" seems to be derived from the demand that it should explain why X exists: if the definition asserts two different things (that X is Y and that X is also Z), then it will not explain why X exists, since it will not explain why there is something that satisfies both Y and Z; and if it asserts Y of X where Y is said of X only per accidens, then again it will not explain why X exists, since something could be X without being Y or vice versa.

Aristotle at Metaphysics Z4 1030a6ff is drawing on this distinction between the two kinds of definitions:

Thus those things have an essence whose λόγος is a definition: where a definition is not whenever a name means the same thing as a λόγος (for then all λόγοι would be definitions: for there [can be] a name for any λόγος, so that even the Iliad will be a definition), but [only] when [it is a λόγος] of something primary: and whatever things are said not through one thing being said of another [ὅσα λέγεται μὴ τῷ ἄλλῳ κατ᾽ ἄλλου λέγεσθαι] [are primary in this way]. So there will not be an essence belonging to anything which is not a species of a genus, but to these [species of a genus] alone (for these seem to be said not by participation and στάσις or per accidens): there will indeed be a λόγος of what each of the others [i.e. the non-species terms] means, if it's a name--that this belongs to this [ὅτι τὸ δὲ τὸ δὲ ὑπάρχει]--or a more precise λόγος in place of a simple λόγος; but there will be no definition or essence. (1030a6-17)

Aristotle flags the reference to the Posterior Analytics discussion by using the Iliad example, and by describing the looser kind of definition as "a λόγος that means the same thing as a name." Here as in the Posterior Analytics, an objection to the looser kind of definition is that it is non-simple; here Aristotle puts this two ways, by saying that in these cases ἄλλο κατ᾽ ἄλλου λέγεται, and by saying that the λόγος in these cases says ὅτι τὸ δὲ τὸ δὲ ὑπάρχει. It is a bit strange to say that a λόγος equivalent to a name can assert a proposition, but presumably the thought is that "white man" (given as the λόγος of cloak) asserts that whiteness belongs to man, since it makes "cloak exists" equivalent to "whiteness belongs to man" (and the λόγος of the Iliad, which asserts many propositions, makes "the Iliad occurred" equivalent to the conjunction of those propositions). In excluding λόγοι that assert ἄλλο κατ᾽ ἄλλου, Aristotle's intention is to exclude definienda like white man, which cannot be given an ἰδιος λόγος without mentioning
white (and, when this is spelled out, color), but of which white and color are said κατ’ ἄλλον or, as Aristotle puts it here, "by participation and πάθος or per accidents," so that white or color cannot occur in a λόγος said καθ’ αὐτό of the thing. These cases contrast with definienda which are "species of a genus," since a genus is said of its species (as color is said of whiteness) "not by participation and πάθος or per accidents" but καθ’ αὐτό, so that there is no objection to color being contained in a καθ’ αὐτό λόγος of whiteness. A species of color will include color synonymously in its λόγος, whereas anything that includes white or color paronymously (or τὸ λευκὸν σώμα, where by a quirk of language λευκὸν is said not paronymously but homonymously) will not have any ἵδιος λόγος that belongs to it καθ’ αὐτό, and so it will not have a definition or an essence. And this argument will apply to simple paronyms like ὁ λευκός just as much as to composites like λευκός ζών. On the other hand, although Aristotle claims in Z4 (e.g. 1030a29-30) that accidents in general do not have essences, or do not have essences ἀπλῶς, his arguments really only apply to concrete accidents like ὁ λευκός: an abstract accident like τὸ λευκὸν (in the sense of whiteness) is a species of a genus and (for anything Z4 has shown) can have an essence in much the same way that an ὀüsία can. Z5 will, however, give reasons why τὸ λευκὸν can have an essence only in a qualified sense.

Having argued that (concrete) accidents and substance-accident composites do not have essences, Aristotle then takes it back, from Z4 1030a17 to the end of the chapter, conceding that "essence" (like "being") is said in many ways, and that "there is a λόγος and a definition even of white man, although not in the same way as of λευκὸν or of an ὀüsία" (1030b12-13). The concession is reasonable enough--as we have seen, "white man" in some sense a definition of "cloak"--and what Aristotle says here (mostly cautions against trying to make black-and-white terminological distinctions) does not really add anything to his argument. What is important, though, is to see why the in-a-weak-sense essences that τὸ λευκὸν or ὁ λευκός or λευκός ζῶν may have do not threaten Aristotle's overall argument. Recall that the purpose of Z4-5 is to support the argument of Z6, which is trying to show that a certain Platonist argument for the Forms does not succeed. The Platonists use the sophism "the essence of X is (this) X, (this) X is (this) Y, (this) Y is the essence of Y, therefore the essence of X is the essence of Y" to show that we cannot accept the proposition-scheme "(this) X is the essence of X"; Aristotle replies that if X is an ὀüsία, then we can still identify X with the essence of X, and that if X is not an ὀüsία then there is no essence of X, so that in either case we have no reason to identify the essence of X with a Form of X παρά the manifest X's. If Aristotle admits that non-おすίατo do, in a weak sense, have essences, then he needs to clarify this "weak sense" enough to show that an essence of X in

19 in a very strange note ad loc., Frede-Patzig say that Aristotle, in denying that there are essences τῶν μὴ γένους εἴδων, is contrasting these εἴδη with genera (which might also be called εἴδη, but in a looser sense); "nach seiner [Aristotle's] Auffassung gibt es z. B. für die Gattung Lebewesen kein 'Was es heißt, dies zu sein,' da die Gattung keine ousia ist" (FP II,66). They then go on to suggest that Aristotle may also be intending to restrict himself to substantial forms as opposed to accidental forms such as whiteness. All of this is just bizarre: animal and whiteness are species of a genus just as much as man is {note FP, in excluding "Lebewesen," can't be meaning to exclude only summa genera--in case anyone thinks that Lebewesen is such--since their reason, that the genus is not an ὀüsία, would apply on their view to all genera; but of course many genera will also be species of higher genera}; it is obvious from context that Aristotle is not thinking of examples like these but of white man (and perhaps, assimilated to him, ὁ λευκός); and the consideration that Aristotle gives, that species of a genus are not said "by participation and πάθος or per accidents" draws an effective contrast with white man or ὁ λευκός but not with animal or whiteness. apparently FP think τὰ μὴ γένους εἴδη must be some other kind of εἴδη as opposed to τὰ γένους εἴδη (this goes back to the pseudo-Alexander, and is taken up by Ross), and so they desperately try to suggest what εἴδη these might be; but the text does not require this. FP themselves translate the text, correctly, without this implication: "dass nichts, was nicht zu den Formen einer Gattung gehört, ein 'Was es heißt, dies zu sein' besitzt"
this weak sense cannot be a Form of X παρά the manifest X's. Practically, there is not going to be a serious threat from terms like "white man." No one will seriously maintain that there is a Form of white man; a Platonist will agree that a white man is a white man not by participating in one essence, but in two. The threat will come from simple accidental terms like "white" (or, for a more authentically Platonist example, "courageous"). Aristotle tries to handle these in Z6 by saying, "as for what is said per accidens, like musical or white [οἶν τὸ μουσικὸν ἡ λευκόν], since it has a double meaning it is not true to say that it and its essence are the same: for both the accident and what it is an accident of are [called] white, with the result that it [sc. the white] and its essence are in one way the same, in another way not the same: for [the essence of white] is not the same as the man, i.e. as the white man, but it is the same as the πάθος [i.e. whiteness]" (1031b22-8). So the claim is that the paronymous concrete λευκός (or the homonymous concrete λευκόν) does not have an essence except inasmuch as it has the same essence as the abstract λευκόν; and that this essence, while it is not identical with the concrete λευκός or λευκόν, is identical with τὸ λευκόν in the sense of the πάθος—an immanent whiteness, present within a manifest white thing, and not a separate form of whiteness. But how does Aristotle know that the essence of white (so far as there is one) is only such an immanent whiteness? We might be able to pull an answer together from Z4, but it becomes much clearer from Z5, which gives a further argument that there is, in the primary sense, no essence of white, and so helps to make clearer in what way the secondary sense in which white might have an essence would have to differ from the primary sense of essence.

Things said like the snub (Z5)

Aristotle claims in Z5 that all accidents are said like the snub, and that this prevents them from having definitions or essences in the primary sense. Aristotle presents his arguments as supplements to the arguments already given in Z4 that non-οὐσίαi do not have essences in the primary sense: first he presents two arguments (1030b14-28 and 1030b28-1031a1) that "coupled things," i.e. things said like the snub, cannot be defined, arguing as if things said like the snub were a specially pathological case among accidents, involving further difficulties beyond those that attend all accidents; then, at 1031a1-14, he makes his real point, that all accidents are said like the snub. Z5 as a whole, then, gives further arguments, beyond those of Z4, that accidents do not have definitions or essences in the primary sense; and because these arguments turn on a more precise analysis of the mode of being of accidents than the arguments of Z4, they are able to show more clearly how much weaker than full essences the quasi-essences of accidents would have to be; and so it will be clearer why these quasi-essences are no threat to the anti-Platonist argument of Z4-6.

Aristotle poses the objections to essences of "coupled things" as a series of aporiai. He had argued in Z4 that the essence of white is not properly expressed by a λόγος ἐκ προσθέσεως, such as the λόγοι of white man or white surface, in which white is "attached" as a predicate to some ύποκείμενον, but only by a λόγος which contains no more than the attribute "white," "so that if to be a white surface is to be a smooth surface, to be white and to be smooth are one and the same" (1029b21-2). He now argues (1030b14-28) that in the case of things said like the snub, these considerations yield an aporia against there being any λόγος of the essence. "It involves aporia, if we deny that the λόγος ἐκ προσθέσεως is a definition, for there to be a definition of any of the things that are not simple but coupled: for one must explain [δηλοῦν] them ἐκ προσθέσεως. I mean, for example, there is nose and there is concavity, and snubness, which is
said [by composition] out of both of these, is this-in-this: and the concavity, i.e. the snubness, is a πάθος of nose not per accidens but per se" (1030b14-20). The example of the snub, which Aristotle takes as the paradigm for coupled things, emerges from the Academic practice of giving and testing definitions. There was a notorious dialectical difficulty about defining "snub," since it cannot be defined as "concave" without reference to nose, and since defining it as "concave nose" leads to the embarrassment of analyzing "snub nose" as "concave nose nose" (On Sophistical Refutations c13); here in Z5 Aristotle is drawing on this dialectical difficulty and trying to show that it reflects both a broader difficulty (arising for a broader class of terms) and a deeper difficulty (arising from the kind of essences that these things have and not merely from a linguistic embarrassment) than appears at first sight. Aristotle also uses snubness elsewhere, notably in Physics II,2 and Metaphysics E1 (discussed above Iβ1c), to illustrate a deeper phenomenon, but in those texts what is crucial about snubness is that it is a form which is essentially dependent on a determinate kind of matter (namely nose). Aristotle assumes this analysis of snubness here too when he describes it as "said out of" concavity and nose, but he is interested here not in the physical point that snubness is a form depending on a determinate matter, but in the logical point that it is a predicate said of a determinate υποκείμενον. Thus, as he says here, "snubness is a πάθος of nose not per accidens but per se": that is, "snub" is said of "nose" per se secundo modo in the sense of Posterior Analytics I,4, as attributes belong per se "to those things which are present in the λόγος that manifests the τι έστι of the things that belong to them, as straight and curved belong to line, and odd and even, prime and composite, square and oblong, belong to number: for line or number belongs to all of these in the λόγος that says the τι έστι" (73a37-b3). For the purposes of Z5, the only relevant fact about the snub is that it is said per se secundo modo of nose, and anything that is predicated per se secundo modo of some subject-genus will be "said like the snub." If X is said of Y per se secundo modo, then neither X nor its contrary nor any intermediate can be said of anything that is not Y (we might say that "X" produces nonsense when predicated of a subject that is not Y), and there can be no λόγος of X that does not include Y, although Y is not part of the essence of X in the way that the genus and the differentia are parts of the essence of the species. Aristotle thinks that this is quite a broad phenomenon: thus although concave is not "said like the snub" in relation to nose, it is "said like the snub" in relation to line, which is the per se υποκείμενον of concavity; and Aristotle is also committed to saying that a differentia is likewise "said like the snub" of its genus or of its higher differentiae (as biped of animal and of footed), and that any natural οὐσία is "said like the snub" (or that its form is said like snubness) of its appropriate matter. For the argument of Z5, however, he is pursuing only the case where X is an accident.

In the first part of the chapter (Z5 1030b14-28) Aristotle is not giving a full argument that things said like the snub do not have definitions or essences, but simply building up a series of examples to illustrate the phenomenon of attributes that cannot be defined without their appropriate υποκείμενον; this implies that the λόγοι of such attributes must be λόγοι ἐκ προσθέσεως in the sense of Z4, and Aristotle then draws on Z4's conclusion that a λόγος ἐκ προσθέσεως is not a definition in the primary sense to argue that things said like the snub do not have definitions in the primary sense at all. {add, in main text or footnotes, elucidatory translations of 1030b20-23 and b23-8}"22

20 οὐθ’ ἢ κοιλότης οὐθ’ ἢ σιμότης makes sense only as epexegetic: the relevant concavity in this case, snubness
21 references to discussion of these cases, in Aristotle and by me (form, Physics II,2 and Metaphysics E1, as mentioned above, also Z11; differentia, Z12)
22 at 1030b21, FP suggest that ϕ refers back to λευκός rather than to Callias; this saves the embarrassment of having
However, in the second part of Z5 (1030b28-1031a1) Aristotle gives a self-sufficient argument, drawing on themes from the On Sophistical Refutations, to show that the snub cannot be defined, by ruling out both of the two plausible definitions, "concave" and "concave nose." Most of the argument is clear enough in structure, though we may wonder how "serious" it is, that is, how far it addresses the ontological question about essences, and how much it depends on accidents of language; but Aristotle ends with an infinite regress argument whose structure is less clear, and interpreting this rightly will help clarify the question of the seriousness of the whole argument. For ease of reference, I will break the text into numbered sections:

[1] There is also another aporia about these things [sc. things said like the snub]. For if snub nose and concave nose are the same, snub and concave will be the same; [2] but if not [i.e. if snub and concave are not the same], on the ground that it is impossible to express [ειςειν] the snub without the thing of which it is a πόθος per se (for the snub is concavity in a nose), then either it is not possible to express snub nose or the same thing will be said twice, concave nose nose (for snub nose will be concave nose nose), so that for this reason it is absurd for such things to have an essence; [3] if not [ει ἔστι μη; i.e. if such things do indeed have essences], then they will go to infinity: for in snub nose nose yet another [nose] will be present. (1030b28-1031a1)

Here the structure of the argument in [1]-[2] is fairly clear. We are inclined to say that "snub nose" and "concave nose" are equivalent, but then this seems to imply that "snub" and "concave" are equivalent, a conclusion which Aristotle has, earlier in this chapter, shown to be false (since snub is essentially dependent on nose and concave is not). But if we deny that the λόγος of "snub" is "concave," then, assuming that snub has a λόγος at all, the only alternative seems to be that the λόγος of "snub" is "concave nose"; but then it seems to follow that the λόγος of "snub nose" is "concave nose nose," and Aristotle takes it for granted (here as in the On Sophistical Refutations) that a formula containing such a repetition ("nugation") is not an acceptable λόγος του τι ἐστι. The inferences [1] and [2] are thus roughly contrapositive: abbreviating to make the structure clearer, [1] infers that if SN = CN, then S = C, which is absurd; and [2] infers that if S ≠ C (but rather, the only apparent alternative, S = CN), then SN ≠ CN (but rather SN = CNN), which is absurd. Both inferences serve to bring out the conflict--given the assumption that snub has a λόγος at all--between two claims that Aristotle finds evidently true, namely that S is not simply C, and that SN is CN (rather than CNN). Aristotle uses the conflict between these two claims to infer that the snub does not have a λόγος at all. 23 However, there is something

Callias accidentally human, but we are trying to explain why man is called white per accidens, not vice versa; white is said of man per accidens because it is said of something else underlying which is man, whereas if it were said of man per se it wouldn't be said of man because it is said of something else

23This argument seems to involve a dubious "cancellation" step, inferring from SN = CN to S = C. in fact I think Aristotle himself accepts the antecedent and denies the consequent; but he thinks that if S had a definition, the definition of SN would be the definition of S plus N; which would not be CN unless the definition of S was C; so the cancellation step is legitimate in a reductio of the claim that S has a definition. but in any case, while Aristotle uses the cancellation step here to motivate the difficulty, the logical force of the argument does not depend on it. it is enough to say that if S is definable, it will be either = C or = CN (for lack of any other alternative); but we know that S = C is wrong (since C can exist without N and S cannot), and if S = CN then SN = CNN and, as Aristotle tries to show, an infinite regress will follow. so the argument hangs on how objectionable the reduplication CNN is, and on whether an infinite regress results and (if so) how objectionable it is.
unsatisfying about the argument, because it is not obvious that the equation \( SN = CNN \) is as absurd as Aristotle suggests. Certainly it is an awkward expression, and a dialectician asked to define \( SN \) would certainly prefer to say \( CN \) rather than \( CNN \); but if the nugation is merely a linguistic awkwardness and not a logical absurdity, we might prefer to admit \( SN = CNN \) rather than give up on defining snub. The infinite regress argument in [3], once it is unpacked, is supposed to make the absurdity more manifest. Here too the argument turns on nugation, in a way that may seem to us to rely on linguistic awkwardness rather logical absurdity; but some reflection on how Aristotle is arguing (in the whole passage, but especially in [3]) will bring out that there is something a bit deeper going on.

First, though, there is a difficulty about how Aristotle thinks the regress arises: the inference from \( S = CN \) to \( SN = CNN \) does not, on the face of it, lead to any further expansion. Indeed, Bonitz thinks that Aristotle has "fallen into error" in assuming that the nugation can be repeated. Aristotle states the regress by saying that "in snub nose nose yet another [nose] will be present," so he must be assuming that, once \( S \) is defined as \( CN \), it will be legitimate to expand \( SN \) not just to \( CNN \) but to \( SNN \); and indeed, if \( SN \) can be expanded to \( SNN \), this is already enough to yield an infinite regress (whether we find this regress vicious or not). But Bonitz thinks Aristotle has made an illegitimate step by inferring from \( SN = CNN \) to \( SN = SNN \). Ross and Frede-Patzig try to defend Aristotle by saying that, here in the regress argument, Aristotle is no longer pursuing the implications of defining \( S \) as \( CN \), but is instead beginning a new reductio ad absurdum afresh from the premiss \( S = SN \). So Ross and Frede-Patzig take \( S = SN \) as a third attempt at giving a \( \lambda\gammao\) of \( S \), after the options \( S = C \) and \( S = CN \) have been rejected: they even propose (Ross tentatively, Frede-Patzig without reservation) that Aristotle's \( \varepsiloni \ \delta\varepsilon \ \mu\eta \) at 1030b35 means not "if things said like the snub do, contrary to what we have been arguing, have essences" but rather "if we reject the objectionable equation \( SN = CNN \), and instead take \( SN = SNN \)." But this interpretation is just bizarre: it would make no sense for Aristotle, having rejected \( SN = CNN \) on grounds of nugation, to propose \( SN = SNN \) as an alternative.\(^{24}\) Rather, the infinite regress argument must still be directed against \( S = CN \), the only plausible \( \lambda\gammao \) once \( S = C \) has been disposed of; but how does Aristotle get from \( SN = CNN \) to \( SN = SNN \) and thus to the regress?

The answer is that Aristotle is adding, to the premiss \( S = CN \), a premiss that he himself accepts, namely that \( S \) and \( C \) are intersubstitutable in a context where they are modifying \( N \):\(^{25}\) thus if the substitution \( S \rightarrow CN \) is legitimate, so is the whole series of substitutions \( S \rightarrow SN \rightarrow CNN \rightarrow SNN \) and so ad infinitum.\(^{26}\) And this notion of intersubstitutability-in-a-context

\(^{24}\) cp. the Londinenses' objection to their reading (2). note the answer to the Londinenses' objection to reading (1) of \( \varepsiloni \ \delta\varepsilon \ \mu\eta \), \( \varepsiloni \ \delta\varepsilon \ \mu\eta \), after "it is absurd for such things to have an essence" means not "if it is not absurd for such things to have an essence" but "if such things do have an essence." \( \delta\varepsilon \) here can be treated as a quasi-\( \gammao \), explaining further the reasons for the absurdity (Denniston gives some examples pp.169-70; there is another apparent example at Z13 1038b13, after \( \varepsilon\nu\zeta \); but the basic point to remember is that \( \delta\varepsilon \) (except when answering \( \mu\nu\nu \)) is equivalent in English not to "and" or "but" but to asyndeton or a slight pause: "... it is absurd for such things to have an essence; if they do have an essence ...". Ross, Bostock, Furth get the idiom right; FP's "aber" and CLM's "but" overtranslate

\(^{25}\) compare SE 31 181b35-182a3: "in the case of those things [sc. like the snub] which are\( \delta\gammao \) of those things through which they are defined [\( \delta\gammao \) to; \( \delta\gamma\varepsilon \) here what is signified by the term analogous to 'concave'] is not the same separately and [when the term is contained] in the formula: for concave in general signifies [\( \delta\gammao \) the same thing in the case of snub and in the case of bandy, but when it is attached [\( \gammao \) to; \( \gamma\varepsilon \) nothing prevents it from signifying [\( \gammao \) different things, one [when it is attached] to nose and another [when it is attached] to leg: for in the first case it signifies [\( \gammao \) snub, in the second case bandy, and there is no difference between saying snub nose and concave nose."

\(^{26}\) I think this is the Londinenses' point when they say: "perhaps Aristotle assumes that \( \mu\nu\nu \), while not identical in meaning with \( \kappa\gamma\nu \), is implied by it, and can replace it in the definiens [sc. where \( \kappa\gamma\nu \) modifies \( \rho\zeta \)]"
helps to bring out the deeper problem (deeper than the awkwardness of nugation) about defining
the snub. The only kind of definition that S has is "S is equivalent to C when modifying or
predicated of N"; we are tempted to convert this into a proper definition by writing either S = C
or S = CN, but neither is correct. This kind of definition-in-a-context is quite common, and often
unavoidable. To take a random example, LSJ define ἐδρα, sense IV, as "face of a regular solid."
Here "face" is in italics, which is how LSJ standardly print their definitions; but in this case LSJ
feel compelled to add "of a regular solid" in Roman type, to indicate the context in which "ἐδρα" and
"face" are equivalent. It would be wrong to put "of a regular solid" in italics, as a proper part
of the definition of ἐδρα, since this would lead to the absurdity of translating "ἐδρα τοῦ
dωδεκαεδροῦ" as "face of a regular solid of the dodecahedron." But it would also be wrong to
omit "of a regular solid" altogether, since "ἐδρα" cannot be replaced by "face" in contexts where
it is not a ἐδρα of a polyhedron. Similarly λευκός sense I.2 "clear, distinct, of the voice," and
περιττός sense III "an odd, uneven, number": here if the Roman-type context were italicized
and incorporated into the definition we would not get outright absurdity, but we would get the
nugations λευκή φωνή → clear voice voice and περιττός ὀρθομός → odd number number, and
this is enough to show that "voice" and "number" are merely context and not parts of the
definition proper. Now we might think that the need for this kind of context-indicator is simply
an accident of natural languages like Greek and English, but in fact the case of mathematical
definitions shows that context-indicators outside the definition proper are intrinsically necessary
in defining terms of some logical types. Thus any mathematical definition of "prime" will
proceed, not by simply giving a longer expression which could be substituted for "prime," but by
giving conditions for a number to be prime: a modern mathematician might write "n ∈ N is
prime iff (n ≠ 1 and (∀j ∈ N ∀k ∈ N (jk = n → (j = 1 or k = 1))))" while an ancient
mathematician might write "a prime number is one that is measured only by a unit" (Euclid,
Elements VII, Definition 11). In either case, the definition does not say simply what prime is
(in the way that "wingless biped animal" says what man is), but what it is for something to be prime;
and it can say this only by saying what it is for a number to be prime. Thus while "prime" has
enough of a definition to enter into demonstrations, it does not have a definition in what Aristotle
considers the primary sense; and neither does "snub," as is revealed by the paradoxical
consequences of each attempted definition.27

27for reasons I am unable to fathom, both Ross and FP think that Aristotle has given an adequate solution to the
infinite regress argument in SE 31, and has no business making the argument here. "Es ist erstaunlich, daß
Aristoteles dieses Regreßargument, und zwar mit genau demselben Beispiel der 'stupsigen Nase,' in Soph.el. 31,
181b37-182a6, ausdrücklich und mit einleuchtenden Gründen zurückweist. Nach den wiethin akzeptierten
Ansichten über die relative Chronologie der aristotelischen Lehrschriften sollten die Soph.el. früher sein als die
Bücher ZHÖ der 'Metaphysik.' Wir sehen keine befriedigende Lösung dieser Schwierigkeit" (FP II,85). FP do not
say what these "einleuchtende Gründe" are. As far as I can see, none of Aristotle's points in the text in question are
dealing with infinite regress arguments, but only with arguments that would produce the nugation "concave nose
nose," without further regress. Aristotle's comments at 181b37-182a3 say only that "concave" is ambiguous, and that
in the context of "nose" it signifies "snub," which seems to amount to giving up on defining "snub" except in terms of
something equivalent to itself. (Ross, however, gives a different interpretation of these lines, AM II,174, which
discuss). More likely FP are thinking of what Aristotle says next, that "the snub is not a concave nose but something
(a πάθος) of a nose, so that there is nothing absurd if the snub nose is a nose having concavity-of-a-nose." Ross puts
a lot of stress on this, and he thinks that once we distinguish between the concrete "snub" and the abstract
"snubness" as "concavity of a nose" the problem dissolves {although Ross' solution turns on saying that σμήν in ρίς
σμήν is meant for the abstract, despite the fact that Aristotle promptly glosses it as ἔχονσα κοιλότητα ρινός}. But
if the issue is the infinite regress argument (which it does not seem to be, here in the SE), then how is defining
"snubness" as "concavity of a nose" any better than defining "snub" as "concave nose"? If "snubness is concavity of
Reflection on these difficulties of definition, which emerge even more clearly in mathematical examples like "prime" than in the standard example "snub," is supposed to reveal, not just a linguistic deficiency in the definitions of terms like "snub," but an ontological deficiency in things like the essence of snubness. The only kind of definition that prime has is a formula that says what it is for a number to be prime, by saying "a number n is prime iff Pn"; and this linguistic fact reflects the ontological fact that the only kind of essence that prime has, all that it is to-be-prime, is what-it-is-for-a-number-to-be-prime; and the only essence of snub is what-it-is-for-a-nose-to-be-snub, and so on. When Aristotle claims, in the conclusion of Z5, that no accidents have definitions except ἐκ προσθέσεως (1031a1-3), and that these are definitions only in a subordinate sense, so that "in one way there will not be not a definition of anything, nor will essence belong to anything, except οὐσία, and in another way there will be" (1031a10-11), he is making an ontological point about the kinds of essences that accidents have. Every accident X is said per se secundo modo of some genus Y of ὑποκείμενον, as "odd is not without number, and female not without animal" (1031a3-4), and the only essence of X that there is is what-it-is-for-Y-to-be-X. And while the example of the snub, and mathematical examples like odd and prime, help to bring out the phenomenon more clearly, the basic point follows directly from Aristotle's analysis of what it is for an accident to be. For the accident X to be is just for some οὐσία Y to be and for Y to be X (or a paronym of X); so what-it-is-for-X-to-be, i.e. what-it-is-for-the-thing-which-is-X-to-be-X, is what-it-is-for-Y-to-be-X, which is not what-it-is-for-Y-to-be ἀπλά, but for Y to have the accidental attribute of being X.28 And thus any scientific knowledge of X must begin by giving a definition that expresses the essence of X in a way that reflects X's derivative mode of being, by specifying the appropriate ὑποκείμενον Y and saying what it is for a Y to be X; we can then build up a science of Y which will also contain a knowledge of X, as the science of numbers contains a knowledge of primes.29

The appropriate ὑποκείμενον of white is surface, and so the only essence of white is what-it-is-for-a-surface-to-be-white (things which are not surfaces can be white, not καθ' αὐτά but only κατά a surface which is white καθ' αὐτό, as Socrates who is not a nose can be σμός but only a nose means just that "snubness" and "concavity" are interchangeable in the context of "nose," then there is no difficulty but no definition proper (just as if we say that "snub" and "concave" are interchangeable in the context of "nose"). If we take "concavity of a nose" to be a genuine definition of snubness, then a regress arises, just as in the concrete case, once we allow (and only once we allow) that "snubness" and "concavity" (resp. "snub" and "concave") are interchangeable in the context of "nose": snubness = concavity of a nose = snubness of a nose = concavity of a nose of a nose, and so ad infinitum. [note in any case that Z5 contains the description of τοῦ σμόν as κοιλίτης ἐν ῥύνι, which seems to differ only trivially from the SE 31 description as κοιλότης ρίνος, which Ross and apparently FP think is enough to solve the regress problem; if this worked, then Aristotle would be pointing out at least the basis of the solution in Z5 as well]

28Indeed, Aristotle makes this point in passing already in Z4, where he concedes that accidents may be said to have essences since essence, like being, is said in many ways: "essence, similarly, will belong primarily and αὑτή to οὐσία and subsequently to other things, just as ὧν ἔστι: does: not what-it-is-to-be-ἀπλά but what-it-is-to-be-such or what-it-is-to-be-so-much [οἷς ἀπλάς τῇ ἐνίκη ἀλλαὶ ποιῶ ἡ ποιητή τῇ ἐνίκη]" (1030a29-32)--in the terms that I have been using, the kind of essence that X has is what-it-is-for-Y-to-be such or so-much.

29Anyway, this is the official theory. There is a problem about the species of quantity (number, line, surface, etc.), which according to Aristotle are not οὐσίαι, but which we seem able to know scientifically without knowing what οὐσία they might depend on. Also, with attributes like odd and (perhaps) white, we do not need to go to the οὐσία which is their ultimate ὑποκείμενον, but only to the quantity which is their proximate ὑποκείμενον, in order to define them and begin a scientific knowledge of them. (Of course, to know whiteness we need more than the geometrical theory of surfaces; I suppose we need something like a theory of surfaces-in-nature, perhaps surfaces-of-natural-things, and so perhaps we do need a theory of natural οὐσία here after all. Cp. Physics II,2 194a11-12 on the object of optics)
κατὰ his nose). And this brings out, more clearly than the argument of Z4, why white does not have an essence in the full sense. It is not just that ὀ λευκός does not properly have an essence and that we ought to ask for the essence of ἡ λευκότης instead: using the "abstract" form allows us to consider whiteness without considering an accidental ὑποκείμενον like man, but it does not allow us to abstract from the καθ’ αὐτοῦ ὑποκείμενον, surface, and we can still give the essence of whiteness only by saying what it is for a surface to be white. And this argument gives Aristotle his thesis, that only ὀ σίατα properly have essences, in the sense that he needs in order to support the argument of Z6. For recall that the reason Aristotle needs the thesis that only ὀ σίατα have essences is to disarm the Platonist argument from the sophism at the beginning of Z6. If the man and the white thing are identical to essence of man and essence of white, then essence of man = the man = the white thing = essence of white, absurdly; so, the Platonist concludes, there must be an essence of man other than this man and an essence of white other than this white thing. Aristotle disarms the argument by saying that there is no reason why the essence of man cannot be the man, and that, while it is false that the essence of white is the white thing, this is because there is no essence of white, not because there is an essence of white other than the white thing. However, Aristotle concedes that λευκόν is homonymous, and that while τὸ λευκὸν in the sense of a white body does not have an essence, τὸ λευκόν in the sense of ἡ λευκότης—πάθος, as he calls it in Z6 (1031b28)—does have an essence; but Aristotle thinks this concession does not damage his case against the Platonists, since "[the essence of white] is not the same as the man, i.e. as the white man, but it is the same as the πάθος" (1031b27-8). This kind of essence does not damage Aristotle's case against the Platonists because (Aristotle thinks) the πάθος exists "not καθ’ αὐτῷ and abstractly," parasitically on the existence of the thing that has the πάθος: thus the essence of white, in the only sense in which there is such an essence, does not exist separately from the manifest white things, and so cannot be, as the Platonists wish, an ἀρχή of the manifest things. ("White" here of course stands in for any accidental term—Plato presumably does not believe in a separate form of whiteness, but he believes in a separate form of temperance, and Aristotle's arguments would apply equally to this case.) But how does Aristotle know that the essence of whiteness is something that exists inseparably in this way, and not something prior to the white things? The arguments of Z4 and Z6 do not require this conclusion, but the argument sketched in Z5 does: a scientific analysis of white (or of temperate or any other accident) will bring out the appropriate ὑποκείμενον of which the accident is predicated per se secundo modo, and this will show that the essence of that accident cannot exist without that ὑποκείμενον any more than the essence of snubness can exist without nose, since the essence of whiteness is what-it-is-for-a-surface-to-be-white, as the essence of snubness is what-it-is-for-a-nose-to-be-snob. The fact that white is inseparable from surface does not quite imply that it is inseparable from bodies; but if there is a white separate from bodies, it can only be a white surface separate from bodies, and whether this is possible will depend on whether mathematical boundaries exist separately from natural bodies. The question of separate mathematical will require further investigation (as will the question of separate souls as ὑποκείμενα of the virtues), but in any case the Platonist has no special route through the essence of accidents (any more than through the essence of ὀ σίατα) to something existing prior to natural things.

30 cf. the beginning of Δ18 on color and surface
31 things said like the snub "cannot be defined χωρίς [from the thing analogous to nose]", as Aristotle puts it in Z5 (1030b24-5); since the essence, which is expressed by the definition, cannot even be expressed separately from the ὑποκείμενον, a fortiori it cannot exist without it. (Aristotle's language here is verbally close to SE 31)
For the purposes of Z4-6 Aristotle needs only the point about the essence of accidents. But in fact he believes that natural ὀφθαλμία-terms too are "said like the snub" and inseparable even in λόγος from their appropriate matters: "flesh and bone and man are said like snub nose and not like curved ... we must investigate as if we were inquiring about snubness, what it is, so that such things are neither without matter nor according to matter" (Physics II.2 194a5-7, 13-15; echoed at Metaphysics E1 1025b30-1026a6). Aristotle can and will use this point in Z11 in arguing against separate forms of natural ὀφθαλμία; he presumes the same analysis in Z17, where he proposes analyzing the essence of house by asking not "why is a house a house" but "why are these bricks and stones a house" (1041a26-7), which will lead to an essence inseparable in λόγος from the appropriate matter. (He also has a similar analysis of differentiae in Z12, where "biped" is said like the snub with regard to its genus "animal," or to the higher differentia "footed.") In Z5 Aristotle is not contrasting accidents with ὀφθαλμία, merely discussing accidents as he needs them for the argument of Z4-6 and leaving the case of ὀφθαλμία (which turns on physics and not merely dialectic) for later. This observation allows us to avoid the bizarre contortions into which criteria-and-candidates interpretations like Frede-Patzig's are forced by Z5. They are convinced that Aristotle is investigating essences, and the identity of a thing with its essence, because having an essence and being identical with that essence are criteria for ὀφθαλμία, and they take Z4's argument that non-ὀφθαλμία do not have essences to be an argument for the first of these criteria; and so when Z5 argues that things said like the snub do not have essences (except in some weakened sense, as Z4 allowed non-ὀφθαλμία to have essences in a weakened sense), that must be an argument that things said like the snub are not ὀφθαλμία, and that if something claims to be an ὀφθαλμία it must establish its non-snublikeness. Of course this makes no sense of the argument-structure of Z5, which argues first that things said like the snub do not have (strict) essences, then that all accidents are said like the snub, then uses these premisses to infer that accidents do not have (strict) essences; whereas on the criteria-and-candidates view it ought to argue instead "things said like the snub do not have (strict) essences, all ὀφθαλμία have (strict) essences, therefore no ὀφθαλμία are said like the snub." But much worse is that Aristotle clearly maintains the opposite of what Frede-Patzig want him to be arguing for here, since he thinks that natural things, or their forms, are ὀφθαλμία, and that these things are indeed said like the snub. Frede-Patzig's answer to these challenges is to say that Aristotle changed his mind between writing Metaphysics E1 (and presumably also Physics II) and writing Metaphysics Z; to find a contorted interpretation of Z11 which will contradict E1 instead of agreeing with it as it seems to; and to say that coherent argument-structure is too much to expect from Aristotle anyway. Once we give up the criteria-and-candidates interpretation of Z, and recognize the function of Z4-6 in disarming Platonist arguments for the forms, we are relieved of all these burdens. 

32 references to discussions of snubness elsewhere, above and on Z11; perhaps cite Suzanne Mansion's perfectly correct sarcastic dismissal of the project of finding metaphysical definitions of natural things alongside the natural ones