Aquinas and the Content Fallacy

Intellect, Thomas Aquinas believes, is an immaterial power of the human soul. It is precisely because of intellect's immateriality, he says, that human beings are able to reason abstractly, grasp universal forms, and recognize general truths. Only an immaterial intellect could do such things, Aquinas argues, because only something immaterial could strip away the accidental, physical properties of the sensible world and apprehend the underlying forms of reality. Because these capacities are unique to what is immaterial, Aquinas's account of the human cognitive faculties is sharply divided. On one side are the material senses, which apprehend the world as material and, hence, as particular. On the other side is intellect, which is immaterial, and which apprehends the universal and formal features of the world.

As we will see, this line of reasoning appears throughout Aquinas's philosophical work, in many different contexts: it shapes his account of agent intellect; it grounds his insistence that intellect has no direct apprehension of singular material objects; it provides a principal argument for the human soul's immateriality and incorruptibility. Nevertheless, this reasoning contains a deep and fatal flaw. That flaw is an instance of what I will be calling the content fallacy.

'The content fallacy' is my name for the mistake in reasoning that comes from conflating two kinds of facts: facts about the content of our thoughts, and facts about what shape or form our thoughts take in our mind. The following would be a crude instance of the content fallacy:

Bob is thinking about a red sports car.

Bob's thought is red.

The argument falsely supposes a correspondence between what someone is thinking about and the intrinsic, non-intentional qualities of that thought. When presented this starkly, the fallacy is obvious. But the mistake can be a seductive one. In talking about objects with representational content there is often an ambiguity between the intentional and the intrinsic qualities of the object: that is, our language often fails to distinguish between what an object represents (e.g., a sports car), and what that object is intrinsically like (e.g., organic, plastic, immaterial). (Throughout this paper I will use the terms 'intentional' and 'intrinsic' to make this distinction between what thoughts are about and what physical (or non-physical) form those thoughts actually take.) Often there is no danger of confusion. If you accuse me of having dirty thoughts I will immedi-

ately get your point. But sometimes it is easy to be misled by the ambiguity. If, for instance, I hear you say that our thoughts are often picture-like, I may not be so clear about whether you are referring to their intentional or their intrinsic qualities — i.e., to what the thoughts are about or to what form they take in our minds. Indeed, speaking of the debate over mental imagery, Zenon Pylyshyn has said that this sort of fallacy "is probably the most ubiquitous and damaging conceptual confusion in the whole imagery literature."

Although, like Pylyshyn, I suppose that this fallacy is quite common — common enough, indeed, to deserve being given a name — I will be interested in what follows only in Aquinas, where I believe the fallacy is embarrassingly and damagingly widespread. The basic form of the fallacious argument, as it occurs in Aquinas, looks like this:

Intellectual thought is immaterial.

Intellectual thought is of things that are immaterial.

Here an inference is being made from the intrinsic, non-intentional qualities of our thoughts to their intentional qualities (what they are about). Notice that the inference in this argument runs in the opposite direction from the earlier example I gave. In the earlier example the inference ran from what the thought is about (red), to what the thought's intrinsic nature is (red). An argument in either direction may be an instance of the content fallacy.

Such arguments would of course not be fallacious if suitable middle premises were provided. So, in the original example, the argument could be made valid through the addition of a premise to the effect that thoughts must literally resemble the things that they are about. So too, if Aquinas can provide a suitable middle premise for the above inference then he would be acquitted. (Indeed, I hope someone will find such a premise and acquit Aquinas of all charges.) But I have been unable to find any such premise or premises.

'Pylyshyn's own characterization of the fallacy is as "the seemingly innocent scope slip that takes image of object X with Property P to mean (image of object X) with property P instead of the correct image of (object X with property P)." "The Imagery Debate: Analog Media versus Tacit Knowledge" in Ned Block (ed.) Imagery (Cambridge, MA: MIT Press, 1981).

²Sentencia libri De anima (=InDA) II.12.71-94. Parallel passages will be quoted below. (All references to Aquinas, unless otherwise noted, are to the Leonine edition (Rome: Commissio Leonine, 1882-).)

Questions are sometimes raised, and reasonably so, about whether Aquinas's Aristotelian commentaries furnish good evidence regarding Aquinas's own views. When Aquinas is engaging in line-by-line exposition of the text then I think one has to be very cautious. But when Aquinas interrupts his literal commentary to raise special philosophical questions then I think we can with confidence treat the views expressed as Aquinas's own. Invariably, in these excursus, he slips into the vocabulary, style, and arguments that are characteristically his own. Indeed, the passage from which I am quoting circulated separately in the Middle Ages under Aquinas's name. (See the appendix to the Leonine edition of InDA, pp.265-71, 277-78.)

The places where the fallacy is perhaps most easily seen are where Aquinas explains why the objects of intellectual cognition are universals, whereas the objects of sensory cognition are particulars. He takes up this question in many different places. But his most detailed discussion comes in book two of his *De anima* commentary, where he interrupts his line by line exposition of the text to ask two questions. The second question, which I will draw on below, asks in what way universals exist in the soul. But the question that concerns us is the first one: Why do the senses apprehend singulars, whereas intellect understands universals? It will be worth our while to look closely at this passage, which runs as follows:

It is important to know, in regard to the first of these questions, that a sense is a power in a corporeal organ. Intellect, on the other hand, is an immaterial power that is not the activity of any corporeal organ. But everything is received in another according to the mode of the recipient. And every cognition is produced by the cognized thing's existing in the one cognizing in some way — namely, in virtue of a likeness. For what is actually cognizing is the very thing actually cognized.

The senses, therefore, must corporeally receive a likeness of the thing being sensed. Intellect, in contrast, incorporeally and immaterially receives a likeness of what it understands. But, in the case of corporeal and material things, a common nature is individuated by corporeal matter contained under determinate dimensions. A universal, in contrast, exists through abstraction from this kind of matter and from individuating material conditions. Therefore it is clear that a thing's likeness, received in the senses, represents that thing as it is singular. A likeness received in intellect, in contrast, represents that thing as the account (ratio) of a universal nature.

This is why the senses have cognition of singular things, whereas intellect has cognition of universals.²

The passage begins with claims about non-intentional qualities of our cognitive faculties, when Aquinas says that "a sense is a power in a corporeal organ" and "intellect is an immaterial power." The passage ends with claims about the intentional or representational features of our perceptions and thoughts, when he says that "this is why the senses have cognition of singular things, whereas intellect has cognition of universals." This shift from intrinsic to intentional facts provides just the most superficial support for the presence of the content fallacy. It is not enough, of course, just look at the argument's

beginning and end. We need to look at what happens in the middle of the argument to see whether it is or is not valid. To this end we have to look at how the argument proceeds line by line.

Aquinas's prose style is so explicit that we can set the argument out step by step while hardly changing a word. He begins with the following premises.

- 1. "A sense is a power in a corporeal organ."
- 2. "Intellect is an immaterial power."

As noted already, these plainly are claims about the intrinsic qualities of our cognitive faculties. A sense is material — or, more precisely, is a power in something material. Intellect, in contrast, is immaterial or incorporeal. It is not obvious precisely how (1) should be interpreted, and whether the difference in wording between the two premises is significant. Is sense a material power? Or is it rather an immaterial power in a material organ? If the latter then what does it mean to be something immaterial in a body? Here we can leave these questions to one side. What is important for present purposes is that these first two premises concern strictly non-intentional qualities of our cognitive powers.

Next we get a premise that is quite general:

3. "Everything is received in another according to the mode of the recipient." This is a claim that Aquinas makes very often and in many different contexts.3 Aquinas's talk of things "received" is his way of referring to causal relations. All such relations, for Aquinas, are the result of a form's being received.4 By 'mode' Aquinas means to refer in the most general way to the characteristics and conditions of the recipient. It is easy to think of cases in which (3) holds true. Water poured into a glass, for instance, takes on the shape of the glass. But, as this example suggests, the claim cannot be taken seriously as a universal truth. The water does not, for instance, turn into glass. And when hot water is poured into a cold glass it is the glass that initially changes temperature. We should understand Aquinas as offering us, with this step, a schema that needs to be fitted to the circumstances. In this case, plainly, he means to be advancing a more specific claim. If we look ahead to the conclusion Aquinas reaches in the beginning of the passage's second paragraph, then we can infer that this more specific claim runs as follows:

'See, e.g., Super IV Sententiarum [=SENT] (Parma, 1856), I.38.1.2; Quaestiones Quodlibetales [=QQ]. 9.4.1; Summa theologiae (=ST] la 12.4c, 84.1c; InDA II.24.35-36. See also John Wippel, "Thomas Aquinas and the Axiom 'What is Received is Received According to the Mode of the Received According to the Mode of the Receiver,'" in A Straight Path: Studies in Medieval Philosophy and Culture, ed. R. Link-Salinger (Washington, DC: Catholic University of America Press, 1988), 279-89. Ironically, given the argument of this paper, Wippel writes, "... it is

my suspicion that Thomas regarded this [sense perception] and human intellection as the most evident illustration of the principle in question" (279–80).

'See, e.g., Quaestiones disputatae de veritate [=QDV] 8.11c: "every action comes from a form;" ST la 85.2c: "Action is of two kinds.... Each is brought about according to some form."

'Theories of Cognition in the Later Middle Ages (New York: Cambridge University Press, 1997), Ch. 3 and Appendix A.

3*. Everything received in something corporeal is received corporeally; everything received in something incorporeal is received incorporeally.

In rephrasing the premise in this way I am anticipating how the argument is going to run: Aquinas is about to speak of a thing's being received "corpore-ally" and also "incorporeally and immaterially." The adverbs here, I take it, should be understood as follows: when an object is received corporeally (or incorporeally), some corporeal (or incorporeal) change is produced in the recipient. And on this reading (3*) becomes entirely uncontroversial. It means merely that corporeal things, when affected, undergo only corporeal changes; incorporeal things undergo only incorporeal changes. Later I will return to consider a different way of reading this premise. But the reading just given seems the most plausible.

Aquinas conceives of the forms received in the cognitive agent as likenesses of external objects. This is the point of the next premise:

4. "Every cognition is produced by the cognized thing's existing in the one cognizing." This occurs in a special way — "namely, in virtue of a likeness" that exists in the one cognizing.

Aquinas apparently does not view this premise as self-evident or obvious in the way the prior three are. For he goes on to add a sentence that should be read as justifying premise 4: "For what is actually cognizing is the very thing actually cognized." The point here, although it is not made explicit, is that this famous Aristotelian doctrine of identity between knower and known explains what sort of likeness is involved, and (consequently) how the thing cognized could exist in the one cognizing. Elsewhere I've explored what sort of identity Aquinas has in mind here, and what it shows about the likenesses in sense and intellect. All we need now take from this passage is the bottom line, which is that the senses and intellect operate in virtue of receiving a likeness of the object they cognize.

This last premise, when combined with the first three, seems clearly enough to entail the next two premises:

- 5. "The senses must corporeally receive a likeness of the thing being sensed" (from 1,3,4).
- "Intellect incorporeally and immaterially receives a likeness of what it understands" (from 2,3,4).

When (3) is rephrased as (3*) then these two conclusions follow immediately from the premises. Now, as discussed in the context of (3*), it's not completely clear what is meant by the phrases 'corporeally receive' and 'incorporeally and immaterially receives.' It may be that a crucial ambiguity rests here,

a possibility to which I will return. But, as was the case with (3*), the most plausible reading of these phrases is that the senses undergo corporeal change when they receive their likenesses; intellect undergoes incorporeal change. When understood this way these claims seem neither surprising nor implausible, given the premises on which they are based. But we are still at the level of the intrinsic features of our cognitive powers. We have yet to see how Aquinas is going to move the argument to the level of intentionality.

Next Aquinas states two general metaphysical premises:

- 7. "In the case of corporeal and material things, a common nature is individuated by corporeal matter contained under determinate dimensions."
- 8. "A universal exists through abstraction from this kind of matter and from individuating material conditions."

There is nothing odd about these claims in themselves, each of which are well known and characteristic theses in Aquinas's metaphysics. The kind of matter he is discussing here, and which in (7) he calls "corporeal matter contained under determinate dimensions," is not the only kind of matter Aquinas recognizes. He also speaks of the matter contained in a thing's common nature—e.g., flesh and bones in general. But here he's speaking of matter roughly as we use the term: the concrete stuff that makes up tables and chairs; this particular flesh and bones. From here on when I talk about matter I will be talking about this latter sort of matter, the stuff that here Aquinas speaks of as "contained under determinate dimensions."

One implication of these premises is that being material is sufficient for being particular. There is nothing that is both material and universal. For (7) tells us that if a thing is material then its common nature will be individuated and hence not a universal nature. And, according to (8), if a common nature is a universal then it must be abstracted from matter. Aquinas is careful not to claim that matter is a principle of individuation in all things. God and angels, for instance, are immaterial and yet individuals. But being material is sufficient for being particular. "In the case of corporeal and material things," as he puts it, it is their materiality that makes their natures individuals and not universals.

We have to be careful, however, in approaching (8). For the juxtaposition of (7) and (8) suggests a misleading parallel. Just as common natures are made individual by matter, it might seem that those natures are made universal by stripping away that matter. But this is not what (8) means. By 'abstraction' Aquinas refers to a mental operation. It is not as if we could take a table and literally peel the matter away from it, leaving the form. Aquinas in fact holds that a common nature cannot be "really abstracted" from matter, as he puts it in this same chapter of the *De anima* commentary. "Human being does not

exist except in this flesh and these bones" (InDA II.12.111-5). Abstraction, for Aquinas, is merely a way of considering one aspect of an object while bracketing the rest: it is as "if I were to separate whiteness from the man in such a way as to apprehend the man while apprehending nothing with respect to his whiteness" (128-31). So when Aquinas speaks of "abstraction from . . . matter" in (8), he is referring to an intentional operation. A change occurs in the way the object is viewed; there is no change in the object's intrinsic features. In contrast, (7) is non-intentional; it is a purely metaphysical claim about what makes common natures particular.

From these premises, what is Aquinas entitled to? He is entitled to the following claim about the intrinsic nature of likenesses at the sensory level:

- 9*. A thing's likeness, received in the senses, is singular (from 5,7).
- But of course this isn't what he wants. What he wants is the intentional version of that claim:
- 9. "A thing's likeness, received in the senses, represents that thing as it is singular" (from 5,7?).

But there is nothing in the argument that entails this conclusion. It seems to be entirely irrelevant that sensory likenesses are received materially (5) or are themselves singular (9*). Generally the argument gives us no reason to think that the likenesses received in the senses will represent things as singular. In the case of intellect the situation is no better. He wants this conclusion:

10. "A likeness received in intellect represents that thing as the account of a universal nature" (from 6,8?).

But we have no reason to think the likenesses received in intellect will represent things as universals. It seems irrelevant that those likenesses are immaterial (6). As for (8), the mental operation of abstraction he describes there seems entirely unrelated to the intrinsic materiality or immateriality of either the likenesses received or the faculty performing the operation. For all we have seen, it seems perfectly possible that something material might, through the act of abstraction, understand universals.

From conclusions 9 and 10 Aquinas draws the final words of the passage, that "the senses have cognition of singular things, whereas intellect has cognition of universals." Obviously we are now firmly settled at the intentional level. But, as I've been interpreting the argument so far, we have no basis for these conclusions. Aquinas has given us no reason to think that the intrinsic features of a likeness have a bearing on that likeness's intentional features. Why couldn't a physical likeness represent a universal? Why should an immaterial likeness be any better suited to represent common natures in abstraction

from matter? What we seem to have is a crude conflation of the intrinsic and the intentional — a crude instance of the content fallacy.

Now one might object that I have introduced intentionality at too late a point in the argument. One might want to introduce it somewhere sooner — in particular, at (5) and (6). One would say that intellect's receiving a likeness "incorporeally and immaterially" means not just (or perhaps not at all) that it receives a likeness that is (intrinsically) incorporeal and immaterial. It also (or perhaps rather) means that intellect understands something as incorporeal and immaterial. The same line could be taken for premise 5. We would then have:

- 5#. The senses must receive a likeness representing the thing being sensed as corporeal (from 1,3,4?).
- 6#. Intellect receives a likeness representing what it understands as incorporeal and immaterial (from 2,3,4?).

This intentional reading of these premises is not implausible, because one can then make some sense of the rest of the argument. The reasoning in intellect's case would be as follows: things are represented in the intellect as immaterial (6#); something is represented as a universal only when it is represented as immaterial (8); therefore, things are represented in intellect as universal (10). The argument in the sensory case would run in a similar way (although it would use 8 as well, not 7).

Still, if this strategy makes sense of the second part of the argument, it makes trouble for the first part. We are now left with showing how Aquinas is entitled to (5) and (6). Evidently, he will need to make (3) carry a lot of the weight. We would have to read (3) as entailing something like the following:

- 3#. Every representation received in a material cognitive power represents the world as material; every representation received in an immaterial cognitive power represents the world as immaterial.
- (3) now becomes much more controversial. We thought we had the uncontroversial claim that what is physical undergoes physical change, whereas what is non-physical undergoes non-physical change. Now it seems we have something far less intuitive. If (3) is meant to underwrite (3#), then it seems that Aquinas is simply presupposing from the start a link between the intrinsic and intentional levels. Certainly, there is nothing in the argument before this point that would provide support for such a link. So we are still left with the sorts of questions asked above: Why can't a physical cognitive power represent the world as non-physical? Why can't a non-physical cognitive power represent the world as physical? While this intentional reading of the argument (in terms of 3#,5#,6#) makes it come out valid, the price is high. A seemingly benign

power's seeing color without becoming colored see, e.g., ST la 78.3c.

^{&#}x27;See also QDV 2.5 ad 5, 8.1c; IV SENT 49.2.1c; and Theories, pp.105-13.

I SENT 34.3.1 ad 4. On the sensory

premise becomes quite contentious and entirely unsupported. Neither my original reading, then, nor this new suggestion, seems attractive. The trouble, I believe, is that Aquinas is misled by the ambiguity between the intrinsic and intentional readings of (3), (5), and (6). On the intrinsic reading (the reading I initially proposed) these two premises are thoroughly plausible, but the argument is invalid, an instance of the content fallacy. On the intentional reading the argument is valid. But now Aquinas begs the question in (3). The argument shows essentially nothing.

But might Aquinas have some way of establishing a link between the intrinsic and the intentional levels? If so, then he might be able to use the plausible intrinsic readings of (5) and (6) to reach the intentional reading (in 5# and 6#) he needs for the argument's validity. Is there any basis for taking (5) to entail (5#), and (6) to entail (6#)? The basis that seems most promising is his claim in (4) that cognition requires likeness. It might seem to follow from this premise that a likeness that is intrinsically material would have to represent objects as material. So too, an intrinsically immaterial likeness would have to represent objects as immaterial. This isn't a line of thought the text we're considering does very much to suggest. But given the lack of a better option, one might be inclined to take the idea seriously.

The problem with the idea is that it expressly contradicts Aquinas's account of the respect in which the likenesses in sense and intellect actually resemble external objects. Aquinas is in fact quite specific in other places about what he means by likeness:

The likeness of any two things to each other can be considered in two ways. In one way according to an agreement in nature, and such a likeness is not required between cognizer and cognized. . . . In another way as regards representation, and this likeness of cognizer to cognized is required (QDV 2.3 ad 9).

This latter kind of likeness, likeness as regards representation, does not require literal resemblance. When we see colors, for instance, the sensory power takes on a likeness of the color, but without becoming colored. This, he says, is a case of representational likeness; there is no "agreement in nature." Many other examples of this same principle can be cited. Aquinas says, for instance, that a simple idea can be a representational likeness of a composite thing, and a likeness existing in actu can be a representational likeness of what exists in potentia. Clearly, Aquinas does not hold a crude likeness theory requiring the cognitive likeness of some quality itself actually to possess that quality.

This leaves us with no basis for bridging the gap between the intrinsic and

the intentional. If vision can contain a representation of color that is not itself colored, then why couldn't it have a physical representation of something non-physical? Why can't something immaterial understand the world as material? Indeed, as I'll show in section three, there are places in which Aquinas explicitly says that something immaterial can understand the world as material. (It's obvious how his theological views might push him in this direction.) But if there is no link of this sort between the intrinsic and intentional levels, then it is utterly mysterious how this argument from the *De anima* could be sound. I think the best explanation is that Aquinas has the two levels confused: he has fallen victim to the content fallacy.

II.

This passage from the *De anima* commentary is just one of very many places where Aquinas employs the same line of thought. Here are some other, briefer passages — first, at the sensory level:

... the sensory powers cannot cognize universals, because they cannot receive an immaterial form, because they always receive in a corporeal organ (Summa contra gentiles [=SCG] II.75.1551).

It is impossible for some spiritual and intelligible nature to fall under the apprehension of sense which, *because* it is a corporeal power, can have cognition only of corporeal things (*InDA* II.14.231-4).

One cognitive power, sense, is the activity of a corporeal organ. And *hence* the object of every sensory power is a form as it exists in corporeal matter. And *because* this sort of matter is the principle of individuation, so every power of the soul's sensory part is cognitive only of particulars (ST 1a 85.1c).

Second, at the intellectual level:

That something that is one in every [mind] can be understood through species multiplied in distinct [minds] occurs as a result of the immateriality of the species that represent the thing without the individuating material conditions. By these conditions a nature that is one in species is numerically multiplied in many (Quaestiones disputate de

"For Aquinas's account see ST la 86.1; QDV 10.6; INDA III.8.161-95.

"See also QDA 20; QDV 2.6c, 8.11c, 10.5c, 19.2c; QQ 7.1.3c, ST la 84.1c, 84.2c, 84.7, 85.1, 86.1. Strictly speaking, Aquinas does not think the human intellect is directly cognizant only of universals. Intellect can, it least in the next life, have a direct cognition of non-material particulars such as God and angels. (See, e.g., Quaestiones disputative despiritualibus creaturis [=QDSC] (Turin,

1931), 9 ad 15; QDA 17 ad 5.) To be precise, then, we must say that intellect is unable to have a direct cognition of material singulars. Aquinas doesn't always bother to put things so precisely, nor in what follows do I.

For a comprehensive history of the scholastic dispute over intellectual knowledge of material singulars, see C. Bérubé, La conaissance de l'individuel au moyen dge (Montreal: Presse Universitaire de Montréal, 1964).

anima [=QDA] 3 ad 7).

The human intellect... is not the activity of any organ, but still is a power of the soul, a corporeal form... And so it is intellect's characteristic property to cognize a form existing as an individual in corporeal matter, but not as it is in such matter... This is to abstract form from individual matter (ST 1a 85.1c).

In all five of these passages Aquinas uses facts about the intrinsic qualities of sensible or intelligible species to explain facts about those species' intentional qualities. In none of them does he even hint at a middle premise that might justify the connection.

The line of reasoning we have been considering spills over into a number of other areas. The most notorious of these is Aquinas's view that just as immateriality is what allows intellect cognition of universals, so too immateriality precludes direct intellectual cognition of material particulars. This claim may sound odd: How can intellect be blind in this way to singular things? But the view is not quite as peculiar as it seems. Aquinas is not denying intellect any of the capacities it so manifestly has to deal with concrete particulars. It is intellect, he recognizes, that reasons about and guides our actions in the material world. To account for how intellect does this, however, he has to postulate a more complicated indirect path — what he refers to as reflection to phantasms. The details of this indirect path needn't concern us; our interest is in what leads Aquinas to complicate his theory in this way. Why should intellect be unable to have direct knowledge of material things? Over and over Aquinas gives an answer of the following form:

In this life our intellect cognizes through species received from the world that are abstracted from matter and all the conditions of matter. Hence it cannot have cognition of singulars whose principle (of individuation) is matter, but only of universals (QDA 20 ad 1)."

The first sentence here is ambiguous between an intrinsic and an intentional reading. On the intrinsic reading it would mean that species in intellect are made non-physical. If that's what he means then this is a straight-forward case of the content fallacy. The argument would move, without a middle premise, from intrinsic to intentional facts. On the intentional reading the first sentence would mean that species in intellect do not represent material features of the world. If that's what Aquinas means then he has given us a valid argument that explains very little. The very thing we want to know is why Aquinas takes the surprising stance that intellect is unable to have representations of the world's material (and hence particular) features. So it would be disappointing.

to say the least, if his argument supposes from the start that intellect is unable to have cognition of matter.

Sometimes, instead of using intrinsic facts to make inferences about intentional ones, Aquinas does the reverse. This is particularly evident when he argues for the human soul's immortality. Although Aquinas has a number of arguments for this conclusion, one of his favorites seems to be a blatant instance of the content fallacy:

An intellective principle of this sort is not something composed of matter and form, because species are received in it entirely immaterially. This is shown by the fact that intellect is concerned with universals, which are considered in abstraction from matter and material conditions. It remains, then, that the intellective principle by which a human being understands is a form with [its own] being. Hence it is necessarily incorruptible (QDA 14c₂₁₀₋₁₉).¹²

It is hard to imagine a clearer instance of the fallacy. The passage's conclusion pertains to intellect's intrinsic qualities: being immaterial and hence incorruptible. These facts are inferred from intellect's intentional qualities: being "concerned with universals."

If Aquinas's reasoning is as fallacious as I am claiming, one would expect his many commentators to have discovered this fact. But with the one notable exception of Joseph Novak, 3 modern scholars have accepted without qualms

¹²Later in this same question (still in the reply) the same line of argument is presented again, with a different structure. And see also ST 1a 75.5c; SCG II.62.1413; Compendium theologiae [=CT] 84.147.

"Joseph Novak, "Aquinas and the Incorruptibility of the Soul," History of Philosophy Quarterly 4 (1987) 405–21. Novak sees precisely the fallacy I am describing, but his discussion is limited to the occurrence of the fallacy in Aquinas's argument for the immortality of the soul, as in the passage quoted earlier from QDA 14c.

¹⁴"Intentionality: Aquinas and Wittgenstein" in A. Kenny (ed.) *The Legacy of Wittgenstein* (Oxford: Blackwell, 1984), p. 74. This is, as Kenny indicates, a close paraphrase of *ST* 1a 75.5c.

13Wippel, "Thomas Aquinas and the Axiom," p. 284 (my emphasis).

¹⁶Verbum: Word and Idea in Aquinas (Notre Dame, IN: University of Notre Dame Press, 1967), p. 150. Emphasis added.

¹⁷Sense, intellect, and imagination in Albert, Thomas, and Siger," in N. Kretzmann et

al. (eds.), The Cambridge History of Later Medieval Philosophy (New York: Cambridge University Press, 1982), p. 608.

¹⁸Aquinas is by no means the only medieval philosopher to argue in the way I am criticizing, although he was certainly the most influential. Here, to quote just one other example, is John of Reading (ca. 1285–1346):

... according to all philosophers, the object of intellect is something immaterial.... From this I take it that for an object of intellect to be sufficiently present to intellect as an object able to cause intellection, it must have immaterial existence. But it couldn't have such existence either in the external object or in any species received in a sensory power... ("Quaestio Ioannis de Reading de necessitate specierum intelligibilium de-

fensio doctrinae scoti" ed. G. Gál, Franciscan Studies 29 (1969), n. 168).
"Quaestiones de cognitione, q.4 ad 5

"Quaestiones de cognitione, q.4 ad 5 (Quarrachi: Collegium S. Bonaventurae, 1957), p. 287.

the inferences we have been considering. Anthony Kenny, for instance, uncritically reports Aquinas arguing that

If the intellect were composed of matter and form, the forms of things would be received into it in all their concrete individuality, so that it would know only the singular, as the senses do, which receive forms of things in a physical organ.¹⁴

Here intrinsic qualities of intellect determine the sort of thing that intellect can think about. No explanation is offered for the leap from one kind of fact to the other. John Wippel makes precisely the same leap in reasoning:

... the intellect receives the form of the sensible object according to the intellect's own mode of being — for what is received is in the receiver according to the receiver's mode of being. It is for this reason, therefore, that through its intellect the soul knows bodies by a knowledge that is immaterial, universal, and necessary.¹⁵

The same fallacy occurs in describing the senses. According to Bernard Lonergan,

Both outer and inner senses are forms of corporeal organs; and they know the particular *because* the species they receive are individuated by the matter and the determinate dimensions of the organs they inform.¹⁶

Intentional facts are being explained by intrinsic facts, but no notice is taken of the gap. The same occurs, finally, in Edward Mahoney: "Since a phantasm in the senses and in imagination is material and individual, it is incapable of producing a universal likeness of a nature or essence." All of these remarks fail to distinguish between taking materiality and immateriality to be (a) properties of what the agent is thinking about, and (b) intrinsic properties of sense, intellect, and the likenesses within sense and intellect.

But if no modern readers seem to have spotted the problem, still Aquinas's sharpest critics have taken him to task on this point. These critics are long since dead, however, and their criticisms aren't often reckoned with. I'm referring to Aquinas's scholastic contemporaries, a number of whom pointedly criticized Aquinas (and others¹⁸) for conflating intrinsic and intentional immateriality.

The particular doctrine that occasioned this attack was the thesis that intellect has no direct knowledge of material singular things. Take, for instance, these remarks by Matthew of Aquasparta (c.1237–1302) in defense of intellectual cognition of material particulars:

Something singular is understood through a species that exists within intellect. In a way this species stays material; in a way it is made imma-

terial. It stays material because it represents and leads to a cognition of the whole matter-form compound. It is made immaterial because it is abstracted from the external object and has no existence in matter.¹⁹

It is easy to see that Aquasparta has in mind a distinction between intrinsic and intentional immateriality. The claim that a thing is made immaterial is ambiguous, Aquasparta here explains, because it might refer either to what the species represents, or to its intrinsic state — as he puts it here, to the fact that it "has no existence in matter."

William Ockham (c.1285-1347) draws this same distinction, at greater length. In the first paragraph of the following passage he explains the intrinsic sense of materiality, in the second the intentional sense:

So I say that to have a material cognition can be understood in two ways. In one way that someone has a cognition that completes matter extensively, like a material form. And it's in this way that the senses have a material cognition and a cognition that is here and now, since corporeal vision is extended through the whole [visual] organ — a composite of matter and form — and thus it has existence here and now. And in that way intellect abstracts from material conditions, since intellection exists subjectively in the intellect, not extensively in some composite or corporeal organ. And it's in this way that we can understand the common expression about those material conditions — that the 'intellect abstracts' etc.

In another way someone can have a material cognition because he cognizes matter or a material object. And in this way the divine, angelic and human intellects have material cognitions, since they intellectively cognize not only material things but even matter.²⁰

Notice that at the end of the first paragraph Ockham indicates how he thinks the ambiguous phrase 'intellect abstracts [matter]' should be taken. What this phrase means, Ockham says, is that intellectual representations are made to be intrinsically immaterial. But, as we've seen, the phrase offers no support for Aquinas's position when understood in this way. Not surprisingly, then, Ockham rejects Aquinas's doctrine of a "reflection to phantasms."

III.

Despite the way that the passages we have considered seem to conflate the

²⁰Reportatio II.12-13 (Opera Theologica [St. Bonaventure: Franciscan Institute Publications, 1967-891 V, 285). See also Ordinatio 3.6 (Opera Theologica II, 494); Expositio in libros Physicorum I.1.2 (Opera Philosophica IV, 24).

An even fuller discussion of the fallacy can be found in Peter John Olivi (1247/8-1298),

in his Quaestiones in Secundum Librum Sententiarum, ed. Bernard Jansen (Quaracchi: Collegium S. Bonaventurae, 1922–26), q.16 ad 20 (I, 352) and q.67 (II, 616–8).

²¹See also QDV 3.1 ad 3, 3.2 ad 5, 10.4c & ad 4

²²On angels, see *QDV* 8.11 ad 3; on separated human souls see *QDA* 18 ad 4.

intrinsic with the intentional, there are a number of other places where Aquinas seems explicitly to rule out the sort of invalid inference I am charging him with. The following passage is among the most clear:

A thing is cognized in keeping with the way it is represented in the one cognizing, not in keeping with the way it exists in the one cognizing. For a likeness existing in a cognitive faculty is a principle for cognizing a thing not in keeping with the existence it has in the cognitive power, but in keeping with the relation it has to the thing cognized. Hence it is that the thing is cognized not according to the mode in which the thing's likeness has existence in the one cognizing, but according to the mode in which the likeness existing in intellect is representative of the thing. And so, although the divine intellect's likeness has immaterial existence, it is nevertheless a principle for cognizing material and hence singular things, because it is a likeness of matter (QDV 2.5 ad 17).

It would be hard to imagine a more straightforward rejection of the content fallacy. Throughout the passage Aquinas insists on a distinction between how something exists, and what it represents. The implication here is that the divine intellect can contain likenesses of material singular things, even though those likenesses are intrinsically immaterial. In other places Aquinas makes the same distinction in order to explain how angels, as well as disembodied human intellects, can have knowledge of particular, material things.²²

How then can Aquinas make his apparently fallacious argument in some places, and then in other places clearly recognize the fallacy? We can frame this question more starkly by taking a closer look at the text from which the passage just quoted was taken. The question at issue here is "Whether God has cognition of singular things" (QDV 2.5). The last of the 17 opening arguments for the negative side argues that "Everything is cognized in keeping with the mode in which it is in the cognitive agent. . . . But things are in God immaterially. . . . Therefore he does not cognize things that depend on matter, such as singular things." Aquinas's reply to this argument is the passage quoted above, where he draws a distinction between the mode in which an intellectual likeness exists, and the mode in which it is representative of other things. Now if we had not seen this reply we might well have taken the original objection 17 to represent Aquinas's own view. For he often makes arguments that are nearly identical. Compare, for instance, how he argues in the Summa theologiae:

Cognition is possible insofar as the thing cognized exists in the cognitive agent. But the thing cognized exists in the cognitive agent in

keeping with that agent's mode. *Hence* the cognition of any agent occurs in keeping with the mode of its nature (ST 1a 12.4c).

From here he goes on to draw the usual conclusions: sense, a material power, "has cognition only of singular things." Intellect, in contrast, "is not the activity of a corporeal organ. . . . Hence by intellect we can cognize things of this sort in universal, which is beyond the capacity of sense."

This passage from the *Summa* is quite close to the one discussed at length in section one. The decisive point in the argument comes when he says that "the thing cognized exists in the cognitive agent in keeping with that agent's mode. Hence the cognition of any agent occurs in keeping with the mode of its nature. . . ." This is, in essence, the same claim that figures in obj.17 from *QDV*. Each relies on the following premise (which I'll call the 'in keeping with' premise):

Cognition occurs in keeping with the mode in which the thing cognized is in the cognitive agent.

Now it's not surprising to see Aquinas employing premises he accepts in arguments he rejects. That's a familiar move of his. What's surprising is that the QDV reply gives the 'in keeping with' premise an interpretation that seems incompatible with its use in the ST passage (written a decade later). The QDV reply says that the premise is true only when referring to mode of representation, not to mode of existence. But in the ST passage Aquinas is trying to reach conclusions about mode of representation, based on mode of existence. The very point of the QDV reply is that one can't make inferences of that sort. The case of God is the prime example. So the QDV would appear to contain a lesson forgotten by the time of the ST.

I don't know how to reconcile this perceptive passage from the QDV with the seemingly fallacious way in which Aquinas elsewhere uses the 'in keeping with' premise. But it is worth looking more closely at this article from the QDV, because in it Aquinas seems to provide an alternative argument for his rejection of direct intellectual cognition of singulars, an argument not based on a fallacious use of the 'in keeping with' principle.

In this QDV article Aquinas poses a question that cuts to the heart of the problem. After describing the way in which God has knowledge of singulars, Aquinas pauses to reflect as follows:

²³Cf. QQ 7.1.3c:

Every form, of itself, is common. Hence the addition of form upon form cannot be the cause of individuation.... The individuation of a form comes from matter, through which a form is tied down to this determinate thing. Hence for a particular to be cognized there must be in the cognizer not only a likeness of form, but somehow [also] a likeness of

matter.

²⁴Bérubé, La conaissance, notices this alternative argument in QDV 2.5 against direct intellectual cognition of singulars. He calls it "un texte isolé, peu en harmonie avec la théorie générale de la connaissance sensible." We will see that the text is hardly isolated. But it's true that the argument seems to raise trouble for Aquinas's general theory of sensory cognition.

But still a problem remains. For since everything that is in something is in it according to the mode of what it is in, and hence the likeness of a thing is not in God if not immaterially, why is it that our intellect, because it immaterially receives the forms of things, does not have cognition of singulars, but yet God does? (ODV 2.5c).

There are actually two problems wrapped together here. First is the problem raised in objection 17: how, given the 'in keeping with' principle, can God have knowledge of singulars? As we've seen in his reply to objection 17, he answers this problem by reinterpreting the 'in keeping with' principle. But then a second problem looms: if immateriality is no impediment to God's having cognition of singulars, then why should it be an impediment to our having cognition of singulars? As Aquinas recognizes, his solution to the first problem seems to undermine a central aspect of his theory of human cognition. And indeed by the end of the body of the question he concedes that intellect's inability to have direct cognition of material singulars "is not a result of the likeness's existing in it immaterially." Evidently, Aquinas needs a new rationale for why intellect directly cognizes only universals.

The rationale he provides in this question from QDV seems, at least prima facie, to avoid the content fallacy. A likeness in the human intellect, he says, "is received from the object insofar as the object acts on our intellect." But matter, he goes on to say, "on account of the weakness of its existence... cannot be a source of action. And so the object that acts on our soul acts only through form." He concludes that the resultant likeness, existing in intellect, can therefore be "only a likeness of form," and hence only a likeness of universals. This line of argument seems to rest on the fairly plausible epistemic principle that one must be causally connected to a thing to have cognition of it. Intellect cannot have a direct cognition of matter (and hence cannot have a direct cognition of material singulars) because matter "cannot be a source of action" (as above). The point here, notice, is not that matter cannot act on what is immaterial. Rather, the point is that pure matter doesn't act on anything at all. Forms act. But forms don't convey information about particulars."

This line of thought, as Aquinas presents it, immediately raises the following worry. If matter "cannot be a source of action" then how can the senses have a cognition of material singulars? That issue doesn't come up here, but in a later question from QDV Aquinas addresses the worry:

Species received by the senses are similar to objects only in respect to the objects' being able to act — that is, in respect to form. Hence singulars cannot be cognized through them, unless perhaps insofar as

they are received in another power that uses a corporeal organ, in which they are received in a way as material, and so as particular.

In intellect, however, which is altogether devoid of matter, [a species] can be a source only of universal cognition, unless perhaps through a kind of reflection to phantasms . . . (ODV 19.2c).²⁵

Here Aquinas repeats the claim that objects act only in respect to form. Still, he says, the senses can have cognition of matter because they use a corporeal organ, which entails that the forms received in them "exist in a way as material." His position is that matter itself doesn't act on the senses — only form does — and yet these forms convey characteristics of the matter. The senses, because they are material, can receive information about material things. Intellect, in contrast, because it is immaterial, cannot receive such information. This is not an instance of the content fallacy, or at least not obviously so. For the inference is not this:

Intellect is immaterial.

Intellect cannot have cognition of anything material.

Rather, the inference is this:

Intellect is immaterial.

What is immaterial cannot receive information about matter.

Intellect cannot have cognition of anything material.

It appears, then, that Aquinas has supplied us with the missing premise in his argument. This middle premise also shows why God's case is different from ours, since God is unlike us in that his knowledge is not received from the physical world (but is instead the cause of the physical world). These passages raise the hope, then, that Aquinas can avoid the content fallacy, at least with respect to his argument for intellect's lacking direct knowledge of material singulars.

To evaluate this new argument fully, we need to turn to the Summa contra

25See also QDV 8.11c, 10.4c.

"This standard reading of Aquinas is challenged by Eleonore Stump and Norman Kretzmann, "God's Knowledge and Its Causal Efficacy," in T. D. Senor (ed.), The Rationality of Belief and the Plurality of Faith (Ithaca: Cornell University Press, 1995) pp.94–124. On Aquinas's account, they argue, God must receive information about material particulars from the physical world. If they are right then Aquinas loses this way of showing how God is unlike us in having direct knowledge of material singulars.

²⁷Notice, however, that this added premise

will not help Aquinas with all instances of the content fallacy, such as his claim that the senses are unable to have cognition of universals. That is an important point, because the charge that a fallacy is being committed receives much of its plausibility from the fact that there are so many different contexts where Aquinas seems to make the same mistake. Unless one can find a way of explaining all of the cases under discussion, the suspicion must still remain that Aquinas is confused in the way I am charging.

²⁸See, e.g., ST 1a 84.6c; InDA 111.4.39-40.

gentiles, where Aquinas spells out in more detail some of the sketchier parts of QDV 19.2. In the later SCG Aquinas presents a fuller account of the causal connections between the physical world, the senses, and intellect. He begins by setting out several general causal principles that govern the relationships between forms of different "levels":

- C1. "A form belonging to a inferior level cannot, by acting, convey its likeness to a higher level."
- C2. "A superior form could, by acting, convey its likeness to an inferior level" (SCG I.65.537).

These are theses about causality: recall from section one Aquinas's view that all causality involves the transfer of forms. Aquinas applies these abstract principles to only one specific relationship, that between what is material and what is immaterial. So we can recast the formulas in a less aridly metaphysical way:

- C1*. A form in a material state cannot, by acting, convey its likeness to something immaterial.
- C2*. A form in an immaterial state could, by acting, convey its likeness to something material.

Aquinas takes C1/C1* to explain why the form of a material object can act on the senses but not intellect.

So the form of something sensible, because it is individuated by its materiality, cannot convey the likeness of its singularity into something that is entirely immaterial. It can, instead, convey that likeness only as far as powers that use material organs (SCG I.65.537).

The sensory realm provides a straight-forward instance of forms from one level acting on an object of that same level (i.e., one material thing acting on another). But material objects cannot, directly, act on intellect. The explanation here is more straight-forward than it seemed in the QDV passages: here Aquinas seems to claim simply that what is material cannot act on what is immaterial. (We know from other passages too that Aquinas thinks such interaction impossible.²⁸)

This passage seems to give a straight-forward account of the middle premise introduced in the above QDV passage. The senses receive information about matter (and hence have cognition of material particulars) because they are in ordinary causal contact with those particulars. Intellect has no such cognition because it cannot be in causal contact with such particulars: what is material cannot act on what is immaterial. Instead of relying on the crude and fallacious formula that intellect can't know material things (simply) because it is not material, these passages offer a more promising account that seems based

on the epistemic principle that cognition requires a causal relationship between agent and object.

Yet this account also falls victim to the content fallacy. For in fact the passage lacks a clear rationale for why intellect is unable to have cognition of particulars. This becomes clearer as the text goes on. According to C1/C1* the forms of material objects cannot act directly on intellect. But of course intellect is, on Aquinas's view, in causal contact with the physical world. In some way, then, impressions make their way from the world, through the senses, and into intellect. Aquinas explains how this happens by invoking agent intellect:

[The likeness of a sensible form] is brought to intellect, however, through the power of agent intellect, inasmuch as [the form] is entirely stripped of the conditions of matter. And thus the likeness of a sensible form's singularity cannot reach as far as the human intellect.

This is where C2/C2* becomes important. For although forms (at this level referred to as *phantasms*) having "the conditions of matter" are unable to act on intellect, intellect can act on those forms and can strip them of their material conditions. With that accomplished, the causal impediment disappears. The new immaterial forms can act on intellect, and through them we can have knowledge of the external world.²⁹ But here again the content fallacy does its work. For it seems that the introduction of agent intellect ought not just to remove the causal barrier, but also to open the forbidden path to our direct knowledge of singulars. We can see as much by distinguishing two ways in which Cl* might be interpreted.

C1*a. A form that is intrinsically material cannot, by acting, convey its likeness to something intrinsically immaterial.

C1*b. A form that is representative of matter (i.e., that is intentionally material) cannot, by acting, convey its likeness to something intrinsically immaterial.

Presumably it is the first of these that Aquinas means to be asserting in this passage. The second has no plausibility on its own; it would hardly be a suitable premise with which to start an argument designed to show that intellect has no cognition of material particulars. But it is C1*b that would give Aquinas the conclusion he needs. If agent intellect's role is to take intrinsically material forms and make intrinsically immaterial forms, then there is no rea-

"It is tempting to think of the same form moving from sense into intellect. But this isn't how Aquinas views the process. Instead, he believes that agent intellect creates an intelligible species numerically distinct from the phantasm out of which it was abstracted. This point is especially clear at ST 1a 85.1 ad 3 and QQ 8.2.1 ad 2. This is one place where Henry of Ghent took issue with Aquinas's ac-

count; see my Theories, Appendix B.

³⁰Compare QDV 10.6 ad 1:

Forms that are sensible, or are abstracted from things that are sensible, cannot act on our mind, unless insofar as they are rendered immaterial by the light of agent endelect, and thus in a way are made homogeneous with the possible intellect, in which they act.

son to regard this as an impediment to cognition of material singulars. For it seems perfectly plausible, from what we've been told, that a likeness might be made intrinsically immaterial and yet remain representative of matter (intentionally material). In fact, then, the existence of agent intellect seems on this reading to *enable* intellectual cognition of material singulars. Agent intellect seems to remove the causal barrier to our knowledge of the external world, without raising any barrier to what that knowledge might be about.

But is this last paragraph correct in its account of agent intellect? Our assessment of Aquinas's argument in SCG is crucially dependent on how we understand agent intellect's role. There seem here to be two different senses of abstraction:

- (a) to alter the intrinsic properties of phantasms, by making material likenesses immaterial;
- (b) to alter the intentional properties of phantasms, by turning representations of material particulars into representations of universals.

Now we can readily see why Aquinas would postulate the existence of powers to perform both of these functions: (a) is required by causal considerations like C1;³⁰ (b) explains our capacity for universal knowledge. Nor does there seem to be anything obviously incoherent about attributing both (a) and (b) to agent intellect. And indeed this is surely Aquinas's position. Sometimes, for instance, he speaks as if agent intellect's role is to transform the representational content of phantasms:

To abstract universal from particular, or intelligible species from phantasms, is to consider the species' nature without consideration of the individual principles that are represented by the phantasms (ST la 85. 1 ad 1).

Elsewhere he clearly indicates that the agent intellect transforms the intrinsic features of the phantasm, as when he describes agent intellect as "a kind of active immaterial power, able to make other things like itself — that is, immaterial" (*InDA* III.10.156–8).

So agent intellect seems to perform both functions. But this raises a serious interpretive problem. Aquinas attributes two sorts of abstraction to agent intellect, (a) and (b), without explaining how these functions are related. Although there is nothing inherently odd about a faculty that plays two discrete roles, it is nevertheless peculiar that Aquinas does not explain their relationship. Does one come before the other (temporally, logically)? Does one happen in virtue of the other? Might the two operations somehow be identical, despite their apparent difference? It is worrisome that sometimes Aquinas seems blithely to mix functions (a) and (b) together, as if there were no real difference between them:

Phantasms, since they are likenesses of individuals and exist in corporeal organs, do not have the same mode of existing as the human intellect has. . . . Thus they cannot through their own power make an impression on the possible intellect. But in virtue of agent intellect, . . . [etc.] (ST 1a 85.1 ad 3).

The first sentence gives two different reasons for why phantasms have a mode of existing different from that of intellect. First he refers to representational content ("they are likenesses of individuals"); then, in the same breath, he refers to their intrinsic materiality (they "exist in corporeal organs"). But these would seem to be two very distinct characteristics.³¹

These considerations about agent intellect bring us once again to the content fallacy. Aquinas has good reasons, based on the general causal principle C1, for holding that agent intellect must abstract in sense (a). But the doctrine that intellect lacks direct knowledge of material singulars seems tenable only if intellect always abstracts in sense (b) as well. If there were reason to think that (a) and (b) are identical, or that doing (a) entails doing (b), then we would have some basis for holding that agent intellect must abstract in sense (b). But I am unable to find any basis for such a link between (a) and (b). Consequently I see no basis for concluding that intellect must always abstract in sense (b). The most plausible hypothesis, then, is that Aquinas conflates (a) and (b), because he has not clearly distinguished the intrinsic level from the intentional level. And so once again we have the content fallacy at work. Facts about what our cognitive faculties are like are being invalidly used to infer facts about what those faculties can know.

IV.

I have written this paper not so that Aquinas might be appreciated less, but so that he might be appreciated better. That means understanding not just Aquinas's achievements, but also his failures. Susceptibility to the content fallacy has to be regarded as a serious philosophical failure. We've seen this fallacy in a number of contexts. In section one it played a role in the explanation of why intellect, but not sense, has cognition of universals. In section two the fallacy was crucial in justifying the doctrine that intellect has no direct cognition of material singulars. In this last section we saw agent intellect become entwined in the fallacy. These are all central strands in Aquinas's thinking about cognition. If the argument of this paper is right then these strands are seriously flawed. But Aquinas's philosophy is made up of many strands, and it can stand to be culled.

"E.-H. W. Kluge, "Abstraction: A Contemporary Look," The Thomist 40 (1976) 337-65, argues that standard treatments of Aquinas's theory of abstraction are "systematically ambiguous" between the two types of

abstraction I have described. But Kluge stops short of accusing Aquinas of any confusion, and he does not explain why these two types of abstraction must always go hand-in-hand.