

Augustine's Trinitarian Examples*

Augustine devotes the greater part of his *De Trinitate* to a series of examples (*imagines*) meant to aid in understanding the Trinity. Whereas Books 1–4 canvass scriptural and patristic support for the doctrine of the Trinity, and Books 5–7 investigate the logic of statements about the Trinity, Augustine's project in Books 8–15 is harder to get a handle on. In these final eight books, Augustine works through several "illustrations" (*similitudines*) of the Trinity as found in human beings — in particular, in the human soul — and these comparisons (*comparationes*) become progressively more adequate as he moves higher up the hierarchy of human cognitive faculties. Thus he compares the Trinity to the lover, what is loved, and loving; to the mind, its knowledge of itself, and its love of itself; to memory, understanding, and will; to the psychological elements involved in an act of seeing or in an act of remembering; and so on, each comparison aiming to shed light on the inner nature of the Trinity.

Augustine's analyses of these trinitarian examples are rich in psychological insight, and I will not say anything about their details. Instead, I want to explore the philosophical underpinnings of Augustine's enterprise, that is, how mere "illustrations" and "comparisons" (however detailed or developed) could provide knowledge, or at least understanding, of the Trinity. The usual reading holds that Augustine's examples are meant as *analogies*, and hence to provide knowledge of the Trinity by analogy. I'll begin by considering the shortcomings of this traditional answer in light of Augustine's

* All translations are mine. This brief essay is dedicated to the memory of Gary Matthews, from whose works I have learned much, and from whose personal example much more. My disagreement in the following pages with his views about analogy and other minds are meant as a philosophical tribute to his work.

remarks in *trin.* 8 about the nature of his project (§1). Next, I'll look at what the implications are for the so-called "Problem of Other Minds" Augustine is said to have raised and resolved in Book 8 (§2). Finally, I'll try to account for Augustine's method by making use of recent work in the philosophy of science on scientific models (§3). The goal is to understand the architectonic of Augustine's *De Trinitate* in a way that does justice to the method he employs in Books 8–15.

1. Examples, Illustrations, and Comparisons

It is traditional to say that the various 'trinitarian' examples Augustine offers in *trin.* 8–15 are *analogies*, so that what we learn from them is a matter of reasoning (or argument) by analogy.¹ There are several reasons to question this claim, on both scholarly and philosophical grounds. First, Augustine is familiar with the Greek *analogia* as a technical mathematical term, which he correctly renders in *mus.* 1.12.23–24 as [*quidam*] *proportio*, a given ratio.² Augustine extends this literal sense in his description

¹ A typical instance: Alfred Schindler, in his *Wort und Analogie in Augustins Trinitätslehre* (J.C.B. Mohr: Tübingen 1965), gives an analysis of the *De Trinitate* as an extended instance of analogical reasoning. He sees it as a natural development of Augustine's earlier speculation on triadic schemes, such as *esse/uiuere/intellegerere* and *uisio/uidere/discernere* (46-48). When Schindler turns to Book 8, which, as we shall see, is central to the case made here, he remarks: "Diese Argumentationsweise Augustins kann insofern ein gewisses Interesse beanspruchen, als sie zeigt, wie die Lösung des Problems bei gleichen Voraussetzungen wie in *De trinitate* nun doch nicht wirklich vorgenommen werden konnte; denn diese Kombination der Analogien oder Kumulation verschiedener Vergleiche ist doch zu sehr der Willkür ausgesetzt und erlaubt im Prinzip den Analogiebeweis jeder möglichen Absurdität" (170).

² In *mus.* 6.17.57, at the very end of the work, Augustine proposes to render the Greek *analogia* more literally as [*quaedam*] *corrationalitas*, literally the abstract property of being a common ratio. The same point is made by

of the fourfold reading of Scripture in *util. cred.* 3.5: as history, aetiology, analogy, and allegory. He explains ‘analogy’ in this hermeneutic sense as “the means by which the agreement (*congruentia*) of the Old and New Testaments is seen clearly” (*util. cred.* 3.7), so that they are “not contrary to one another” (*util. cred.* 3.5)—they proceed from a common rationale, we might say.³ But whether the term is taken strictly for a mathematical ratio or in a more extended sense for a common rationale, Augustine does not use it anywhere in his *De Trinitate*. Instead, he speaks of his trinitarian examples as images, illustrations, and comparisons, each of which is useful in understanding the Trinity.

Yet this could seem to be mere quibbling. If Augustine thought that ‘analogy’ was a (quasi)-mathematical term, it might be objected, it is no wonder that he does not use it in the *De Trinitate*; but what he describes there is what *we* can see clearly are analogies — he just doesn’t have a handy term for them. The key to analogies in the modern sense is the sameness of structure between the analogous pairs, and Augustine surely is careful to track the parallels in his examples between the structural relations among their elements and those he believes by faith are to be found in the Trinity. Whether he calls his examples ‘analogies’ or not, that is the function they serve, and there is no reason not to treat them as such.

It is undeniable that Augustine is careful to note points of similarity and dissimilarity between his trinitarian examples and the Trinity. Yet that would be true of any comparison worth drawing, and does not depend on the comparison being an analogy. In general, an illustration or comparison or image

Lewis Ayres, *Augustine and the Trinity* (Cambridge University Press 2010), 66. He notes that Augustine explicitly disavows ‘*analogia*’ as appropriate to his practice; see *serm.* 52.23.

³ Augustine classifies what we might be tempted to call ‘analogies’ between the Old and New Testaments as forms of allegory, e.g. Jonah being three days and nights in the belly of the whale before being ‘reborn’ as a parallel to the three days and nights in which Christ lay in the tomb before rising again (*util. cred.* 3.8).

is not an analogy, and nothing is gained by calling it one. Furthermore, if the heart of an analogy is the parallel structure between the elements of the terms of comparison, then analogies are particularly ill-suited when applied to the Trinity, whose elements and internal structure are largely unknown to us. More precisely, if an analogy is designed to produce new knowledge either of one of the paired elements of comparison (the x in $A:B::C:x$) or of the relation in which the second paired elements stand (the R in $A:B::CRD$), the doctrinal status of the Trinity as a Mystery necessarily prevents it from succeeding in its aim. No mundane comparison can lead us to new knowledge of the Trinity; all we can know of the Trinity is granted to us through revelation. Nor do we have independent access to the terms of the comparison, or to one term and the relationship it bears to the other, so as to draw conclusions about the unknown x or R . Analogy is singularly ineffective when applied to the Trinity.

There is a deeper point at stake here. Philosophers have long criticized arguments based on analogy as a weak form of reasoning. If Augustine meant his trinitarian examples to be the foundation for inferring conclusions about the Trinity, then his enterprise in *trin.* 8–15 is subject to the standard criticisms of analogical argument: to the extent that the analogy holds, it is superfluous, since the argument can be reconstructed without it; given that only some properties, even structural properties, may be shared but not others, there is no reason to think that an analogy holds; analogical comparisons are not deductive and, when inductive, inherit all the defects of inductive arguments; and the like. Even defenders of analogical argument grant that it is much weaker than deductive or statistical argument, seeing that an analogical argument can at best make its conclusion somewhat plausible.⁴ In short, if Augustine is attempting to produce analogies as a basis for inferential reasoning about the Trinity, his project seems deeply and irremediably flawed.

⁴ See for instance Paul Bartha, *By Parallel Reasoning: The Construction and Evaluation of Analogical Arguments*, Oxford University Press 2010.

However, for all its drawbacks, the traditional reading of Augustine has the virtue of making his enterprise clearly a philosophical endeavor. What alternative is there? Shorn of an argumentative role, Augustine's trinitarian images are no more than a series of more or less appropriate metaphors — perhaps a literary enterprise, the way an author might cast about searching for the right metaphor,⁵ but not a philosophical way to engage the problem.⁶ Perhaps they are no more than a series of edifying examples, a guide for reflection on our relation to God.⁷ Perhaps they are just a loose illustrations to

⁵ In his account of academic life at a liberal arts college, P. F. Kluge tries to “hit upon an image” (his term!) that will “capture the role” of a college president: “...Coach and team? Baseball manager? Baseball owner? Nothing works. Captain and ship? No, mostly we sail in circles. Chef and waiters? Shepherd and flock? Landlord and tenant? Hold it! That's worth exploring. [The president] is the guy who owns a building. He presides over rents and leases. He stays close enough to worry about the roof and the boilers, to monitor changes in the neighborhood, but not so close he gets drawn into tenant quarrels, noise complaints, not enough hot water. Not bad, but I still haven't nailed it: that combination of presence and absence, of power and laissez-faire, of caring and indifference, that hand that can make a fist, offer a handshake, pat a back, reach into a pocket, stifle a yawn, wave farewell.” (*Alma Mater* 233).

⁶ Donald Daniels, in his doctoral dissertation *The Argument of the “De Trinitate”* (University of Georgia 1976), argues that this is precisely the way to read Augustine. His main theme is that Augustine's examples should be understood as ‘signs’ (in line with the semiotics put forward in *De dialectica* and *De magistro*), such that we reason from sign to significate in an attempt to gain knowledge — with the difference that the signs are not linguistic but real objects: “Vestiges (*uestigia*) are things taken as metaphors” (72). As such, Augustine's project is not philosophical at all, instead aiming to provide the kind of understanding or insight that a literary text might offer regarding its subject.

⁷ This appears to be the view put forward by Mary Clark in her article “*De Trinitate*” in *The Cambridge Companion to Augustine*, Norman Kretzmann and Eleonore Stump (eds.), Cambridge University Press 2001: 91–102. She characterizes Augustine's project in Books 8–15 as follows: “Not merely an introspective,

provide Augustine with a springboard for his meditative reflections on (mostly psychological) triads.⁸ Yet none of these options credits Augustine's trinitarian examples with any philosophical role, or indeed much of a serious intellectual role at all. In this light, the 'analogical' construction of his examples appears more attractive. Better to read Augustine as a philosopher exploring a doomed line of thought rather than as no philosopher at all.

We can escape these stark alternatives, I think, by taking a more careful look at what Augustine says in *trin.* 8 he is (going to be) doing. Once we put aside preconceptions about his project, we can gain a better understanding of why he does what he does in the remainder of the *De Trinitate*, and how it counts as a philosophical undertaking.

psychological search, it is guided by the divine missions and the desire to know the value of realizing that one is an image of God" (97). After listing Augustine's trinitarian examples, Clark concludes: "His search for an image has at least shown that three things can be one, and has been beneficial. It gave awareness of spirit life as utterly distinct from material life" (99). It might well be beneficial to reflect on how human beings are made in God's image, but that is a far cry from giving Augustine's examples any philosophical role to play in thinking about the Trinity

⁸ Ayres, *Trinity*, seems to hold this position. In describing Augustine's Trinitarian examples in Books 9–10, he notes: "Although I use the term 'analogy' here Augustine appears to avoid the term *analogia* in favour of a number of terms that indicate a much looser set of likenesses (*similitudines*)" (288). Earlier Ayres glosses Augustine's 'analogies' as including "light and word metaphors," which are both highly traditional yet also developed by Augustine—for "Augustine's central strand of metaphorical reflection is something very much his own" (280). These 'looser likenesses' may be ground for fruitful meditation, but they are the occasion for whatever thoughts Augustine might have, not an integral part of those thoughts. Here again the project is more or less literary: Augustine's intellectual endeavor, or at least its "central strand," is a kind of "metaphorical reflection."

Augustine begins *trin.* 8 with a dilemma. We cannot love the Trinity unless we know it, but we can only know it if we love it. Augustine proposes to escape this chicken-and-egg situation by looking more closely at how we know something. He starts his investigations with a homely example: we love the Apostle Paul because we believe the things that are said of him in Scripture, although we do not know them to be the case; in fact, we do not ‘know’ Paul at all, since we have no direct acquaintance with him — and while we cannot help but construct a mental image of Paul, this image will be different for different people, and none of them is likely to be in any way accurate (*trin.* 8.4.7, a point further emphasized in 8.5.7 and 8.6.9). So too for the Virgin Mary, or even for Jesus in the flesh. Yet as Augustine sensibly points out, the variety and inaccuracy of mental images is not a serious problem, since our beliefs do not depend on Jesus as a human being looking any particular way, though of course there must have been some way he looked. More exactly, the mental image we formulate of Jesus *qua* human is not how we know about Jesus; rather, we know about Jesus because we know about human beings (8.4.7):⁹

In our faith that we have in the Lord Jesus Christ, salvation does not pertain to what the mind constructs for itself, which is perhaps quite different from the way things are, but rather to what we think about a human being in species. For we possess a notion of human nature, which is ingrained like a rule according to which anything we see of the sort we know immediately to be a human being (or the form of a human being).

⁹ Neque in fide nostra quam de domino Iesu Christo habemus illud salubre est quod sibi animus fingit longe fortasse aliter quam res habet, sed illud quod secundum speciem de homine cogitamus; habemus enim quasi regulariter infixam naturae humanae notitiam secundum quam quidquid tale adspicimus statim hominem esse cognoscimus uel hominis formam.

Augustine’s theological point is that the work of salvation was accomplished by the fact that Jesus (the second Person of the Trinity) became a human being. His philosophical point is that the notion of human nature that we possess¹⁰ regulates how we understand the world: When we encounter human beings, we “know immediately” (*statim cognoscimus*) that they are human beings.¹¹ The ingrained notion operates like a law (*quasi regulariter*) with respect to our experience, so that we see human beings as part of the world around us.¹² It is not a matter of reasoning; we see human beings directly — as we would say nowadays, noninferentially.

The solution to Augustine’s dilemma is present in embryo here. There are two components. First, we cognitively grasp an object in virtue of having something within us — never mind how we got it — that governs our epistemic standing with respect to such an object. In the example just given, the ‘something within us’ is a generic or specific notion of human nature, which is one way of grasping Paul or Jesus. Second, the cognitive grasp thereby enabled is immediate (*statim*). Through it we simply *see* objects, without any mediating inferential stage, be it conscious or unconscious. Hence the immediate cognitive grasp of an object is not a matter of reasoning, but something more like acquaintance or

¹⁰ Augustine says that this notion is *infixa*, ‘ingrained’ or ‘embedded’. He does not mean that it is innate: in *trin.* 8.5.7 he explicitly leaves it open whether our generic and specific concepts are innate or acquired (*natura insita uel experientia collecta*).

¹¹ Augustine’s qualification “or the form of a human being” alludes to the case of Jesus, who has the form of a human being but also is divine. There is no reason to think that Augustine is worried about imitations or fakes here.

¹² In *trin.* 8.5.8, Augustine asks whether experience of similar cases can provide a specific or generic notion “by the rule of likeness” (*per regulam similitudinis impressam uel specialem uel generalem notitiam*), and in 8.6.9 he declares that we know other souls “through the generic or specific rule” (*ex qua ergo generali uel speciali regula*) constituted by our knowledge.

awareness. The paradigm example of this kind of cognition is seeing, but it is not restricted to perception; we grasp Paul via understanding that he has a human nature, even if the mental image we construct of him is mistaken in every (perceptual) detail.

Augustine is quick to point out that his example, as it stands, does not completely solve his dilemma. For one thing, we have not acquired a generic or specific conception of the Trinity from our interaction with the world, “as though there were many such trinities and we knew some of them through experience” (8.5.8). There is no concept *trinityhood* for us to deploy; the Trinity is unique, and not a kind with multiple instances. Augustine rejects the idea that we might come to have the conception of ‘trinityhood’ from experience (8.5.8):¹³

Thus when we speak about or believe in the Trinity, we know what the Trinity is, since we know what three are. But we do not delight in this. For we easily have this when we want — not to mention other things, by holding up three fingers.

Threeness is not trinityhood, and we cannot get from the one to the other. Hence the ‘something within us’ is not an abstract concept of trinityhood. Just as well, since the Trinity is a unique individual (a three-in-one individual).

We need not grasp objects by means of (innate or acquired) concepts, though. Consider what Augustine says about whether we need to use generic or specific concepts when thinking about the Apostle Paul (8.5.8):¹⁴

¹³ Cum ergo dicimus et credimus esse trinitatem, nouimus quid sit trinitas quia nouimus quid sint tria; sed hoc non diligimus. Nam id ubi uolumus facile habemus, ut alia omittam uel micando digitis tribus.

¹⁴ Qui etiam si non ea facie fuit quae nobis occurrit de illo cogitantibus, et hoc penitus ignoramus, nouimus tamen quid sit homo. Ut enim longe non eamus, hoc sumus, et illum hoc fuisse et animam eius corpori

Even if [Paul] did not have the appearance that occurs to us in thinking of him (and we are wholly ignorant on this score), we nevertheless know what a human being is. For — not to go very far — we are this, too, and it is obvious that he was this and that his soul lived a mortal life linked to his body. Thus we believe of him what we find in ourselves, in line with the species or genus in which every human nature is equally contained.

We believe specific or generic truths about Paul, not individual details (such as his appearance), but we do not have to have recourse to our grasp of abstract human nature to know such truths. Rather, we grasp things about Paul because we know what a human being is, and we know this because we are human beings ourselves: *ut enim longe non eamus, hoc sumus*. Augustine keeps the two components of his solution, but he shifts the first; now the ‘something within us’ that allows us to grasp Paul, or to believe truths about Paul, is our inner nature itself with which we are directly and intimately acquainted. This grasp is immediate: it is “obvious” (*manifestum*) that Paul shared in ordinary human life.

This is the background against which Augustine poses his dilemma once more, which he now restates in terms of the solution he has sketched out in his discussion of Paul (8.5.8):¹⁵

But this is the question: From what illustration or comparison drawn from known things do we believe, and thereby delight in God, Who is as yet not known?

What is there within us that can support an immediate cognitive grasp of the Trinity?

copulatam mortaliter uixisse manifestum est. Hoc ergo de illo credimus quod inuenimus in nobis iuxta speciem uel genus quo humana omnis natura pariter continetur.

¹⁵ Sed ex qua rerum notarum similitudine uel comparatione credamus quo etiam nondum notum deum diligamus, hoc quaeritur.

2. The Lives of Others

To answer his restated question, Augustine returns to the example of loving the Apostle Paul to explain how ‘something within us’ can be immaterial and yet lead to knowledge of something further (8.6.9). For what we love in Paul is not his physical appearance (which is unknown to us), nor the mere fact that he is human. Instead, Augustine asserts, we love him for the justice present in his soul (*animus*),¹⁶ which can happen only through the generic or specific rule that we (already) know what a soul is and what justice is — a clear reference to the considerations canvassed in the preceding section, a point Augustine immediately underscores by identifying the ‘something within us’ by which we can grasp Paul’s just soul (8.6.9):¹⁷

It is not inappropriate for us to say that we know what the soul (*animus*) is, namely for this reason: because we ourselves have a soul (*animus*). We have never seen it with our eyes, or perceived a generic or specific conception derived from the examples of other instances we have seen, but rather, as I have said, because we ourselves have one. What is so intimately known and so grasps itself to exist as that by which others are grasped — that is, the soul (*animus*) itself?

¹⁶ Augustine speaks of Paul’s *animus*, but in his subsequent discussion shifts readily to the *anima* which non-human animals have; it seems clear he is thinking of Paul’s *animus* as the specific type of *anima* humans have, where the generic term *anima* covers human beings and brute animals. Had Augustine meant to draw a contrast, he could easily have spoken of Paul’s *mens* (as he does in *trin.* 10 and thereafter). I will translate *animus* as ‘soul’ and parenthetically add the Latin term so that the reader can track Augustine’s usage

¹⁷ Et animus quidem quid sit non incongrue nos dicimus ideo nosse quia et nos habemus animum; neque enim umquam oculis uidimus et ex similitudine uisorum plurium notionem generalem specialemue percepimus, sed potius, ut dixi, quia et nos habemus. Quid enim tam intime scitur seque ipsum esse sentit quam id quo etiam caetera sentiuntur, id est ipse animus?

As before, we can grasp *X* because we have an *X* within us, either as an innate or acquired notion, or as the very thing itself, which Augustine emphasizes here. (He spends most of the rest of 8.6.9 explaining how we have a conception of justice, which he clearly took to be the more difficult question.) We do not literally *see* the soul, and we do not grasp it by abstracting a conception of it from perceived instances. Rather, as Augustine repeats, we know what a soul is because each of us has one. It is known (*scitur*) intimately, perhaps ‘inwardly’, and recognizes its own existence,¹⁸ each of which it does through itself. This awareness is non-perceptual, though broadly speaking cognitive; Augustine says that we ‘grasp’ something (*sentit*), a phrase that indicates an awareness that is immediate, though not sensory. Its immediacy makes sensory metaphors a natural way to express this cognitive grasp, even as we say that we ‘see’ something when we come to understand it. The foundation of our grasp of Paul’s soul, then, is our own soul, with which we are directly and immediately acquainted: it is “that by which other [souls] are grasped.”

Augustine enlarges on his claim that we grasp other souls by means of our unique individual souls with which we are intimately and directly acquainted (8.6.9 continuing the previous passage):¹⁹

For we also recognize, from our own example, the movements of bodies by which we make out that other people besides us are alive. For we too move our bodies in the course of living, in precisely the way we notice their bodies move. It is not that when a living body moves, some way is opened up for our eyes to see the soul (*animus*), which is a thing that cannot be seen by the eyes. Rather, we make out something to

¹⁸ This is likely a nod in the direction of the so-called Augustinian *cogito*, sketched in *trin.* 15.12.21

¹⁹ Nam et motus corporum quibus praeter nos alios uiuere sentimus ex nostra similitudine agnoscimus quia et nos ita mouemus corpus uiuendo sicut illa corpora moueri aduertimus. Neque enim cum corpus uiuum mouetur aperitur ulla uia oculis nostris ad uidendum animum, rem quae oculis uideri non potest; sed illi moli aliquid inesse sentimus quale nobis inest ad mouendam similiter molem nostram, quod est uita et anima.

be present within that bulky mass²⁰ such as is present within us for moving in like manner our bulky mass, namely life and soul (*anima*).

We recognize (*agnoscimus*) bodily movements that are the manifestations of life in another object, and in recognizing these movements we grasp (*sentimus*) that the thing is alive. The ground for this recognition is our own example, as Augustine has been at pains to make clear; what we grasp in virtue of ourselves being alive is that others are alive, just as we are. We are able to do so when we see their bodily movements, which are of the same sort as our bodily movements; to see (perceive) their living movements just *is* to ‘see’ (grasp) something as alive. In doing so we grasp (*sentimus*) the presence of life and soul in another.

Augustine has traditionally been read as proposing that we *infer* the presence of soul in something from observing its life-like bodily movements.²¹ But there is no talk of inference here. Quite the contrary: Augustine insists, in keeping with the development of his account, that our cognitive grasp is immediate, *i.e.* noninferential. To make sure that there is no mistake on this score, Augustine uses a technique common in antiquity to show that reasoning is not required. He points out that the very same phenomenon is readily observable in brute animals, which cannot infer anything since they are bereft of reason and higher faculties (8.6.9 continued):²²

²⁰ Augustine speaks of *moles*, translated here as ‘bulky mass’. Often it has the connotations of size and shapelessness, though that cannot be what Augustine has in mind here; he simply means ‘physical body’ (but to translate it as such might suggest an unnecessary dualism).

²¹ See the discussion of Matthews and McNulty below (and the remarks in note 27).

²² Neque quasi humanae prudentiae rationisque proprium est. Et bestiae quippe sentiunt uiuere non tantum se ipsas sed etiam inuicem atque alterutrum et nos ipsos, nec animas nostras uident sed ex motibus corporis idque statim et facillime quadam conspiratione naturali. —Gary Matthews draws the opposite conclusion, that

Nor is it as though this is unique to human reason and prudence. Brute animals also make out not only that they themselves are alive, but also one another, and us as well. They do not see our souls, but make them out from our bodily movements, and they do so immediately and readily by some natural concordance.

A cat recognizes a mouse as a living being, and likewise it recognizes another cat, and the human beings who own it. The cat does not do so in virtue of a special sense, but the same way we do, namely by having a direct acquaintance with its own principle of life, its soul. Furthermore, since cats lack reason, their grasp of the lives of others cannot be inferential. Augustine explicitly denies it: the cat grasps the fact that a human being is alive immediately (*statim*), which, as when he introduced the term earlier, means ‘non-inferentially’ or ‘non-deductively’. There isn’t even time for reasoning, since the cat achieves this recognition quite easily (*facilissime*). It comes about “by some natural concordance” just as it does in our case.²³ Hence grasping *X* in virtue of having *X* within is not a feature of reason, nor even of practical reason (*prudentia*), since animals exhibit the same ability.

humans and animals are more alike than is usually thought: see his “Augustine and Descartes on the Souls of Animals” in *From Soul to Self*, M. J. C. Crabbe (ed.), Routledge: London 1999: 89–107. To do so, however, is to set aside the historical context in which philosophers in antiquity appealed to animals in philosophical contexts.

²³ Augustine’s term for “concordance” is *conspiratio*, literally ‘breathing together’. It is possible to read him here as making a weaker claim than the one I advance, namely as saying only that brute animals do by some natural instinct what we do by our reason. Even so, that shows reason is not necessary for an immediate grasp, which is all my argument here requires. However, it is better to read Augustine as pointing to some broader “natural concordance” through which human beings and animals can recognize other living beings as living beings, since he has already been to some trouble to emphasize that this recognition is not an instance of reasoning.

Augustine summarizes the moral he wants to draw from this illustration (8.6.9 continued):²⁴

Hence we know anyone's soul (*animus*) in virtue of our own, and in virtue of our own we believe what we do not know.²⁵ We not only make out the soul (*animus*), but we can even know what the soul (*animus*) is by considering our own; for we have a soul (*animus*).

Augustine does not explain the way in which we are directly acquainted with our own souls. But it is clear that through our possession of and acquaintance with our soul we are able to make out other souls and even what the soul is. In particular, we can recognize Paul's soul and perhaps even come to love it. In the larger argument of the *De Trinitate*, Augustine is one step closer to his goal of explaining how we can have some cognitive grasp of the Trinity, despite its immaterial nature. The trick is finding 'something within us' with which we are intimately and immediately acquainted that can provide the foundation for recognizing the Trinity. This is, of course, the task of the several images of the Trinity that Augustine proceeds to investigate.²⁶

A word must be said about the analysis of 8.6.9 presented here before we turn to Augustine's investigation of cognitive models for the Trinity. In describing the passages given above, Gary Matthews, for example, characterizes them as follows (55):²⁷

²⁴ Animum igitur cuiuslibet ex nostro nouimus, et ex nostro credimus quem non nouimus. Non enim tantum sentimus animum, sed etiam scire possumus quid sit animus consideratione nostri; habemus enim animum.

²⁵ "We believe what we do not know": This remark is a throwaway, hearkening back to the worries about belief with which Augustine began.

²⁶ When Ayres analyzes the content of Book 8, he skips over these passages, despite his stated intention to clarify the course of Augustine's argument (*Trinity* 282–282)

²⁷ Gareth B. Matthews, *Augustine*, Blackwell Publishing Company, 2005, Chapter 7. The claim he makes here was defended in detail in his *Thought's Ego in Augustine and Descartes* (Cornell University Press 1992),

So far as I know, these passages... are not only the first statement of the Problem of Other Minds in western philosophy, they are also the first attempt to solve that problem. The solution is what in recent philosophy has come to be called the “Argument from Analogy for Other Minds.”

The reading given here is standard but, I think, wrong in every detail. For one thing, there is no acknowledgement of any kind of “problem” in Augustine’s discussion of “other minds.” Quite the opposite: Augustine brings up our recognition of soul in other living beings as an *uncontroversial* fact, to which he appeals in explaining how we grasp immaterial objects (such as Paul’s soul). The contemporary “Problem of Other Minds” is how we can know that there are minds/souls apart from our own. But Augustine is not worried about justifying any knowledge-claim in his discussion. Indeed, there is no sign that he thought of other minds/souls as posing any special philosophical problem. Augustine is prepared to acknowledge that each of us has a special direct acquaintance with our own soul. This is not a case of Cartesian privileged access; God also has immediate access to our souls, and perhaps so do angels and demons. Furthermore, recognizing certain actions as manifesting the life of the being acting in that way is a more or less public means of access to its soul — certain movements are distinctive of living beings. This is not to say that our judgments are infallible; we might be deceived by a cleverly programmed robot, or, to use an example of Augustine’s, a corpse animated by a demon. But since Augustine is not concerned here to find certainty, the possibility of error is not particularly troublesome; he has already refuted scepticism in his *Contra Academicos* (or so he thought), and he

Chapter 9. The same line of thought was presented earlier by Michael McNulty, “Augustine on the Existence of Other Souls” in *Modern Schoolman* 48 (1970): 19–25. Matthews has some reservations about his reading; he thinks Augustine in the end is concerned with belief rather than with knowledge strictly speaking, for instance. But this does not affect the main lines of his interpretation.

takes it as obvious that we recognize other living beings as such. The occasional barn-façade doesn't mean we do not see barns when out in the country, after all.

Augustine therefore did not countenance the “Problem of Other Minds” as we know it, and *a fortiori* he did not offer “the first attempt to solve that problem.” The problem on the table is *how* (not *whether*) we can grasp the immaterial, and his claim is that we do so in virtue of having the same thing within ourselves. As pointed out above, Augustine is careful to insist that this yields a noninferential recognition of the object in question, of the sort that brute animals likewise have. Hence what Augustine proposes is not an argument, or any kind of reasoning, at all. Just as well, since the “Argument from Analogy for Other Minds” makes a poor job of it. Here is how Matthews describes the “argument” which he finds in Augustine (60–61):²⁸

Indeed, [Augustine's] is a “top-down” argument — from a whole repertoire of bodily movements that resemble movements in my body that I notice my mind bringing about, to the conclusion that there must be a mind in the other body that brings about that repertoire of movements.

There is no argument in Augustine to this effect, but if there were, it would founder on the unexpressed assumption that the “repertoire of movements” exhibited by the other body could only be produced by a mind. There is no reason to accept this claim. That is a fatal flaw in an argument. If we had grounds to accept the claim, we wouldn't need an argument in the first place. The “analogy” on which it is based would be superfluous. But a look at Matthews's reading of Augustine shows that he finds an argument where there is none in the text. We do not “notice” our mind bringing about movements and reason our way to the presence of something like a mind in another physical object that exhibits similar movements. Rather, as Augustine says, we grasp the life in something in virtue of the fact that we

²⁸ Matthews, Augustine. Oddly, he represents Augustine as talking about minds, although he is clear that we should understand *animus* as “the animator of the human body” (55).

ourselves are alive, and our grasp is direct and noninferential. The contemporary philosophical setting for Augustine's discussion is much closer to Ryle than it is to Mill or Reid.²⁹ Consider, for instance, the Augustinian flavor of what Ryle says in *The Concept of Mind* (59):

Contemporary philosophers have exercised themselves with the problem of our knowledge of other minds... We can now see our way out of the supposed difficulty. I discover that there are other minds in understanding what other people say and do. In making sense of what you say, in appreciating your jokes in unmasking your chess-stratagems, in following your arguments and in hearing you pick holes in my arguments, I am not inferring to the workings of your mind. I am following them. Of course, I am not merely hearing the noises that you make, or merely seeing the movements that you perform. I am understanding what I hear and see. But this understanding is not inferring to occult causes. It is appreciating how the operations are conducted. To find that most people have minds (though idiots and infants in arms do not) is simply to find that they are able and prone to do certain sorts of things, and this we do by witnessing the sorts of things they do.

Clearing away the rubble of the Problem of Other Minds allows us to appreciate Augustine's series of trinitarian examples for their intended purpose. But what, exactly, is their intended purpose?

3. Trinitarian Models

Augustine's trinitarian examples have some common features. They are all examples of 'something within us' that support whatever grasp of the Trinity they provide. More particularly, they have to do with human psychology, usually with a mixture of structural elements (mind, will, memory, and so on) with occurrent activities (thinking, loving, and the like). These are all immaterial, at least to the extent that the human psyche is, and they are meant to capture the complex interplay of the constituent elements of the Trinity: one substance and three persons. They are also alike in failing to

²⁹ See Part One of Anita Avramides, *Other Minds*, Routledge: London and New York, 2001.

capture the Trinity accurately, which is inevitable given its unique nature. In addition to falling short of what they are meant to illustrate, Augustine's trinitarian examples differ one from another. Indeed, they are strictly incompatible: one example has some feature or features that another example does not have, or, worse yet, one example has a feature that is in opposition to a feature possessed by another example. The comparison of the Trinity to the triad of lover, beloved, and the loving that unites them involves two substance-like entities, whereas the comparison of the Trinity to the mind, its knowledge of itself, and its love of itself involves only one; the comparison to memory, understanding, and will involves only 'substance-like' faculties of the mind in their respective actualizations. Each illustration of the Trinity has its own advantages and drawbacks. The usual moral drawn from these reflections is that Augustine is presenting a series of ever-better approximations to the Trinity. An example is proposed for our consideration; an analysis of its features reveals the ways in which it is like and unlike the Trinity it is designed to illustrate; armed with an understanding of its defects, we can move on to another example, and so on, never quite reaching the Trinity — it is a doctrinal matter that we cannot do so — but at each stage deepening our understanding of its inner workings.

This picture of Augustine's procedure is attractive, and has much to recommend it. For instance, he clearly thinks that the example of the 'inner man' is a better illustration of the Trinity than the 'outer man' that preceded it. But there is a powerful objection against reading Augustine in this fashion: Why should he bother with the preliminary examples? Why show us his work-in-progress rather than the finished result? If the 'inner-man' illustration is the closest we can come to grasping the Trinity, why didn't Augustine proceed to it directly in *trin.* 8, instead of developing one inadequate example after another? If the last example is the best, why not present it in solitary glory?

The best reply to this objection is to undercut its central assumption, namely that Augustine is giving a series of ever-better approximations. I propose instead that Augustine's trinitarian examples

function very much like a certain class of scientific models, where the model itself provides immediate (non-inferential) understanding of some phenomenon. Scientific models may be incompatible with one another; they may fall short of capturing the theory they are designed to illustrate. Yet they nevertheless provide a way to grasp phenomena that we would be hard-pressed to do without. So too for Augustine's trinitarian examples.

There are many kinds of scientific models, of course, and what I have to say applies only to a certain kind of model. It will be useful to begin by describing which scientific models do *not* fit Augustine's practice.³⁰ Some models, for instance, are literally scale models: larger or smaller versions of the object of study, the way one might build a scale replica of a new airplane design to test it in a wind tunnel. But Augustine's examples are not literally trinitarian, let alone the same 'size', and so scale models are irrelevant. Closer to the mark are what are sometimes called 'idealizations' or 'Galilean models', where certain real-world features are left out of the model: the textbook case in physics of a perfect sphere rolling down a frictionless plane at a precise angle, or in economics of the emergence of perfect distributions of goods among individual consumers each of whom is rational and concerned only with utility maximization, are familiar enough instances. But the way such models work is by depicting an ideal case which, with the addition of complicating factors (such as frictional resistance or imperfect information), can be made to approximate ever closer to the actual case. Augustine's trinitarian examples are not at all like that. They are not ideal representations of the Trinity (whatever that would

³⁰ The literature on scientific models, by philosophers and scientists alike, is vast. For a reasonably up-to-date survey, see Daniela M. Bailer-Jones, *Scientific Models in Philosophy of Science*, The University of Pittsburgh Press 2009. There is a long tradition associating scientific models with 'analogies' in a broad sense, pioneered by Mary Hesse, *Models and Analogies in Science*, University of Notre Dame Press 1966. Recent work has been collected in F. Hallyn (ed.), *Metaphor and Analogy in the Sciences*, Dordrecht: Kluwer 2000.

be), and they do not become closer representations when abstracted details are added back into the picture; complications in the relation of memory and will (say) do not make Augustine's example of will/memory/intellect a better representation of the Trinity.

Idealizations depict the essential workings of a phenomenon, and on that score do seem relevantly like Augustine's examples. A step farther along that road might be scientific models that are called 'structural models' or (of all things) 'analogies'. Consider two competing and incompatible models of the atomic nucleus: Rutherford's 'planetary' model and the Gamow-Weiszacker 'liquid drop' model. Each suggests a powerful new way of thinking. Rutherford drew on celestial mechanics, with the idea of the atomic nucleus being like the central mass around which smaller point-charges 'orbit'; the Gamow-Weiszacker model drew on hydrodynamics, treating the atomic nucleus as a drop of incompressible fluid with a variety of properties, including surface charge. Despite their differences, each model sheds light on the nature of the atomic nucleus, proposing not only how the nucleus is related to other elementary particles but also a new way of thinking about it. The nucleus is neither a celestial body nor a drop of liquid, but thinking about it along each of these lines is surprisingly fruitful. Yet it is precisely this strength that makes structural models not a good match for Augustine's trinitarian project. While they unquestionably shed light on the structures they model, it is clear that they work, at least in part, by providing theoretical contributions. If we think about a nucleus as though it were a liquid drop, then we can apply certain laws and equations derived from hydrostatics to explain and account for some of its properties which were not explained, or not explained as well, by the previous paradigmatic theory. Augustine's examples, by contrast, do not extend our theoretical knowledge of the Trinity. Indeed, our theoretical 'knowledge' of the Trinity is already complete, having been granted to us by revelation and exhaustively canvassed by Augustine in *trin.* 1–4. His examples are not meant to be any kind of contribution to knowledge of the Trinity.

Instead, Augustine's trinitarian examples are meant to illuminate what we do understand, theoretically, of the Trinity. The Rutherford and the Gamow-Weiszacker models likewise make it possible to grasp the structure of their intended objects. However, in so doing they also contribute to their theoretical interpretation. Augustine's models do not go so far, offering illumination of a fixed (and to a large extent incomprehensible) theoretical doctrine. Furthermore, as we have seen in the preceding sections, Augustine does not intend his examples to be mere means for reasoning about the Trinity. Instead, they identify 'something within us' in virtue of which we have an immediate understanding — to whatever limited extent may be possible — of the Trinity.

Augustine's use of trinitarian examples comes closer to what John Haugeland calls 'morphological' scientific models.³¹ Consider the following explanation of how fiber-optic cables can transmit images. Take a closely-packed bundle of fiber-optic cables, each held in the same relative position to the others over its length, and each fiber being a leakproof conduit for light; an image can be regarded as made up of closely-packed individual dots of light differing in colour and brightness; thus an image projected onto one end of such a fiber-optic bundle will make the other end light up with dots of the same colour and brightness in the same relative position, that is to say, presenting the same image at the other end of the bundle. Now in this explanation no appeal is made to premises or to covering laws, so it does not have the form of an argument or a piece of reasoning. But it is such as to provide an immediate and intuitive understanding of how fiber-optic bundles work. Like a diagram or a blueprint, such a model shows us the structure of its intended object, and our grasp of the phenomenon does not

³¹ John Haugeland, "The Nature and Plausibility of Cognitivism" in *Behavioral and Brain Sciences* 1 (1978): 215–226; reprinted in his *Having Thought: Essays in the Metaphysics of Mind*, Harvard University Press, 1998: 9–45. The next examples are adapted from his discussion in §1, though the use to which they are put here is mine.

require any particular thought; we simply *see* (*i.e.* understand) that the relations as described do in fact obtain, and hence that fiber-optic bundles can transmit images. We know *that* they can by understanding *how* they can, which in turn is a matter of grasping what the elements are (fiber-optic cables) and how they are related to one another (in light-transmitting fixed bundles). Augustine's trinitarian examples are each morphological in much the same way. They describe how several elements are interrelated in such a way that the phenomenon in question — the being of one substance and three Persons — is, just like the transmission of an image through fiber-optic cables, grasped immediately.

The double-helix model of DNA is perhaps an even better illustration: two adjacent strands are wound around each other, with each strand being a series of chemical sites that are linked to their complements on the other strand. Add to this picture of the structure of DNA, which is roughly accurate, an account of how it replicates, namely as follows. Each strand unwinds from the other, beginning at the top, and bonds to another free-floating strand with the same chemical complements in the same order (if one is available); at the end of the process there are now two DNA double-helix paired strands, each an exact replica of the original. Likewise, Augustine's trinitarian examples describe three constituent elements, which are dynamically interrelated through the kind of activity they are or exhibit — usually loving, but also willing, or thinking, or the like. In the example of DNA, the double-helix model makes it immediately and intuitively evident just how the complementary chemical sites are related, and how the entire structure can be self-replicating, without any argument; the model alone is enough to provide understanding. To be sure, the portrayal of DNA and its chemical structure given in the model is crude and inaccurate in many respects, and closer attention to the details of the model can

help refine it. But as crude as it may be, understanding the model gives us insight into the phenomenon it tries to explain.³²

Whether we think of Augustine's trinitarian examples or of suchlike morphological models, it is well to be clear about what is being explained and what is being assumed. These scientific models, like Augustine's examples, do not explain or even try to explain *how* they provide the insight — or to use an Augustinian term, the illumination — that they do. They merely capitalize on the fact that they do provide this sort of insight. It is an interesting and important fact about (human) cognition that this is so, but that is a separate point, and deserves a separate inquiry. It will seem more palatable, perhaps, if we think of a case where the formulation makes all the difference to our understanding. Ever since Descartes, it has been well known that geometrical problems can be given an algebraic formulation, and vice-versa. In some sense the two systems are equivalent; that was the intellectual breakthrough in algebraic geometry (which might with equal justice be called geometrical algebra). Yet despite their mathematical equivalence, it can be much easier to grasp a problem or a solution or both if presented one way rather than another: the geometrical version might be obvious at a glance whereas the algebraic formulation is arduous at best. The same difference shows up elsewhere in mathematics. The objects of graph theory, for instance, can be represented as matroids (a kind of generalization of matrices), but are far easier to grasp when illustrated, well, graphically. In physics, the Maxwell equations can be written simply in Clifford algebra (also known as geometric algebra), in a much more perspicuous fashion; the fact that they are Lorentz-invariant is clear in this preferred representation. And as in mathematics and physics, so in the rest of the sciences, and indeed in knowledge generally.

³² The role of models in scientific reasoning has recently been the focus of much study. See for instance Margaret Morrison, *Unifying Scientific Theories*, Cambridge University Press, 2000, and Lorenzo Magnani and Nancy Nersessian (eds.), *Model-Based Reasoning: Science, Technology, Values*, Dordrecht: Kluwer 2002).

Augustine is clear that what he is searching for, in his examples and illustrations and comparisons, are instances of things ‘within us’ that provide the basis for noninferential immediate understanding of the Trinity. Some examples are better than others in some respects, worse in others; each has the potential to jump-start an episode of Augustinian illumination, and to provide the foundation for insight into something that, in its theoretical formulation, seems impenetrable if not simply incomprehensible. Augustine’s trinitarian examples are not grounds for inferential knowledge about the Trinity, but for our noninferential understanding of how trinitarian structures might work, and do what they do, to the extent that we can grasp them. He is explicit in *trin.* 8 that this is the shape of his project for the remaining books; by reflecting on the use of models in science, we can better understand how his approach is part of philosophical methodology. The architecture of the second half of the *De Trinitate* depends on it.

Conclusion

By reading carefully what Augustine has to say in *trin.* 8, a different picture of his practice has emerged. Not only does he not reason by analogy, as that is usually understood, but his method is antithetical to analogical reasoning or any kind of inferential grasp of the Trinity. In keeping with his broadly platonist leanings, he is interested in finding ways to spark our understanding, to bring on insight. This comes in for its own examination in the *De Trinitate* in his discussion of the function of mind and intellect, but is presupposed in his approach to the problem. We do not have to worry about the mechanics to see that his methodological procedure is strikingly original. It has something in common with some features of contemporary scientific practice, in particular the deployment of (morphological) models in search of understanding. Augustine’s project is theological rather than scientific, but reflection on the methods of the latter may shed light on the methods of the former. At the

least we can hope to gain a new appreciation of Augustine's trinitarian examples and the uses for which they were devised.

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