

THE INNER CATHEDRAL

MENTAL ARCHITECTURE IN HIGH SCHOLASTICISM*

1. INTRODUCTION

Contemporary philosophy of mind is much concerned with issues pertaining to ‘mental architecture’ – describing how mental processes are organized, typically by identifying sub-personal functional mechanisms which causally interact, often through the intermediary of a mental representation, thereby giving rise to psychological phenomena. Such internal mental mechanisms can be quite low-level and operate with a degree of relative independence; if so, they may be considered ‘modules’ or minimal centres of mental activity. A module or a set of modules may be specific to a given domain of phenomena, *e.g.* only processing visual data. The way in which a set of mental modules is arrayed makes up the architecture of the mind, offering structure to ‘inner space’. The detailed structural articulation of the mind offers psychological theories some traction on the slippery realm of the mental.

Mediaeval philosophy of mind was likewise concerned with issues pertaining to mental architecture, in much the same way and for much the same reasons: sub-personal functional mechanisms are identified and organized into faculties; these faculties causally interact such that one reduces another from potency to act, perhaps through the intermediary of a mental representation (called a *species*), thereby giving rise to psychological phenomena. These faculties operate with a degree of relative independence, as centres of mental activity, each concerned with its own domain of phenomena. The arrangement of these faculties makes up the mental architecture of human beings as understood in the period of High Scholasticism.

Such mediæval mental architecture has a great deal of structure. In fact this bit of architecture, appropriately, looks like nothing so much as a vast inner cathedral. Taking Aquinas as our guide, a long hike up the nave of the vegetative soul, with its fundamental drives and urges, brings us to the realm of psychology proper: the central area in which the ‘space’ is partitioned by two distinctions that criss-cross – on the one hand a distinction between the cluster of principles and capacities that account for movement and sensation, known as the sensitive part of the soul, and the cluster of principles

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and capacities that account for thought and volition, known as the intellective part of the soul; on the other hand a distinction between the apparatus of powers whereby information about the world is acquired and assimilated, known as the cognitive or apprehensive potencies, and the apparatus of powers whereby one engages the world, known as the appetitive potencies. Each region of this ‘inner cathedral’ is marked off by the intersection of these distinctions and covers a specific and unique domain of psychological experience, with faculties apportioned as follows:

- *sensitive cognition*, better known as sense-perception, which includes the five ‘outer senses’ (sight, smell, hearing, touch, taste) as well as ‘inner sense’ (the common sense and perhaps imagination and memory)
- *intellective cognition* is the domain of the intellect (*a. k. a.* reason), the faculty behind the operations of thinking (concepts), judging (propositions), and ratiocination, with theoretical and practical sides; it is the realm of the subordinate faculties of the agent intellect and the possible intellect
- *sensitive appetite* includes the emotions (*passiones*), divided into the concupiscent and the irascible, each comprising several kinds of emotions and acting semiautonomously
- *intellective appetite* is the domain of the will, which is the faculty of volition, decision, choice, and action

Each region is the focus of intense study, leading to a wealth of detailed psychological theory that is often unique to a given mental region. In addition, the interaction among the faculties of the different regions needs clarification, with special attention being paid to three cases: the ‘transductive’ link between sensitive and intellective cognition; the influence of the emotions on the intellect and conversely; and the relative standing and autonomy of intellect and will.

In what follows I’ll use a particular question, one that has to do with the autonomy of affective psychology, as a way of raising general issues about the mediæval account of mental architecture. The particular question is roughly this: *What are the grounds for holding that the will is a distinct faculty?* To answer this question we need to get straight about how to identify psychological faculties as well as how to judge their (degree of) distinctness. I’ll proceed as follows. In §1 I’ll talk about Aristotle’s sketchy remarks on the foundations of psychology, the raw materials for constructing the inner cathedral. We’ll fade in to the mediæval account around 1250 in §2, where I discuss Aquinas at some length as representative of what I’ll call the ‘mainstream’ view of mental architecture. In §3 I’ll talk about the dissent from the mainstream view by Duns Scotus and William of Ockham. Scotus’s dissent is in the end minor, but Ockham’s is not; he inauguates a radical minority tradition opposed to

the mainstream. By way of conclusion I'll offer some suggestions for why the radical minority tradition eventually won out and became the dominant majority tradition in the Cartesian account of the mind *ca.* 1650.

2. ARISTOTLE AND FACULTY PSYCHOLOGY

For Aristotle, ‘psychology’ was a branch of natural philosophy, the branch dealing with things whose φύσις involves being alive. Yet little of the natural philosophy of (say) the *Physics* carries over to psychology as found in the *De anima*, apart from a general concern with motion and the explanatory apparatus of the four causes.¹ Instead, Aristotle makes a new beginning, working his way through definitions of ‘life’ and physiological accounts of sense-perception. Now in the course of the *De anima* there are three things Aristotle does not do that are worth noting. First, apart from a few programmatic and sketchy remarks in *De anima* 1.1, Aristotle doesn't offer much reflection on what, if anything, makes psychology a science, or the kind of science it is. Second, he doesn't put forward an account of the mind in terms of faculties, although he does speak of its powers and capacities. Third, he doesn't have any clear-cut notion of ‘will’ as mediæval philosophers understood it, namely a distinct faculty of volition, choice, decision, and action. These three absences make two passages in the *De anima* extremely important, for each passage raises general reflections on philosophical psychology that invite a systematic account of mental architecture – in particular, they are open to a ‘faculty’ interpretation of mental architecture, and the second passage seems to suggest the faculty approach specifically in connection with choice and decision, that is, in the case of the will.

The first passage is little more than a throwaway, when Aristotle concludes his discussion of the constituent elements of life in *de an.* 2.2 (413^b11–16):²

¹ The *De anima* has much more in common with the biological works that follow it than with the ‘physical’ works preceding it in the traditional arrangement of the corpus.

² There were three Latin versions of the *De anima* available in the Middle Ages. The earliest was by James of Venice and is known as the *uetus*, it was composed *ca.* 1125–1150, and is extant in some 144 manuscripts. The next was by Michael Scotus and is known as the *alia translatio*; composed *ca.* 1220–1235, and extant in some 62 manuscripts, for the most part included in Averroës's *Great Commentary on the “De anima”*. Finally, the last and most influential translation was by William of Moerbeke and is known as the *nova*; it was composed *ca.* 1265–1268, and is extant in some 268 manuscripts. The translation here is from the Greek but with an eye to Moerbeke's version.

For the present let us say only this, that soul is the principle ($\chiρχή$: *principium*) of the aforementioned things and is characterized by them – that is, by the vegetative, the sensitive, the intellective, and by motion. Whether each of these is a soul or a part of a soul ($\psiχή$ ἢ μόριον $\psiχῆς$: *anima* aut pars *animae*), and if a part whether it is separable in account ($\lambdaόγω$: *ratione*) alone or also in place – some of these things are not hard to know, whereas for some there is difficulty.

Aristotle goes on to point out that the powers and capacities of the soul form natural clusters. Putting aside movement for the time being, nutrition is associated with the vegetative soul as found in all living things, perception with the sensitive soul found in animals, and thought with the intellective soul in human beings. Broadly speaking these souls are ordered hierarchically, distinguished by the classes of things to which they belong; the intellective soul is perhaps separable (413^b24–27). Hence there is some kind of real difference among the various ‘parts’ of the soul, and this passage in *de an.* 2.2 became the *locus classicus* for arguments over the unicity or plurality of substantial form. More important for our purposes, though, is the fact that Aristotle associates a cluster of psychological powers with “a soul or with part of a soul” – but he does not clearly settle the issue of how the powers are related to the souls, though the clear suggestion is that they are ‘parts’ in some sense, a sense naturally read by mediæval thinkers as a psychological faculty.

The second passage sees Aristotle return to the deferred issue of movement and its standing in the soul, *de an.* 3.9 (432^a18–^b13):

Next we must look into what it is of the soul that produces movement: whether it is a part of it separate either in account or in magnitude, or whether it is the whole soul; and if it is a part, whether it is a part different from those usually described or already mentioned by us, or whether it is one of them. The problem immediately arises of how we are to speak of ‘parts’ ($\muόρια$: *partes*) of the soul and how many there are. On the one hand there is an indefinite number: not only those [parts] that some mention in distinguishing them, namely the ratiocinative and passionate and desiderative,³ or as others do, the rational and the irrational; for in virtue of the differentiae⁴ by which they separate these things, other parts seem to have a greater disparity than these, namely the ones we have mentioned – the vegetative, which belongs both to plants and to all

³ Here the Latin does not properly match the Greek: for $\lambdaογιστικὸν$ καὶ θυμικὸν καὶ $\epsilonπιθυμητικόν$, William of Moerbeke has *rationatiuam et irascibilem et appetitiuam*. See also note 5.

⁴ “Differentiae”: τὰς διαφορὰς (*differentiae*), likely meant non-technically here by Aristotle, but later interpreted strictly as a term of art.

animals; the sensitive, which cannot easily be classed as either irrational or rational; yet again the imaginative ($\tauὸ\ \varphiανταστικόν$: *phantastica*), which is different in its being from them all ($\delta\ τῷ\ μὲν\ εἰναι\ πάντων\ ἔτερον$: *quae per esse quidem ab omnibus altera est*), while it is very difficult to say with which of the others it is the same or is not the same if one were to postulate separate parts of the soul; in addition to these there is the appetitive, which is, one would think, different in account and in potentiality from all of them. Surely it would be out of place to split up the latter, for there is wishing ($\betaούλεσθαι$: *woluntas* [!]) in the ratiocinative part, and desire and passion⁵ in the irrational; and if the soul is threefold there will be appetite in each. To turn now to the matter at hand, what is it that moves an animal in respect of place?...

Aristotle begins by asking about the source within the soul of animal movement, which is a matter of determining whether the soul as a whole is responsible for movement; if not, which part is responsible, and how it is related to other parts of the soul. This methodological point leads him to wonder generally about what a ‘part’ of the soul is. Yet rather than treat the question in full generality, Aristotle compares several different divisions of the soul: the Platonic tripartite analysis, the rational/irrational split mobilized in the *Nicomachean Ethics*, and the series of souls investigated earlier in the *De anima*, namely the vegetative soul, the sensitive soul, and the intellective soul. Criteria for parthood are alluded to but not given (“the differentiae by which [various thinkers] separate these things”), and Aristotle rightly notes the difficulty in incorporating both imagination and appetite into any of the aforementioned schemes. With that he abandons the general question and returns to the matter at hand. Three points to note.

First, the suggestion noted in the first passage is reinforced: movement, like perception, stems from something that belongs to the soul. In the case of such fundamental features the ‘something’ belonging to the soul is to be understood as a part of the soul acting as a principle. In short, Aristotle could easily be read as looking for a psychological faculty to account for movement, though he does not say so in so many words.

Second, Aristotle suggests that the source of animal movement is found in the appetitive power. He therefore generally sets ‘appetite’ (as a principle) against cognition, which looks to the distinction between cognitive and affective psychology that will be a *leitmotiv* of mediæval philosophy.

Third, recall that in the first passage Aristotle floated the idea that one

⁵ Again there is a mismatch: for $\epsilonπιθυμία\ καὶ\ δὲ\ θυμός$, William of Moerbeke has *concupiscentia et ira*.

part of a soul can be distinct from another in account. Here he explicitly says that parts can differ in account or essence without that settling the ontological question whether they are to be identified with a given part of the soul or not; it is an open question whether any real difference in the world answers to parts differing in definition.

These two passages in Aristotle do not put forward an account of how to construct a psychological theory. If anything, Aristotle seems to deliberately refrain from giving such an account. But the passages, suggestive as they are, provided his mediæval readers with the raw materials with which to construct psychological theories, built along the lines implicit here. Let's fast-forward a millennium and a half to watch them in action.

3. THOMAS AQUINAS AND THE MAINSTREAM VIEW

Aquinas is representative of his generation of scholastic thinkers. The details of the presentation are his, but the position sketched here can be found in his teacher Albert the Great, his fellow-student Bonaventure, his renegade disciple Durand of St.-Pourçain, Giles of Rome, Godfrey of Fontaines, and many others.⁶ Aquinas discusses both passages from Aristotle in his commentary, the *Sententia libri de anima*, and covers much the same ground in his *Quaestiones disputatae de anima* q. 12 as well as in *sum. theol.* 1^a q. 77 art. 1. As usual, his presentation is exceptionally lucid.⁷

Aquinas discusses the second passage from Aristotle, *de an.* 3.9 432^a 18–^b 13, in his *in de an.* 3.8. He takes the opening sentence, where Aristotle raises the question what the source in the soul of movement is, to lay out the whole agenda of Aristotle's subsequent discussion: "whether it is a part of it separate either in account or in magnitude, or whether it is the whole soul" gives three possible choices: the principle of movement is either (a) the whole soul; (b) a part of the soul that is separable in magnitude; (c) a part of the soul that is separable in account.

The first alternative to be rejected, according to Aquinas, is (b). Aquinas interprets 'in magnitude' (μεγέθει) as 'in subject', "as the Platonists hold" (239A16–18). Their mistake is to think that distinct principles require distinct subjects, so that there would be at least two souls in a human being, one that thinks and senses, the other that feels and moves. Aquinas rejects this move because human beings, as indeed all animals, are substantial unities: the life of an animal involves movement as well as perception, which is to say in

⁶ See Künzle [1956] for a survey of views about the relation of the soul to its powers (and hence its faculties) from Augustine to Aquinas.

⁷ See Gallagher [1991] for a study of Aquinas's account of will as rational appetite.

Aristotle's terms that these principles belong to a single soul (the fundamental principle of life).⁸ Hence 'part' cannot mean 'distinct soul'. What then does it mean? That is the problem Aristotle says "immediately arises."

Aquinas treats the remainder of Aristotle's second passage as addressed to that problem, in the form of a scholastic debate: "Aristotle pursues the point first in the manner of a disputation (*disputatio*), and second by settling the question (*determinatio*) (239A26–29). Roughly, Aquinas takes Aristotle to first present candidates for divisions of the soul, and then to offer three arguments against them, thereby proving that movement has to be explained by postulating a different division, one that encompasses both desires and wants – the appetitive 'part' of the soul, a conception that supersedes and incorporates the traditional divisions. But rather than following Aquinas's exegesis of the text, we can get to his solution of the problem about psychic parts by starting with his fundamental principles.

In *sum. theol.* 1^a q. 77 art. 3, Aquinas gives the theoretical background to his analysis. The soul's 'movement' involves both a passive aspect (emotion) and an active aspect (choice). These are potencies – something the soul is *able* to experience, where the modality here is interpreted as roughly akin to the modern notions of an 'ability' or 'capacity.' These modern notions correspond to a fundamental distinction among kinds of potencies: abilities to active potencies, capacities to passive potencies. Active potencies enable their possessor to 'do' something, whereas passive potencies enable their possessor to 'suffer' or 'undergo' something. This intuitive sense is captured in the idea that the reduction of a potency to act⁹ requires a cause or explanation: those potencies whose actualization is due to an internal principle are active potencies; those potencies whose actualization is due to an external principle are passive potencies. There are systematic differences between them, but a unified account is nonetheless possible. A brief look is in order.

Acts have objects (*objecta*), and therefore so do the potencies that are individuated by the acts.¹⁰ What is an 'object' in this technical sense? An acorn

⁸ Aquinas uses a close variant of this same argument to establish the unicity of substantial form: it must be one and the same soul that accounts for perception and thought in the human being, since otherwise the human being will not be a substantial unity.

⁹ Acts are not to be confused with actions. The latter are a special case of the former, namely realizations of potencies where the principle is within the agent. Strictly speaking, an 'act' is an *actuality* or *actualization* of a power, and only some of these are actions.

¹⁰ Potencies are individuated by their corresponding acts because potencies and acts are not capable of definition: the division of potency and act is a transcendental

has an active potency for growth, for absorbing nutrients from the surrounding soil and converting them to upward growth (stem, seedling, sapling...). Yet the acorn's potency is not for unlimited growth. Oak trees stop growing when they reach their adult form, which limits their potency. To reach the full adult height is the 'goal' of the acorn, the culmination and terminus of its growth. Biochemical processes are the efficient cause of the acorn's growth, whereas its formal and final cause are its end. This end is the object of the act, and hence the object of the acorn's potency for growth. The point may be summarized as follows:

(OAP) The object of an active potency is the act's end.

Now consider a passive potency, such as water's capacity to be heated. The heating of the water occurs due to an external principle or cause and exists so long as the external principle is reducing the potency to act: the water's capacity to be heated is actualized by a fire so long as it actively heats up the water. The external principle acts as the formal and final cause of the actualization of the passive potency – its end.¹¹ As before, the end is the object of the act. Hence the object of seeing is the thing seen; the object of being heated is heat (more exactly being hot), which is imparted by the fire. The point may be summarized as follows:

(OPP) The object of a passive potency is the act's external principle.

Acts are themselves distinguished by their objects, which determine the kind of act in question: "potencies are distinguished in accordance with the accounts (*rationes*) of their objects" (*in de an.* 3.8 240B124–125).

Since the actuality (or realization) of either kind of potency is defined, and hence individuated, by reference to its object, there are as many distinct potencies as there are distinct objects.¹² Yet we do not want to identify each

division of being, on a par with the division of being into the ten categories, and hence unable to be captured in a genus-species hierarchy (which is what makes definition possible). Yet because act is prior to potency, potencies can be distinguished by their corresponding acts.

¹¹ In this case the external principle is also the efficient cause of the passive potency's reduction from potency to act. The efficient cause actualizing a passive potency may differ from its formal and final cause, however.

¹² Following Aristotle's lead, Aquinas distinguishes the ends of an active potency into roughly two kinds (*eth. nic.* 2.5 and 10.4): (a) activities, where the goal of the act is the act itself, such as dancing or walking; (b) performances or achievements, where the end or completion of the act is the state that obtains at or after the temporal limit of the act, such as winning the race or being married. Both activities and achievements are kinds of actions. Passive potencies, by contrast, are of a single type. Since the actuality (or realization) of a passive potency is an act that is defined by reference to an external principle, according to OPP, such acts must therefore

potency responsible for the soul's movement as a principle that is a distinct part of the soul. Aquinas takes this to be the problem Aristotle diagnoses at the beginning of the second passage (*in de an. 3.8 239A38–B45*):¹³

Aristotle says first of all that IMMEDIATELY at the beginning of his investigation THE PROBLEM ARISES OF HOW we ought to distinguish THE 'PARTS' OF THE SOUL AND HOW MANY THERE ARE, since in one way THERE IS AN INDEFINITE NUMBER, that is, not able to be summed up under any definite number. This would be true if it were necessary to attribute diverse parts of the soul to each of the soul's operations and movements stemming from the soul.

The proper way around this difficulty – the apparently endless fragmentation of the soul – is to take inspiration from Aristotle's remark in *de an. 2.2* and look not for each proximate potency involved in movement but for their underlying principle. Aquinas does this by focussing on the 'primary object' of the potencies for animal movement, a notion which itself rests on the idea of a '*per se* object'.

Something counts as the *per se* object of a potency if it is the proper object of the potency. For instance, the *per se* object of building is the house that is built. The builder may also become strong through his physical labor, but health is not what building is about by definition: health is only an incidental or accidental result of construction. (Building could take place without anyone becoming healthy, but not without something getting built.) Thus *per se* objects are particular items in the world, such as the newly-constructed house.

The 'primary object' of a potency is the most general nonrelational feature, or set of features, in virtue of which its *per se* object counts as its *per se* object.¹⁴ The primary object of a potency is therefore the most general char-

be occurrent states of the subject: the external principle exercises its influence on the subject, causing a change within it in some way, one which persists so long as the external principle continues to exercise its influence. The subject of a passive potency may be put into a state by the exercise of a passive potency that persists after the potency is no longer being exercised, but the state is not properly the exercise of the passive potency; it is instead the result of its exercise. Since the passive potency is only actualized by an external principle, the acts of passive potencies are examples of what the subject suffers or undergoes. They are not actions but passions.

¹³ Dicit ergo primo quod MOX in principio huius inquisitionis HABET DUBITATIONEM QUOMODO oporteat distinguere PARTES ANIMAE, ET QUOT sint, quia secundum aliquem modum VIDENTUR esse INFINITAE, id est non posse comprehendendi sub aliquo certo numero; et hoc uerum esset, si singulis operationibus animae et motibus qui sunt ab anima necesse esset attribuere diuersas partes animae.

¹⁴ The notion seems derived from Aristotle's discussion of 'commensurate subjects'

acterization anything that counts as the object of the potency can fall under; it is the condition any object must satisfy in order to be intelligible as an object of the potency, whether the potency be active or passive. The primary object must be nonrelational, since otherwise it risks being empty. To say that Jones's vision is actualized by anything visible is true but trivial, since 'visible' is a relational term that means "able to actualize the faculty of vision." The primary object must equally be general: to say that Jones sees the blackness of the cat's fur in virtue of its blackness is true but unhelpful, since we can see ginger cats as well as black ones. The most informative general characterization of what can be seen is *colour* (or more precisely *the coloured*, the primary object of sight. (Analogously, the primary object of geometry is *figure* rather than, say, *triangle*.)

Aquinas's strategy should now be evident. He identifies a 'part' of the soul as any psychic principle defined through its primary object, which he calls a *faculty*. In the case of sensitive cognition, for example, this strategy allows us to identify vision and hearing as independent faculties. The primary object of vision is the coloured, and of hearing is tone and pitch; these are clearly distinct, since we can neither see sounds nor hear colours. Hence each is a faculty of the soul.

According to Aquinas, the primary object is what Aristotle had in mind in his third alternative in *de an.* 3.9, listed as (c) at the beginning of this section: a part of the soul that is separate "in account." In the case at hand, then, Aquinas declares that the primary object of the various cognitive powers is *the true*, whereas the primary object of the various appetitive powers is *the good* (*sum. theol.* 1^a q. 80 art. 1 *ad 2*).¹⁵ In particular, the primary object of the sensitive appetite is *the sensible good* and that of the intellective appetite, the will, is *the immaterial good* (*sum. theol.* 1^a q. 80 art. 2). These differ as passive and active principles: the sensitive appetite is home to passive potencies, the emotions,¹⁶ whereas the intellective appetite is home to the active potency that is the will. In contemporary terms, the difference between cognitive

in *an. post.* 1.4 73^b32–74^a3. Aquinas's terminology is not completely stable; I am using the accepted later regimentation of the vocabulary. He sometimes calls the primary object the 'formal object'.

¹⁵ Remember, when Aquinas says that the primary object of the appetite is *the good*, he means that any item that counts as an object of appetite must be characterized as good, not that goodness itself (whatever that may be) is the object of appetite.

¹⁶ There is a further relevant difference. In keeping with OPP, the nature of any emotion is given as an object falling under the sensible good. The differentiae of these objects define distinct kinds of potencies defined through them. Thus the concupiscent passions (love and hate, desire and aversion, joy and sorrow) have the common primary object *sensible good or evil taken absolutely* and the irascible

psychology and affective psychology is an intensional difference. He sums up his view pithily in commenting on *de an.* 2.3 in his *in de an.* 2.5 (L45.1 87A1–9):¹⁷

After defining ‘soul’ in general, Aristotle now turns to giving an account of its parts. But a soul has ‘parts’ only insofar as its potencies are called its parts; in this way the parts of something capable of many things can be called capacities for each of them. Accordingly, to give an account of parts of the soul is to give an account of each of its powers.

The description of the psychological faculties spells out the ‘parts of the soul’, each in its own domain of psychological phenomena.

That might seem to settle the matter: cognitive and affective psychology are different. To his credit, Aquinas recognizes that it does not, for two interrelated questions have not yet been answered. First, while an intensional distinction among the objects of potencies might be enough to show that they are distinct *qua* potencies, that does not yet settle the issue about the ontological standing of faculties in the soul. Second, Aquinas has yet to address Aristotle’s alternative (*a*) raised in *de an.* 3.9, namely whether the source in the soul of animal movement is the whole soul rather than a part.

Aquinas addresses both problems with a single response, presented variously in his commentary on *de an.* 2.2, *sum. theol.* 1^a q. 77 art. 1, *sent.* 1 d. 3 q. 4 art. 2, and *quaest. disp. de an.* q. 12. He underwrites the intensional difference between psychological faculties with an extensional difference between the soul and its faculties, and one faculty from another. His avowed target is the view that “the soul is its faculties,” which he expounds as follows (*quaest. disp. de an.* q. 12 108B131–142):¹⁸

Those who hold that the soul is its faculties (*potentiae*) have in mind that the very essence of the soul is the immediate principle of all the soul’s

passions (hope and despair, confidence and fear, anger) have the common primary object *sensible good or evil taken as difficult or arduous* (*sum. theol.* 1^a q. 81 art. 2).

¹⁷ Postquam Aristoteles definivit animam in communi, nunc accedit ad determinandum de partibus eius; non autem habet aliter anima partes nisi secundum quod eius potentiae partes eius dicuntur, prout aliquius potens multa, partes dici possunt potestates ad singula; unde determinare de partibus animae est determinare de singulis potentiis eius.

¹⁸ Ponentes igitur quod anima sit suae potentiae, hoc intelligunt, quod ipsa essentia animae sit principium immediatum omnium operationum animae, dicentes quod homo per essentiam animae intelligit, sentit, et alia huiusmodi operatur, et quod secundum diuersitatem operationum diuersis nominibus nominatur: sensus quidem in quantum est principium sentiendi, intellectus autem in quantum est intelligendi principium, et sic de aliis; utpote si calorem ignis nominaremus potentiam liquifactuam, calefactuam et dessicatuam, quia haec omnia operatur.

operations, claiming that it is through the essence of the soul that a human being understands, senses, and does other things of the sort, and that it is referred to under diverse names in line with the diversity of these operations: ‘sense’ insofar as it is the principle of sensing, ‘intellect’ insofar as it is the principle of understanding, and so on – just as if we were to refer to the heat of fire as the ‘melting power’, ‘heating power’, and ‘drying power’, since it does all these things.

The appeal of this view is obvious: “since it is one and the same mind that wills, that senses, that thinks,” there seems to be no advantage in regarding the faculties as separate parts of the mind.¹⁹ The intensional difference between cognitive and affective psychology might in fact be purely nominal, neither corresponding to nor in any need of a distinction *a parte rei*. But this view doesn’t work, Aquinas declares. His reasoning is as follows.

An agent causes an effect only to the extent that the agent actually is or has the features of the effect: fire doesn’t cause heat because it shines, but because in itself it is actually hot. The principle of the action and the actual effect are therefore ‘conformal’ (*conformatae*). Aquinas then offers a causal principle (109A152–155):²⁰

When that which an agent does doesn’t pertain to the substantial being of the thing (*ad esse substantiale rei*), it is impossible that the principle by which it does it belong to the essence of the thing.

Aquinas illustrates the principle by an example involving natural agents in generation. His example is not entirely perspicuous, but perhaps a moment’s reflection on the conformality of cause and effect will make the principle seem plausible: if an agent brings about a result that “doesn’t pertain to the substantial being of a thing,” then that result must have recourse to a form the agent possesses that is not itself essential to the agent – for otherwise the agent would be the *per se* cause of an accidental result, which is not possible. Hence the causal principle must hold. And this is all the more clear for the subjects of passive potencies, since they do not ‘suffer’ anything non-substantial that properly belongs to their essence. Once we have the causal principle in place, Aquinas thinks his conclusion follows directly (109B192–110A209):²¹

¹⁹ Descartes, *med. 6* (AT 7 86): Neque etiam facultates uolendi, sentiendi, intelligendi etc. eius partes dici possunt, quia una et eadem mens est quae uult, quae sentit, quae intelligit.

²⁰ Quando igitur id quod agitur non pertinet ad esse substantiale rei, impossibile est quod principium quo agitur sit aliquid de essentia rei.

²¹ Manifestum est autem quod potentiae animae, siue sint actiuae siue passiuae, non dicuntur directe per respectum ad aliquid substantiale, sed ad aliquid accidentale: et esse intelligens uel sentiens actu non est esse substantiale sed accidentale...

It is clear that the soul's powers, whether active or passive, are not said directly in respect of anything substantial but rather something accidental: *to be actually understanding* and *to be actually sensing* are not substantial being but accidental... Hence it is clear that the essence of the soul is not the immediate principle of its operations, but it operates mediately through accidental principles. Accordingly, the soul's powers are not the very essence of the soul, but properties (*proprietates*) of it.

In *sum. theol. 1^a* q. 77 art. 1 Aquinas clarifies why thinking (say) is not 'substantial' in the sense at issue: if thinking or willing did pertain to the essence of the soul, then merely in virtue of having a soul we would be always thinking and willing; manifestly we are not, and so these must not belong to the soul's essence. The upshot, then, is that there is a real difference between the soul and its faculties.²²

This, then, is the mainstream mediæval view: the mind's mental architecture consists in the arrangement and interconnection of its faculties, each of which is defined intensionally by its primary object and covers a unique domain of psychological phenomena; there is a real difference among these several faculties, as well as between any psychological faculty and that of which it is a faculty, namely the soul. This seems to have been the dominant view in High Scholasticism. Its strategic appeal is clear: a distinction that seems borne out in experience between cognitive and affective psychology is underwritten by metaphysics. The soul is the fundamental subject, but the each psychological faculty was licensed to operate as a sub-personal locus of activity (by nature separable), causally connected with other faculties, functionally defined and linked in an input-output stream.

4. SCOTUS AND OCKHAM

For all its virtues, though, Aquinas left two components of the mainstream

Manifestum est igitur quod ipsa essentia animae non est principium immediatum suarum operationum, sed operatur mediantibus principiis accidentalibus. Unde potentiae animae non sunt ipsa essentia animae, sed proprietatibus eius.

²² See the detailed discussion of this clarificatory argument by Christopher Shields in his contribution to this volume. Aquinas offers further support for his conclusion by noting that whereas the soul is a single principle, psychological faculties must be multiple, since some are active (such as intellect and will) and some are passive (such as perception and emotion); hence they must stem from distinct principles: "and since the essence of the soul is a single principle, it thus cannot be the immediate principle of all its actions, but must instead have several diverse faculties" (110A214–220). Since this depends on the claim that nothing can simultaneously be the source of both active and passive acts, though, it is not as well-founded an argument.

view unacceptably vague: (a) what kind of entity, metaphysically speaking, is a psychological faculty? (b) what exactly does the ‘real difference’ between the soul and its faculties amount to? At best, Aquinas waffles in his answers. Psychological faculties are ‘properties’, a word he adopted from Albert the Great; it is vague enough to mean almost anything, and Aquinas’s arguments, rehearsed above, encourage thinking of faculties as accidents, since Aquinas is at such pains to contrast them with essential features.²³ As for their distinctness, all Aquinas does is say that faculties are not the same as the soul in reality; he leaves it open how this is to be understood. The usual construal took Aquinas to uphold a *real distinction* between the soul and its faculties, that is, to maintain that one was metaphysically independent of the other, separable by divine power at the least.

There was some dissatisfaction on the latter score. Henry of Ghent, for instance, argued that psychological faculties were real relational aspects of the soul, and hence distinct by his infamous ‘intentional distinction’ rather than by a real distinction (*quodl. 3 q. 14*). But the dissenting position with the most followers was articulated in the succeeding generation by John Duns Scotus, who proposed the following alternative account in his *rep. 2 d. 16 q. un. nn. 17–19* (WV 13 43A–44A):²⁴

I say that ‘unitive containment’ [of the sort characterizing the soul and its faculties] is not a feature of items that are entirely the same, since they aren’t united; nor is it a feature of items that remain distinct by the distinctness they had before their union; but those items that are really one yet remain formally distinct, or are the same by real identity yet distinct formally:.... We can take it this way in the case of the intellect and the will, which aren’t essential parts of the soul but are univitely contained in the soul as though they were its attributes,²⁵ and according to which

²³ Including *propria*, which technically “pertain to the essence.” Aquinas takes ‘*proprietas*’ from Albert’s *Sent. 1 d. 3M* (135), who uses it to explain how Augustine’s triad of memory, intellect, and will are distinct yet form a unity: “Illa uera tria naturales proprietates seu uires sunt ipsius mentis, et a se differunt.”

²⁴ Ideo dico continentia unitua non est eorumque omnino sunt idem, quia illa non uniuntur; nec est eorum quae manent distincta, ista distinctione qua fuerunt distincta ante unionem; sed quae sunt unum realiter, manent tamen distincta formaliter, sive quae sunt idem identitate reali, distincta tamen formaliter.... Sic ergo possumus accipere de intellectu et uoluntate, quae non sunt partes essentiales animae, sed sunt unitiue contenta in anima quasi passiones eius, propter quas anima est operativa, non quod sint essentia eius formaliter, sed sunt formaliter distinctae, idem tamen identice et unitiue.... et possunt etiam dici partes, secundum quod nulla dicit totam perfectionem essentiae continentis, sed quasi partiale.

²⁵ ‘Attributes’: *passiones*, here with the technical meaning of something truly predica-

the soul is able to perform its acts – not that they are the soul’s essence formally, but are formally distinct, and nevertheless are really the same identically and univitely... The [faculties] can even be called ‘parts’ in that none of them expresses the whole perfection of the essence containing them, but only partial [perfection].

Scotus is proposing that the soul is not *really* but only *formally* distinct from its faculties. This might seem to explain the obscure by the more obscure, but it is not so bad as all that. The core intuition behind Scotus’s formal distinction is, roughly, that existential inseparability does not entail identity in definition, backed up by the conviction that this is a fact about the way things are rather than a matter of how we conceive them.²⁶ Since formally distinct items are existentially inseparable, they are really identical, in the sense just defined. Hence the formal distinction only applies to a single real thing. Now some really identical items may differ in their definitions. More precisely, they may differ in account (*in ratione*), which is a generalization of the strict notion of aristotelian ‘definition’: an account, like a definition, picks out the feature or set of features that make something to be what it is, though it need not do so by genus and specific differentia. All definitions are accounts but not conversely: there are items that lack definitions yet do have a set of features that make them what they are: the highest genera, potencies, the four causes, accidental unities, and so on. Thus items that are formally distinct have non-identical definitions or accounts, that is, the account of one does not include that of the other. Nevertheless, the items that are formally distinct are combined together into something that has them in such a way as to make up a unity – ‘unitive containment’. Hence Scotus’s position is that the psychological faculties of intellect and will are really identical with the soul, but formally distinct from one another, since what it is to be an intellect does not include the will, and what it is to be a will does not include the intellect. Exactly how this works out on the metaphysical side is a bit of a mystery, but the position is clear enough; it maintains intensional difference with extensional identity, although the intensional difference is underwritten in reality somehow.

Yet although Scotus explicitly argues against Aquinas at length (nn. 3–10),

ble *per se secundo modo* of another, the way ‘one’, ‘true’, and ‘good’ are attributes of being.

²⁶ Scotus discusses the formal distinction *ex professo* in his *lect. 1 d. 8 p. 1 q. 4 nn. 172–188; ord. 1 d. 2 p. 2 qq. 1–4 nn. 388–410* and *d. 8 p. 1 q. 4 nn. 191–217*; and several Parisian lectures, mostly surviving only in student transcriptions (*reportationes*). I will ignore here the vexed question about whether Scotus changed his account of the formal distinction.

the difference between their positions is, I think, minor. Whatever Aquinas may have intended by the claim that the soul and its faculties are not the same in reality, it is clear he thought that there is some real difference between them. Scotus likewise thinks that the soul differs from its faculties in reality. Indeed, the formal distinction is not a ‘distinction of reason’ (a merely conceptual distinction) precisely because it is based in reality. This is apparent from Scotus’s description of the formal distinction. For both real identity and definitional non-identity are independent of any activity of the intellect. We discover the accounts of things through thinking; we do not thereby create them.²⁷ Hence the distinction between formally distinct items seems to be present in the world, not even partially caused by the intellect. It is therefore ‘real’ in the broad sense. That is sufficient to be counted in the mediæval mainstream.

William of Ockham dissents from the mainstream, inaugurating a minority tradition that is radically opposed to the ‘real difference’ tradition represented by Aquinas and others (including Scotus). Ockham explicitly holds that the soul just is its psychological faculties. He devotes *rep. 2 q. 20* to the matter, asking “whether memory, intellect, and will are really distinct faculties”; he states and refutes at length the views of Thomas Aquinas, Henry of Ghent, and Duns Scotus, before declaring his opinion (435.4–8):²⁸

I say that the faculties of the soul that we are speaking of in the case at hand, namely intellect and will (I’m not talking about the sensitive powers now since there will be a treatment of them later), are really the same as each other and with the essence of the soul.

Ockham enunciates this conclusion after his mind-numbing detailed examination and refutation of the philosophers mentioned above. But he does offer some positive grounds for adopting his view. When he turns to the strongest argument for thinking that there is a real difference among psychological faculties, namely that really distinct operations must proceed from really distinct faculties, and the operations of intellect and will are really distinct (425.5–7), he begins his reply with a flourish of the Razor (444.2–8):²⁹

²⁷ Scotus makes this point explicitly in *ord. 1 d. 8 p. 1 q. 4 n. 193*: “Furthermore, the definition indicates not only an aspect that is caused by the mind, but the quiddity of a thing; formal non-identity is therefore *ex parte rei*.” See also *d. 25 q. un. n. 10* and *in met. 7 q. 13 nn. 90–91*.

²⁸ [Dico] quod potentiae animae, de quibus loquimur in proposito, scilicet intellectus et uoluntas – non loquendo de potentis sensitius nunc, quia alias erit sermo de eis – sunt idem realiter inter se et cum essentia animae.

²⁹ Ad primum principale dico quod aliquando operationes distinctae requirunt distincta principia, aliquando non; sicut cognitio sensitiva et intellectiva arguunt dis-

As for the initial argument, I say that sometimes operations require distinct principles and sometimes they do not. For instance, sensitive and intellective cognition bespeak a distinction between sense and intellect. But as for when this ought to be postulated and when not, we should turn back to experience or an evident argument. Yet since neither is present in the case at hand, [namely the case of intellect and will], a plurality of principles should *not* be postulated due to the plurality of operations.

Ockham sketches an account of when such plurality should be postulated (444.17–445.12):³⁰

In order to know when the distinctness of powers can be inferred from the distinctness of operations and when not, note the following:

In every case when all the factors external to the knower are uniform – *e.g.* when the object is equally present (or the many objects are equally present), and the medium is equally disposed, and all external factors are equally related in respect of the knower – if at that point the one who knows, desires, and also has the power can have one act with respect to one object and no other with respect to the same (if it is appropriate to have an act with regard to that object or with regard to some other object in respect of which it is appropriate to have it), such that it cannot have another act in any other way, whether each act is cognitive or appetitive or sensitive or intellective, *then*, from the distinctness of such acts, the distinctness of the powers [that are the source of the acts] follows of necessity.

tinctionem inter sensum et intellectum. Sed quando istud est ponendum et quando non, recurrendum est ad experientiam uel ad euidentem rationem. Sed quia in proposito neutra est, ideo ex pluralitate operationum non est ponenda pluralitas principiorum.

³⁰ Ideo ad sciendum quando ex distinctione operationum potest inferri distinctio potentiarum et quando non, sciendum quod uniuersaliter quando omnia extrinseca cognoscenti sunt uniformia – puta quando obiectum est aequaliter praesens, uel plura obiecta, et medium aequaliter dispositum et omnia extrinseca aequaliter se habent respectu cognoscentis – si tunc cognoscens et appetens, habens potentiam, potest habere actum unum circa unum obiectum et non aliud actum circa idem – si natus sit haberi circa illud obiectum uel circa aliud obiectum circa quod natus est haber – ita quod nullo modo potest habere aliud actum, siue uterque actus sit cognitius siue appetitius siue sensitius siue intellectius, tunc ex distinctione talium actuum necessario sequitur distinctio potentiarum. Sed quando cognoscens et appetens, habens potentiam, amoto omni impedimento extrinseco, cognoscens habet unum actum circa aliquod obiectum, et eo ipso, stante natura sua, potest habere aliud actum circa idem obiectum uel aliud, ibi ex distinctione actuum nunquam sequitur distinctio potentiarum, immo sequitur necessario identitas et unitas potentiae respectu illorum actuum.

On the other hand, if, when every obstacle is removed, the one who knows, desires, and has the power has one act with respect to some object and by that very fact, with his nature remaining the same, can have another act with regard to the same object or to another, then, from the distinctness of the acts, the distinctness of the powers [that are the source of the acts] never follows. Instead, an identity and unity of the powers follows of necessity in respect of those acts.

Not for Ockham the “evident” difference between the primary objects of intellect and will, such as Aquinas saw, to underwrite a real distinction. Ockham holds that a merely intensional difference, such as the difference in proper objects, can never as such underwrite a real difference. To establish a real distinction among powers, and therefore among psychological faculties, Ockham invokes the stringent standard outlined in this passage: if it is not possible to elicit distinct simultaneous acts directed at the same object, holding all other relevant circumstances fixed, the faculties from which the acts stem are really distinct;³¹ otherwise, ontological parsimony holds sway, and the acts stem from one and the same faculty or power.

Having enunciated this stringent criterion for the real distinction, Ockham points out that acts of intellect and will fail to satisfy it, since they can be elicited simultaneously with respect to the same object. He does not bother to argue the point, since he believes, correctly, that it is obvious. Likewise, there is no reason to postulate a real distinction between the soul itself as a whole and any of its various faculties. Hence on Ockham’s alternative picture, the difference between the soul and its various faculties, and between the faculties themselves, is merely conceptual. Willing something and knowing it (say) are just two ways that one and the same thing, the soul, has of relating itself to the thing. Nor is there any reason to think that these ‘ways’ are distinct in themselves. What appears convex may come to appear concave by changing position; perhaps thinking and willing are no more distinct than that; to want something may be nothing other than to make certain judgments about it, for instance.

Ockham’s radical rejection of the mainstream view seems to have had some currency at Oxford in the 1320s; Robert Holcot was apparently an adherent, and William Crathorn identified the soul not only with its faculties but also with its actions – a mediæval Hume, indeed, finding only mental acts within: *Sent. 1 q. 1* (74–97).³² But it is not clear how far Ockham’s opinion

³¹ Ockham’s reasoning here is that any given faculty can only elicit one act at a time, and hence if the second act in question can occur it must stem from a different faculty, and if not, not.

³² Schepers [1972] describes Holcot’s adherence to Ockham’s view. But he surely

extended. Even the arch-nominalist Jean Buridan, when he discussed the relation of the soul to its acts, opted to endorse Aquinas's view rather than Ockham's in his *quaest. in de an.* 3.20.³³

Still, these replies [against the mainstream view] notwithstanding, I firmly adhere to the contrary opinion: namely, that as long as I understand and know, my intellect is neither intellection nor knowledge; on the contrary, intellection and knowledge are dispositions distinct from it and inhering in it.

As for intellect and act of cognition, so too for the soul and any of its faculties in general. Ockham's opposition was strident but it did not even become an entrenched dogma of nominalism.

5. CONCLUSION

Despite Ockham's opposition, the mainstream view of mental architecture seems to predominate, all the way to the point where it vanishes practically overnight with Descartes. It is no surprise to find Cajetan defending Aquinas's view, as he does; it is likewise understandable that Suárez does so. But it is a surprise to see the mainstream view defended by the independent-minded Renaissance philosopher Giacomo Zabarella, who treats the question at length in his *Liber de facultatibus animae* – one of the thirty ‘books’ making up his weighty (even by Renaissance standards) tome *De rebus naturalibus in libros Aristotelis de anima* of 1590. Zabarella even apologizes for defending the mainstream view at such length, since it is a traditional chestnut. Aside from a few diehard Ockhamists and a few materialists who wanted to identify the biological bases of all psychology – too far ahead of their time – the mainstream view was part of the prevailing intellectual climate; philosophers instead put their energies into determining the relative standing of the psychological faculties, in particular whether the intellect is dependent on the will or conversely. The real distinctness of the faculties seems not even on the table for discussion.

What happened? Descartes could breezily dismiss the whole mediæval tradition, clearly alive and well in his day, with a throwaway that seems almost lifted from Ockham at the end of *med. 6* (86):³⁴

Neither can the faculties of willing, sensing, thinking, and so on be called

goes too far when he says that Ockham's view was the “common opinion” of Oxford at the time.

³³ Translation in Zupko [1989].

³⁴ Neque etiam facultates uolendi, sentiendi, intelligendi etc. eius partes dici possunt, quia una et eadem mens est quae uult, quae sentit, quae intelligit.

‘parts’ of [the mind], since it is one and the same mind that wills, that senses, that thinks.

A cartesian soul is itself a substance, related to but really distinct from the substance which is its associated bodily machine. It is notoriously a “thinking thing,” a *res cogitans*. According to *med. 2*, a thinking thing is something that “doubts, understands, affirms, denies, wills, refuses, and also imagines and senses (*imaginans quoque et sentiens*)” (28). Descartes defines “thought” in the appendix to his *Replies to the Second Objections* as “all that of which we are conscious of operating in us, and that is why not only understanding, willing, and imagining but also sensing are thoughts” (160). Indeed, Descartes more than once speaks of sensations as ‘confused’, as when he states in *med. 6* that “all these sensations of hunger, pain, thirst, and so on, are nothing other than certain confused modes of thinking” (81). Therefore, thinking and sensing are treated on a par as phenomena which are equally grounded in the same thing, namely, the cartesian soul itself, distinguished only by degrees of clarity and distinctness. Pains, perceptions, ideas, and truths are the immediate subjects of non-representational awareness; at least some of these elements are themselves representational, where ‘representation’ is analyzed as the presence of what is represented in objective being. The assimilation of sensations – pains and perceptions – to ideas and truths is motivated by construing the living body as a well-functioning automaton; the distinction among psychological phenomena seems to be grounded on the distinction between degrees of clarity and distinctness (although there may be non-trivial distinctions on the basis of representative character). With the location of (second-grade and third-grade) sensing on the side of the cartesian soul, divorced from the physiological sense-organs of the bodily machine, Descartes has created a unitary ‘inner space’: the mind. A distinction of subject and object is possible, but the highly articulated Scholastic framework of distinct faculties is not present; the cartesian soul contains only a self and its ‘thoughts’ (including volitions), confused or otherwise.

The factor that brought the inner cathedral to ruins, I suggest, is eliminating the gap between the sensitive and the intellective souls, on the side of the intellect. Once the real distinction between animal souls and human souls had collapsed – possible since Descartes rejected the idea that animals have souls – there was no reason to keep the other fundamental distinction, that of the cognitive and the affective, in place. Descartes himself, of course, hung onto the distinction as well as he could; we learn in *med. 4*, for instance, that the intellect is finite whereas the will is infinite. But without a metaphysical distinction to support their distinctness, there was no reason to adopt the mainstream mediæval view, and the success of Cartesian philosophy, in

essence, razed the Inner Cathedral to the ground.

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