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Avicenna's *De anima* in the Latin West

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Avicenna's *De Anima* in the Latin West

The Formation of a Peripatetic Philosophy of the Soul
1160–1300

Dag Nikolaus Hasse
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PREFACE

The 'errors' of Avicenna have vexed Western thinkers since the thirteenth century. When it appeared to some Catholic scholars in the 1920s that Avicenna’s impact on medieval thought might have been on the scale of that of Averroes, they had to integrate him into the then prevailing view of the thirteenth century: a period of condemnations, of movements dangerous to Christian belief, and of errors. Much of this turmoil seemed due to false interpretations of Aristotle's true philosophy, and the culprits at hand were the Arabs, who had hidden the pure Aristotle beneath a Neoplatonic veil. It was the wrong time for Avicenna to re-enter the history of Western thought; and as so often happens when one starts on the wrong foot, the next step is unbalanced as well. Hence, in recent scholarship hostile to the older interpretation, Avicenna is portrayed as the foreign rebel, the Muslim challenger to the authority of Christian thought, who introduced the West to the use of reason in science and religion. But whether he was seen as a culprit or rebel, in substance the perception of Avicenna remained the same.

We therefore need to look again at Avicenna’s place in the thirteenth century: not as a footnote to Aristotle, nor as a danger to confessionalists, nor yet as a role-model for their post-modern counterparts, but as a philosopher in his own right. Few have taken him seriously, because in the end he lost against Aristotle and Averroes in the competition to be the leading philosopher in the West. But to be impressed by the contingent verdict of history is to underestimate a philosopher powerful enough to eclipse Aristotle and to dominate philosophy in the Arabic East for centuries. If we are to be fair and pay our tribute to Avicenna, we should make him the protagonist of his own story, that is, we should look at the reception of his thought in the West as an autonomous phenomenon with its own chronology and not merely as a function of other developments. If we adopt this perspective, the emphasis falls on his most frequently copied and quoted philosophical work, the Kitab an-nafs or De anima, his book on the soul. The present study is concerned with the history of its influence on the Latin West.

It was Etienne Gilson who first examined closely the Western fate of Avicenna’s De anima; and one can truly say that after his seminal studies of the late 1920s Avicennism became a key topic among medievalists. Gilson’s starting point was Thomas Aquinas and the latter’s criticism of the Augustinian theory of intellection. In an attempt to explain why Thomas turned against one of the highest authorities of Christian learning, Gilson came to the conclusion that Thomas had reacted against a doctrinal current which connected Augustinian theories about illumination with those of Avicenna. This current he labelled ‘Avicennized Augustinianism’.
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Gilson's thesis aroused controversy. In 1934, Roland de Vaux made it even more radical by claiming that there existed a heterodox Avicennian movement in the West, which he called 'Latin Avicennism', which, he claimed, came to be a danger to Christian belief. This in turn provoked numerous refutations, of which the most important were those by Fernand Van Steenberghen and Ermenegildo Bertola. Gilson's brilliantly written, but highly speculative studies influenced subsequent scholarship not only on the Latin Avicenna but also on the intellectual position of many medieval writers. Scholars before Gilson had been aware of Avicenna's influence on the psychology of Albertus Magnus; but Gilson succeeded in diverting attention towards Thomas Aquinas and William of Auvergne – a misleading shift in focus.

After Gilson (who, it must be admitted in fairness to him, has often been misunderstood) there have been several brief surveys of Avicenna's Western influence, which merely reiterate previous scholarship (Goichon, Afnan, Ulken, Van Riet, Verbeke, Davidson). Several significant case studies concerning his impact on particular scholastic writers have, however, appeared. The credit for raising our knowledge of Avicenna's impact on Western thought to a higher level by giving it a firm philological grounding, goes to Marie-Thérèse d'Alverny, who produced a catalogue of manuscripts, and Simone Van Riet, who published a multi-volume critical edition of Avicenna's philosophical works in the Latin translation. The recent revival of philosophical interest in Avicenna (e.g. Flasch, de Libera) has benefited from working within these new parameters.

A common weakness of almost all the studies mentioned above is that their 'Avicenna' is the Avicenna of the Latin translation. The most notable exception to this general neglect of the Arabic original is Simone Van Riet, whose editions contain a very useful Arabic-Latin apparatus criticus. As a rule, the Latin of Arabists is much better than the Arabic of Latinists, but it is seldom used. Given the enormous work still to be done in the field of Arabic studies, it is understandable, though regrettable, that Arabists do not make greater use of their Latin skills.

Twentieth-century scholarship on the psychology of the Arabic Avicenna – or Ibn Sīnā, to use his Arabic name – though modest in its beginnings, has seen remarkable progress. First, Fazlur Rahman provided both a critical edition of the Kitāb an-nafs from aṣ-Ṣifā‘ (i.e. De anima) and a number of studies which benefit from his excellent knowledge of the text and his acquaintance with the Greek commentators on Aristotle. Unfortunately, Avicenna's other psychological writings have not received editions of such a high standard, if any at all (e.g. the Māribīqiyūn).

It is not surprising that only a few scholars (Gätje, Marmura) have been able to improve our knowledge substantially at this stage. One of the main hindrances to research has been the lack of a philological assessment of Avicenna's own statements about the aim and standpoint of his philosophy, and even about his life and works. Dimitri Gutas's Avicenna and the Aristotelian Tradition (1988) has now filled this gap and given Avicennian scholarship a new and more solid foundation. In the last few years the level of philosophical analysis of Avicenna's theory of the soul has risen considerably: Herbert Davidson has studied the theory of the intellect; Jean Michot has published studies and translations on religious aspects of Avicenna's psychology; and Deborah Black has investigated his theory of estimation.

There thus exists a more solid philological and historical basis for a new attempt to comprehend the role of Avicenna and his theory of the soul in the history of Western thought. Nevertheless, the situation is far from ideal. On the Arabic side, not only is there a dearth of reliable editions, but there is also a total absence of apparatus fontium or detailed accounts of the sources of Avicenna's psychology. To study these sources, in particular the Greek commentators on Aristotle, is beyond the scope of this survey. Throughout the book, I have therefore adopted the method of scriptura sui ipsius interpres and have aimed at elucidating Avicenna's standpoint by collecting evidence from his own works. Avicenna's œuvre is, in fact, a paradise for practitioners of the sola scriptura method. His many different philosophical treatises represent different stages in a continuous process of reworking his position within the Peripatetic tradition and eventually emancipating himself from it. Consequently, for most of his psychological doctrines, one can find counterparts in works earlier and later than De anima. I only depart from the sola scriptura method to compare Avicenna's standpoint with the major source and role-model of his philosophy, Aristotle. This seems an especially appropriate approach since most of the scholastic writers examined here did not yet know the Greek commentators on Aristotle's De anima.

On the Latin side, we are far from having a complete set of editions for all psychological treatises written between 1160 and 1300. This is immediately apparent from René Antoine Gauthier's survey of commentaries on Aristotle's De anima between 1240 and Thomas Aquinas (in the preface to his edition of Thomas's commentary). Half of these commentaries have not been published. The manuscripts considered in the present survey are mostly of writers of the first half of the thirteenth century, when Avicenna's influence was particularly strong. In general, the core material of the book consists of Latin sources that treat psychology as a primary subject. This includes sections on the soul in longer works, such as Michael Scot's chapter on the soul in his Liber introductorius, but excludes, for example, Robert Grosseteste's sermon Ecclesia sancta celebrat, which touches upon psychological matters, but does not devote a separate section to it. Hebrew and medical sources, as well as highly conservative sources that do not take account of either Aristotle or Avicenna, are mentioned only in passing (e.g. Pseudo-Robert Grosseteste, De anima).
My approach to Avicenna’s influence is to move from the general to the specific. The first part of the book analyses the impact of Avicenna’s *De anima* as a whole on the structure and method of Western psychological writings in the twelfth and thirteenth centuries. As will become clear, the story of the rise and decline of Avicenna’s *De anima* as a methodological model for philosophers and theologians is largely identical with the history of psychology in this period. It opens with Dominicus Gundissalinus’s *Liber de anima* and ends in the second half of the thirteenth century, when the scholastics came to prefer other formats, notably the commentary, for their psychological writings.

The second part of the book turns from questions of genre and approach to specific doctrines. Each chapter is an entity in itself and leads from an analysis of a particular Avicennian theory to its understanding and reception in the Latin West. Instead of covering all the theories laid out in *De anima*, six representative doctrines have been chosen and are presented in the order of their appearance in *De anima*: the Flying Man as part of Avicenna’s discussion of the notion of the soul in general (*De anima*, book one); shellfish and nerves as an example of the theory of sense perception (book two); optics as the topic treated most extensively in *De anima* (book three); estimation and ‘intentions’ as an example of the theory of the internal senses (book four); prophecy as a theory which connects several core notions of Avicenna’s philosophy (books four and five); and intellect as an aspect of Avicenna’s theory of the rational soul (book five).

The last two topics present the particular difficulty that they seem to be linked with metaphysical ideas and to demand an investigation of Avicenna’s *Metaphysics* and its reception. It turns out, however, that this is a problem only for the modern reader: Avicenna makes a straightforward division between what belongs to natural philosophy and what to metaphysics (see, for example, *De anima*, ed. Van Riet, IV, 2, p. 28 and V, 5, p. 132). In addition, the pattern of dissemination of the *Metaphysics* and the period of its main influence, the late thirteenth century, were also different from that of *De anima*. Avicenna’s metaphysical doctrines will therefore be discussed only when scholastic writers connected them with his psychology.

Consideration of the social background, of universities, countries, courts, libraries, religious orders, schools, church organization and especially condemnations has been deliberately left aside, partly because it seemed preferable to let the sources themselves determine the topics. The story of the influence of Avicenna on thirteenth-century psychology can – and perhaps should – be told with no more than incidental reference to the condemnations or the social background. But now that the story has been told, I hope it will be fruitfully linked with a larger context by other scholars.

The last part of the book consists of an *Index locorum* containing all quotations and adaptations of Avicenna’s *De anima* in the Latin West found in the body of sources described above and in several other texts dating from between 1160 and 1300. The Index comprises c. 1600 quotations ordered according to the passages in Avicenna from which they are drawn. Instead of giving complete references in the course of the book, I often refer to the *Index locorum*. It hardly needs to be pointed out that the Index is far from complete, given the many treatises not yet edited and the fact that important works, such as half of the *Opera omnia* of Albertus Magnus, still lack indexes. I have turned many pages with the constant fear of overlooking a reference, and obviously there is room for improvement: *Quae me fugerant, ali facile reperient*.

It remains for me to thank all those who have helped and advised in writing this book. It was in the medieval Latin and Arabic seminars of the University of Göttingen that my attention was first drawn to the encounter of Arabic and Latin cultures in the Middle Ages. I am grateful for the advice and encouragement of Fidel Rädle, Otta Wenskus, Ulrich Rudolph and Peter Bachmann. When, as a postgraduate at Yale University, I was exploring several Arabic-Latin subjects with an eye to future study, Dimitri Guas aroused my interest in Avicenna. I wish to thank him for this, for the very enjoyable and intense year at the Near Eastern Languages and Civilizations Department, and for the many hints and pointers which he continued to provide after I had left. Above all, my gratitude goes to Charles Burnett, who was the supervisor of my doctoral dissertation written at the Warburg Institute, which was the precursor of the present book. This gratitude pertains not only to all I have learned from him in these years, but also to the constant exchange and dialogue with him on matters scholarly and personal, which made my stay at the Warburg Institute so pleasant. I should also like to thank Jill Kraye – everyone knows how much that is produced at the Institute is indebted to her knowledge and care, and my work benefited from both. The Warburg Institute proved to be an ideal place for working on cross-cultural topics and I am grateful to the Director Nicholas Mann, the staff and the students for the scholarly atmosphere which was so conducive to my work. At the Institute there are many people to whom this book is indebted, and my heartfelt thanks go to all of them and especially to Christopher Ligota. The Arabic part of my study benefited from the informal reading class on Arabic philosophy held at the Institute and from the philological competence of Fritz Zimmermann and Rob Wisowsky. The librarians of the Warburg Institute were of the greatest help, responding without complaint to my requests to buy books. The final version of the book was written at my present academic home, the University of Tübingen: I am grateful for the warm welcome I was given there. My thanks extend to a number of scholars I have enjoyed discussions with, and from whom I have learnt while working on Avicenna, especially Silke Ackermann, Henryk Anzulewicz, Frank Bezner, David d’Avray, Luc...
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Dag Nikolaus Hasse
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Note on terminology:

— *Peri psychē* refers to Aristotle's *De anima* (Περὶ ψυχῆς);
— 'psychology' means theory of the soul and excludes modern connotations;
— 'Aristotelian' is used to refer to Aristotle's own theories, books, etc. only, and not to those of his followers;
— 'Peripatetics' refers to Aristotle's Greek and Arabic followers, but not to Aristotle himself; the same applies to the adjective 'Peripatetic';
— 'Avicennian' does not imply a doctrinal current;
— 'Avicennist' applies only to a doctrinal current;
— 'Arabic' puts the emphasis on the language;
— 'Arab' puts the emphasis on the ethnic group;
— 'Islamic' puts the emphasis on the religion and culture.

The transliteration of Arabic follows the rules laid down by the Deutsche Morgenländische Gesellschaft, with the exception that I have used the diphthongs *aw* and *ay* instead of *au* and *ai*. The Latin is quoted in a standardized version, even if the edition or manuscript employs medieval spelling: *ae* for *e* where appropriate, *ti* for *d*, *i* for *y*, *v* for *u* where appropriate. Punctuation is modernized and adapted to the expectations of English readers.

[...] deletion

<...> phrases in my English translation that do not have a direct equivalent in the original

(*italics*) explanatory remarks

INTRODUCTION

*De anima* is Avicenna's most comprehensive work on the soul. It was written as part of *ār-Šifāʹ* ('The Cure'), an enormous compendium covering logic, natural philosophy, mathematics and metaphysics. Avicenna started to work on *ār-Šifāʹ* not long before AD 1021 (412 AH), when he was in Hamadān serving as vizier to the ruler Šams ad-Daula. The city was captured in 1023–24, and Avicenna moved to Isfahān, where he completed the book by 1027 at the latest. *De anima* was very probably written in Hamadān between 1021 and 1024, as part of the section on natural philosophy.¹

It is a common mistake among Western medievalists to call Avicenna's *De anima* a commentary on, or paraphrase of Aristotle's *Peri psychēs*. The true character and purpose of the book is obvious both from Avicenna's prologue to *ār-Šifāʹ* and from testimonies by his secretary Gūzgānī. To quote the latter's introduction to *ār-Šifāʹ* written shortly after Avicenna had completed the work:

The hope of ever obtaining his lost works having dimmed, we asked him *i.e.* Avicenna* to rewrite them and he said: 'I have neither the time nor the inclination to occupy myself with close textual analysis and commentary. But if you (p/.)* would be content with whatever I have readily in mind *Which I have thought on my own, then I could write for you (p./.) a comprehensive work arranged in the order which will occur to me*. We readily offered our consent to this and urged that he start with Physics.²

What is meant by 'close textual analysis and commentary' is more obvious from Gūzgānī's other testimony: 'Then I asked him myself to comment upon the books of Aristotle, but he answered that he had no leisure at that time.'³ It can be inferred from these passages that Avicenna in fact had written commentaries on Aristotle in his youth, but that they were already lost by about AD 1020 when he started to write *ār-Šifāʹ*. This book then is *a comprehensive work arranged in the order which will occur to me*. In the prologue to the part on natural philosophy (which includes *De anima*) Avicenna says that he will write about natural philosophy 'in the manner established by our opinion and arrived at by our theoretical investigation. The arrangement on this occasion will correspond to that followed in Peripatetic

1. Only the first 20 folios of the section on natural philosophy were completed before 1021; *De anima* is part six out of eight (cf. the Latin title *Liber sextus de naturalibus*). We owe most of the information on the genesis of *ār-Šifāʹ* to Gūzgānī, Avicenna's secretary. See Gutas, *Avicenna*, pp. 41 and 101–12.
3. Ibid., p. 101, slightly changed.
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philosophy. De anima, therefore, is a comprehensive compendium of the theory of the soul; it is arranged for the most part according to the Peripatetic tradition but presents Avicenna's own philosophy.

The work is divided into five sections which cover the following topics: the general notion of the soul (book one); the faculties of the vegetative soul and the external senses except vision (book two); vision (book three); the internal senses and the motive faculties (book four); and the rational soul (book five). A closely argued philosophical work of 468 pages (in Van Riet's edition) is not easily summarized; nevertheless, if the history of its influence is to be intelligible, its contents have to be sketched out and its terminology explained.

The soul is defined as the perfection of the body. Although it cannot be proved it is obvious to intelligent people that the soul exists independently of the body (I,1). The soul, defined in itself, is a substance. The soul is one; from it the faculties flow into the organs (I,3). There are three vegetative faculties (nutrition, growth, reproduction). There are two kinds of motive faculty: one which orders, the other which performs. There are five external and five internal senses. There is a practical and a theoretical intellect. The latter has four different relations to intelligible objects: the first three levels (material intellect, intellect in habitu, intellect in effectus) are increasingly higher dispositions to reach the fourth level (acquired intellect), which is a temporary actualization of the third (I,5).

There are different degrees of abstraction, extending from sense perception to intellection (II,2). Flesh and nerves are the natural instrument of touch; there is no medium (II,3). The process of smelling happens when the medium is either mixed with particles from the object or permuted by it (II,4). Sound is the product of the undulation of air or water when pressed between two objects (II,5).

The elements involved in the process of sight are natural light, acquired light and the translucent (III,1–4). The correct theory of vision is that of the intromission of visible forms, which are conveyed without any change in the medium or any lapse of time. Their transmission proceeds in the internal senses (III,5–8).

As for the internal senses, imagination stores the sensible forms perceived by the senses and collected together by common sense (IV,1). The imaginative/cognitive faculty combines and separates these forms. If it acts freely (as in sleep or madness), unreal forms are perceived. In some people the imaginative faculty and the soul are so powerful that they have visions in waking life (IV,2). Estimation instinctively perceives connotational attributes (the so-called 'intentions'), which are relational attributes (such as hostility) that exist in the object perceived. Estimation then forms a judgement. Memory stores these connotational attributes (IV,3). The soul has an influence on matter, i.e. its body. Some people's souls are even able to influence external matter; this is one of the properties of prophets (IV,4).

The rational soul is not a body, nor does it subsist in a body (V,2). The senses assist in the process of intellection, but only up to a certain point. The human soul comes into existence together with its particular body. It is individuated by certain dispositions, which ensure its continued individuation after the death of the body (V,3). It is immortal (V,4). The universal forms, which are abstracted from the particular imaginable forms in the soul, flow into the human intellect from the active intellect, which is separate (V,5). There is no storehouse for intelligibles in the soul. The acquisition or re-acquisition of an intelligible form depends upon the skill or predisposition of the soul to hit upon the middle term of the syllogism by intuition. A very highly developed ability of intuition is a prophetic property (V,6). There is only one soul in each living being (V,7). The soul reigns over the body by means of the heart (V,8).

Apart from De anima, Avicenna wrote a number of other psychological works. None of them (except the Canon medicinae) was available in Latin in the twelfth and thirteenth centuries; nevertheless, they will be used in the present study to clarify Avicenna's position in his De anima. The major works are, in chronological order:

1. Compendium on the Soul (ed. Landauer): written at the age of about eighteen; it follows the order of Aristotle’s Peri psychēs, but is independent of it.
2. De anima.
3. 3. an-Nāqṣa (The Salvation), section on the soul: written after the completion of al-Sīfā; it does not contain new material, but is a compilation from earlier works, in particular (but not exclusively) from De anima.
4. Dāneināme, section on the soul: written in Persian for the ruler 'Alā ad-Dawla; al-Gazālī (Latinized as Algazel) produced an 'intelligent reworking' of it in Arabic, the 'Intentions of the Philosophers' (Maqāsid al-falāsiṣfa), which was translated into Latin; the 'Tabāifat al-falāsiṣfa, Gazālī's 'Refutation of the Philosophers', was not translated, and in the Latin West he was therefore generally thought to be a straightforward follower of Avicenna.
5. al-Mašīqīyin (The Easterners), section on the soul: the work was erroneously believed to contain Avicenna’s mystical ‘oriental philosophy’; the section on the soul is largely identical with that of De anima, but much shorter; it concentrates on Avicenna’s own conclusions in the earlier work.
6. Canon: Avicenna’s main medical work; book one contains a discussion of the philosophers’ and physicians’ psychology.
7. al-‘Ibrār wa-t-tamāniḥāt (Pointers and Reminders), psychological section: a late

4. Ibid., p. 295.
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magnum opus on the same topics as the previous compendia; written in the peculiar method of hints and pointers.

There is some controversy among scholars about the chronology of Avicenna's writings, but the overall development of his approach to philosophy seems clear. It leads from his first tentative and brief treatises on topics belonging to the Peripatetic tradition to proper commentaries on Aristotle's works, of which none survive, and then to the great summa of Peripatetic philosophy, al-Sifā', in which Avicenna abandons textual analysis and critical engagement with his predecessors. In subsequent works, he further emancipates himself from the Peripatetic tradition by making extracts and writing expositions not of Aristotle's works but of his own. The Ibarat wa-t-tambilhāt mark the culmination of this development in that Avicenna merely states the conclusions of his philosophy, addressing himself only to those able to understand.

In the middle of the twelfth century, Avendauth 'Israelita' writes a Latin letter to an unnamed important person, whom he addresses as 'dominatio vestra':

Wishing to excite the appetite of your studious soul for the translation of a book by Avicenna, which he called 'Asschiphe', meaning 'Sufficiens', I have undertaken to translate for your sovereignty from Arabic into Latin several chapters on general aims which he put at the beginning of his treatment of logic at the opening of this book. But since in most manuscripts one can find at the beginning of the entire book the prologue of one of Avicenna's disciples, from which one can derive much information about the life and works of this writer, I decided to translate this prologue together with the aforementioned chapters.

The 'chapters on general aims' that Avendauth refers to must be Avicenna's own preface and table of contents to al-Sifā', which accompany Avendauth's letter in the manuscripts. We do not know the reaction of the addressee to this advertisement of a translation, but it must have been encouraging. For we have from Avendauth the Latin translation of De anima, which he produced in Toledo in collaboration with the archdeacon Dominicus Gundissalinus. The preface to this translation tells us that the work was ordered and paid for by John, Archbishop of Toledo, to whom it is dedicated and who is therefore likely to be the 'dominatio vestra' of Avendauth's letter. This fixes the date of the translation between 1152, the death of Archbishop Raimundus, and 1166, the death of his successor Archbishop John of Toledo. The text of Avendauth's preface — the earliest Latin comment on Avicenna's book — is as follows:

The philosopher Avendauth the Jew announces the grateful obedience of service he owes to John, the most reverend archbishop of the seat of Toledo and the primate of the Spains.

Although everyone is composed of soul and body, not everyone is as certain about the soul as about the body. Whereas the latter is accessible to the senses, the former can be reached by the intellect alone. Hence, those devoted to the senses either believe that the soul is nothing, or, if they happen to suspect its existence on the ground of the body's movement, most of them take on faith, and few show by reason, what it is and what kind of thing it is. For it is unworthy of a human being not to know the part of himself by which he knows, and not to be able to understand with his reasoning that part by which he is rational. How could he love himself or God, if he is shown to be ignorant about that which is best in himself? For a human being is inferior to almost every creature with regard to his body; he surpasses the rest only with regard to his soul, in which he carries the likeness of his creator more evidently than the rest.

Therefore, I took pains to carry into effect your command, Sir, of translating the book of the philosopher Avicenna on the soul, so that by your provision and by my labour the Latins will have firm knowledge of something hitherto unknown, namely of whether the soul exists, and what it is and what kind of thing it is with respect to essence and effect — corroborated by very true reasons.

Here then you have this book, translated from the Arabic: I took the first steps in the translation of part of al-Sifā' which is headed 'capitulum de universalibus translatum ab Avaendauth de Libro Avicennae de loyoce' (Avendauth, Avicenna latina. Codices, pp. 40, 78, 93, 99, 125, 142, 157, 174, 190, 220).

This is for three reasons. First, the chapter on universals is transmitted in many more manuscripts than the letter with the prefaces. Second, the specimen of Avendauth's translation is put (by Avicenna) at the beginning of his treatment of logic at the opening of this book; this is true for Avicenna's preface and the table of contents — which together form the first fold of the Ibarat in the Cairo edition, pp. 9–11 — but is not true for chapter twelve of the Ibarat. Third, Avendauth in the translation of Avicenna's preface uses intentio only for yudr (purpose), but not for ma'ta (concept, meaning) (ed. Birkenmajer, p. 98, line 10, and p. 101, line 92). Thus, his phrase 'capitula intentionum universalium' may well mean 'chapters on general aims'.

10. See Van Riet, 'La Traduction latine du "De anima"', p. 95; Rivera Recio, La Iglesia de Toledo, v. 1, p. 123; Rivera Recio, Los Arzobispos de Toledo, pp. 21–6. Archbishop John of Toledo, formerly bishop of Segovia (1149–52), was a Frenchman: Jean de Castelmoron-sur-Lot (Burnett, 'Magister Johannes Hispalensis et Limienses', p. 236, n. 38).
and read out every word as it is spoken by the people; and the archdeacon
Dominicus turned each word into Latin. In the book, the author, as you will
notice, has collected together what Aristotle said in his books: *On the Soul, On
Sense and What is Sensed, and On Intellect and What is Intelliged*, hence, after you
have this book, God willing, you should not doubt that you have these three
works fully contained in it.12

Avendauth has been convincingly identified with Abraham ibn Daud, the Jewish
historiographer and philosopher, for whose own writings Avicenna's *De anima* was
an important source. Ibn Daud was born in Toledo, studied in Cordoba and
returned to Toledo, probably around 1148, to escape the persecutions of the
Almohads, the intolerant new Muslim rulers. He died in Toledo around 1180.13
It is possible that it was because he had written to the archbishop that Avendauth
established contact with Dominicus Gundissalinus, his fellow translator, who was
the archdeacon of the district of Cuéllar in the diocese of Segovia between 1162 and

11. The first two titles clearly refer to Aristotle's works *Peri psychê* and *De sensu et sensato*, but the third recalls the title of works by Alexander of Aphrodisias (*Makala fi l-i'âq, ed. J. Finkenauer* + *De intellectu et intellecta, ed. Théry*), Alkindi (*Risâla fi l-i'âq, ed. Boyojes + *De intellectu et intellecta, ed. Gilson*). Given the very limited knowledge of *De sensu et sensato* in the Arabic world (see Gätje, *Studien*, pp. 81–92, in the 1980s a manuscript with an Arabic translation of the *Parta naturalia* was found), it is likely that Avendauth's knowledge of 'On Sense and What is Sensed' and 'On Intellect and what is Intelliged' rests on hearsay. This agrees with the fact that Ibn Daud, the first Aristotelian in Jewish philosophy, holds Aristotle, 'the chief of the philosophers', in great esteem, but does not seem to use either Aristotle's *De sensu et sensato* or the treatises on the intellect by Alexander, Alkindi and Alfarabi; instead, he relies mainly on Avicenna's *De anima* and Aristotle's *Peri psychê* (see Fontaine, *In Defense of Judaism: Abraham ibn Daud*, pp. 40, 82, 253–4, 256–7).

12. I follow the version of the Latin text as edited by Van Riet, giving significant divergent readings in brackets (for a comparison with the prologue of Gundissalinus's *Liber de anima* see pp. 13–15 below). See Avicenna, *De anima*, I–III, ed. Van Riet, pp. 103*-104* and 1–4 (and Van Riet's careful analysis on pp. 91*-103*): 'Iohanni Reverentissimo Toledoensi sed archiepiscopo et Spaniarum primatii, Avendauth israelitam, philosophum, gratum debiteo servitutis obsequium. Cum omnes contenti ex anima et corpore, non omnes sic certi sunt de anima sicut de corpore. Quippe cum illud sensui subiaceat, ad

13. See d'Alvemy, 'L'introduction d'Avicenne en Occident' (1951), p. 13, and 'Les Traductions à deux interprètes' (1989), p. 197, n. 1). Firstly, the translation *causa* for *causa* or *a's* ('thing') appears only in two passages (chapter IV, 2, 218–3); 'Sed propterea mutus eius <scil. virtutis imaginativa> ... fit ex rebus singularibus quae non numerantur. Omnia autem oportet ut origo rei in hoc scilicet qua sua ...'. Avicenna says here that he is not going to enumerate the causes for a certain characteristic function of the imaginative faculty, but only to mention the basic cause in a general way. The term *causa* would be a more precise translation, but *res* certainly does not mar the meaning. In fact, the phrase *origo rei* is the more elegant translation (for *a's* or *a*-'s) since it does not double the sense as *origo causa* would; this may have convinced the translators to use *res* in both sentences. In sum, the translations are carefully chosen – which makes it hard to imagine that Avendauth read out *causa* and that Gundissalinus then decided whether he would chose *res* or *causa*.

14. For a different view holding that a Romance language was used as an intermediate, see d'Alvemy, 'Les Traductions à deux interprètes', pp. 194–7. But cf. preceding note.

15. The entry 'Iohannes Hispanus' in Schultheiss/Imsbach, *Die Philosophie im Intonischen Mittelalter*, pp. 486–7, treats as one person what are three different translators working in Spain: (1) Avendauth, (2) *Magister Johannes Hispanus*, the second collaborator of Gundissalinus on the translation of Algazel and Avicenna, working in the second half of the 12th century (see the articles by Rivera Recio and Burnett referred to in n. 14 above), (3) John of Seville, the translator of many astrological texts in the first half of the 12th century.


18. See Van Riet, 'La Traduction latine du "De anima"', pp. 95–98. I am not convinced by d'Alvemy's argument that the confusion between the terms *res* and *causa* in the Latin translation of *De anima* goes back to the use of the vernacular term *causa* in the translation process of D'Aquino, *L'introduc­tion d'Avicenne en Occident* (1951), p. 13, and 'Les Traductions à deux interprètes' (1989), p. 197, n. 1). Firstly, the translation *causa* for *a's* or *a*-'s ('thing') appears only in one passage (chapter IV, 2, 218–3): 'Sed propterea mutus eius <scil. virtutis imaginativa> ... fit ex rebus singularibus quae non numerantur. Omnia autem oportet ut origo rei in hoc scilicet qua sua ...'. Avicenna says here that he is not going to enumerate the causes for a certain characteristic function of the imaginative faculty, but only to mention the basic cause in a general way. The term *causa* would be a more precise translation, but *res* certainly does not mar the meaning. In fact, the phrase *origo rei* is the more elegant translation (for *a's* or *a*-'s) since it does not double the sense as *origo causa* would; this may have convinced the translators to use *res* in both sentences. In sum, the translations are carefully chosen – which makes it hard to imagine that Avendauth read out *causa* and that Gundissalinus then decided whether he would chose *res* or *causa*.

1181, and who was resident in Toledo.14 Their method of translation is explained
in the preface to *De anima*: Avendauth first read out every word of the Arabic
original 'as it was spoken by the people' ('singula verba vulgariter proferente'), and
Gundissalinus then turned it into Latin ('Dominico archidiacono singula in latinum
convertente').15 The meaning of the word *vulgariter* ('as spoken by the people') is
ambiguous: it may refer either to a vernacular Romance language or to vulgar Latin
or to spoken Arabic. Given that Avendauth uses the word *proferente* ('reading out',
'pronouncing') to describe his activity rather than *convertente* ('translating'), and
given that there are no traces of an intermediate language in the Latin translation,16
it is most likely that Avendauth read out the Arabic text word for word and that
Gundissalinus, who presumably understood Arabic but did not read the language,
 wrote down the Latin equivalent.17 The outcome is a literal translation of some
quality, as will repeatedly emerge in the present study; it certainly surpasses the
modern French rendering by Jan Bakoš. *De anima* seems to be the only translation
these two scholars produced together; in other translations Gundissalinus
collaborated with 'Magister Johannes Hispanus'.18

The translation of *De anima* by Avendauth and Gundissalinus is extant in fifty


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manuscripts, of which thirty-five were copied in the thirteenth century, fourteen in the fourteenth, and one in the fifteenth.19 Judged by the sheer number of manuscripts, De anima was Avicenna's most influential philosophical work, followed by the Metaphysics with twenty-five.20 The textual tradition of De anima is complicated by the fact that it is extant in two recensions, called A and B by modern scholars. Simone Van Riet, the editor, has convincingly shown that someone who had recourse to the Arabic reworked the translation—especially the popular chapter 1,5—in the late twelfth or early thirteenth century. It is not impossible that this person was one of the translators. Van Riet decided to publish the version B, which is extant in the majority of manuscripts (thirty-one of the fifty), and to give the readings of version A in the apparatus criticus, represented by manuscripts P, N and V. She invested much labour in attempting to determine which of the versions preceded the other, but without success. Either version could be a reworking of the other. Van Riet in the end tentatively suggested that B was the older.21 The present study sheds new light on the question only with regard to the reception of the two versions. Dominicus Gundissalinus in his Liber de anima (c. 1170) and John Blund (c. 1200) quote version A.22 The quotations in Jean de la Rochelle's Tractatus (c. 1233–5) are predominantly in the wording of version A, whereas the newly added passages in his Summa (ca. 1235–6) usually follow version B.23 Albertus Magnus's De homine (1242–3) quotes version B. It may still be that version B was the original translation, which Gundissalinus reworked into version A before he wrote his Liber de anima, and that B was not used until it began to circulate in the first half of the thirteenth century. But it is more natural to assume that the reason why version B circulated several decades after A is that it was produced at a later date. In short, it seems likely that B is a reworking of the original translation A.

Avicenna's De anima was to become a bestseller among thirteenth-century writers on the soul, but it was not the only one. It was translated at about the same time as other texts of the Greek and Arabic Aristotelian tradition, most notably Aristotle's book on the soul itself. In Islamic culture, two and possibly three Arab translations of Peri psychê were made. The only complete one is anonymous and dates from the ninth century AD. Only fragments survive of the second translation, which was produced by Ishaq ibn Hunayn (d. AD 910).24 Averroes in his long commentary, which is not extant in Arabic,25 seems to have used a third version; of this we have only the Latin translation and the Hebrew version by Zeraiah Hên from 1284.26 From these translations developed a rich tradition of Arabic Peripatetic psychology; and Alkindi, Alfarabi, Avicenna and Averroes influenced both Latin and Hebrew philosophy. The present study is confined to the Latin tradition, which means that the interesting question of the influence of Avicenna's De anima on Jewish thought is left aside.27

Towards the middle of the twelfth century James of Venice translated Aristotle's Peri psychê from the Greek, in Italy or Constantinople.28 This version, which is extant in 120 manuscripts, is called the translatio vetus to distinguish it from the revision produced by William of Moerbeke between 1260 and 1269.29 Around 1220, an unknown scholar (who in only one manuscript out of fifty-seven is said to be Michael Scot) translated Averroes's long commentary together with Aristotle's Peri psychê from the Arabic.30 Thus, there existed two translations of Aristotle's Peri psychê in the Latin West: an early version from the Greek, a late one from the Arabic.

The introduction of the works of Aristotle and Avicenna (and later Averroes) into the Latin Middle Ages proved an enormous challenge to Western scholars. The translations of these books provided the West with hundreds of folios of systematic, terminologically refined and strictly philosophical teachings on the soul, which are unparalleled in early medieval psychology. This is not to say that the early Middle Ages lacked a long and rich, albeit largely unexplored tradition of psychological anonymous translation (wrongly attributed to Ishaq in the manuscript) was published by Badawi (1954). For the transmission of Aristotle's psychology in Islamic culture see in general (and most pertinently) Gätje, Studien zur Überlieferung der aristotelischen Psychologie im Islam (1971), and recently Ramon Guerrero, La Recepción arabe del De anima (1992), and Arzzen, Aristotelers De anima: en verlorene spätmittelalterliche Paraphrase in arabischer und persischer Überlieferung (1998), esp. pp. 690–707.

25. Averroes's synopsis of and middle commentary on Aristotle's Peri psychê are, however, extant. See the editions by Gómez Nogales (1983) and Ivey (1994). Averroes's middle commentary influenced medieval Hebrew psychology; see Davidson, Alfarabi, Avicenna, and Averroes, pp. 262–3 and 298–300.


27. For an example of the influence of Avicenna's De anima on Jewish thought see Fontaine, In Defence of Judaism: Abraham ibn Daud, chapter 5. See in general Pines, 'Avicenna', pp. 957–9.


29. See Minio-Paluello, 'Le Texte du "De anima" d'Aristote: la tradition latine avant 1500', pp. 221 and 226. William of Moerbeke seems to have revised the translation twice, once 1260 and again around 1266–9; see Wielockx, 'Guillaume de Moerbeke, réviseur de sa révision du "De anima"', pp. 113–85, and Verbeke, 'Les Progrès de l'Aristote latin', pp. 195–201. We still do not have a critical edition of James's translation; I have used the text printed in Stroick's edition of Albertus's De anima. See Gauthier's critical review of this edition in his 'Les Commentaires de la Féné', pp. 257–9.

30. See the prolegomena to Crawford's edition of Averroes's commentary, p. vii.


23. See p. 50 below.

24. See Frank, 'Some Fragments of Ishaq's Translation of De anima', pp. 211–4. The early...
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writings. The list of authors of texts on the soul is considerable: Alcuin, Hrabanus Maurus, John Scot Eriugena, Pseudo-Bede De mundi ... constitutione, Hugh of St-Victor, Adelard of Bath, William of St-Thierry, William of Conches, Peter Lombard, Alfred of Rievaulx, Achard of St-Victor, Isaac of Stella, Pseudo-Augustine Liber de spiritu et anima, Alan of Lille, Thomas of Cantimpré, to name only the most prominent. Early medieval psychology goes back ultimately to Plato and Aristotle, but its main direct sources are Calcildius, Augustine, Cassiodorus, and Pseudo-Dionysius.

For all the differences between them, there are standard patterns in these writings, which may be seen in the following quotation from Hrabanus Maurus's Tractatus de anima (first half of the ninth century):

I have therefore written for you <King Lothar> something about the definition of the soul, why it is called the soul and what the soul is; as well as on its origin and whether it is thought to have a form; also about its magnitude, whether it is smaller in children and bigger in adults, and where it is thought to have its seat principally; then, what its moral virtues are; also, a few words about its dwelling place, that is, its possession of the body.31

These questions reappear in many of the authors named above. In answering them they take up a great deal of Augustinian and Cassiodorian material, such as the distinction between intellectus, memoria and voluntas or between the desiring part, the irascible part and the rational part of the soul (which is Platonic in origin); but they use also Aristotelian teachings such as the definition of the soul as a perfection or the list of the five external senses. The question of the origin of the soul is concerned with whether new souls derive from previous souls (of the parents) or whether they are newly created by God, and if the latter, when. One frequently finds the inaugural tropos that it is most unworthy for the soul not to know itself, as it is the part of the human being most akin to God (Cassiodorus, Alcuin, William of St-Thierry, Isaac of Stella, Pseudo-Augustine). In a way then, these are theological treatises: they are written by theologians, they are theologically motivated and the authors specifically call attention to their use of material derived from the philosophi or the ancient sources in general.

The most important event in the course of the early medieval history of psychology is apparent in the twelfth-century theologian William of St-Thierry, who says in the prologue to De natura corporis et animae:

31. Hrabanus Maurus, Tractatus de anima, p. 1109: 'Scripti itaque vobis quasdam de diffinitione animae, quare anima dicatur vel quid sit anima; nec non et de origine ipsius, utrumque formam habere credatur; de quantitate etiam ipsius, utrum in parvisus minor, in fortiobus maior, vel ubi maxime sedem habe creduatur; deinde quae sint virtutes eius morales; paucas etiam de habitacio eius, hoc est corporis possessione.'

You should know that what you read is not mine, but <is drawn> partly from philosophers and natural scientists (physici), partly from ecclesiastical writers—not merely the contents of their works, but their very words and writings, as they have published them.32

The keyword here is physici; it refers to the medical sources translated in the later eleventh century from Arabic (and partly Greek) into Latin. In some cases these were rewritten rather than translated. Thus, William’s most important source is Constantine the African’s Theoria Pantegni, a reworking of the first part of ‘Ali ibn al-Abbâs al-Mağalla’s Kitâb Kâmîl as-fînâ’î a-tîbiyya. How does its influence manifest itself in William’s treatise? He divides the work into two parts: the first presents the theories of the philosophers and natural scientists; the second lays out what the ‘Church Fathers have learned from God and taught to the people’.33 Consequently, the latter part resembles Hrabanus’s Tractatus de anima in the topics treated and in the contents, whereas in the first we meet the new medical theories of the four elements and humours, the three spirits (naturalis, spiritualis, animalis) and their respective organs (liver, heart, brain) and a long treatment of the five external senses.

William of St-Thierry is particularly clear in his distinction between the medical and the theological tradition; he is very interested in the first. Other writers of this period such as Isaac of Stella, Pseudo-Augustine (De spiritu et anima) and Thomas of Cantimpré adopt the new learning only in fragments and integrate it into a predominantly theological framework. Still others, like William of Conches, use the format of a commentary on Macrobius, Martianus Capella, Boethius or Plato’s Timeus to discuss psychological issues connected with both the theological and the medical traditions.34

This was the situation when the Latin West became acquainted with the philosophy of the soul of Aristotle and Avicenna. Their work challenged not only doctrines— which will be treated in the second part of this book—but the entire medical traditions.

32. William of St-Thierry, De natura corporis et animae, prologue, p. 69: ‘Sciatis autem quae legis non mea esse, sed ex parte philosophorum vel physicorum, ex parte vero ecclesiasticorum doctorum, nec tantum eorum sensa sed ipse eorum sicut ab eis edita sunt dicta vel scripta.’

33. William of St-Thierry, De natura corporis et animae, p. 127: ‘... quid catholici patres a Deo didiciscint et homines docuerint.’ See the recent discussion of these passages in Ricklin, ‘Voe et vision’, pp. 24-7 and 37-8.

34. Unfortunately, questions of genre and attitudes towards the authorities in psychology have not yet received a proper study—nor has the history of early medieval psychology as a whole—and the reader can be referred to only a few works for further information and literature. A good introduction to early medieval psychology is given by Talbot, ‘Alfred of Rievaulx: De anima’ (1953), pp. 32-47. See also Werner, Die Entwicklungsgang der mittelalterlichen Psychologie (1876); Baumgartner, Die Philosophie des Alanus de Insulis (1896), pp. 88-106; Michaud-Quantin, ‘La Classification des puissances de l’ame’ (1949), pp. 15-34; d’Alverny, Alain de Lille: Textes inédits (1965), pp. 163–80; Bertola, ‘Di una inedita trattazione psicologica’ (1966), pp. 572–6; Mojaesch et al., ‘Seele’ (1995), pp. 12–13.
approach to psychology. It was not altogether clear what role the powerful new learning would play. There was no genre of philosophical treatises on the soul into which it could be integrated, nor was there a gap in the system of sciences waiting to be filled. Instead, the new psychology met with a strong current of theological treatises on the soul whose questions and answers were specific to Christianity. And the medical tradition, while it left its mark in many places, had only served to enrich the discussion; it had not established a new genre of physiological treatises on the soul. It is all the more remarkable that many scholastic writers tried to integrate into their account of psychology Avicenna’s systematically structured De anima, which presented a far greater methodological challenge than Aristotle’s Peri psychê. Still, Latin readers found a way – in fact many ways – to accomplish the integration. It is to this story of the formation of a Peripatetic philosophy of the soul that we now turn.

I. APPROACHES TO PSYCHOLOGY

1. DOMINICUS GUNDISSALINUS

The first treatise on the soul to incorporate material from the newly translated De anima of Avicenna was written by one of the translators themselves, Dominicus Gundissalinus, the Archdeacon of Cuéllar, who lived in Toledo. The treatise is called Liber de anima, and is attributed to Gundissalinus in two of the six extant manuscripts. Further indications that Gundissalinus is indeed the author of this treatise are, firstly, quotations by Albertus Magnus, who refers to its author as ‘Toletanus,’ and, secondly, the fact that the two main sources of the treatise are works which Gundissalinus knew very well, since he collaborated in their translation from the Arabic: Avicenna’s De anima and Avencebrol’s Fons vitae.

There is disagreement among scholars about how to characterize Gundissalinus’s Liber de anima: some stress the Christian background of the author, whereas others emphasize his secular approach, arguing that Gundissalinus integrates the Christian doctrine ‘into a secular edifice.’ There is a consensus that the treatise is a rather mediocre compilation. These judgements should be reconsidered. Let us take the prologue to the Liber
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It is closely modelled on the preface to the translation of Avicenna's *De anima*, which means that Gundissalinus re-used what Avendaouth had probably written jointly with him. Gundissalinus's opening sentences are almost identical with their counterparts in the preface to the translation. One should be careful, however, not to associate Gundissalinus's prologue too closely with the Arabic Peripatetic tradition; the fourth sentence recalls a rather traditional opening of Christian treatises on the soul of the early Middle Ages:

For it is not proper that a human being should not know that part of himself with which he knows, and that he himself cannot understand with his reason that part by virtue of which which he is rational; someone who is shown to be ignorant about that in which he is similar to God, will not be able to know fully either God or himself.

This is close in wording and content to passages in Cassiodorus's *De anima*, Alcuin's *De animae ratione* and the Pseudo-Augustinian *Liber de spiritu et anima*. Also, Gundissalinus's objective of drawing on the arguments of the philosophers can be found in early medieval writings on the soul: Cassiodorus uses not only Christian works but also *libri saeculares*, and Isaac of Stella states that he was asked to write not about the doctrines to be found in the Bible, but about the soul's essence and faculties, thus referring to philosophical theories. And again it is in Cassiodorus, on whose treatise Gundissalinus seems to have modelled the opening of the *Liber de anima*, that one can find the idea of bringing to light knowledge about the soul until now hidden away in books. With this in mind, a reader will find Gundissalinus's following sentences less secular than might have been thought:

Therefore I took care in collecting all rational theories about the soul which I found among the philosophers. Thus a work hitherto unknown to the Latins, because it was hidden in the secret places of the Greek and Arabic languages, has now by the grace of God, but nevertheless with great labour, come to the notice of Latin readers so that the faithful who work so hard for their soul know no longer by faith alone but also by reason what they should think about the soul.

How then does Gundissalinus arrange his newly acquired material? He does it in a rather clever way in that he divides the whole treatise into four parts by asking four traditional questions, which can also be found in earlier treatises on the soul. The answers consist entirely (with a few exceptions such as the end of the treatise) of passages pillaged from Avencebrol, Avicenna and Costa ben Luca, whose names are never mentioned. That the treatise is quadripartite can be seen immediately in the prologue: every question is introduced with the words *postea* or *deinde*. The first question is whether the soul is existent, the second asks what the soul is, the third concerns the soul's origin, and the fourth the soul's immortality and afterlife. That the author uses this scheme throughout the text becomes clearer if one follows the chapter headings of the earlier manuscripts and not those of the edition.

Now and then Gundissalinus inserts introductory and concluding sentences which deserve a longer investigation of their own. Here we can say only that for all questions he gives his own answer and thus adopts a particular standpoint (which itself is rather traditional): the soul exists (p. 32); the soul moves the body (p. 36, line 12); the soul is an incorporeal substance (p. 40, line 10); souls are created (p. 43); they are many in number (p. 47, line 10); new souls are created every day (p. 48, line 31); they are created out of prime matter (p. 58, line 13); the soul is immortal (p. 63, line 41); of all faculties of the soul only memory and the contemplative faculty remain after the death of the body (p. 103, line 10).

12. Gundissalinus, *De anima*, p. 31. The vocabulary is still similar to Avendaouth's and his preface to Avicenna's *De anima* (parallels in wording are indicated by underlining): *Quomodo* aequo de anima sapud philosophos rationabiliter didicere inveni, simul in unum colligere eorum qui opus diciueum hactenus incoptum utero in arcas gracie ac arabicae tantum linguae recensidum, sed iam per Dei gratiam quamvis non sine multo labore ad noziam latinorun est dedutum ut fideile qui pro anima tam studiose laborant quid de ipsa sentire debeant, non iam fide tantum sed etiam ratione comprehendant.


14. The heading 'Quomodo anima movet corpus' (ed. Muckle p. 33) introduces an appendix to the first chapter. There is no heading in MSS V, M and A (= Abeloos, 'Un cinquieme manuscrit'). The heading 'De viribus animae' (ed. Muckle p. 64) does not appear in MSS V, M and A either. Instead, one would like to read the heading (of V and A): 'Animae et de corpore quas retineat vires et quas non, quod ut appareat de viribus animae [Ac: eius] est tractandum'. This heading makes sense since it recalls a similar sentence in the prologue.

15. Gundissalinus favours the Platonic definition over the Aristotelian definition of the soul. After having explicitly said that Plato's definition is true (p. 40, line 11), he discusses Aristotle's view, but only to come back to the view of the soul as a spiritual substance (p. 42, line 6).
Let us now examine Gundissalinus's attitude to the philosophers and especially Avicenna. He names only two of them, Plato and Aristotle, the 'princes of the philosophers' ('principes philosophorum'), as he calls them. It would be wrong to deduce from this that Gundissalinus's main source is Aristotle and that Avicenna is used only to shed light on the Greek philosopher – implying that Gundissalinus in fact had written a commentary. One should be careful not to apply categories of the late thirteenth century to earlier writings, as one scribe did who added the phrase 'Explicit commentum de anima' in a thirteenth-century manuscript of Gundissalinus's work. A commentary is about explaining Aristotle, whereas a treatise is about knowledge of the soul, and Gundissalinus, as his prologue indicates, certainly wrote a work of the latter kind.

One might rather ask why Gundissalinus shows so little interest in Aristotle whom he quotes, as does Plato, only at second hand from Costa ben Luca's De differentia spiritus et animae. It is interesting to see that Gerard of Cremona and Gundissalinus working and translating at the same time in Toledo but choosing very different works for translation. While Gerard translated several Aristotelian treatises from Arabic into Latin (Analytica posteriora, Physica, Meteorologica), Gundissalinus concentrated exclusively on Avicenna and other Islamic writers like Alkindi, Alfarabi and Algalzel. He might have been influenced by his fellow translators or in general followed a vogue among the Jewish scholars he was in contact with. The fact that the psychology of Abraham ibn Daud – who was probably the same as Gundissalinus's collaborator Avendauth – is based mainly on Avicenna and not on Aristotle, fits into such a picture.

How does Gundissalinus make use of Avicenna's De anima? I have stated already that he takes large sections from the original and reproduces them verbatim. Of the two versions in which Avicenna's De anima is extant he uses version A (leçon A), which is not the text printed in Van Riet's edition. Avicenna is most extensively quoted in the fourth part, which consists of thirty-six pages of Avicenna quotations and six pages of Christian theories about the afterlife. Gundissalinus here reproduces the entire system of faculties developed by Avicenna. It is not true, however, that the Liber de anima is a 'mediocre compilation'. Not only is it well-structured, as has been shown above, it also reveals an excellent knowledge of Avicenna's text. An example is his presentation of Avicenna's distinction between the practical and the contemplative intellect (pages 84–6) where scattered passages from chapters I, V, I and V,2 are connected in a masterly way, thus forming a more coherent theory of the practical intellect than the one in Avicenna's book. What Gundissalinus presents here is his own reading of Avicenna's De anima, a reading which is not 'mediocre'. When he, for instance, quotes Avicenna's scheme of the four intellects, he omits all phrases containing the word comparatio, which are residual traces of Avicenna's original idea of modelling intellect on visual perception. Gundissalinus thus links the scheme of the intellects more directly with the preceding passage about different kinds of potentiality – which is his own interpretation of De anima. Other omissions point to the interests of the compiler: Gundissalinus does not include a single quotation from the lengthy third book of De anima, on optics, which he knows very well from his own translation. In general, one can see that he is much less interested in the theory of the senses than was Avicenna. A conspicuous omission is Avicenna's rather daring theory of prophecy by will-power and by intuition, which is the only part of chapter IV,4 which Gundissalinus does not quote: 'quia longum est de eis disserere' ('because the discussion would take too long'). To conclude: the Liber de anima is certainly a compilation, but compilations can be clever or unintelligent, and this is a clever one.

An open question is what influence the book may have had. Callus has claimed that the influence is 'oustanding'. This judgement, which is repeated by other scholars, is based on the studies of Wittmann, Kleineidam and Lottin, who in turn juxtapose the standpoints of different scholastic writers, without any textual evidence.
evidence that Gundissalinus's book was used. To my knowledge, Anonymous (Gauthier) and Albertus Magnus are the only writers to quote Gundissalinus's *De anima*, and apart from John Blund and these two writers, no one has been shown even to have known the book, which is extant only in six manuscripts. The situation is different in the Hebrew tradition. An anonymous scholar translated *De anima* into Hebrew at some time between 1160 and the late thirteenth century when the encyclopaedist Gershon ben Solomon of Arles inserted large sections of this translation into his *Sā'ar ba-Šamayim* ("The Gate of the Heavens"). Hillel ben Samuel of Verona (about 1220/25 to 1291/95) also quotes "expanded sections" in his *Sefertagnušl ba-nefiš* ("Retributions of the Soul"), translating directly from the Latin original. Thus the influence of Gundissalinus's *De anima* was perhaps more significant in Hebrew than in Latin.

2. JOHN BLUND

John Blund is the first master of arts we know of who wrote a treatise on the soul. This is his *Tractatus de anima*, rediscovered in the 1940s by Callus. The *Tractatus* is quoted by Blund's teacher Alexander Neckam in his *De naturis rerum*, written between 1197 and 1204, which fixes the date of Blund's work around 1200. From a poem written by Henry of Avranches in 1232, recommending John Blund for the post of archbishop of Canterbury, we know that he lectured on Aristotle in Oxford and Paris, very probably at the beginning of the century. He was made chancellor of York Cathedral in 1234 and died in 1248.

As one might expect from a master of arts, John Blund's approach to psychology is different from that of the translator in Toledo and of the many theological writers on the subject. His standpoint is most clearly presented in a well-known passage answering the question of whether the study of the soul is the province of the theologian:

The theologian has to inquire how the soul may earn merit and demerit and what leads to salvation and what to damnation. But it is not his task to inquire what the soul is, to what category it belongs, and how it is infused into the body. Consequently, knowledge of these things pertains to someone of another faculty. Therefore, since the theologian only has to teach how to earn merit and demerit, it is not his proper task to teach what the soul is and what its essence is.

We shall meet with similar demarcations of the respective realms of the philosophers and theologians in the thirteenth century; the latter group will define their own territory in much broader terms than John Blund grants them. His sharp words witness to the growing competition between the faculties of arts and theology at the newly founded universities.

How then does John Blund approach the self-appointed task of the philosophical discussion of the soul? The common answer among scholars today is that Blund's main source and inspiration is Avicenna, whom he follows very closely as a guide in his reading of Aristotle. There is an apparent contradiction here: either


32. See below p. 38 on Roland of Cremona and p. 43 on William of Auvergne.


Avicenna is the main inspiration or he is only the secondary source. Let us therefore reassess Blund's attitude towards Aristotle and Avicenna.

As far as we know, Blund's treatise marks the entry of Aristotle's *Peri psychës* into psychological theory in the Latin West. Not only does Blund quote Aristotle's treatise frequently, he is also credited in the above-mentioned poem of 1232 to have been one of the very first to study the newly translated Aristotelian books ('primus Aristotelis satagens perquirere libros / quando recenter eos Arabus misere Latinis') – which obviously included *Peri psychës*. Blund's work is an early example of a fully-fledged *quaestio* scheme in psychological literature, presenting questions, arguments pro and contra, the solution and answers to the objections. The question for us then is whether this treatise is meant to expound Aristotle in the manner of the later *sententiae cum quaestionibus* (for instance by Pseudo-Petrus Hispanus, about 1240). An argument in support of this thesis is that John Blund calls Avicenna 'commentator' and his *De anima* 'commentum' or even 'commentum super librum de anima', just as later writers would do with Averroes and his commentary. But Blund's term is exceptional; usually Avicenna's book is referred to as the *Liber de anima* or the *Liber sextus de naturalibus*. It may be that Blund's manuscript of the work was headed 'Commentum'. It seems more likely, however, that this is his personal way of referring to a work of the Peripatetic tradition, since he also calls Algazel's *Metaphysica* a 'commentum primae philosophiae', again a phrase without parallel in the West, to my knowledge – and a very inappropriate phrase if we take it to mean 'commentary'. The meaning of the term *commentum* or *commentarium* in the context of translation literature is not fixed; it was also employed, for instance, for Latin reworkings of translated texts by Euclid and Theodosius in the course of teaching. John Blund, who knew his Avicenna too well to conceive of it as a commentary, must have meant something like this, a work written in the tradition of a specific Aristotelian book.

This interpretation is confirmed by the structure of the *Tractatus de anima*, which, as has been said, is modelled on Avicenna's *De anima*. One may add that chapters five to twenty (of the twenty-six), which comprise the discussion of the faculties of the soul, follow closely the arrangement of the faculties in chapter 1,5 of Avicenna's book, a procedure we will encounter also with other writers. In fact, each of the vegetative and animal faculties is introduced with a quotation from that chapter in Avicenna, before Blund enters the discussion of a particular *quaestio*. This resembles the pattern of the later *sententiae cum quaestionibus*, where Aristotle is the authority quoted at the beginning. It has been suggested by different scholars that Blund's *Tractatus* grew out of the classroom and represents the sum and substance of his oral teaching. We cannot prove this. But if there had been a textbook, it must have been *De anima* of Avicenna and not the *Peri psychës* of Aristotle.

This is reflected also in the content of the *solutiones* that Blund arrives at, and in the content of the descriptive passages which are not part of a *quaestio*. Compare the number and weight of *solutiones* and descriptive passages based on Aristotle's *Peri psychës* with those based on Avicenna's *De anima*:

(1) Aristotle:
- the definition of the soul (pp. 5–6)
- the thesis that psychology is a part of natural philosophy (p. 7)
- the refutation of divergent opinions on the soul (p. 9)
- the thesis that sense perception does not perceive universals (p. 23)
- that consonance is a kind of measure (p. 43)
- that there is no taste without saliva (p. 58)
- that touch is necessary for the survival of a living being (p. 59)
- that the common sense exists (p. 65)
- the definition of memory (p. 71)

(2) Avicenna:
- the argument for the existence of the soul (p. 1)
- the thesis that the soul is one soul (p. 12)
- the definition of the vegetative soul (p. 13)
- the definition of the perceiving soul (p. 16)
- the thesis that sense perception does not perceive universals (p. 23)
- the definitions of vision, hearing, smell, taste and touch (pp. 24, 39, 51, 56, 58)
- that touch is located in the whole living being (p. 59)
- the definition of common sense (p. 63)
- the argument that common sense exists (p. 65)
- the definitions of imagination, estimation and memory (pp. 67, 68, 71)

47. Callus, 'The Treatise of John Blund', p. 483; Bertola, 'La dottrina dell'immortalità', p. 36.
48. John Blund cites only a rudimentary version of Avicenna's definition (*De anima*, 1,3, p. 84). The reason seems to be that he wants to dispense with Avicenna's theory that parts of the tasted object are mingled with the saliva.
49. John Blund does not acknowledge an intermediate faculty ('imaginative/cogitative faculty') between imagination and estimation, as Avicenna does; cf. his discussion of *squitatio* on pp. 94–5.
the introduction to the questions of incorporeality and immortality (pp. 80 and 86)
The definition of the faculties of the rational soul (pp. 91–2)
The theory of the four intellects and their definitions (p. 93)
The imprinting of the formal intellect into the soul by the giver of forms (p. 94)\[Note that all the theories of Aristotle mentioned can be found also in Avicenna, but that most of Avicenna's theses go beyond Aristotle's philosophy. This is especially true of the Avicennian definitions and descriptions of the external and internal senses.]

This list is certainly a rather crude outline of doctrines — they will be discussed in more detail and in the context of the Peripatetic tradition later in this book. There we will find that John Blund occasionally chooses a compromise between Aristotle and Avicenna, for instance in the question of the organ of touch.\[He has a more marked interest in optics than most other writers on psychology but falls victim to the serious shortcomings of the Latin translation which leads him to misrepresent totally Avicenna's theory of vision.\] In general one can say that he is more indebted to Avicenna's theory of the vegetative and animal faculties than to his theory of the intellect, a recurring feature in the history of Avicenna's influence. He transforms the doctrine of the four intellects, and the treatment of the questions of immortality and incorporeality is different in the two writers, even though the questions and conclusions are the same.\[He does not identify the active intellect with God and therefore cannot be counted among the adherents of Avicennized Augustinianism.\]

As for the technical side of Blund's reading of Avicenna's De anima, it can be shown that he uses version A of the manuscript tradition, as did Gundissalinus.\[He quotes Avicenna's De anima directly, that is, not from a secondary source like Gundissalinus's Liber de anima. It is difficult to answer the question of whether John Blund knew Gundissalinus's work at all; there are some passages which seem to point in this direction, but Blund may also be drawing on a different source.\] The influence of Gundissalinus's Liber de anima certainly is very limited.\[In conclusion, it can be said that telling the story of the growing interest in Aristotle backwards from the thirteenth century has led some historians to a misconception regarding Blund's treatise. John Blund did not in fact use Avicenna as a guide to understanding Aristotle; this was not his aim. His main interest, as he said himself, was to inquire what the soul is. He had two new sources at his disposal, Aristotle's Peri psychê and Avicenna's De anima, and of these he very much preferred the latter.\]

83.

3. Michael Scott

Michael Scott, the Toledan translator and later court astrologer of Frederick II, is known not only for his Arabic–Latin translations of Alpetragius, Aristotle, Avicenna and Averroes, but also as the author of a comprehensive introduction to astrology, the Liber introductorius. It comprises three books, the Liber quatuor distinctionum, Liber particularis and Liber physionomiae, which probably for the first time fully adapt astrological texts of Arabic provenance to Christian culture.\[Despite its significance, the text has not yet received a critical edition, perhaps because of its very complicated textual history. The four principal manuscripts of the Liber quatuor distinctionum differ considerably from each other, with interpolations and

50. For the meaning of the term dator formarum see pp. 188–9 below.
51. See p. 103 below.
52. See pp. 114–15, and 124 below.
53. See pp. 145–6 below.
55. See Bertola's article 'La problematica dell'immortalita' for this doctrinal context.
57. Compare the following passages in John Blund and Avicenna: Tractatus p. 13, line 23, ('generationem et complexionem') and De anima, I.5, p. 82, line 38 (generari et commiscere); manuscripts NV (= version Aj): 'generationem et complexionem'; Tractatus, p. 24, lines 5–8 ('in nervo concavo' and 'corporum coloratorum') and De anima, I.5, p. 83, lines 59–61 ('in nervo optico' and 'corporum habentium colorum'; FNV: 'in nervo convavo' and 'corporam coloratorum'); Tractatus, p. 91, line 11 ('quae ipsa eligere') and De anima, I.5, p. 90, lines 65–6 ('quae sunt propriae cogitationis ... '); FNV: 'quae prascipue sibi elegit/elegerit/elegerit'.
58. (I) The same quotation from Avicenna's De anima, I.1, pp. 14–15, is used by both John Blund and Gundissalinus as an answer to the question 'an anima sit' (Tractatus, p. 1, and Gundissalinus, Liber de anima, p. 32). (II) Both open their chapter 'De anima sensibili' with a general statement about the perceiving soul, linking it with the faculty of movement; this sentence is not in the corresponding passage in Avicenna (I.5, p. 82, line 40): Gundissalinus (p. 67): 'Secundum autem quod anima est sensibilis duo operatur, silicet sennum et motum voluntarium'. John Blund (p. 10): 'Anima sensibilis est anima movens corpus voluntarie'. (III) John Blund says on p. 94: 'vel, ut plures auctores videntur velle, est illa forma impressio ab intelligentia ut ministerio eius, et a primo datore formarum ut auctoritate ipsius. Ista autem intelligentia a multis auctoribus dicitur esse angelus'. This may go back to Gundissalinus, p. 51: 'Hoc autem quod Philosophi probant animas non a Deo sed ab angelis creati, sane quidem postest intelligi, silicet non Dei ministerio sed angelorum. ... Sic et angelie creatans animas ministerio tantum, non auctoritate'. A similar passage is in Gundissalinus's De processione mundi, p. 51. Alonso has drawn attention to a passage in Peter Lombard, Sententiae, IV.5.3: 'Ita etiam posset Deus per alijem creatr alijaque: non per eum tamquam auctorem sed minisurban' (Alonso, 'Gundissalinus y el 'Tractatus de anima'\[. 59.\]
60. A recent misjudgement about John Blund can be found in Dales, The Problem of the Rational Soul, p. 20, quoted below (p. 224, n. 2).
61. For an assessment of its significance in the history of astrology, see Burnett, 'Michael Scott and the Transmission of Scientific Culture', p. 117. The title Liber Introductorius applies to all three books, not only to the first (see Burnett, ibid., p. 101, n. 4).

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additions. They represent two different redactions of the text, a longer and a shorter, and there is no agreement among scholars about the chronology of the two. But there is a consensus that Michael Scot is the author of most of the material.

The first book of the Liber introductorius is important for the history of psychology because one of the four manuscripts – MS Escorial f. III.8, representing the shorter redaction – contains a long treatise on the soul (ff. 34ra to 53vb), which for several already established reasons is probably an authentic part of Michael Scot’s work. The most important clue is that there is a reference to the section on the soul in one of the other manuscripts, which is now in Munich. At the very point where the Escorial manuscript inserts the psychological treatise, the Munich manuscript postposes treating the soul to a chapter in the fourth distinctio: ‘Quae... sint virtutes... animae... nunc reliquimus dicere in hac loco cum sit certum capitulum in quarta distinctione ubi sufficienter enarratur de illa’. Other cross-references point to the same conclusion: the chapter on the soul in the Escorial manuscript is part of the otherwise lost fourth distinctio of the first book of the Liber introductorius and was inserted by a later redactor at a suitable point in the first distinctio. In one reference the chapter is called the ‘Capitulum animo-as’ after the opening sentence of the section on the soul: ‘Animo-animis est verbum et significat confortare’ – ‘I animate you animate is a verb and means “to strengthen”’. There is also internal evidence for the authorship of Michael Scot, namely the noticeable astrological tone of some passages, a very uncommon feature among the psychological works examined. Morpurgo was the first to sketch an outline of the


A second cross-reference is in the chapter on the soul itself: ‘secundum quod dicimus in prooemio primae distinctionis huius primi libri deum deintimatis’ (MS Escorial, f. 44ra). For a third cross-reference see the following note.

This reference is given by Morpurgo (‘Fonti di Michele Scoto’, n. 9). It comes from the Liber physiominiae, MS Oxford, Bodleian Library, Canon Miss. 555, f. 64va: ‘De proprietate autem animae satis praedictum est in primo libro i.e. the Liber quartus distinctioines, circa principium quartae distinctioinis, capitulum animo-as’. The chapter; it is now possible to be more precise about its contents and sources. The author of the ‘Capitulum animo-as’ – who from now on will be referred to as Michael Scot – makes it clear in one of the first sentences that he is writing for scholars of astrology:

Although the theory of the soul (‘scientia animae’) is difficult and dangerous for every researcher, nevertheless we shall say something here about the soul, as something familiar to us and to everyone else, as far as God, the creator of every single thing, will grant us his grace, not to our own praise, but to the honour of God and for the use of modern scholars in this art of astrology (‘scholarius modernorum in hac arte astrologiae’).

This statement is in accordance with what Michael Scot says in the prooemium of the Liber introductorius, where he sets out his task of writing a book which comprehends everything pertaining to the ‘ars astronomiae’ for the use of beginners, ‘novitii scholars’. This latter phrase appears also in a passage in the ‘Capitulum animo-as’, where he modestly refers his readers to more well-known writers on psychology:

Since so very many and so important things about the soul have been said and discussed by wise men such as Aristotle, Jerome, Augustine and others in detailed investigations, this little booklet (‘opusculum’) should be enough for the beginner (‘nunc sufficat scolari novitio adnotandum’).

I have noted three further passages which address astrological topics. One of them occurs in the context of original sin. Michael Scot maintains that the reason for a wrong deed may either be God, who influences the soul, or the constellation of the firmament, which influences the body. This statement is preceded by a short justification of the thesis that the constellation of the firmament has some influence.

In the second passage Michael Scot reveals his high regard for the profession of the
astrologer. A good astrologer, he says, who in his inquiry finds perfect delight in God, already begins to surpass the order of the Seraphim in pleasing God; it is plausible, therefore, that the astrologers by virtue of their science are much closer to God than artisans (just as theologians are closer to God than farmers), and that they will have a place next to God in the divine realm. Finally, Michael Scot introduces an astrological tone into his adaptation of Avicenna's theory of estimation, as we will see later.

Michael Scot's approach differs from that of the other writers on psychology of his time, but his psychology does not. Morpurgo has characterized it as a mixture of Augustinian theories of the twelfth century and new Avicennian material, indirectly transmitted through Gundissalinus. I should like to point out that there is indeed much Augustinian material in the treatise, but that Michael Scot has first-hand knowledge of Avicenna's De anima, that he does not use Gundissalinus's book on the soul, and that he draws on the medical tradition which originated in eleventh-century Italy.

It is difficult to give an outline of the 'Capitulum animo-as', since it is very loosely structured. The first section (ff. 34ra-36rb) is concerned with different definitions of the soul, such as that of Aristotle (f. 34rb) and those to be found in the Bible (ff. 34vb-35ra). The next part (about ff. 36va-37vb) deals with the relation of the soul to the body and contains a hierarchy of faculties derived from Avicenna's De anima. Then follows a long discussion of questions concerning the origin of the soul, its future life and its similarity to the creator, the most Augustinian section of the work (ff. 37vb-44ra); here we meet with theories such as the mirroring of God's trinity in will, reason and memory (f. 43rb). Michael Scot proceeds by announcing a collection of the opinions of different philosophers. What follows looks like an adaptation of the first book of Aristotle's Peri psychés, which discusses the opinions of the pre-Socratic philosophers, but is in fact mainly based on Avicenna's De anima, chapter I,2 (see below). After this section (stretching roughly from f. 44ra to f. 45vb) there comes a rather long passage which draws on the medical tradition (ff. 46ra to 48vb); it explains the vegetative and the animal soul indirectly through Gundissalinus. The last section of the treatise (ff. 49ra to 53vb) is a mixture of different topics and questions known already in early medieval psychology: the unity of the soul, its many names, visions, sensuality, sense, imagination, reason, memory, the soul as the likeness of everything ("omnium similitudio"), etc.

One might say that this is rather a hodge-podge of contradicting psychological traditions, but I would prefer to stress its open-mindedness and broad approach, unparalleled in other writings of the time, and perhaps a result of Michael Scot's objective of writing not only for students of the arts or theology, but for anyone interested in astrology.

It is noteworthy that this early adaptation of Avicennian theories is closely linked to the medical tradition. It can be shown by textual analysis, firstly that the treatise is early because it does not betray any knowledge of Aristotle's Peri psychés, secondly that Avicenna's De anima is used directly and not by way of Gundissalinus, and thirdly that there are indeed traces of the medical tradition in the 'Capitulum animo-as'.

Michael Scot mentions Aristotle's Peri psychés once, but only to introduce a quotation from Avicenna's De anima, as Morpurgo has already pointed out. Aristotle is referred to five times by name and three times as a philosophus, but passages from his psychological work are not quoted. As a test case for Michael Scot's knowledge of Peri psychés—which, according to only one manuscript, Michael Scot himself translated from Arabic into Latin together with Averroes's commentary—we shall take his discussion of the philosophers' opinions (ff. 44va-b), which closely resemble Aristotle's refutation of the pre-Socratic philosophers in Peri psychés, book I. In fact, three of these opinions certainly derive from Avicenna's De anima, I,2: that the soul is natural heat, that the soul is blood and that the soul is God. This last passage, incidentally, is therefore not an attack on

73. MS Escorial, ff. 50va to 50vb: 'Quare dicendum est quod qui perfecte in deo delectatur opere damnationis camis praetermiss<o> inquisitione physicae, iam incepit transcendere ordinem seraphym agricultor et in divina patria domino vicinius locabuntur'.
74. See p. 146 below.
75. Morpurgo, 'Fonti di Michele Scotto', p. 69.
A~LICHAEL Scot had any knowledge of Gundissalinus's work to see that Avicenna's discussion ultimately derives from Peri psychet$, book I, and we can assume that Michael Scot, who shows such interest in these opinions, would have used Aristotle's book if he had known it.

We can draw another conclusion from this passage. Gundissalinus's Liber de anima does not contain the mentioned quotations from Avicenna's De anima, I,2. As for the other quotations and adaptations from Avicenna which are found in the Liber de anima, it is not true, however, that the Capitulum animi-as is taken over almost entirely (pressoche integralmente) by Bartholomaeus. I have found literal quotations only from folios 46ra to 49rb, which is the section presenting physiological teachings (De proprietatibus rerum, Lib. IV, cap. 9 quotes f. 46ra; cap. 10 quotes f. 46rb; cap. 11 quotes f. 46va; cap. 12 quotes f. 46vb; cap. 13 quotes f. 47ra; cap. 14 and 15 quote f. 47ra; cap. 16 quotes ff. 47ra-b; cap. 17, 18 and 19 quote f. 47va; cap. 20 quotes f. 47vb; cap. 21 quotes f. 47vb-48ra). Michael Scot is the source of Bartholomaeus and not vice versa for the reason that Bartholomaeus adds authorities such as Aristotle's Peri psychet, which is not known to Michael Scot.

When Aristotle's Peri psychet was known to most writers on psychology in the West. It is unlikely that it was written much earlier than 1200 since Michael Scot knows of the name of Averroes (d. 1198), whom he mentions once. In about 1235, Bartholomaeus Anglicus borrows extensive passages from the physiological section of the Capitulum animi-as into his encyclopedia De proprietatibus rerum.

Michael Scot is thus one of the earliest writers to adopt parts of Avicenna's psychology. Apart from the teachings mentioned, i.e. the divergent opinions of the ancient philosophers on the soul, and the quotation mentioning Avicenna's name, he chooses the following doctrines, which derive exclusively from De anima, I,5: the distinction between the animal faculties of perception and motion (f. 46rb) and between external and internal senses (f. 46vb), the description of the five external senses (f. 37ra), the description of the internal senses (f. 37vb and partly 46va), the distinction between the practical and the contemplative intellect (f. 37vb and perhaps f. 49ra), and the quadripartite division of the intellect (f. 37va).

It can be shown that for some of these topics, and especially for the doctrine of the animal faculties, Michael Scot also draws on the medical writers. A number of passages present teachings which derive from the Panegyri of Constantine the African; they concern the virtus vitalis, the imagination, reason and memory, the virtus sensibilis and the external senses of vision, smell and taste.

80. MS Escorial, f. 43rb: 'Fuerunt alii qui posuerunt animam esse principium omnium aliarum rerum, per hanc rationem solum similis cognoscituir a su simili. Sed habet anima cognitioem omnium rerum, oportet igitur ipsum esse principium omnium rerum.' Cf. Aristotle, Peri psychet, Greek-Latin version, 405b15: 'Dicunt enim similis cognoscituir similis. Quoniam autem omnia anima cognoscituir, constiputuam ex omnibus principis.' It is conspicuous, however, that the term principium omnium rerum does not appear in Aristotle. It very probably comes from Avicenna, De anima, I,2, p. 41, line 7: 'Omnem autem isti diecbant animam non scit omnia nisi ex hoc quod est de essentia principii omnium rerum.'

81. MS Escorial, f. 37vb: 'Fundamentum vero huius virtutis sive proprium domicilium est cor a quo procedit vivificanda.' Cf. Constantine, Panegyri, Lib. IV, cap. 5: '...cuius fundamentum est cor a quo vita ad membra corporis procedit vivificand.'

82. From De anima, I,1, see n. 85 above.

83. MS Escorial, f. 47ra: 'Fundamentum vero huius virtutis sive proprium domicilium est a quo videtur procedere vita corporis et conservatio virtutis ad omnia membra vivificandae potentiales.' Cf. Constantine, Panegyri, Lib. IV, cap. 5: '...cuius fundamentum est cor a quo vita ad membra corporis procedit vivificand.'

84. MS Escorial, f. 47vb: 'Ratio est illa virtus animae qua recipit totum actum imaginiosis ad referendam (?) et hanc velut iudicet et diffinit.' Cf. Constantine, Panegyri, Lib. IV, cap. 9: 'Intelliget iudex est et discretor rerum quas ab imaginazione rationabiliter sive solo intellectu suscipit.'

85. MS Escorial, f. 47vb: 'Ab omni praeclaram corporis ad actum reducit, quase conservat formae et custodit.' Cf. Constantine, Panegyri, Lib. IV, cap. 9: 'Memoria format in tuis poaris custodient et eam ad actum ducat.'
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If we compare Avicenna's and Constantine's doctrines, we find that there are differences, for instance in the number and definition of the internal senses and in respect to the function, object and organ of the external senses, but that Michael Scot has chosen doctrines from both writers which are relatively similar and compatible with each other. In some cases they are hardly distinguishable. To take the example of the organ of smell: Avicenna and Constantine mention that the organ of smell consists of two small pieces which hang from the brain and resemble the nipples of breasts. Michael Scot mentions them twice: once (f. 37r) he says that the organs of smell are 'similes capitibus mamillarum', whereas in the other passage (f. 48vb) he uses the wording 'frustula carnis mamillis assimilantur quae a cerebro dependent'. The first is a quotation from the Panegri, the second from the Panegri.

One of Michael Scot's motives for reading and using Avicenna as a primary source thus seems to be the compatibility of Avicennian psychology with the physiological tradition of the twelfth century. One should note that the theory of the active intellect, which attracted so many later scholastics, does not appear in the 'Capitulum animo-as'.

4. ANONYMOUS (VAT. LAT. 175): DUBITATIONES CIRCA ANIMAM

In 1952 Ermengildo Bertola drew attention to a manuscript in the Vatican Library which contains—apart from works of Pseudo-Dionysius, John of Damascus, Boethius and Anselm of Canterbury—four predominantly psychological treatises. One of them can be identified as Gundissalinus’s De anima, the other three are anonymous. Whereas two of these are less relevant for the present purpose since their psychological parts focus on the one question of the immortality of the soul, the remaining anonymous treatise is of considerable interest.

Constantine, Panegri, Lib. IV, cap. 10: 'Virtus visus est subtilior alii quippe cum eius natura sit ignea...'

93. MS Escorial, f. 47va: 'Sensus enim visus cum sit igneus est subtilissimus omnium sensuum et ideo remotissimum subito comprehendit. Cf. Constantine, Panegri, Lib. IV, cap. 11: 'Vitius cum sit sensus igneus... neesse est aliis subtillior habare quod illud incomprehendit quod comprehendit longe remotissimum'.

94. See n. 96 below.

95. MS Escorial, f. 48vb: '...ad quam <soll. linguam> nervus mittitur a cerebro qui divertitur per eam ut sibi det sensum gustus qui sic efficitur. Res enim gustanda cum pervenit ad linguam et ipsa eius tangat essentiam secundum suam proprietatem in ea operatur quippe ut lingua in sui complexionem mutetur'. Cf. Constantine, Panegri, Lib. IV, cap. 14: '... procedit vero quidam nervus a cerebro qui... hic per linguam dividitur, ut gustus det sibi sensum qui sic efficitur. Res gustanda cum ad linguam veniat, et eius essentiam tangat suam naturam in ea operatur, ut lingua in sui naturam mutetur'.

96. Avicenna, De anima, I, 5, p. 84, line 69: '... est vis ordinata in duabus carunculis anterioria pars cerebri similibus mamillarum capitibus'. Constantine, Panegri, Lib. IV, cap. 13: '... huius instrumentum duo diximus esse fructula a cerebro producuntia mamillis assimilantia'.


Bertola has given a detailed description of the treatise; it opens with a prologue and a description of contents and then deals with the following questions: 1) 'An sit anima'; 2) 'Quid sit anima realiter'; 3) 'Quid sit diffinitione'; 4) 'Utrum fuerit ab aeterno'; 5) 'Utrum de aliquo vel de nihilo procedent in esse'; 6) 'Utrum omnes animae rationales sint simul creatae'; 7) 'Utrum creentur ante infusionem'; 8) 'Utrum immediate procedent a deo'. The text is incomplete—it ends abruptly in the middle of a word ('am<plius>'). From the description of contents at the beginning we know that what is extant today is most of the first part of the treatise, which concerns the soul's being ('Circa esse'). The second part is lost or was never written; it was called 'On what preserves the <soul>'s being' ('Circa conservans esse') and comprised two sections, one on essence ('essentia') and one on power (or faculty: 'potentia'). Bertola has found references to Augustine, Aristotle, Avicenna, Plato, John of Damascus, Remigius of Auxerre and the De motu cordis (of Alfred of Shareshill). He argues that the work was written by a master of arts between 1180 and 1210.

We learn that much from Bertola, whose analysis is sound, apart from the last mentioned conclusion. The framework employed by the unknown author clearly points to a theologian; compare the psychological works of masters of arts (John Blund, Anonymous (Gauther), Petrus Hispanus) who structure their treatises after Peripatetic models and not according to a traditional set of questions. As for the date of the treatise—for which I shall use the title Dubitationes circa animam—it is unlikely to be earlier than 1200. One has to take into account that the author’s most recent source is Alfred of Shareshill’s De motu cordis, which was written...
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around 1200 at the earliest and 1217 at the latest. 102 The author quotes at least once the Greek-Latin version of Aristotle's Peri psychés (remember that this could not be proved for Michael Scot's 'Capitulum animo-as'), 108 and also mentions Aristotle's Prima philosophia and De animalibus. 109 It may be that the author is dropping names (I was not able to trace the passages in the last two works), but even this suggests a rather late dating, perhaps in the 1220s.

What makes this writer and his Dubitaciones circa animam important for the history of psychology, is that he is independent, that is, he does not simply copy a source known to us, and that on the other hand there are obvious links with Michael Scot and Jean de la Rochelle. He has in common with Michael Scot the fact that he quotes large portions of chapter I,2 of Avicenna's De anima, which receives hardly any attention in subsequent Latin writings. This chapter is a presentation and refutation of previous theories on the soul and is very much akin to Aristotle's Peri psychés, book I. Just like Michael Scot, the anonymous author mentions Aristotle and Avicenna but draws exclusively on Avicenna, even more extensively than Michael Scot. 108 This is the passage with the references to the two philosophers:

These and similar 'doctrines' are presented sufficiently in the first book of Aristotle's De anima and in the Sectus de naturalibus of Avicenna. But there is no need to invest much labour into their refutation, partly because all of them are

105. See Orte, 'The Life and Writings of Alfredus Anglicus', pp. 277-8. Cf. Anonymous, MS Vat. lat. 175, f. 219vb: '... una quadam sapientii in libro de motu cordis ubi dicta: anima est substantia incorpora interactiva illinationum a prima ultima relatione susceptiva' and Alfred of Shreshill, De motu cordis, p. 2: 'In eneem considerata: ex anima substantia est incorporea, interactiva illinationum qua a primo sunt ultima ratione perceptiva'.


107. For the Prima philosophia see the preceding note, for De animalibus see Anonymous, MS Vat. lat. 175, f. 220va: 'Amplius philosophus dicit in libro de anima et in prima philosophia quod anima habet ad corpus sicut nauta ad manem (probable: naevem) and Aristotle, De anima, Greek-Latin version, 413ab: '... sie sit actus corporis anima sicut nauta navis'. The Arabic-Latin version has 'sicut gubernator navi'. Further, cf. Anonymous, MS Vat. lat., f. 219va: 'Secundum primum modum datur haec definitione: anima est prima perfectio corporis physcis organis potenti vitam habentis, et a primo sunt ultima ratione perceptiva'.

108. Anonymous, MS Vat. lat. 175, f. 219vb: 'De his et similibus sufficienter habetur in primo Aristotelis de anima et in sexto de naturalibus Avicennae. Non oportet autem laborare ad horum destructionem tum quia ibi sufficienter haec omnia per rationes reprobata sunt, tum quia nullas haec hortiorum, tum autem quia ex investigatione eius quod verum est anima in sequentibus patet'.

109. Anonymous, MS Vat. lat. 175, f. 219ra; for the text see p. 89, n. 50 below. Cf. Jean de la Rochelle, Summa de anima, ed. Bougerol, I.1, p. 51: 'Ad hoc est ratio Avicennae tales ...'.

110. Anonymous, MS Vat. lat. 175, f. 219vb: '... hoc est quod dictus Augustinus in libro de spiritu et anima nihil tam novit mens quam quod sola praestet est ... - ... se cognoscere, se iudicare et se convincere'.

111. Also, all other treatises in the manuscript are much older than 1240. See also Bertola, "De anima" del Vat. lat. 175, p. 253: 'L'esame della scriptura ci permette di affermare con buona certezza che esso il manoscritto - è della fine del XII secolo o dell'inizio del XIII'.

112. See p. 87-92 below, and Index locorum, I.1, m for the references.

113. Cf. Gundissalinus, De anima, p. 31, line 19: '... deinde an sit creatum vel increatum; sed si creatum, an una vel multae; si multae, an simul creatum et simul increatum vel simul creatum et simul increatum vel simul increatum vel simul creatum vel simul increatum'.

114. For the complete text of the description of contents, see Bertola, 'Psicologia platonico-agostiniana', p. 274, n. 3.
The fact that there are interconnections between the treatises mentioned, but not direct dependencies (to the best of my knowledge), indicates that the psychological tradition between 1200 and 1240 was much broader than the few testimonies we have.

What then is the place of this anonymous treatise in the history of psychology? It has been said that it is a theologian’s work, and in fact it distinguishes carefully between theological and philosophical psychology in its prologue.115 The aim of the treatise is to collect what the philosophers and also the doctors of theology have said, in order to improve knowledge about the soul: ‘In hoc autem opusculo colliguntur quae dixerunt philosophi et etiam doctores theologi ad habendam de anima scientiam latiorem.’ Unfortunately, we do not know the exact amount of influence exerted by the new Peripatetic learning, because we only have the author’s section on the soul’s being (“Circa esse”), but not on its essence and – more importantly – on its ‘potentia’.117 If the treatise is a forerunner of that of Jean de la Rochelle (and of Anonymous (Callus), who will be mentioned shortly) then the section ‘Circa potentiam’ may well have contained a division of the soul’s faculties. There we would have met with the powers of the vegetative, animal and human soul, which are not mentioned in the extant text.

Even without this, the anonymous treatise is significant as an example of the early reception of Aristotle and Avicenna: the author knows both treatises on the soul, but it is to Avicenna’s Flying Man that he assigns the prominent place in the opening question, and it is Avicenna’s account of divergent theories of the soul which is quoted extensively, and not Aristotle’s.

S. ANONYMOUS (GAUTHIER) AND ANONYMOUS (CALLUS)

From about the years 1225 and 1230 respectively, there survive two anonymous treatises on the soul, of which the latter copies the earlier: De anima et de potentia eius, edited by Rene Gauthier, and the De potentia animae et objectis, edited by Daniel Callus. I shall not discuss in detail these two treatises, which have been well studied by the two editors.

The first treatise is particularly precious, because it is one of the few witnesses to the psychological doctrine of masters of arts before 1240 (the only other example being John Blund).118 The treatise starts off with Aristotle’s definition of the soul (in the Greek-Latin version), explains it briefly, and, after establishing the criteria for distinguishing the powers of the soul, goes through the whole range of Avicennian faculties: the three vegetative faculties, the five external and the five internal senses, the motive faculties, the practical and the contemplative intellect. The author rejects Avicenna’s theory of the separate active intellect, but ingeniously connects the Avicennian doctrine of the four intellects with Western discussions of the demonstrative method.119 Averroes’s long commentary on Peri psychēs is used for the first time, but one should not overemphasize its influence;120 the treatise is thoroughly Avicennian in its structure (and most of its content), and one has to wait until the first commentaries on Aristotle’s Peri psychēs in about 1240 before Averroes’s book receives serious attention.121

The second treatise, the anonymous De potentia animae et objectis,122 draws heavily on the first, and inherits both structure and content from Anonymous (Gauthier).123 The anonymous author is a theologian, as is apparent from the changes and additions he makes to his source: he omits the first section on Aristotle’s definition, but keeps the criteria for distinguishing the powers of the soul, like many other theologians, he misses out the vegetative faculties,124 and then goes through the Avicennian external and internal senses, the different kinds of intellects and the motive faculties. He finally departs from his Porfírio and adds a long theological second part, which deals with the innate, infused and acquired habitus. The treatise is one of the earliest examples of a ‘divisio potentiae animalis’ (or ‘animae’) which appears in later theologians such as Jean de la Rochelle, Alexander of Hales (or rather the Summa fratrīs Alexander) and Albertus Magnus;125 it has been shown, in fact, that Jean de la Rochelle’s Tractatus quotes our author.126 By arranging the purely philosophical theories of the soul under ‘divisio potentiae’, the anonymous theologian has found (or perhaps adopted from an unknown source) a convenient way to juxtapose, and thus distinguish between, theological and philosophical psychology.

115. See n. 102 above.

116. Anonymous, MS Vat. lat. 175, f. 219ra (the complete text of the prologue can be found in Berthola, “De anima” del Vat. lat. 175”, pp. 260–1).

117. Anonymous, MS Vat. lat. 175, f. 219ra: ‘Dubitationes autem quae circa potentiam sunt, multae sunt et diversae ut post patebit’.


120. For a critique of Gauthier’s misleading term ‘First Averroism’, see below p. 205, n. 709.

121. Gauthier’s claim that between 1225 and 1240 there was a fight (‘lutte’) between Avicennist Aristotelianism and Averroist Aristotelianism, does not have a basis in the sources (Gauthier, ‘Le Traité De anima et de potentia eius’, p. 25). If there was a fight at all, it was between Avicennian psychology and Aristotelian psychology; Averroes’s book was widely ignored before 1240.


123. Gauthier compares the two treatises in the introduction to his edition; see ‘Le Traité De anima et de potentia eius’, pp. 6–19.

124. See p. 38, n. 147 below.

125. Anonymous (Callus), De potentia animae et objectis, p. 147, line 13: ‘Quod autem atque autem de divisione potentiae animalis. Dimittamus autem potentiam animae vegetabilis et dividamus potentiam animae sensibilis et rationalis’.

6. ROLAND OF CREMONA

Roland of Cremona was the first Dominican master to teach theology in Paris and, after 1229, in Toulouse. His reputation today rests less on the impact of his writings, which are extant only in a few manuscripts and seem to have had very limited influence, than on the fact that they show a remarkable interest in matters philosophical, medical, and scientific, and witness to a comprehensive knowledge of Aristotle's writings.127 We know of two works by Roland: a commentary on the book of Job (Postilla super Job) and a large theological Summa in four books which is extant in four manuscripts128 and is referred to under different titles: Liber quaestionum (Roland's own term),129 Quaestiones super quattuor libros sententiarum,130 Summa (Roland's own term),131 Summa fratr. Rolandi.132 Only the third book of the Summa, as the work is commonly called in modern literature, has been published.133 The work is structured after Peter Lombard's Sententiae, but its main immediate sources are Praepositus of Cremona and William of Aucerre.134 Since Roland also quotes the commentary on the Sentences by Hugh of Saint-Cher of about 1231–2, he probably wrote the Summa not long after his return to Italy from Toulouse in 1223.135

Roland touches upon psychological topics time and again in the Summa, but he is here quoted among the psychological writers for a different reason. When Roland in book two of the Summa arrives at the discussion of the sixth day of creation, he inserts a section devoted entirely to the vires naturales of the human being. This passage stretches from folio 32vb to folio 34vb of the Mazarine manuscript (on which the following analysis is based), covering about twenty printed pages in transcription.

The peculiar position adopted by Roland is better understood if it is compared with the approach of one of his sources, Hugh of Saint-Cher. In his commentary on the Sentences Hugh introduces new material from Avicenna's De anima and Aristotle's Peri psychê, but he does not take over the structure of these philosophical works.136 An example is his chapter on book two, distinction 24 of the Sentences: He gives short explanations of passages in Peter Lombard and discusses at some length a number of questions. They concern the status of man before the original sin,137 the definition of free will,138 the two parts of the faculty of reason,139 the identification of syndereis with the higher part of reason and the possibility of it sinning.140 An example of the Peripatetic teachings which appear in this chapter is the distinction between external and internal senses,141 the shape and doctrine of

'Roland de Crémone', pp. 179–80. Gauchard recently argued ("Notes sur les débuts" (1982), pp. 330–31) that the date of the Summa may be as late as 1244 when Roland returned to Cremona and had a reason to take action against his otiwm: '... et prodesse modicum simplicibus et otium repellere cogitabam', as he writes in the prologue (ed. Cremascoli, p. 860, lines 25–6). However, this may well be a topos. Since we do not know at which time of his life Roland may have felt menaced by otiwm, the earlier date, which is closer to his teaching activity, remains more probable.

136. Hugh's psychology has been studied by Ehrle, 'L'Agostinismo et l'aristotelismo' (1925), pp. 544–50; Lottin, 'Roland de Cremone et Hugues de Saint-Cher' (1960), pp. 171–80; Lottin, 'Trois “quaestiones” d’Hugues de Saint-Cher' (1942), 142–8. In this latter article Lottin draws attention to the fact that in the collection of MS Douai 434 there are three questions on the soul which can be attributed to Hugh of Saint-Cher. They concern the nature of the soul, its unity and its composition of matter and form, and do not leave theological terrain. The second question is published by Lottin in his 'L’Unité de l’âme humaine' (1942), pp. 471–4. The third can be found in the mentioned article "Trois "quaestiones"", Kaeppeli, Scriptores Ordinis Praedicatorum II, pp. 269–81, gives further secondary literature on Hugh of Saint-Cher and a list of the over 30 manuscripts of his commentary on the Sentences: I have used Vatican City, MS lat. 1098, 13th c., ff. 1r–208r.

137. MS lat. 1098, f. 64va, line 56: ‘Circum secundum triplex est opinio. Quisam dicunt quod homo ante casum numquam (?) habuit gratiam sive virtutem’.

138. MS lat. 1098, f. 65ra, line 2: ‘Circa haec multa quaeri possunt. Primo quid sit liberum arbitrium et quae sint operationes eius’.

139. MS lat. 1098, f. 65va, line 5: ‘Sed quaeritur de illa parte duplici rationis quae dicetur vir et mulier ... et an sint eadem in potentia et essentia ...’.

140. MS lat. 1098, f. 65ra, line 40: ‘Iem quaeritur si syndereis sit idem quod superior pars rationis et utrum peccare posset ...’.

141. MS lat. 1098, f. 66a, line 30: ‘... cuius <callio> principalis id est aliis vires tam motiva quem apprehensiue deinitus et deforis comodent mane id est in rebus transtitoris ut mane defectur. Cf. Avicenna, De anima, 1,5, p. 83, lines 56–7: “... sed vis apprehendens duplex est: alia enim vis quae apprehendit a foris, alia quae apprehendit ab intuis. For other quotations from Avicenna see
Hugh’s psychology, however, is not affected by it.

Turning to Roland, one finds that the text says little about his motives for writing on the soul. Roland quite abruptly ends a discussion of whether man was created in grace with the sentence:

It seems appropriate that we shall determine in this place the natural goods of the human being, which are the natural faculties. For it is said in the gospel that some man came down from Jerusalem etc. and was injured in natural things (‘et vulneratus fuit in naturalibus’).

The reference is to the story of the Good Samaritan and seems to serve only as a bridge to the new topic. Roland concludes the psychological section by returning to the story of the creation of man:

We have spoken about the natural goods in which man is created. But after man was created and put into paradise, God gave him three commands...

More information can be derived from the text of the section itself. There we find explicit references showing that Roland takes a particularly theological standpoint in writing about psychology. The external senses, says Roland, do not need to be treated extensively because theologians do not have to know much about them. He refers his readers to the very detailed accounts in medical books.

In the discussion of memory, Roland refrains from answering the question of how reason knows that an image has been perceived before, because this is not the province of the theologian. Similar statements which attempt to demarcate theologically relevant part of psychology can be found in other writers as well, for example in Philip the Chancellor.

Index locorum, L .5. g, k, da, df, ff. and IV. 1. a.

142. MS Mazarine, f. 32vb, line 41: ‘Michi videtur quod nos debemus determinare in loco isto bona naturalia hominis quae sunt vires naturales. Dicitur enim in evangelio quod quidam homo descendent de Hierusalem et cetera et vulneratus fuit in naturalibus’. (See the discussion of man’s creation in grace, see Filthaut, Roland von Cremona, pp. 134-5: ‘... quodnuncum homo ante peccatum fuit in natura’.)


144. MS Mazarine, f. 34vb, line 1: ‘Diximus de bonis naturalibus in quibus creatus est homo. Postquam enim creatus fuit homo et positus in paradiso, dedit ei Deus triplex praecessum...’

145. MS Mazarine, f. 32vb, line 60: ‘De exterioribus viribus non oporet quod loquamus quando notae sunt secundum quod debent esse notae theologia nisi pauca’. (See the discussion of memory, see Lottin in his ‘Synderese et conscience’, pp. 103-4. . . .

146. MS Mazarine, f. 32vb, line 41: ‘Homo descendent de Hierusalem et cetera et vulneratus fuit in naturalibus’. (See the discussion of man’s creation in grace, see Filthaut, Roland von Cremona, pp. 134-5: ‘... quodnuncum homo ante peccatum fuit in natura’.)


We also meet with similar questions in Roland, such as whether synderesis sins or not. In contrast, however, to other theologians like William of Axerre and Hugh of Saint-Cher, Roland does not structure his psychological section according to these questions, but according to the philosophical and medical system of faculties. We shall demonstrate this in what follows, and attempt to trace Roland’s sources.

Roland’s psychological section consists of an introductory passage and eleven parts: about the external senses, common sense, the estimative faculty, memory, ingenium, the rational faculty, the intellect, the irascible faculty, the desiring faculty with an inserted passage on the vegetative faculty, and free will. Roland treats ingenium and free will, which are common topics of early medieval psychology, only to decide that they are not faculties of the soul (‘viries animae’; ingenium is an act rather than a faculty and free will is a power of the faculty of reason). Roland is thus left with twelve faculties, as he explains in the prologue to the section: five external senses and five internal senses, namely common sense (which Roland says is identified with the imagination by some people), estimation, reason, intellect and memory; the other two senses are the irascible and the desiring faculty.

The number twelve is a particular feature of Roland’s psychology; he compares the
twelve faculties to the twelve sons of Job, to the twelve cows carrying the ‘iron sea’ of Solomon’s temple and to the apostles.\(^{153}\)

Which then are Roland’s sources? In his list of twelve senses there are two features which cannot be found in early medieval psychology: \(^{154}\) the distinction between the external and internal senses and the faculty of estimation. Neither go back to Aristotle’s *Peri psychēs* (which Roland knows and quotes), but to Avicenna’s *De anima*.\(^{155}\) For the description of the estimative faculty Roland draws on different chapters of Avicenna’s book, which he seems to know well.\(^{156}\) Another feature is distinctive: the disappearance of the faculty of imagination or ‘phantasia’. Roland says that common sense is called differently by medical scholars (or natural scientists: ‘a physicis’), namely *phantasia*.\(^{157}\) The only medical source I could identify for this theory is Avicenna’s *Canon*, where it is said that:

one of the internal faculties is common sense and *phantasia*, and for medical scholars (‘apud medicos’) they are one faculty, but for the verifying people (‘cercernicantes’),\(^{158}\) who are among the philosophers, they are two.\(^{159}\)

Another feature also may have its origin in the *Canon*. Roland just as Avicenna in the *Canon* divides the vegetative faculty into two branches, the reproductive (*generativa*) and the nutritive faculty (*nutritiva*),\(^{160}\) and not into three, by adding the faculty of growth, as was usually done in the West after Constantine the African.\(^{161}\) Roland’s knowledge of the *Canon* is all the more remarkable since allusions to Avicenna’s medical *magnus opus* are very rare in his time and appear only after about 1225.\(^{162}\) One has to be careful, though, not to overemphasize his use of the *Canon*, as Ephrem Filthaut did by saying that Roland regarded Avicenna mainly as a physician. The bulk of Avicenna quotations in the *Summa* comes from the *Metaphysics* and *De anima*,\(^{163}\) and it has been shown that Roland repeatedly refers to Avicenna (and not Aristotle) by the phrase ‘dictae philosophiae’.\(^{164}\)

Turning from the structure of Roland’s psychology to its content, we can distinguish at least four traditions which serve as sources: the theological, the medical, the Avicennian and the Aristotelian. As an example one may take the theory of the intellect, or better Roland’s internal faculties *ratio* and *intellectum*. From Augustine he takes the distinction between *scientia* and *sapiencia* and applies them to the two faculties.\(^{165}\) The medical tradition is present insofar as Roland locates reason in the middle ventricle of the brain.\(^{166}\) Avicenna’s distinction between theoretical and practical is drawn from Algazel’s *Metaphysica*, an adoption of Avicenna’s *Dānāscīme*.\(^{167}\) Avicenna’s influence is also felt in the definition of *ingenium* as that power of reason which is able to grasp the middle term of a ministraturum quidem duobus sunt genera. Unam genus ministratur in re nutrimentis ad hoc *nutritivum* ut individuum remanet, quod in duos partit viri species *nutritivum* et creativum. Aliter genus ministratur in re cognitiva ad hoc ut remanet species *creativum* et formativum.*


163. Filthaut, *Roland de Cremona*, p. 74, repeated by d’Alverny, *Avicennisme en Italie*, p. 124. Filthaut counted about 42 references to Avicenna (excluding book III), without locating them. I was able to trace only 31, on the following folios of MS Mazarine: 31va (twice; *De anima*), 31vb (*De anima*), 32va (*De anima* or *Algazel*), 32va (De anima), 15vb (*Canon*), 40vb (*Canon*), 42ra (*auicenna et algerzal*; ‘auicenna in sua metaphysica’), 44vb, 45ra, 49rb (Logio), 51ra (twice; *Canon*), 52va (philosophus auicenus), *58va (auicenus et algerzal*), 62ra (‘auicenus qui huit medicus’); *De anima*), 62vb (*Metaphysica*), 63ra (*Metaphysica*), 72ra (*Metaphysica*), 89vb (*auicenus medicus arabum*); *De anima*), 91vb (‘in logica sua’), 93vb, 95ra (*Metaphysica*), 104va (*auicenus in metaphysica*), 128vb (*in metaphysica auicenus*), 131va (*auicenus medicus arabum*; ‘twice; *Canon*’). For the quotations from *De anima*, see Index locorum: I.5.1b–u, vv. 3a; II.3.e; IV.1.b, v. 4.3.b; IV.4.h, k; V.1.k, v.6.a; V.8.a.


165. MS Mazarine, f. 33va, lines 9, ‘usta est scientia, dict Augustinus, intellectus est sapiencia’, 59 and 68. For Augustine’s distinction see his *De trinitate*, XII, 14, pp. 374–7.


syllogism. Finally, Aristotle's *Peri psychēs* is used when it comes to the question of the fallibility of the intellect, which is denied. Rolands psychological section does not include either Aristotle's distinction between the active and the passive intellect or Avicenna's theory of the separate active intellect. A similar range of traditions can be traced in Roland's discussion of the other faculties, which is equally dense. In view of the fact that Roland adopts material from many traditions, it is all the more noteworthy that, as has been shown above, the new features in the structure of Roland's psychology come from Avicenna's *De anima*.

### 7. William of Auvergne

With William of Auvergne's *De anima* we come to a work which is remarkable for its highly critical and very engaged assessment of philosophical ideas about the soul. William of Auvergne was the bishop of Paris for a substantial part of his life, from 1229 to his death in 1249. In about 1223, when he became master of theology at the University of Paris, he began to write his immense *Magisterium divinale ae supinatiae*, which he published in instalments. *De anima* is the third of its seven parts, but was written last, between 1235 and 1240. Of all the psychological works examined in this survey, William's *De anima* is the most resistant to a straightforward classification. It is a work by a theologian, but refrains from relying upon Scripture or ecclesiastical teaching; it is a very philosophical treatise, which, however, takes an openly polemical stand against philosophical theories.

How then does William define his approach to psychology? In the prologue to *De anima*, he says that the science of the soul ('scientia de anima') is usually said to belong to natural philosophy ('philosophia naturalis'), but that the science of the *human* soul does not belong to it, because 'what is caused or made in the image of God ..., the natural philosopher does not reach'. And he continues:

Since this kind of knowledge of the creator which is acquired by the methods of philosophy pertains solely to the first wise and divine teaching ('primum sapiente et divinale magisterium'), therefore knowledge of its image and likeness pertains to the same teaching only.

William here not only mentions the title of the whole seven-part work, but also presupposes what he had said in the programmatic prologue to *De trinitate*, the first book of the *Magisterium*: that there are three modes of knowledge in divine teaching, through revelation or prophecy, through virtue, and through philosophy. It is this last way which he chooses. In *De anima*, William sets out to speak about that part of psychology which does not pertain to natural philosophy but to the philosophically acquired 'first wise and divine teaching' ('primum sapiente et divinale magisterium'). It is quite probable that this phrase is William's way of referring to metaphysics in contrast to natural philosophy. This is more obvious in *De anima*, Prologue, p. 65a: 'Quod enim causata vel facita sit ad imaginem Dei ... naturalis philosophus non attingit'.

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in the alternative terms given by William: 'scientia sapientialis et divinale' and 'philosophia prima ac theologica'. Before the advent of Arabic and Greek sources, the metaphysical branch of philosophy was usually referred to as *scientia theologiae vel divinale*. The term *prima* points to the influence of Avicenna's *Metaphysics* and its Latin title: *Liber de philosophia prima sita scientia divina*. The word *sapientiale* appears in the first sentence of Avicenna's work: 'convenientius est accedere ad cognitionem intentionum sapientialium'. That William should have named his main work after Avicenna's *Metaphysics* accords well with the fact that William was the first scholastic to use this book on a large scale. He also knows parts of Aristotle's *Metaphysics*, but often quotes Avicenna under the name of Aristotle.

This approach to human psychology as part of metaphysics is unique in the early thirteenth century, as far as we know, and helps to explain other unique features of *De anima*. Although William uses and quotes Avicenna's *De anima*, he is not interested in the chapters that many of his contemporaries found impressive, in particular chapter 1.5, which is Avicenna's outline of the entire system of faculties. William starts from the other end. His main focus is on Avicenna's theory of the active intellect and of the substantiality and immateriality of the soul. In fact, William's knowledge of Avicenna's *De anima* is rather limited, even in his own

Avicenna's *Metaphysics* is a combination of the Arabic titles of the whole book (al-*ilāhiyät-illāhiyya*) and of the first chapter (al-*ilāhiyät-al-jalāliyya al-`ādīyya*, 'inquiry into the subject of first philosophy'). See Van Riet's introduction to the edition of Avicenna's *Liber de philosophia prima*, pp. 123–4. As for the origins of the term *ilāhiyya*, see Endres and Gustas, *Greek and Arabic Lexion*, s.v. *ilāhiyya* (pp. 309–13); the term *ilāhiyya al-qatl* translates the Greek *ἰλαχίστος* in Aristotle's well-known distinction between the three speculative philosophies, mathematics, physics, and theology (Met. E. 1, 1026a19–20).


183. I have found only few explicit references ('Aristoteles in libro metaphysicorum'): *De universo*, I.1, pp. 853a, 873a, 843b. Switalski, the editor of the *De trinitate*, gives James of Venice's translation of the first four books as William's source (p. 4, n. 12 and p. 256).

184. This is a well established fact since the studies of de Vaux (*Notes et textes*, pp. 22–38), and has been confirmed by the later editors and translators of William: see Switalski's introduction to *De trinitate*, p. 4, and Teske, *William of Auvergne: The Immortality*, p. 13.

185. See Index locorum: I.1.m; I.3.e–d; I.5.h, u; IV.1.f, V.4.a; V.5.a–c; V.6.1, n, p, v.

186. Explicit quotations in *William's* *De anima* deriving from Avicenna's *De anima*: pp. 73a, 82b–83a, 101a, 112b. From Avicenna's *Metaphysics*: pp. 66b, 90a, 91b, 107b–108a, 118b–170b. There does not seem to be any explicit reference to Avicenna's *De anima* in William's other writings. I have noted numerous references to Avicenna's other works, especially to his *Metaphysics* in *De universo*, but none to Avicenna's *De anima: Opera omnia*, v. 1, pp. 690, 691 (4 times), 692 (twice), 693 (three times), 694 (twice), 695, 713, 714, 741, 754, 755 (four times), 797, 801, 812, 845, 847, 853, 915.

187. See the references in n. 172 and Teske, *William of Auvergne's Use of Avicenna: The Metaphysical Principles*. Scholars have often shown that even Avicenna's explicit or implicit rejection of passages, it is difficult to explain why William attributes numerous theories to Aristotle which are in fact drawn from Avicenna. This is very uncommon in the psychological literature of the time. Aristotle's and Avicenna's psychological works were translated at about the same time in the twelfth century, and writers like John Blund or Roland of Cremona do not have difficulty in keeping them apart. The situation is different with metaphysics. William is one of the very first to use the metaphysical treatises of both writers, and also the pseudo-Aristotelian *Liber de causis*, which he attributes to Aristotle, even though its Neoplatonic theories are
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much closer to Avicenna's metaphysics. One may say sine praedictio (since scholarship on this is at its beginning) that William's confusion has its origin in the state of his metaphysical sources. The most remarkable mistake he makes is to attribute the followers of Aristotle the theory of the active intellect (which is Avicennian) and to the followers of Aristotle the theory of the active intellect as a part of the soul (which, if by anybody, is held by Aristotle). William rejects both theories and cannot therefore be said to adhere to the doctrine of Avicennized Augustinianism, as will be demonstrated later.191

For all of William's uniqueness, the structure of his De anima is not innovative, but highly traditional. It consists of seven prominent topics of the theological tradition (which do not always correspond to the chapters of the 1674 edition):192 the existence of the soul, the essence of the soul, the parts of the soul, the unity of the soul, the origin of the soul, the soul's relation to the body, the immortality of the soul,193 the likeness of the soul to the creator.194 Philip the Chancellor, for instance, in his slightly earlier theological Summa de anima (about 1232) covers a very similar range of topics, in nearly the same sequence.195 The same is true for the theological section of Jean de la Rochelle's Summa de anima.196 It seems improbable, therefore, that William's treatise is structured according to the methodological teachings of Aristotle's Second Analytics197 or that it is modelled after Aristotle's Peri psychê.198 William takes a standpoint in regard to many theological questions about the soul, and one cannot say therefore that his work is mainly apologetic or polemical.199

However, if his questions and conclusions are theological, his method certainly is not, as we have said. The other theologians of the 1230s who adopt Peripatetic psychology, either integrate it into their theological writings, mixing it with proofs on the authority of Scripture or the Church Fathers (Hugh of Saint-Che, Roland of Cremona), or keep philosophical and theological teachings apart by simply juxtaposing them (Anonymous (Callus), Jean de la Rochelle, the Summa fratis Alexandri). William of Auvergne is in a category of his own. He writes philosophically, but is on the whole conservatively theological in his actual teaching on the soul.

8. JEAN DE LA ROCHELLE

Jean de la Rochelle is one of the most influential figures in the history of thirteenth-century psychology. He is the author of two works on the soul, the Tractatus de divisione multiplici potentiariam animarum (about 1233–5)200 and the Summa de anima (about 1235–6),201 the second of which is quoted extensively in the Summa fratis Alexandri202 and in Vincent of Beauvais's popular encyclopaedia Speculum naturale.203 From 1238 at the latest, Jean de la Rochelle was master of theology at the University of Paris, the only Franciscan among the University's masters other than the well-known theologian Alexander of Hales, with whom he closely collaborated. Both died in the year 1245.204

191. See pp. 211–14 below.
192. The chapters are introduced with the following sentences: pp. 63b (‘dicam imprimis quid est’), 73a (‘notissi more is eius est et essentiam eius esse omnem atque substantiam’), 88b (‘Declaranda est ratio et intention eius quod est potentia et posse’), 104b (‘perscrutari de unitate animae humanae’), 125b (‘de natura animarum humanarum’), 147a (‘investigare de hac dispositione ipsius exist. animarum’), 203a (‘de similitudinibus... animarum humanarum ad creatorum’).
193. Allard has suggested that this chapter forms William's third redaction of his treatise on the immortality of the soul, the first being the one which was attributed to Gundissalinus in earlier scholarship, but now is held to be by William himself (Allard, ‘Note sur le De immortalitate’, pp. 68–72). One may add that in the course of De anima, the chapter on immortality seems to be inserted into chapter five (on the status of the soul in the body), which begins on p. 121b, but to which pp. 194–203 also belong, after the section on immortality. Cf. p. 125: ‘Tertio de modo essendi ipsarum’.
194. In chapter 3 William affirms (just as Philip the Chancellor) the identity of the faculties and the soul. See Lottin, ‘L'Identité de l’âme’, pp. 487–90. For William's position on free will in the same section, see Lottin, ‘Libre arbitre et liberté’, pp. 74–9. The last chapter deals mainly with the intellect, but also treats the theological topics syneresis and conscience; for William's standpoint on these, see Lottin, ‘Syndesia et conscience’, pp. 134–5.
195. Like the Chancellor, Summa de bono, ch. IV, pp. 155–297: quid sit anima; de potentis animae; utorum potentia sensibilis et rationalis in eadem substantia fundentur; utrum homon sit imago Dei vel ad imago Dei; de origine animarum; de immortalitate animae rationalis; de quaestione animae; de unione animae ad corpus; de loco et tempore animarum. The tradition of these questions is much older, as was said above, p. 10 and p. 15, n. 13.
196. See the next chapter. The Summa de anima was perhaps written as early as 1235–6 (according to Bougerol, in the introduction to his edition of the Summa, p. 12), that is, slightly earlier than William's De anima.
Jean de la Rochelle's psychological works have been characterized as eclectic and old-fashioned. But seen in the context of the history of psychology they mark two important steps: the explicit differentiation between various psychological traditions (in the *Tractatus*) and the considerable expansion of the Peripatetic section in an otherwise theological treatise on the soul (in the *Summa*). Let us begin with the earlier treatise, the *Tractatus*. From a recapitulation at its end we know that it is divided into three parts, which deal with the soul's substance, its faculties and its virtues. The structural division between substance and faculties comes from the theological tradition, as represented by the anonymous *Dubitaciones circa animam* (Vat. lat. 175) and Philip the Chancellor's *Summa de bono*. The idea for the second part, i.e. for speaking about 'divisiones potentiarum animae' may well have come directly from Anonymous (Callus), a theologian repeatedly quoted by Jean. The model for the third part on virtues seems to have been the Pseudo-Augustinian *Liber de spiritu et anima*. As one might expect, the second part on the faculties of the soul contains much philosophical material. But Jean differs from his predecessors in that he keeps the philosophical, theological and medical traditions apart by organizing the material in five sections, which present the divisions of the faculties as found in Avicenna's *De anima*, Iohannitius's *Isagoge*, Avicenna's *Canon*, John of Damascus's *De fide orthodoxa* and the Pseudo-Augustinian *Liber de spiritu et anima* respectively. Moreover, he gives reliable references to the sources. Jean's work certainly is a compilation, but it also is an important step towards mastering the seemingly boundless tradition of psychological doctrines. He adds critical or approving remarks and occasionally inserts digressions on problematic questions. In one of these digressions, Jean presents a position on the active intellect which includes — among other theories —

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206. Jean de la Rochelle, *Tractatus*, 3.3.1, p. 190: 'Nota, lector, quod huius libri tres sunt partes principales: in prima agitur de anima secundum differentiationem, in secunda secundum divisionem, in tercia secundum eius perfectione. Prima pars est de anima secundum eius substantiam et esse; secunda pars est de anima secundum eius operationem et potentiam; tercia est de anima secundum bene esse et complectionem.'

207. See p. 31 and p. 46, n. 195 above.


209. Jean de la Rochelle has first-hand knowledge of the doctrine of Avicennized Augustinianism. That Jean further develops the Peripatetic philosophy of the soul can be demonstrated for the doctrine of the four intellects, which he interprets as a theory about the acquisition of syllogistic knowledge. He combines this interpretation, which he inherits from Anonymous (Gauthier) and Anonymous (Callus), with a fresh reading of Avicenna.

Unfortunately, Jean does not say anything explicit about the purpose of his book, and one is left to assume that he aimed at giving a presentation of the soul's faculties which would include everything known about it at the time. In general we may assume that Jean follows the theological tradition, going back to Cassiodorus, of collecting philosophical opinions about the soul which are useful for the Christian believer. If the *Tractatus*, as a compilation, cannot be said to present Jean's opinion directly, the *Summa de anima* can. The first part of this work, on the substance of the soul, is a fully-fledged theological treatise on the soul, which is influenced primarily by Philip the Chancellor's *Summa de bono*. The second part, on the faculties of the soul, is a reworking of the second part of the *Tractatus*. Jean picks up what he had written on the psychology of Pseudo-Augustine, John of Damascus and Avicenna, but omits the two medical divisions (Iohannitius and Avicenna's *Canon*). It is remarkable (but does not seem to have received attention) that Jean enlarges the already comprehensive Avicennian section of the *Tractatus* considerably by adding numerous new quotations, often silently, in particular on the vegetative faculties and on the senses. Almost exactly one third of this part consists of quotations from Avicenna's *De anima*. This is unfortunately not apparent in the critical edition of the *Summa of 1995*, where about half of all the quotations from Avicenna are overlooked. Jean de la Rochelle has first-hand knowledge of the doctrine of Avicennized Augustinianism. That Jean further develops the Peripatetic philosophy of the soul can be demonstrated for the doctrine of the four intellects, which he interprets as a theory about the acquisition of syllogistic knowledge. He combines this interpretation, which he inherits from Anonymous (Gauthier) and Anonymous (Callus), with a fresh reading of Avicenna. Unfortunately, Jean does not say anything explicit about the purpose of his book, and one is left to assume that he aimed at giving a presentation of the soul’s faculties which would include everything known about it at the time. In general we may assume that Jean follows the theological tradition, going back to Cassiodorus, of collecting philosophical opinions about the soul which are useful for the Christian believer. If the *Tractatus*, as a compilation, cannot be said to present Jean’s opinion directly, the *Summa de anima* can. The first part of this work, on the substance of the soul, is a fully-fledged theological treatise on the soul, which is influenced primarily by Philip the Chancellor’s *Summa de bono*. The second part, on the faculties of the soul, is a reworking of the second part of the *Tractatus*. Jean picks up what he had written on the psychology of Pseudo-Augustine, John of Damascus and Avicenna, but omits the two medical divisions (Iohannitius and Avicenna’s *Canon*). It is remarkable (but does not seem to have received attention) that Jean enlarges the already comprehensive Avicennian section of the *Tractatus* quite considerably by adding numerous new quotations, often silently, in particular on the vegetative faculties and on the senses. Almost exactly one third of this part consists of quotations from Avicenna’s *De anima*. This is unfortunately not apparent in the critical edition of the *Summa of 1995*, where about half of all the quotations from Avicenna are overlooked. Jean de la Rochelle has first-hand knowledge of the doctrine of Avicennized Augustinianism. That Jean further develops the Peripatetic philosophy of the soul can be demonstrated for the doctrine of the four intellects, which he interprets as a theory about the acquisition of syllogistic knowledge. He combines this interpretation, which he inherits from Anonymous (Gauthier) and Anonymous (Callus), with a fresh reading of Avicenna.
De anima; he seems to have had different manuscripts at hand, for in the Tractatus the quotations are predominantly in the wording of version A,219 whereas in the Summa the newly added passages usually follow version B.219 He cites passages never referred to before in the West, such as the long discussions of the faculty of estimation and different instinctive reactions in chapter IV,3. The authority of Avicenna certainly eclipses that of Augustine and of John of Damascus, whose sections are much shorter. Jean de la Rochelle's Summa, one can conclude, gives a very prominent place in theological literature to a Peripatetic philosophy of the soul.

The total absence of an Aristotelian division of faculties in both books has perplexed modern scholars: why does Jean's section 'according to the philosophers and especially Avicenna' mention Aristotle only in passing?220 It is highly unlikely that this is an effect of the condemnations of 1210/1215 in Paris, which, after all, would concern Avicenna too. We cannot say much more than that obviously Avicenna was preferred because he offered more. This does not make Jean 'curiously old-fashioned'.221 In fact, he is very much following a fashion: that Avicenna's psychology in some way or other is preferred to that of Aristotle we have found with John Blund, Anonymous (Vat. lat. 175), Anonymous (Callus), Roland de Cremona and William of Auvergne. It is significant that Jean in his Summa also passes over the medical writers in the Tractatus, and instead quotes Avicenna's De anima more extensively on the vegetative and animal soul. He can do

9. THE SUMMA FRATRIS ALEXANDRI

It was stated above that Jean de la Rochelle's Summa de anima considerably influenced the Summa fratris Alexandri.222 Already in the thirteenth century this Summa was thought to be written by Alexander of Hales, although Roger Bacon remarked that it was not Alexander who produced it, but others ('quam ipse non fecit, sed alii').223 From the magisterial studies of Victorin Doucet we know that the Summa is a compilation and partial reworking of a whole range of sources, among which are many treatises by Alexander himself and by Jean de la Rochelle.224 Alexander was the initiator and gave his name to the project, but it was Jean de la Rochelle who in fact produced the first and third books,225 certainly with the help of others.226 He referred to as 'Inquirens'. The redactor of the second book, who is referred to as 'Considerans', is an unknown scholar who is not Jean or Alexander.227 When Alexander and Jean de la Rochelle both died in 1245, the

222. Bougerol, introduction to the edition, p. 32: 'Jean de la Rochelle s'appuie autant sur Augustin que sur Aristote', de Libera, 'Le Sens commun', p. 479, n. 6: 'il s'efforce de concilier les doctrines d'Aristote avec celles d'Augustin'.


224. The earliest example seems to be Petrus Hispanus's Questiones libri de anima. See Gauthier, 'Les Commentaires de la Fera', pp. 239-242, 'The Expositio librorum II-III de anima by Pseudo-Petrus Hispanus may be from the same time (ibid., pp. 236-238').

225. This is the correct medieval title of what is sometimes also called the Summa theologica of Alexander of Hales, or the Summa Holiana. See Doucet, Prolegomena, pp. 50b-53a.

226. Roger Bacon, Opera loquarem inedita, p. 326.

Jean's books very well, especially his *Summa de anima*, of which he makes ample use.231 The whole section is entitled *De anima rationalis* and has five parts: about the soul according to its substance, about the faculties of the soul, about free will, *synderesis* and conscience. It is again Doucet who has traced the sources: the tracts on conscience and on free will will derive mainly from *quaestiones* by Alexander of Hales, whereas the part on *synderesis* is adopted from Philip the Chancellor's *Summa de bono*.232 Jean de la Rochelle's *Summa de anima* is the principal source for the first two parts, which is reflected in their titles: 'Secundum substantiam' and 'Secundum potentias'. The unknown author follows Jean closely in the theological part 'Secundum substantiam', but is more independent in the second part 'Secundum potentias', which contains the philosophical teaching on the soul.233 We learn this much from Doucet. But what exactly did Considerans produce in this second, philosophical part?

The first point to notice is that the author has changed the format of the treatise. He has abandoned Jean's descriptive style and employs the format of *quaestiones* which is used in the other parts of the *Summa fratris Alexandri*. This in fact leads him to address a fair number of philosophical questions, in particular in respect to points of conflict between the different divisions, which are not explicit in Jean's *Summa de anima*.234

It can be shown that Jean's influence is most apparent in the phrases that connect the different chapters of the *Summa fratris Alexandri*. Here we find many parallels in wording with the *Summa de anima*.235 Let us recall that the second part of Jean's *compliatarum* was a loane de Rogella (Inquirere) et partum ab alio quodam ignoto (Censurae), sed minime ab ipso Alexandro, qui imnne ne partem quidem cursus seu directoris realizet formae. Alexander's name was attached to the *Summa* since it was 'scriptis Alexandri principaliter complatae ab eoque concepta atque promota'.

231. Doucet, *Prolegomena*, p. 360a-b. Dales incorrectly maintains that the whole *Summa* was put together after Alexander's death (*The Problem of the Rational Soul*, p. 27).

232. As Bougerol says (introduction to the edition of the *Summa de anima*, p. 13).

233. Lottin was the first to show convincingly that the *Summa fratris Alexandri* depends on Jean de la Rochelle and not vice versa. See his 'Apropos de Jean de la Rochelle', pp. 211-23. He improved upon previous research by Mingis, who had maintained the opposite ('Die psychologische *Summa*', pp. 365-78). According to Doucet, Jean's *Tractatus de multiplici divisione* is quoted three times in the *Summa fratris Alexandri* (*Prolegomena*, p. 212b). Bougerol maintains that the *Tractatus* is never used (in his introduction to the *Summa de anima*, p. 39).


236. Compare the following phrases, first in Jean, second in the *Summa fratris Alexandri*; adiuvante Jesu Christi (p. 181)//cum adiutorio Jesu Christi (p. 424); an anima sit sua potentia (p. 181) // an anima sit sua potentia (p. 424); per comparationem eam ad se (p. 197) // de comparatione harum... virium inter se (p. 428); subdividit primo per cognitivam et motivam (p. 228) // primo de cognitiva deinde de motiva (p. 430); numerus autem sensum (p. 229) // numerus virium sensibilium apprehendentium extrinsae (p. 432); de virtute apprehensiva interiori sensibili (p. 239) // de virtute sensibiliori ad cognitionem sensibilium pertinente (p. 434); per quinque differentias (p. 240) // quinto differentiae (p. 434); de viribus sensibilium apprehensivis ... // de virtibus sensibilios ... (p. 322) // de cognitiva viribus ... de motivis (p. 439); de virtibus rationalibus ... quae primo dividitur per apprehensias et motivas (p. 268) // de parte rationali cognitiva et motiva (p. 446).

237. *Summa de anima*, pp. 297-8, and *Summa fratris Alexandri*, II, pp. 796-7. The headings are not reliable as a source in all cases, since some of them are the editor's additions. Teachings of John of Damascus and Augustine are integrated into the part on the motive faculty. 239. See pp. 216-18 below. Compare the following list which contains all references to Avicenna that do not simply refer to him by name: 'Avicenna in metaphysica sua' (Summa fratris Alexandri, I, p. 117), 'vidam philosophorum' (I,142), 'dictum philosophorum' (II,37), 'Avicenna in sua philosophia' (II,18), 'Avicenna in sua prima philosophia' (II,17), 'vidam philosophorum' (II,400), 'Avicenna in tractatu de anima' (II,436), 'idem philosophorum' (II,436), 'dictum philosophorum' (II,143), 'philosophus' (II,458 and 4549), 'dictum philosophorum' (II,468), 'quid dicitur physici' (II,539), 'Avicenna in principio de anima' (II,547), 'Avicenna de caelo et mundo' (II,591), 'Avicenna libro I »sect. Canonis«' (II,651), 'vakth philosphor' (II,689), 'habet a philosopho' (II,701), 'legitirum in libro de naturis animalium' (II,200).

238. *Summ a fratris Alexandri*, p. 428a: 'dictum philosophorum': 'Sciit apud medicos hepar prime generationis est principium ...' - '... sic dicit Avicenna'. *Canon*, Lib. I, 1, Dec. 6, Cap. 4 (L.24b): 'quemadmodum ex humorum spissitudine ... — cor generationes secundae principium existit'.
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philosophers and physicians about the primary organ,242 the different names of the imaginative/cognitive faculty,243 and the definition of common sense.244 One might suspect that Considerans derives his knowledge of the Canon from Jean de la Rochelle's Tractatus de multiplicitate divisione potentiarum, but in fact some of the Canon passages do not appear in Jean; Considerans seems to draw directly on the Canon. One result is that he introduces the heart-versus-brain debate, which does not figure in Jean's Summa de anima.245 Particularly impressive is the combined citation of two passages from Avicenna's De anima and Canon on the very same subject, the names of the imaginative/cognitive faculty (p. 435a); this is a passage from Avicennian exegesis foreshadows the more mature attempts of Albertus Magnus to understand the textual tradition of Peripatetic psychology.

The influence of Avicenna on the solutions our scholar arrives at is most apparent in the section on the internal senses and in the partial adoption of the doctrine of Avicennized Augustinianism. He has inherited the technique of juxtaposing different psychological systems from Jean, but unfortunately bases his account on Jean's Summa and not on the Tractatus, which gives explicit references to the sources; the effect is that Considerans is less conscious of the various traditions he is building upon. On the other hand, he goes a step further than Jean by attempting to show how and by what criteria the three divisions are justified. The unknown author of the Summa's psychological section emerges, therefore, as a rather independent scholar, one who draws on new sources such as the Canon, and whose main interest is in philosophy. For of the five parts of his psychology, it is the philosophical part on which he leaves his mark.

242. Summa fratrii Alexandrini, p. 429: 'Ad quod videtur decendum per hoc quod dicit Avicenna, ostendens differentiam naturalis philosophi et medici. Dicit enim quod medicus indicat secundum id quod appareat et ex propositionibus sufficientibus procedit, naturalis vero philosophus, qui considerat primum causam, non tantum propinquam, dicit omnium operationum principium esse cor, sicut visum est Aristotelis'. Cf. Canon, Lib. I, Fen I, Doc. 6, Cap. I (f. 73rb): 'Omnibus autem philosophis maioribus... id est Aristotelis videt quod omnium itarum operationum principium existit cor... et medicis inveniunt tractatus suos extractos ex propositionibus sufficientibus et non necessariis in quibus non asseveratur nisi quod ex rebus appareat'.

243. Summa fratrii Alexandrini, p. 433a: 'haec vis duo sortitur vocabula... —... si... reduxitur eam ad id quod ei prodest, dicitur cogitativa'. Cf. Canon, Lib. I, Fen I, Doc. 6, Cap. 5 (f. 24vb-25ra): 'Et secunda quidem est virus quorum medicus vocat cogitativam, sed certificatores... —... et reduxitur eam ad illud quod prodest, vocatur virtus cogitativa'.

244. Summa fratrii Alexandrini, pp. 437b-438a: 'et hoc videtur per hoc quod dicit philosophus (!) quod sensus communis est qui omnibus sententiae receptum et properer ex iis omnium formas patiatur, quae in ipso copulatum'. Cf. Canon, Lib. I, Fen I, Doc. 6, Cap. 5 (f. 24vb): 'Sensus enim communis existit quas omnibus sententiae receptum et properer omnium formas patiatur quae in ipso copulatum'.

245. The corresponding passage of the Summa de anima is the opening section of the division according to Augustine (pp. 189-90), which starts with the medical distinction between the natural, vital and animal spirit. The first sentence of Jean's chapter appears at the end of a question on the criteria for dividing faculties (p. 428b: 'Ut autem manifestius fiat, ad differentissimum virium descendendum. Habet autem anima...').

246. See pp. 216-18 below.

10. PETRUS HISPANUS PORTUGALENSIS

With Petrus Hispanus's first psychological work, the Quaestiones libri de anima from the early 1240s,247 we come to the beginning of the end of the kind of psychological writing we are investigating. For the Quaestiones are — with some probability — the first of a long series of Western Latin commentaries on Aristotle's Peri psychis. A new form of discourse about the soul is developing, in which there is not much space left for the type of psychology developed by Avicenna in his De anima. On the other hand, Petrus's main psychological work, the Scientia libri de anima, dating between 1250 and 1260, is perhaps the most Avicennian work written in the West. We shall come back to it later.248 The so-called Expositio libri de anima has been shown not to be by Petrus.249

Recent research has made it unlikely that our author Petrus Hispanus from Portugal, the later Pope John XXI, is identical with Petrus Hispanus the Dominican, author of the famous logical textbook Summulae logicales.250 Petrus Hispanus Portuigalensis was born in Portugal, spent several years at the university of Paris, became teacher of medicine at the university of Siena from 1246 to 1250, was back in his native land from 1250 to 1264, where he held various ecclesiastical posts, became court physician of the pope in 1272, was elected pope in 1276, and died one year later through an accident.251 While we do not know where Petrus was in the early 1240s when he wrote the Quaestiones,252 the Scientia libri de anima from 1250-60 was very probably written in Portugal.

The Quaestiones are extant in two manuscripts, and are attributed to Petrus Hispanus, Commentum in libros de anima, in M. A. Alonso, ed., Pedro Hispanus Obras filosoficas, II, (1944) (here referred to as Quaestiones libri de anima). Alonso's editions are mere transcriptions of the manuscripts; they are useful to work with, but have to be treated with much caution.253 Petrus Hispanus, Scientia libri de anima, ed. M. A. Alonso (1941). There exists a second edition of this work (1979), which we have not been able to consult.

247. Petrus Hispanus, Commentum in libros de anima, in M. A. Alonso, ed., Pedro Hispanus Obras filosoficas, II, (1944) (here referred to as Quaestiones libri de anima). Alonso's editions are mere transcriptions of the manuscripts; they are useful to work with, but have to be treated with much caution.

248. Petrus Hispanus, Scientia libri de anima, ed. M. A. Alonso (1941). There exists a second edition of this work (1979), which we have not been able to consult.


251. The testimonies can be found in de Rijk's biography of the other Petri (or rather the combined Petrus) in his introduction to the edition of the Summularum, pp. xiv-xvii, xxxviii-xl.

252. Earlier research suggested that they were written in Toulouse (Gauwyter, 'Les Commentaires', p. 2407), but this assumption rests on the identification of the two Petri Hispani.
AVICENNA'S DE ANIMA IN THE LATIN WEST

Hispanus in one of them. Since they do not bear a title we shall here call them *Quaestiones libri de anima*, a phrase which is used in an explicit in one of the two manuscripts. For each passage of the Aristotelian text Petrus first gives a brief division, and then a summary of it, the *sententia* or *summa*, and afterwards raises and discusses questions. The *Quaestiones* seem to be the outcome of Petrus's teaching activity as a master of arts.

Aristotle, quite naturally, has a much more prominent place in the *Quaestiones libri de anima* than in earlier psychological treatises; he is now the writer regularly commented upon and referred to. One may encounter sentences where Petrus almost identifies Aristotle's opinion with truth: 'We say according to the truth and according to Aristotle that it is not true that the soul has the nature of fire.'

The *Quaestiones* also witness to the growing authority of Averroes: he is referred to some thirty times and is used often in the formulation of Petrus's *solutions*. The number of quotations in itself is quite unparalleled in the early 1240s (one may compare the psychological sections of the *Summa fratr. Alexandri* and of Vicent of Beauvais's *Speculum naturale*) and is only matched by Albertus's *De homine*. That the *Quaestiones* are different from the psychological writings discussed so far, is apparent also from the way Avicenna's *De anima* is used: Petrus has a preference for chapters I, I, V, 2 and V, 7 - and not for the outline of the faculties of chapter I, 5 which most earlier writers favoured, and the structure of which they imitated in their own writings on the soul.

This being the case, one could conclude that Petrus's *Quaestiones* represent a new form of psychological writing in the West, which is less indebted to Avicennan than the writings we have studied up to now. But there are indications that Petrus's approach is not significantly different from that of his predecessors. First, Avicenna is referred to much more often than Averroes. Second, there is an accumulation of quotations from Avicenna's *De anima* towards the end of Petrus's treatise, especially in the *solutions*. This phenomenon can be explained by the fact that Petrus's *Quaestiones* are incomplete. Both manuscripts stop abruptly at the same point of Aristotle's *Peri psychê*, namely book II, 11, 415b27-28. Either Petrus never finished the treatise, or the second part of it got lost. I should like to argue that the limited influence of Avicenna is mainly due to the fact that the topics of book I of Aristotle's *Peri psychê* play only a marginal role in Avicenna's *De anima*. Petrus seems to proceed in a way similar to that of Albertus in his *De homine*: both start to use Avicennan *De anima* extensively when it comes to the discussion of the different faculties. If the lost (or only planned) part of the *Quaestiones* looked like the last two hundred pages of what has survived, it would probably rely very much on Avicennan psychology. The extant text stops some folios after Petrus has introduced the vegetative faculty, which gives him the first opportunity to use Avicennan faculty-psychology - and he does not miss it.

But what the vegetative soul is, is apparent from the definition by Avicenna: the vegetative soul is that which is the first perfection of the natural and instrumental body which is reproduced, growing and nourished.

It may well be, therefore, that we would meet with the Avicennan definitions of other faculties in the lost part of the *Quaestiones*, as previous masters of arts did before Petrus: John Blund and Anonymous (Gauthier). Hence, although Petrus is commenting on Aristotle, he seems to be introducing Avicenna by the back door.

Let us turn to Petrus's philosophical *magnum opus*, his *Scientia libri de anima*, written between 1250 and 1260, probably in Portugal. The prologue is explicit about the purpose of the book and its relation to Petrus's earlier writings:

Hence the inquisitive intention, which is worth pursuing, arose to the throne of our mind that we should provide a comprehensive and perfect account ('compendiosam ac perfectam traditionem') of the nature of the soul and its differences, so that investigative discussions proceeding under the examination of the disputations-methods had been published by us in other books and had been sent out in advance, in this work the sentences of truth about all questions are brought

(underlining indicates that they are found in Petrus's *solutions*): pp. 71, 259, 261, 277, 381, 442, 505, 533, 534, 545, 552, 554, 576, 578 (twice), 579, 594, 595, 622, 650, 652, 654, 677 (twice), 678, 680 (three times), 685, 700, 701, 705 (twice), 724, 740, 751. The phenomenon is less obvious in the list of quotations from other Avicennian works than *De anima*: pp. 79, 130, 138, 149, 160, 173, 190, 196, 206, 307, 367, 368, 399, 444, 456, 499, 500, 502, 508, 534.


256. Petrus Hispanus, *Quaestiones*, p. 346: 'Dicamus autem secundum veritatem et secundum Aristotelem quod non est verum quod anima habeat naturam ignis'.
to a conclusion in firm and short summaries (certis summis ac brevibus). The contrast here is between a work which examines and discusses the topics – he refers to the Quaestiones – and a work which dispenses with the arguments pro and contra and gives only the conclusions. The Scientia libri de anima indeed differs very much in its approach from the Quaestiones. It is written in a descriptive and categorical style and rarely engages in discussing a problem. Except on the last pages, no writer is mentioned in the book, not Aristotle, not Avicenna. The phrase ‘compendiosa ac perfecta traditio’ indicates that Petrus is intending to write his final book on the soul.

The prologue does not convey any sense of history or of a tradition in which Petrus would locate himself; for this, one has to turn to his discussion of predecessors’ opinions at the end of the book:

The endeavour of the ancient writers in their writings about the soul, even though the ultimate end and the real depth of the truth was not completely reached, a certain part of the truth. For some of them described the soul through the effectus of its condition, through its dispositions, actions and its faculties, sticking to the path of posterior attributes. Others tried to explain the soul through metaphorical allegories and thus hid the clarity of its light under the coverings of similitudes. It is not proper, therefore, to disdain their theories; instead we can embrace them with a kind heart. We shall therefore present their opinions in this last chapter. There follows a discussion of the opinions of the Presocratic philosophers, drawn from Peri psychês, book one. The first ‘ideo’ of this passage (‘it is not proper, therefore’) refers back to the first sentence: we should not disdain them because they had already hit upon some part of the truth – not the whole, however, for reasons of method; they explained the soul either according to its external attributes or in a metaphorical way. Petrus implies that he himself uses an improved method, which enables him to ‘bring the truth of all sentences to a conclusion’. We meet here with a sense of progress reaching from the Presocratics through Aristotle and Avicenna (who is used amply, as we shall see) to Petrus Hispanus himself. Curiously enough, this attitude resembles that of the late Avicenna (whose methodological standpoint Petrus cannot have known); I shall come back to this in the conclusion to the book.

To what genre does the Scientia libri de anima belong? It does not have a counterpart in thirteenth-century psychology, since, while being a work by a master of arts, it does not betray the characteristics of either commentaries or quaestiones. The title which is given to the work in the ‘Incipit’ indicates that Petrus is writing the science of the soul in the tradition of Aristotle’s Peri psychês. If we recall what he said in the prologue, we can deduce that the Scientia libri de anima presents the conclusions that a master of arts arrives at when he takes Aristotle’s Peri psychês as a starting point for his own discussion.

What is the content of these conclusions? It has been maintained that Petrus took his material from many different sources and hence partly from Aristotle, and that his theory of the intellect is indebted to Augustine and Avicenna.

The last point will be examined below in the chapter on the intellect. As for Aristotle, his presence is felt not only in the already mentioned last chapter on the Presocratics (which, however, covers only fifteen of the over 500 pages), but also in the title of the Scientia libri de anima, and on a number of occasions when Petrus adopts his doctrine. However, Petrus’s main inspiration comes from somewhere else: his work is mostly indebted to Avicenna’s De anima.

Petrus uses the book on a massive scale, but tacitly – that is, he presents it as his own teaching – and usually with many alterations; he may adopt an Avicennian argument, but change the wording completely, or employ Avicennian vocabulary without drawing on a particular passage. Avicenna’s philosophy is integrated into the Scientia to such an extent that there is hardly a single chapter in Avicenna’s book which is not quoted or somehow adopted by Petrus. A list of the few Avicennian quotations, but there are certainly more. The quotations come from the following chapters of Avicenna’s De anima (the number of quotations is given in brackets after the
1. ALBERTUS MAGNUS

Albertus Magnus’s extraordinary preeminence among the writers examined is perhaps best introduced by pointing out that his De anima (and partly also his De homine), considered in itself and not historically, is still one of the most valuable pieces of secondary literature on the Peripatetic psychological tradition. It is worth while to consult this work whenever one is looking for the differences between Aristotle and his followers, especially the Arabic philosophers, who seldom signal explicitly when they deviate from Aristotle. Avicenna, for instance, hardly ever does this. The De anima thus is a helpful tool for working one’s way through the only apparently monolithic body of Peripatetic doctrines, in particular on the vegetative and animal faculties.

To turn to the historical Albertus Magnus: he is the author of several psychological works, of which we shall first examine his early De homine.275 It dates from about 1242–3, a time when he was bachelor of the Sentences at the University of Paris.276 The De homine very probably is the fruit of quaestiones disputatae – that is, questions raised by the teacher or the pupil over reading the Bible or Peter Lombard’s Sentences – and Albertus in fact often refers to the book as his Quaestiones de anima.277 The questions of De homine are raised in relation to reading the latter part (on human beings) of the second book of the Sentences. The first part (on angels and the first days of creation) is covered by Albertus’s book De IV vocaequarvis, written immediately before the De homine.278

It is obvious that the De homine is the work of a theologian and not of a master of arts such as Petrus Hispanus. The overall structure of the book manifests its adherence to the genre of theological treatises on the soul. We meet with the following familiar topics, in sequence: the existence of the soul (qu. 1,2), the definition of the soul (qu. 2–4), the origin of the soul (qu. 5), the division of the soul (qu. 6), the unity of the soul (qu. 7), the differences or parts of the soul (qu. 8–68), sensualitas, reason, free will, syndrestis, conscience, the image of God (qu. 69–73), the body of Adam (qu. 74–7), the joining of body and soul (qu. 78), the status of men in paradise and this world (qu. 79–81).281


276. Lottin, ‘Ouvrages théologiques de saint Albert le Grand’, pp. 281–84; Gauthier, ‘Les Commentaires de la Vérité’, pp. 256–7; Weisheipl seems to prefer a later dating, after 1245, the year when Albertus became master of theology (“The Life and Works”, pp. 21–2). This later dating, however, collides with the fact that the De homine has been shown by Lottin to antedate the reduction of the commentary on the Sentences, which for most parts dates before 1246 (Lottin, ibid., pp. 273–84). The relative chronology: De IV vocaequarvis, De homine, De bono, Sententiarum super 1 Sententiarum, has been validated by Geyser in his prolegomena to Albertus Magnus, De bono (1951), pp. xi–xiii.


Theories which Petrus is not interested in, amounts to a characterisation of his psychology: he is not interested in Avicenna’s more theoretical discussions of the notions of substance, form and perfection, or the Flying Man (II,1–3); he quotes almost every page of Avicenna’s account of the faculty of touch (IV,2 and IV,4), which belong to the Parva naturalia tradition; and he adopts theories on the intellect, but not the discussions of the incorporeality, individuation and immortality of the soul (V,2–4). It is obvious that Petrus refrains from engaging in discussion of the more metaphysical parts of psychology275 and that his focus is on the psychology of faculties, and especially the physiology of the senses. This accords well with the fact that Petrus is also a medical writer and that apart from Avicenna his sources are predominantly medical.276

What Petrus wrote in Portugal about the soul was not in vogue with many of the contemporary masters of arts and theologians in Paris and Oxford, for instance Thomas Aquinas. Here we find the focus shifting towards more metaphysical questions, such as the individuation of the soul and the unicity of the intellect.

275. There are exceptions to this rule, for instance the highly metaphysical chapter De vita substantiae spiritualis (Scientia libri de anima, pp. 403–13).
In contrast, however, to other writers in this tradition, such as Philip the Chancellor and William of Auvergne, Albertus has reduced the role of the theological topics to a mere framework for the disproportionately extended philosophical section on the vegetative, animal and rational parts of the soul (questions 8–68). Moreover, he inserts philosophical teachings already in the first eight questions, for instance by contrasting the definitions of the sancti (Augustine, Remigius, Bernard of Clairvaux and John of Damascus)\textsuperscript{282} with the definitions of the philosophers. Another example is the chapter about the origin of the soul, which takes as its model the corresponding part of Gundissalinus’s \textit{De anima}, which contains much philosophical material.\textsuperscript{282} Of course, Albertus’s approach is not without parallels: Roland of Cremona, Jean de la Rochelle and the \textit{Summa fratrës Alexandrë} resemble Albertus in that they also transform their chapters on the division of the soul into philosophical treatises. But Albertus goes much further by marginalizing theological psychology.

How then does he conceive of the history of philosophy? As has been said, Albertus differentiates between the philosophi and the sancti, for instance in this passage:

\begin{align*}
\ldots & \text{this is not true nor is it said in accordance with philosophy, because philosophy says the opposite, Aristotle as well as Avicenna, and the sancti say the opposite, Augustine as well as Bernard of Clairvaux.}\textsuperscript{284}
\end{align*}

Aristotle and Avicenna are clearly the most eminent philosophers for Albertus; this is reflected not only in sentences like this, but also in the number of explicit quotations of their works on the soul: Aristotle’s \textit{Peri psychës} is quoted about 280 times, Avicenna’s \textit{De anima} about 230 times, whereas there are only about sixty references to Averroës.\textsuperscript{285} The fifty references to Algalzè’s \textit{Metaphysica}, a reworking of Avicenna’s \textit{Dvænitvæ}, add to the influence of Avicennian psychology. Algalzè

kindly given by Henryk Anzulczek: 6 (‘secundo quæritur an sit anima’), 9 (‘quæratur de divisione cionis eius’), 62 (‘uram anima sit una vel multae in omnibus animatis ... ’), 85 (‘de divisione animae per has differentiæ vegetabile, sensibile et rationale’), 89 (‘uram sit una substantia in homine vel non ... ’), 102 (‘licet a divisione aratum vegetabile, sensibile et rationale’), 365 (‘... a sanctis tractabant et sunt sex, sicut sensualitates et ratio cum portione superiori et inferiori et librum arbitrium et syndesis et conscientia et imago de quae est in anima’), 621 (‘de corpore hominis quantum pertinet ad theologum’), 635 (‘de divisione animae et corporis’), 638 (‘secondum statum animalis vital habitaculum est duplex, sicuter paradiso et mundus ... ’).


\textsuperscript{283} 283. Albertus, \textit{De homine}, qu. 5, pp. 62–84; Gundissalinus, \textit{De anima}, chs 3–7, pp. 43–60. Albertus refers to Gundissalinus as ‘Toletanus’ (misread in the editions by Jammy and Borget as ‘Collectanus’, see Callus, ‘Gundissalinus’ De anima and the Problem of Substantial Form’, p. 319). For the occurrences of the name in Albertus, see p. 13, n. 3 above.


\textsuperscript{285} 285. To these should be added Albertus’s quotations from ‘Alpharabius in suo libro De sensu et sensato’ which in fact come from Averroës’s \textit{Epitheme of the Parsa naturalis}; see Gireje, ‘Der Liber de sensu et sensato von al-Fārābī’, pp. 107–16.

and Dominicus Gundissalinas are referred to as followers of Avicenna:

Algalzè says the same in his \textit{Metaphysica}, because the positions (\textit{dicta}) of Algalzè are nothing else than a summary of Avicenna’s positions.\textsuperscript{286}

In this opinion Avicenna is explicit in his \textit{Sextes de naturalibus}, and \textit{<also>} the two who follow his traces, namely Algalzè and Toletanus.\textsuperscript{287}

If Aristotle and Avicenna are Albertus’s main philosophical authorities, is Avicenna preferred to Aristotle, as was the case in most of the other psychological treatises examined? Only in the sense that Albertus follows Avicenna rather than Aristotle in the structure of his psychology, as will be shown later. But otherwise, Albertus differs from most of the earlier writers on the soul — if we exclude Petrus Hispanus, whose commentary on \textit{Peri psychës} was written at about the same time — in that he refers to Aristotle’s text with the words \textit{textus et littera}\textsuperscript{288} and to the Greek and Arabic Peripatetic philosophers not only as \textit{philosophi naturales} but also as \textit{commentatores}.\textsuperscript{289} This is remarkable since Albertus was not writing a commentary, but seems to give greater weight to the authority of Aristotle deliberately, for reasons of doctrine, and not because the genre of a commentary demands it. It is in this mode that Albertus discusses points of disagreement between Aristotle and Avicenna. Earlier psychological writers (or even contemporary ones like the author of the \textit{Summa fratrës Alexandrë}) tend to treat both philosophers as representing one body of philosophical teaching. One may, therefore, observe a turn towards Aristotle in Albertus’s \textit{De homine}.

However, it would be very wrong to say that Albertus’s purpose is to purge Aristotle of ‘false interpretations, in particular those of the Arabic commentators’.\textsuperscript{290} Rather, his aim is not to explain Aristotle, but to establish a comprehensive account of philosophical teachings on the soul. This is best seen from the least Aristotelian and most Peripatetic part of the \textit{De homine}, the doctrine of the internal senses.


Albertus repeatedly refers to the teaching of the *philosophia*, and bases his theory upon its authority.291 His attitude towards the Peripatetic tradition is also obvious from the section on the three vegetative faculties: here he approves explicitly of Avicenna's definitions and each time gives the following reason:

We say that the quoted definition is good and natural ('physica', *that is, appropriate for natural philosophy*). For a natural faculty is defined by the action it has on its own matter and in relation to its function and through its subject in which it is.

All these points are covered in the quoted definition.292

One can see here that Albertus places his writing in the realm of natural philosophy and that he has certain criteria for the quality of such philosophy.

In this project of a philosophical theory of the soul, Avicenna has a very special role. He is not referred to as a commentator,293 but serves as a philosopher in his own right: his *De anima*, is quoted extremely often, more often than in any other psychological work of the thirteenth century; the structure and content of his theory of the soul greatly influenced Albertus. It is instructive to see how Albertus deals with those problematic cases when Aristotle and Avicenna contradict each other: either he tries to reconcile the two by showing that both are correct but in different regards,294 or (if they are in blatant disagreement) he gives another interpretation of Avicenna's text, in order to rescue ('salvare') him.295 Avicenna is the only philosopher (apart from Aristotle) to be treated with such respect. Averroes, for instance, is criticized harshly for his ignorance of the Aristotelian interpretation of Avicenna's text, in order to rescue ('salvare') him.295 Avicenna is not only used as a commentator, but also as a common source for natural philosophy.


293. See the passage in n. 289 above, which gives Alexander, Themistius and Averroes as commentators. Whereas references to Averroes say *in commento de anima* or *super liberum de anima*, Avicenna's *De anima* is called *Liber sexus de naturalibus* (about forty times).

294. See, for instance, the discussion of the location of the sense of taste (*De homme*, 32.3.5, pp. 278–9), the question of which is the primary sense, touch or vision (*De homme*, 19.2, pp. 166–8), the definition of *phantasia* in a strict and a wider sense (*De homme*, 38.1, pp. 330–2), the question of whether there is a memory for intelligible forms (*De homme*, 57.5, p. 498). See pp. 92–3, 148–50, 190 below.

295. Albertus, *De homme*, 4.3, p. 44 (*Ad alium dicendum quod si volumus salvare Avicennam tunc faciamus vim in verbo eius*...); 173.3, p. 156 (*si volumus sustineri Avicennam dicamus...*); 22, p. 225 (*et alium dicendum quod licet Avicenna dicit quod quaedam animalia...*). Albertus even compares different passages in Avicenna's *De anima* which seem to contradict each other (13.2, p. 128) and gives an explanation. This happens again in the chapter on the cause of sleep (43.4, p. 390). In a similarly philological manner, Albertus discusses Avicenna's theory of common sense (*De homme*, 32.3, pp. 310). See n. 294 above, which refers to Albertus's attempts of establishing a concordance between Avicenna and Aristotle. Albertus is the first writer in the West to make use of the vast material on optics presented in Avicenna's *De anima*; see pp. 117–19, 125–7 below.

300. See n. 294 above, which refers to Albertus's attempts of establishing a concordance between Avicenna and Aristotle. Albertus is the first writer in the West to make use of the vast material on optics presented in Avicenna's *De anima*; see pp. 117–19, 125–7 below.


AVICENNA'S *DE ANIMA* IN THE LATIN WEST

By Albertus Magnus

In his *De anima*, Albertus does not quote the lemma of Aristotle's text, but integrates it into his own commentary. He inserts numerous digressions which for the most part settle questions about the different standpoints and interpretations of the Peripatetic philosophers. Many modern scholars label this type of commentary a 'paraphrase', and maintain that Albertus's model is Avicenna's *De anima*. This can hardly be true. It has been demonstrated in the previous chapters that the structure of Avicenna's book influenced many psychological works, in particular Petrus Hispanus's *Scientia libri de anima* and Albertus's *De homine*. These are not paraphrases, but independent treatises on the soul, as is Avicenna's *De anima* itself. Avicenna's commentaries on Aristotle are lost, and none of the extant books by him can count as a paraphrase of an Aristotelian work. On the contrary, Albertus's *De anima* deviates from this Avicennian tradition. The book obviously is a compromise between the type of commentary written by masters of arts such as Pseudo-Petrus Hispanus and Adam of Buckfield, who follow Averroes closely, and Albertus's earlier rather independent approach in *De homine*.

This is apparent from the role Avicenna plays in *De anima*. On the one hand, Avicenna's presence is felt in many parts of the commentary, most prominently in the digressions. In contrast to *De homine*, Avicenna is often quoted silently, and many theories connected with his name in *De homine* now appear under Albertus's own name or as theories of unnamed philosophers. The effect is that almost the whole system of Avicenna's faculty psychology is worked into *De anima*.

The other side of the coin is that instead of about 230 explicit quotations from Avicenna's *De anima* in *De homine*, we now find about forty. Also, Albertus turns against those theories of Avicenna that he finds to conflict with Aristotle, whereas in *De homine* he had still embraced them or constructed a compromise bridging the differences between the two philosophers. Examples are Avicenna's opinions on the medium of smelling, the medium of taste and the organ of touch, and the doctrine of the four intellects. Note that Albertus had never accepted the theory that the structure of Avicenna's *De anima* in *De homine*, we now find about forty. Also, Albertus turns against those theories of Avicenna that he finds to conflict with Aristotle, whereas in *De homine* he had still embraced them or constructed a compromise bridging the differences between the two philosophers. Examples are Avicenna's opinions on the medium of smelling, the medium of taste and the organ of touch, and the doctrine of the four intellects. Note that Albertus had never accepted the theory of the medium as being a quality of the soul, which Avicenna held, as well as the theory of the organ of touch being related to the organ of taste. Albertus, on the contrary, did not accept the theory of the organ of touch being related to the organ of taste, and he rejected the idea of the medium as being a quality of the soul, which Avicenna held.
of the separate active intellect; what he did accept were Avicennian theories based on a physiology different from that of Aristotle. It is here perhaps that Avicenna's psychology seemed most attractive to Albertus, and it is here that he later turns against him. Finally, the structure of Albertus's commentary is that of Aristotle's *Peri psyché*; that means, topics from the tradition of the *Parvus naturalia* are excluded and the internal senses, for instance, appear only in digressions.114

Therefore, in spite of its marked Avicennian traits, which set it apart from the works of Albertus Magnus, but make it akin to Petrus Hispanus's *Quaestiones libri de anima*, Albertus's *De anima* represents a new kind of writing on psychology which turns away from Avicenna back to the *pater philosophorum*.115

This should not hide the fact that Avicenna's psychology pervades almost all of Albertus's works. I have counted about 460 explicit references to Avicenna's *De anima*, i.e. about one third of all entries in the *Index locorum*. Knowledge of Avicenna's psychology in the later Middle Ages was largely due to the omnipresence of Avicenna in Albertus's works, even when his *De anima* found very few readers.116 Late medieval writers could also get their knowledge of Avicenna from Vincent of Beauvais's *Speculum naturale*, whose psychological section draws heavily on Albertus's *De homine*. Albertus Magnus's extraordinary understanding of Avicenna's philosophy will emerge repeatedly in the course of this study. As a Western connaisseur of Avicenna's philosophy, he has been surpassed by few, even up to our time.

112. THOMAS AQUINAS

Thomas Aquinas, the Dominican theologian active in Paris and Italy, was a pupil of Albertus Magnus, but his attitude towards the Peripatetic psychological tradition was markedly different from that of his teacher. He did not choose to develop further an Avicennian system of faculties, as many theologians had done before him; instead, his writings on natural philosophy, notably the *Sententia libri de anima* (about 1268),117 have Aristotle as a starting-point, and his own psychology took a new direction.

By the time of 1268 (six years before Thomas's death), the practice of writing commentaries on Aristotle's *Peri psyché* was already about thirty years old in the Latin West, and one could thus say that Thomas was simply following a fashion.118 But commentaries are of very different kinds, and which type a writer chooses reveals much about his standpoint. In contrast to Petrus Hispanus's *Quaestiones libri de anima* and Albertus's *De anima*, Thomas's *Sententia* does not inform his readers about the Peripatetic tradition on the soul. His most important secondary sources, Themistius (who is employed extensively for the commentary on the first book), Averroes, and Albertus Magnus, are all used silently: Themistius and Albertus are never mentioned, Averroes only once.119 Also, the number of digressions, which are called *quaestiones* and *dubitaciones* in this case, is rather limited, about twenty.120 These digressions would be the place to introduce Avicennian material, but Thomas rarely does this: the internal senses, for instance, appear only embedded in a *quaestio* about accidental perception.121 Not one of the solutions of these digressions adopts a standpoint from Avicenna. In fact, positions of his are refuted twice in passing,122 and one can duly say that Thomas's commentary witnesses to the decline of Avicenna's influence on philosophical psychology.123

Mahoney, 'Albert the Great and the Studio Patavino', pp. 537–63.


319. See Gauthier's history of Latin commentaries on *Peri psyché* up to Thomas Aquinas ("Les Commentaires de la Peri", pp. 235–73*).

320. Cf. the *Index nominum et operum ab ipso Thoma nominatorum* in Gauthier's edition (pp. 285–6) and the corresponding index to names which appear in the *apparatus fontium* (pp. 286–309).


324. Cf. Callus, *Les Sources de Saint Thomas*, p. 163: 'il est également vrai qu'on ne trouve aucune trace d'influence véritable et profonde d'Avicenne dans les commentaires de S. Thomas sur Aristote'.

314. Albertus, *De anima*, 2.4.7 and 3.1.1–4. In the years following the composition of *De anima*, Albertus writes commentaries on the different parts of Aristotle's *Parvus naturalia*. He refers the readers of his *De anima* to these books (e.g. *De anima*, 3.4.1, p. 229, lines 68–74).

315. Albertus, *De anima*, 2.3.4, p. 147, line 40: 'Nos autem et veritatem salvare cupientes et reverentiam exhibere patri philosophorum Aristotelii dicamus cernem esse medium tactus'. Directed against Avicenna; see p. 104 below.

316. See the following very preliminary list of explicit quotations from Avicenna's *De anima*:

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<td>7–1264</td>
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<td>1270</td>
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<td>1272</td>
<td>38</td>
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</table>

AVICENNA'S DE ANIMA IN THE LATIN WEST

This is not to say that Thomas's psychology, as it appears in his other works, does not owe much to Avicenna's De anima.325 That this is the case has been pointed out repeatedly326 and is confirmed by the Index locorum, which contains the passages from Avicenna that Thomas has used. His indebtedness is most evident in the case of the internal senses – he takes Avicenna's theory of estimation as the starting point for his own concept of a ratio particularis →, but pertains also to the theory of individuation.327 More often than any other writer of the thirteenth century, Thomas defines his own standpoint in contrast to Avicenna's, that is, by criticizing his psychology: such is the case for instance with the theories of prophecy, abstraction, intellectual memory, and the active intellect.328 Thomas disagrees with Avicenna's claim that prophecy depends to a high degree upon the right disposition of the prophet; that the bodily (or animal) faculties, having assisted in the acquisition of universals, are not needed any more, but rather distract the soul; that strictly speaking there is no intellectual memory; that the active intellect is separate.

In view of Thomas's critical attitude towards Avicenna, it may appear obvious why Thomas writes a psychology which follows Aristotle rather than Avicenna. The reasons given by modern scholars can be summarized as follows: Thomas's theory of intellect is based on the Aristotelian principle that all natural knowledge in this life is grasped through particulars (or phantasms). He realizes that Avicenna's theory of the separate active intellect as the illuminating source of knowledge is similar to that of Plato and that it is, just like Augustine's, incompatible with his own doctrine. Hence he turns to Aristotle.329

This is only partly correct. It is true that Thomas thinks that Avicenna's and Plato's theories of intellecction are related (we shall come back to this) but the fact that Thomas turns his back on Avicenna's psychological system as a whole has more profound reasons than that: in general, Thomas does not favour a psychology of faculties grounded on physiology. This is apparent from the way Thomas uses Avicenna's De anima. He hardly ever mentions Avicenna's localization of the internal senses in the different ventricles of the brain,330 and he does not pick up Albertus's presentation of the differences between Avicenna and Aristotle on the media and organs of the external senses. He discusses the faculties of touch and taste without mentioning the sensory nerves.331 His lack of interest in the physiological aspects of psychology is demonstrated by the fact that he quotes Avicenna's theory of the intellect (book five) much more often than the theories of the external and internal senses.332 It is also reflected in his method of quoting Avicenna on the senses: whereas previously examined writers mostly integrate the quotations into the corresponding part of their treatise on the soul, Thomas often puts them out of context and rephrases them in his own wording.333 There are, in fact, few literal quotations.

It is unlikely that Thomas's partial rejection of Avicenna's intellect theory accounts for his general attitude towards Avicennan psychology: he could have written a treatise on the soul just like Considerans, the unknown author of the Summa fratriss Alexandridi, who follows Avicenna on the senses and on the structure of his psychology, without taking over the theory of the intellect. But Thomas does not do this. In the first part of his Summa theologica he inserts a psychological section at the same place as previous theologians (questions 75–89). The latter usually have first a theological part on the essence of the soul (dropped in Roland of Cremona, but extant in Jean de la Rochelle, Considerans and Albertus), then a philosophical part on the faculties of the soul, and finally a theological part on sensualitas, conscience, free will etc. Thomas follows this general pattern, but adds numerous questions about human intellecction

325. Vansteenkiste has conveniently collected and printed all references to Avicenna in Thomas (without tracing their source): 'Avicenna-citaten bij S. Thomas', pp. 457–507.
327. On estimation see Thomas, Prima pars Summae theologiae, 81.1.c, and pp. 151–2 below. On individuation: Thomas, Scriptum super sententiarum, I.8.5.2 ad 6o, pp. 231–2; ibid., I1.7.12.1.c, pp. 424 and 425; De ente et essentia, 5, p. 379, line 68. See also Index locorum, I.5.a.2.2–3 (estimation), and V.3.e.1 (individuation).
328. See pp. 171–4, 190, 204 below.

330. Exceptions are Thomas, Scriptum super sententiarum, I.3.4.1 ad 2, p. 113, and Prima pars Summae theologiae, 78.4.c. See Jordan, 'Medicine and Natural Philosophy in Aquinas', pp. 233–46, who refers to Thomas's 'parsimony in the matter of medical sources' (p. 246), in particular on cerebral organization, human reproduction and the theory of radical moisture.
331. See p. 105 below.
332. See the following table which shows the distribution of Thomas's explicit quotations over the different chapters of Avicenna's De anima (L1–3, I1–3, II1–3, III1–3, IV1–3, V1–3 are not quoted).

<table>
<thead>
<tr>
<th>L1–2 quotations</th>
<th>III1–1</th>
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<td>IV1–1</td>
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<td>V1–13</td>
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It is instructive to compare this table with the corresponding one for Petrus Hispanus (n. 274).

at the end (questions 84—9), and—which is more significant—considerably abridges the discussion of the vegetative and animal faculties, by treating them in one question (no. 78): ‘First we have to consider those <faculties> which are the preambles to the intellect’ (praebamula ad intellectum). 334 The Avicennian system of faculties does not serve as the paradigm for Thomas’s approach to psychology, the focus of which is on epistemological and metaphysical questions. 335

That Thomas has a very particular view of Avicenna’s psychology is also reflected in his repeated claim that Avicenna’s theory of intellect is akin to that of Plato—336 a rare claim in the thirteenth century. 337 In contrast to Gundissalinus, Anonymous (Gauthier), Jean de la Rochelle, Petrus Hispanus, Albertus Magnus and Vincent of Beauvais, he does not quote Avicenna’s well-developed theory of abstraction, as it appears in chapter IL2 of De anima. 338 Nor does he adopt Avicenna’s doctrine of the four intellects, which a number of previous writers correctly understood as a theory about the acquisition of syllogistic knowledge. 339 Consequently, Thomas presents Avicenna’s theory as if intellection happened only through the illumination of the active intellect—which is a misrepresentation. Thomas knows the passages in De anima, V, 5, where Avicenna explains the function of the active intellect in the process of abstraction, and curiously enough, he once, in his commentary on the Sentences, comes close to understanding Avicenna’s doctrine:

If the possible intellect turns towards the active intelligence, which he (i.e. Avicenna) posits as being separate, the possible, human intellect accepts the intelligible species through the influence of the active intelligence, the task of which is to abstract the forms from the phantasms (formas a fantasmatibus abstrahere) and to put them in the possible intellect. 340

Thomas has realized that Avicenna somehow links a theory of abstraction with a theory of illumination. 341 However, his other references to Avicenna’s theory of intellection mention only the emanationist aspect of Avicenna’s theory, which reminds him of Plato. 342

Thomas, therefore, is not a reliable guide to Avicenna’s psychology, since his exposition of it is restricted to certain parts of the doctrine. One should therefore be careful not to accept his judgement too easily that Avicenna’s theory is Platonic or Neoplatonic. If Thomas’s reading of Avicenna is careless in some cases, it is also very perceptive in others (as we will see below) when he turns his full attention to a critical assessment of a theory, such as the denial of intellectual memory or the naturalistic explanation of prophecy.

1.3. THE LATER THIRTEENTH CENTURY

In the preceding chapters, the criteria employed for an Avicennian type of psychological writing was whether Avicenna was preferred to other philosophers, and in particular to Aristotle, in matters of the treatise’s structure and the content of the author’s solutions. This was indeed the case for most of the treatises of the first half of the thirteenth century, whether they were written by masters of arts (such as Anonymous (Gauthier), John Blind and Petrus Hispanus), or by theologians (such as Gundissalinus, Roland de Cremona, Jean de la Rochelle, the Summa fravit Alexandri and Albertus Magnus).

After Albertus’s De homine (about 1243) and Petrus’s Scientia libri de anima (1250—60) the situation changes: hardly a single writer fulfills the stated criteria. There are, however, a few exceptions. During Albertus’s lifetime, one of his readers or pupils, perhaps the Dominican Albert von Orlandinnie, wrote a compilation of Albertus’s natural philosophy which would become one of the textbooks of German

334. Thomas, Prima pars Summarum theologiae, 78.1: ‘Primo namque considerandum est de his quae sunt praebamula ad intellectum; secundo, de potentias intellectivae (qu. 79); tertio, de potentias appetitivae (qu. 80).’

335. In his earlier Summa contra gentiles, Thomas also treats psychological matters, but not the animal and vegetative faculties (cf. book II, questions 56—90).

336. See Thomas, Summa contra gentiles, 2.74, p. 469: ‘... sed si diligentius consideretur hac positio <vit. Avicennae> quantum a origine, parum aut nihil ditterit a positione Platonis. Possit autem Plato formas intelligibles esse quasdam substantias separatas a quibus scientia fluat in animas nostras. Hie autem <vit. Avicennae> ponit ab una substantia separata, quae est intellectus agens secundum ipsum, scientiam in animas nostras fluere ...’. Thomas, Prima pars Summarum theologiae, 84.4.c: ‘... et sic in hoc Avicenna cum Platone concordat quod species ... effluant ... quas tamen Plato dicit per se subsistere, Avicenna vero ponit eas in intellectiva agenti’. Further passages that link Avicenna and Plato: De potentias, 5.1 ad 5; Quodlibeta, 9.11.c; Prima pars Summarum theologiae, 110.1 ad 3; ibid., 115.1.c.

337. Cf. the following passages in William of Auvergne, Albertus Magnus, Anonymous (Van Steenberghen), Consalvus de Delebo, and Averroes: William, De anima, 7.4, pp. 207b—208a: ‘Si vero intellectus ister agens vel est pars animae humanae vel ipsa tertia, ex utroqque eorum necesse est sequi animam humanam naturaliter intelligentem esse sive scientiam per ipsum omnia sibi naturaliter intelligibil a et scibilia, et tunc incidit Aristoteles et sequentes in sententiam Platonis ...’; ibid., 7.6, p. 211b: ‘Et quoniam ab universali non est possibile hoc fieri justa quod videtur Plato sensisse, necesse est ut hae impressiones sint ab aliquo quod sit particulari seu singulare, et hoc est quod Aristoteles posuit intelligentiam agentem, intendens eam esse formam plenam formam ...’; Albertus, De homine, 17.3.p. 152a—b: ‘Et tara rationes omnes sunt ad hoc quod necesse est ponere datorem formarun ut posuert Plato, Avicenna, Theodorus et sequaces eorum’; Anonymous (Van Steenberghen), Quaestiones, 2.19, p. 229; Gonsalvus, Quaestiones, 2.8, p. 258: ‘<quoq intellectus agens est quaedam substantia separata, est Platonis opinio et Augustini et Avicennae’ (quoted p. 204, n. 702 below).

Averroes attacks Avicenna’s theory of the giver of substantial forms as being akin to Plato’s theory of ideas (Commentarium in libros Metaphysicorum, in Aristotelis opera, VIII, ff. 180vb—181vb: ‘... et omnes homines <vit. Avicennae et Alfarabius> declinatis magis ad opinionem Platonis ...’). 338. See Index locorum, IL2.a—g.

339. See p. 198 below.
AVICENNA'S DE ANIMA IN THE LATIN WEST

town schools, the *Philosophia pauperum*, also called *Summa naturalium*. It is not surprising that we find here a psychological section (in the fifth book) of distinct Avicennian colour; it is entitled 'De potentis animae' and presents the whole system of vegetative, animal and intellectual faculties as found in Avicenna's *De anima*.344

Of similar significance for the history of Avicenna's influence is the fact that Vincent of Beauvais, the most influential encyclopedist of the Middle Ages, included a long section on the soul, indebted to Avicenna, in his *Speculum naturale*, written probably between 1244 and 1246.345 Its psychology depends heavily upon Albertus's *De bonima* and Jean de la Rochelle's *Summa de anima*. Further authorities quoted in the compilation are Aristotle, Algalz, Averroes, Hali ibn Abbas, John of Damascus, William of Conches and others. Consequently, many heterogeneous elements are placed side by side, but Avicenna's psychology is among the most prominent. This is mainly due to the fact that many Avicennian passages from Albertus and Jean are adopted, but is also an effect of the additions from Avicenna's *De anima* which Vincent introduces from his own reading. In the Index locorum I have indicated which quotations from Avicenna derive from the two scholastic writers, and which witness to Vincent's direct acquaintance with Avicenna's *De anima*. Most of Avicenna's definitions for the faculties appear, plus much additional information, which may be one reason why the psychology of handbooks around 1500 in structure and content still owes very much to Avicenna.346

But apart from the encyclopedic tradition, there is hardly any treatise (at least among those published) in the latter half of the thirteenth century which takes Avicenna's *De anima* as its model.347 An exception is John Pecham's *Tractatus de anima*.348 This work, written between 1270 and 1279, contains a section on the soul's powers which presents the full range of Avicennian faculties.349 Pecham tries to establish a concordance between Aristotle and Avicenna, for instance by saying that both philosophers attribute three faculties to the vegetative soul (which is correct only for Avicenna)350 and that Aristotle calls Avicenna's 'intellectus accomodatus' the active intellect (which is not correct either, since for Avicenna the acquired intellect is a status of the human intellect, whereas the active intellect is separate).351 One can see that this is not a convincing strategy: Pecham is not writing a commentary on Aristotle, but neither does he develop Albertus' diligent account of Peripatetic philosophy into a post-Avicennian direction. In contrast to what happened in the Arabic East, where Avicenna's philosophy eclipsed that of Aristotle and dominated Islamic philosophical thought for many centuries,352 it did not determine the direction of Western philosophical writing after 1250. Can this be explained?

For a complicated historical process like this there probably exists a number of interconnected reasons. Two of them seem to be particularly important. First, and this is the standard explanation353 — there is the growing influence of Averroes. Without his commentaries as the model, and also the source, for the many commentaries on Aristotle in the thirteenth century, the scholastic writers might not have been convinced by the necessity of a radical return to Aristotle. Even a thoroughgoing Peripatetic philosopher like Albertus distances himself from Avicenna in his *De anima*, as we have seen, and decides to comment upon Aristotle.

But this can only be an external reason. For Averroes's commentary on *Peri psychés* was not very influential at first, indeed was perhaps even unpopular: one may recall Albertus's harsh words for Averroes in *De bonima*, and the fact that Averroes was known to Latin writers from 1225 onwards, but used rather sparingly.354 Moreover, in the 1240s and 1250s, when some writers like Pseudo-Petrus Hispanus and Adam of Buckfield take Averroes as a model for their own commentaries, others like Considerans, Albertus and Petrus Hispanus write psychological treatises

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347. An interesting case is Anonymous (MS Siena Com. L.III.21, ff. 134ra-177va), *Quaestiones super liberum de anima*, written about 1250. This treatise has a long prologue, published by Gardinali ('Da Avicenna ad Averrood'), which is thoroughly Avicennian in structure and content (less on intellect than on the other faculties). But the work itself is a commentary in form of *quaestiones* on books one and two of Aristotle's *Peri psychés*. On this treatise, see Gauthier, 'Les Commentaires de la philosophie', *Papers of the Psicological Society* (1973), v. II, pp. 421-8.
348. John Pecham, *Tractatus de anima*, ed. G. Melani (1948). Pecham has also written *Quaestiones* on the soul (ed. Spettmann), which focus on the intellect and on epistemology. For further information and
of an Avicennian kind. If both traditions could coexist, why did the latter stop?

Here we come to the second and more important reason: a shift in intellectual interest. Most of the psychological treatises written after 1250—the treatises *De unitate intellectus* by Albertus and Thomas, and the psychological works by John Pecham, Siger of Brabant, Anonymous (Van Steenberghen), Anonymous (Bazán), Giles of Rome and Matthew of Aquasparta— in one way or another take part in a lively dispute over doctrines of the intellect: the unicity of the possible intellect, universal hylomorphism, plurality of forms, the theory of intellection etc. Apart from the last-mentioned field, these are not topics central to Avicenna’s psychology. Of course, his book was used in the disputes, but the Latin tradition had by now developed its own questions and answers, and the Arabic authorities were not the centre of attention any more. This is partly true even for Averroes, whose writings had helped to trigger the disputes. It is indicative that very few psychological theses of Avicenna were included in the condemnation of 1277. The most prominent Avicennian thesis concerns the separate active intellect, but, as Thomas explains, this theory is based on good reasons and less open to criticism than the (Averroistic) thesis of the unicity of the possible intellect.

The other side of the coin is a decline in interest in physiology and in faculty psychology in general. This has been and will be further demonstrated for different doctrines and writers in the course of this study. The only part of Avicenna’s *De anima* which continued to receive full attention is book five, on the intellect. The following table, arranged chronologically, gives the percentage of *De anima* quotations in each writer which derive from book five. From Thomas onwards, the percentage of quotations about the intellect is noticeably higher:

<table>
<thead>
<tr>
<th>Writer</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Gundissalinus</td>
<td>38 percent</td>
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<tr>
<td>John Blund</td>
<td>16</td>
</tr>
<tr>
<td>Anonym. (Gauthier)</td>
<td>13</td>
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<tr>
<td>Anonym. (Callus)</td>
<td>10</td>
</tr>
<tr>
<td>Michael Scot</td>
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356. If one follows the thesis of Van Steenberghen and others that the heterodox movement in Paris in the 1260s, which is labelled ‘Latin Averroism’ by modern scholars, has only a few roots in Averroes’s doctrine itself (*Die Philosophie im 13. Jahrhundert*, pp. 341–50).


359. See pp. 67–8 and 71–2 above and pp. 103–6 and 153 below.


362. There are no statutes extant for the Parisian medical faculty before 1270; at the same time, the first formal degrees in medicine were granted at Bologna. From the years 1200 to 1250 very few medical writings have survived. See Jacquet, ‘La Réception du *Canons d’Avicenne*’, pp. 69–77; Siraisi, *Avicenna in Renaissance Italy*, pp. 43–53; McVaugh, ‘Medical Knowledge at the Time of Frederick II’, pp. 3–17.


364. See p. 38, n. 147 above.
on the classification of sciences assign the study of the human soul to medicine, precisely because it is linked with physiology.\textsuperscript{365} It remains to be studied whether medical authors in fact take over this part of Avicenna’s philosophy or whether they prefer the simpler psychology of Avicenna’s \textit{Canon}.\textsuperscript{366} What is certain is that hardly anybody remains interested in Avicenna’s \textit{De anima} as a whole, as Jean de la Rochelle, Albertus Magnus and Petrus Hispanus had been.

The influence of Avicenna’s \textit{De anima} stretches well beyond the thirteenth century. Much Avicennian material finds its way into the works of Averroist and Albertist philosophers (for instance John of Malines) of the fifteenth and sixteenth century.\textsuperscript{367} In the present state of scholarship, first hand knowledge of Avicenna’s \textit{De anima} in the Renaissance has been demonstrated only for very few writers such as Marsilio Ficino\textsuperscript{368} and Antonio Cattani da Imola,\textsuperscript{369} but is doubtless also true of Niccolò Tignosi and Agostino Nifo. Most of the Avicennian material current at the time appears to be mediated by the writings of Albertus, Averroes and the above-mentioned compendia. More research is needed on the history of Avicenna’s influence on Renaissance thought, for instance on the theories of imagination, prophecy and wonders, and of the intellect.\textsuperscript{370}

The influence of Avicenna’s doctrines therefore lasted much longer than that of his overall approach to psychology. In some cases the doctrines also came first.


II. DOCTRINES

1. THE FLYING MAN

The Flying Man is a thought-experiment which appears repeatedly in Avicenna's writings. The most comprehensive version is the following (De anima, I,1):¹

We say that the person among us who is intelligent enough should imagine the following: he is created all at once and in a perfect state, but his eyes are prevented from seeing things outside, and he is created flying in the air or the void in such a way that the substance of the air does not collide with him so as to allow him to perceive; his limbs are separate and do not meet or touch each other. He then reflects whether he affirms the existence of his essence (or his self, see below). He does not have doubts about his affirmation that his essence is existent; but still, he does not affirm any outer organs, such as his limbs, nor anything inside, such as his inner organs, neither the heart, nor the brain, nor any of the things existing outside; rather, he affirms his essence, without affirming for it length, breadth or depth. If it were possible for him in this state to imagine a hand or another limb, he would not imagine it as a part of his essence or as a condition for his essence. You know that what is affirmed is different from what is not affirmed and what is conceded is different from what is not conceded. Therefore, the essence which he affirms to be existential is specific for him in the sense that it is he himself without his body and his limbs; these he does not affirm.

Avicenna's story of the Flying Man has attracted the attention of several scholars, in particular because it has a certain resemblance to Descartes' 'cogito ergo sum'. It seems impossible, however, to prove a historical connection between Avicenna and Descartes, that is, to prove that Avicenna was the latter's direct or indirect source.¹ The present investigation will not be concerned with Descartes, but with the influence of the passage in the Latin West in the twelfth and thirteenth century.

There are quotations from this De anima passage in at least seven writers: Gundissalinus, Anonymous (Vat. lat. 175), William of Auvergne, Jean de la Rochelle, Petrus Hispanus, Matthew of Aquasparta and Vital du Four.² It is part of the attractiveness of the Flying Man that its meaning and purpose are rather difficult to understand. The problems arising from Avicenna's story are apparent already in the first of the Latin adaptations: what we have rendered as 'the Flying Man's affirmation that his essence is existent' has become 'affirmare se esse' - 'he affirms that he is existent' in Gundissalinus's own De anima.³ A second difficulty concerns the thesis in support of which Avicenna relates the allegory. Gundissalinus introduces the story as follows: 'The soul is not a body, the philosophers prove (probant) in the following way by saying: let us suppose ...'⁴ But is Avicenna's story about the incorporeality of the soul? There seem to be alternatives:

1. The independence of the soul from the body
2. The existence of the soul
3. The self-awareness of the soul
4. The substantiality of the soul.

It will be shown that Avicenna's primary objective is to point to the independence thesis and that the other theses are only implied. A final problem concerns the logical status of the story. In Gundissalinus, it is given in order to prove ('probare') a thesis, but we shall see that in Avicenna's original version the logical status is not a proof, but a pointer for people intelligent enough to grasp it.

Let us start by juxtaposing all sentences which contain information about what the Flying Man affirms:⁵

1. De anima, I,1:¹⁰
'he then reflects whether he affirms the existence of his self/essence (wağûda dâbiru)'

2. 'he does not have doubts about his affirmation that his self/essence is existent'

3. 'but rather he affirms his self/essence'

6. See Index locorum, I,1,m for the references. There also a Hebrew quotation by Gerson ben Solomon, which is printed in Furlani, 'Avicenna e il "Cogito, ergo sum" di Cartesio', p. 62. Gilson was the first to give a list of Latin writers quoting the Flying Man ('Les Sources gréco-arabes', pp. 41-2, notes).

7. Gundissalinus, De anima, 2, p. 37, line 23: '... nec tamem dubitabit affirmare se esse'.

8. Gundissalinus, De anima, 2, p. 37, lines 17-18: 'Quod autem anima non sit corpus philosophi sic probant dicentes: ponamus ...'.

9. Apart from the five occurrences of the Flying Man that I discuss here, there is also an allusion to it in al-Mahābūsī (ed. 'A. Badawi, p. 208, line 1), which Black translates in her 'Estimation (Wahm) in Avicenna', p. 256, n. 97. It is translated and discussed by Michot in 'La Réponse d'Avicenne', pp. 146-53.


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2. 'he does not have doubts about his affirmation that his self/essence is existent'

3. 'but rather he affirms his self/essence'

6. See Index locorum, I,1,m for the references. There also a Hebrew quotation by Gerson ben Solomon, which is printed in Furlani, 'Avicenna e il "Cogito, ergo sum" di Cartesio', p. 62. Gilson was the first to give a list of Latin writers quoting the Flying Man ('Les Sources gréco-arabes', pp. 41-2, notes).

7. Gundissalinus, De anima, 2, p. 37, line 23: '... nec tamem dubitabit affirmare se esse'.

8. Gundissalinus, De anima, 2, p. 37, lines 17-18: 'Quod autem anima non sit corpus philosophi sic probant dicentes: ponamus ...'.

9. Apart from the five occurrences of the Flying Man that I discuss here, there is also an allusion to it in al-Mahābūsī (ed. 'A. Badawi, p. 208, line 1), which Black translates in her 'Estimation (Wahm) in Avicenna', p. 256, n. 97. It is translated and discussed by Michot in 'La Réponse d'Avicenne', pp. 146-53.

AVICENNA’S *DE ANIMA* IN THE LATIN WEST

‘the self/essence (ād-dāt) which he affirms to be existent is specific for him in the sense that it is he himself without his body’

(2) *De anima*, V,7;11

‘he would know the existence of his that-ness/individual being (ωνγοδα anني Tigers) as one thing’

(3) *Maʿṣūriyyīn*;12

‘there is no doubt that in this condition he affirms his self/essence to be existent’

‘rather he affirms his self/essence’

‘the self/essence which he affirms to be existent is specific for him in the sense that he himself is identical with it without his body’13

(4) *Īsārát*.14 In this version, it is not some one of us (wāḥidun min-nā) or a man who is suspended in the air but ‘your self/essence’ (dātuka). Therefore, in a strict sense, there is no Flying Man in the *Īsārāt* but only a ‘flying dāt’. What does it affirm?

‘it would be unaware of everything except the ascertainment of his that-ness/individual being (tubāt aniyyatikah)’

(5) ar-Ḥisāb al-Adhāwiyā fi l-maʿād, IV;15 This fifth passage is different from the others that in it does not use the image of a man elevated in the air. Avicenna maintains that no one could dispense with his heart as one could do with other organs. But one could do so in imagination (fi t-tawāḥhum):

‘because the man would know that his that-ness/individual being, about which we are talking, is existent, and it would be possible that he then does not know that he has a heart’

It is obvious from this list that much depends upon the meaning of the words dāt and anīyya. In the case of dāt, the crucial question is whether to translate it as ‘self’ or ‘essence’, both meanings are possible.16 Anīyya is even harder to understand. The term has been discussed by many scholars over the last two centuries.17 There is dispute on whether anīyya means ‘being’ or ‘essence’ or ‘that-ness’ or ‘I-ness’ and whether it has any connotations like ‘individual’ or ‘essential’. It seems to be clear from the discussion so far that the term first appears in translations from the Greek (mostly rendering to ḍūr or tō ʿelvat),18 that it was used in rather different ways by different writers and that there is no common meaning for all occurrences found in mystical literature, theology and philosophy.

Thus, a juxtaposition with other passages in Avicenna does not immediately solve the question of what the passage in *De anima*, I, I means. But we may find some basis for an interpretation of Avicenna’s passages if we turn our attention to the context of *De anima*.

First, when Avicenna picks up the story of the Flying Man a second time in *De anima* (number (2) above), he explicitly refers back to the first passage and repeats it in an abbreviated form. But this time he says that the Flying Man would affirm the existence of anīyya, whereas in the first passage he had used the word dāt.

Hence it seems that the two terms should have a similar meaning in *De anima*. This makes it unlikely that dāt in the first passage means ‘self’, for anīyya certainly does not mean ‘self’. The common denominator of the two words is something unspecific like ‘core being’.

Second, in the course of *De anima*, I, I (at the end of which the story of the Flying Man is given) Avicenna announces that he has not yet begun to discuss the dāt, but only the name (ism) of the soul: ‘We need to arrive from this accident, which <the thing which is called soul> has, at knowing validly the dāt of it, in order to know its quiddity (māhārya)’.19 In other words, as long as we speak about the soul in terms of its relation to the body, we call it perfection (kāmāl).20 Avicenna says, but then we are speaking only about accidents and not about the substance (qiyābah).21 Obviously the term dāt in *De anima*, I, I – which is the context in which the Flying Man is embedded – does not mean ‘self’ but ‘essence’ as opposed to ‘accident’. Avicenna in fact uses the explicit expression ‘the essence of the soul’, dāt an-naːf.22

Third, it is evident from the list above that what the Flying Man affirms is not only his essence, but the existence (or ‘ascertainment’) of his essence. This agrees

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12. *Maṣūriyyīn*, MS Ahmet, f. 660v, lines 1,2,3 (MSS Nu and Ay have the same text for these sentences).
13. See n. 4 above.
17. Among them de Sacy, Dieterici, Munk, de Slane, Massignon, de Boer, Badawi, Kraus, Abu Rida, Goichon, Alonso, Cruz Hernandez, Frank, van den Bergh, whose opinions are well documented by d’Alverny, *Anīyya-anītas*, pp. 39–68.
20. *De anima*, I, I, ed. Rahman, p. 10, lines 15–18. Avicenna’s term kāmāl ultimately derives from Aristotle’s definition of the soul. It is, however, not the term used in the earliest translation of *Peri psychē*: The Greek ἐν τῷ ἀγαθῷ ἀτάμον (Peri psychē, I, I, 412a27 and 412b5) is rendered with the transliteration *tamām* or the translation *tamām* (‘completeness, perfection’) in the translation which is extant (ed. Badawi, p. 30). The Latin version of the second and lost translation into Arabic has *endelechia* and *perfecitore* (*Averroes, Commentarium magnum De anima*, ed. Crawford, p. 552). The paraphrase edited by Arnae also has *tamām* (see Arnae, *Aristoteles’ De anima*, p. 492).
nicely with what Avicenna says when he introduces the Flying Man in De anima, I,1: ‘We need to point in this place to the affirmation of the existence of the soul’.23

These three arguments do not preclude the possibility that the Flying Man is affirming the existence of his self, but make it very unlikely. Avicenna is therefore not being ambiguous here, as is sometimes suggested.24 We shall come back to this.

Let us now turn to the question of what Avicenna wants to demonstrate with this story, whether it is the soul’s incorporeality or its independent existence from the body, or simply its existence, its self-awareness, or its substantiality. These are the relevant sentences:

(1) De anima, I,1:25

We should occupy ourselves with apprehending the quiddity (maḥīyya) of this thing which is – in the mentioned respect – the soul. We need to point in this place to an affirmation of the existence of our soul by way of alerting and reminding, a hint which finds its target in someone who has the power to notice the truth by himself ...

The one who is alerted has a means to be alerted to the existence of the soul as something other than the body – or rather: other than body.

(2) De anima, V,7:26

I would be myself even if they - i.e. the limbs - were not there. ... These organs are in fact only something like clothes for us ...

(3) Maṣrīqiyūn:27

In order to know the essence of the soul and to get to know validly its quiddity, we have to make another investigation. Before we begin with it we need to point to an affirmation of the existence of our soul by way of alerting.

The one who is alerted has a means to be alerted to the existence of the soul as something other than the body.

We say that it is known from what has been said that the soul is not a body <but rather: other than body>. In none of the five versions is the topic the substantiality of the soul.31 That the soul is a substance is shown in chapter I,3 of De anima. In the version of the Maṣrīqiyūn the opening of chapter I,3 of De anima (on which the Maṣrīqiyūn draw) reveals very clearly the argumentative connection with chapter I,1 (because chapter I,2 is glossed over with a reference to De anima):32

We shall come back to this.

24. Cf. Druart, ‘The Soul and Body Problem’, p. 34: ‘Avicenna uses rather ambiguous terminology and one cannot always be sure it is a perception of the self as such or of one’s essence or both, since the Arabic term used (al-dāh) can mean both’.
27. Maṣrīqiyūn, MS Ahmet 2125, f. 659v, line 16 and f. 660r, line 4; I follow MSS Nu and Ay (which otherwise have the same text) in ‘we begin’ and ‘we need to point’t; MS Ahmet has the third person singular.

(4) Ilārāt:28

... would you ever> be oblivious of your self (dāh) and not affirm your soul (naft)?

In my opinion it is not possible that this happens to an intelligent person.

(5) ar-Risāla al-Adhawiyā fi l-ma‘ād IV:29

Thus it is determined and ascertained that the body in its entirety is not something which enters the concept “human being”.

In De anima, I,1 and the Maṣrīqiyūn the crucial sentence is: ‘to be alerted to the existence of the soul as something other than the body’. Here the focus is clearly on what we have called the independence thesis. Obviously, the incorporeality and the existence of the soul are implied, but Avicenna does not say so explicitly. He gives a hint at the incorporeality thesis by adding a ‘rather’ in the following sentence in De anima: ‘the existence of the soul as something other than the body – or rather: other than body’. In De anima, V,7 and also in Risāla Adhawiyā the emphasis is on ruling out the body or the limbs as being part of the core entity of the human being – which is closer to the incorporeality thesis.30 In the Ilārāt the Flying Man is an illustration of a statement about constant self-knowledge. However, the role of the body is discussed as well, in the following two tambūhūt, where Avicenna argues that it is not the senses which are able to have this self-knowledge.

In none of the five versions is the topic the substantiality of the soul.31 That the soul is a substance is shown in chapter I,3 of De anima. In the version of the Maṣrīqiyūn the opening of chapter I,3 of De anima (on which the Maṣrīqiyūn draw) reveals very clearly the argumentative connection with chapter I,1 (because chapter I,2 is glossed over with a reference to De anima):32

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together with the existence of its essence can be proved, and there will be no doubt that the soul is a substance.

Then follows a twofold argument for the substantiality of the soul, which will not be discussed here. It is likely that this passage in I,3 is the fulfilment of the intention stated by Avicenna in chapter I,1: that he is going to speak about the quiddity of the soul. His discussion therefore has three steps, in which the Flying Man serves as a bridge to the discussion of the substantiality of the soul:

First: The definition of the soul in relation to the body (as a perfection of the body).

Second: A pointer to the soul’s independent existence from the body (the Flying Man).

Third: A discussion of what the soul is essentially (it is a substance).

Having established that the emphasis is on the independence thesis, we can now solve the previous question of what it is that the Flying Man affirms. The inference drawn is not: the Flying Man affirms his own existence, therefore the soul exists independently from the body. But: the Flying Man affirms the existence of his essence but not of his body, therefore the soul – being this essence – exists independently from the body. The clue is that the Flying Man detects a core entity, which we identify as the soul. See how Avicenna shifts from the story of the Flying Man to the more general conclusion. The word ḍāt (essence) is replaced by nafs (soul):

Therefore, the essence which he affirms to be existent is specific for him in the sense that it is he himself without his body and his limbs; these he does not affirm. The one who is alerted has a means to be alerted to the existence of the soul as something other than the body – or rather: other than body.

To conclude: the Flying Man does not have ‘immediate access’ to himself,36 nor is he ‘conscious of his existence’36; or ‘fully aware of his personal existence’,37 nor does he ‘affirm his existence’,38 but he affirms the existence of his core entity, his essence, while not affirming the existence of his body.

Let us finally settle the third question: the logical status of the story. In De anima, I,5 and the Mašāriqīyān39 the story is explicitly characterized as a āṯāb, a reminder, hint, something that alerts and which is of value only for people with enough intelligence to understand it. Avicenna’s late book al-Ībārāt wa-t-tanbīḥāt consists entirely of such pointers:

This method depends on providing hints and guidelines, rather than ready-made arguments, to the student who is then expected to elaborate the entire theory on his own. This is what the two words of the title, pointers and reminders, refer to.36

Since the characterization of the story of the Flying Man as a tanbīh is repeated at the end of the passage, I do not see any reason to accuse Avicenna of using a hypothetical example for categorical ends.41 In the case of the other three versions (numbers 3 to 5) which use the Flying Man as an illustration for an argument, nothing is said explicitly about its logical status.

To recapitulate: what the Flying Man affirms is the existence of his essence. What Avicenna intends to demonstrate is not always the same: In its strongest version, the story serves to point to the soul’s independent existence from the body. The logical status of the Flying Man is to be a pointer for intelligent people in some texts and a simple illustration to an argument in others.

The Latin Reception

The Latin translators and their readers do not display any lack of understanding of the story of a man elevated in the air and without any sense perception. It will be instructive, however, to see how they deal with the three problematic areas discussed above. Let us proceed in sequence and start with a list of the Latin versions of the passages dealing with what the Flying Man affirms (De anima, I,1):42

(1) ‘deinde videat si affirmat esse suae essentiae’
(2) ‘non enim dubitabit affirmare se esse’
(3) ‘affirmabit se esse’
(4) ‘essentia quam affirmat esse est propria illi, eo quod illa est ipsem et est praeter corpus eius’43

A comparison with the Arabic original (see the English translations above) reveals that the first and fourth of these Latin sentences are good translations: the Flying Man affirms the existence (‘esse’) of his essence (‘suae essentiae’). However,

35. Druart, ‘The Soul and Body Problem’, p. 34.
39. In MSS Nu and Ay of the Mašāriqīyān the heading for the chapter classifies the Flying Man with the other term for pointer, īlāra: ‘dīkr an-nafs wa-l-īlāra īlā iḥṣa-ha’ (MS Nu, f. 404r; MS Ay, f. 81r).
42. The passage in De anima, V,7 (ed. Van Riet, p. 162) does not seem to be quoted by any writer and is therefore of limited interest in this investigation: ‘sciret se esse et quia unum aliquid est’. The Arabic means: ‘he would know the existence of this that-noun/individual being’ – or as I tried to argue above: ‘he would know the existence of his essence’. Again, the translators chose to translate ‘his essence’ with se. The Risāla Aḥbāb al-waṣīlāt was translated only in the sixteenth century by Andrea Alpago (among other treatises): De Medicinâ, id est de dispositione seu loco ad quem revertitur homin, vel anima post mortem ... (Venice, 1546, repr. 1969), f. 64v.
Gundissalinus and Avendauth are not consistent in their translation. The second and third sentences are most naturally interpreted as meaning that the Flying Man 'affirms that he is existent', instead of, correctly, 'affirms that his essence is existent' (and 'affirms his essence'). The phrase 'his essence' is translated with 'se'. The cause lies not with the limitations of the Latin language, since one can certainly express the correct meaning in Latin: 'affirmabit suam essentiam esse'. Avendauth and Gundissalinus thus juxtapose a traditional interpretation ('affirms his existence') and the interpretation I have argued for in this chapter.

There are reasons to believe, however, that the phrase 'se esse' (in De anima, I, I), which every reader must have understood as meaning 'that he exists', was intended to mean something else. This is indicated by the way Gundissalinus adapts the passage in his own De anima, where he says: 'nec tamen dubitatit affirmare se esse, cuius tamen non affirmat longitudinem...'. The crucial word here is the 'cuius'. It shows that Gundissalinus thought of the 'se' as being a substantive and not a reflexive pronoun. The sentence therefore translates: 'but he will not doubt to affirm that his self is existent, the length of which he does not affirm'. This, then, is close to one of the traditional interpretations of the Flying Man (as a discovery of the self), which I have tried to argue against.

No one in the West, however, reads Gundissalinus's translation this way. The relevant sentences in Jean de la Rochelle, Matthew of Aquasparta and Vital du Four quote the translation verbatim and take over its ambiguity. William of Auvergne, on the other hand, who mentions the Flying Man twice in his De anima, comes closer to the correct interpretation. He writes that the Flying Man 'acknowledges in respect to himself his being ('esse suum')'. The word 'esse' here refers to some kind of entity, as becomes clear in a later passage where it is identified with the person's essence: 'He will find that his entire being or his entire essence ('totum esse suum sive tota essentia sua') is the soul of himself.' William seems to have grasped the crucial idea that the Flying Man has to detect or to affirm a core entity in himself. The other writer in the West to have understood this idea is Anonymous (Vat. lat. 175): 'it is certain that «a person» in this situation would say that he is something ('se aliquid esse'). The author proceeds to explain that this person would not say that he is his members, and that therefore that which he asserts must be something different from the body. Like William, this writer comes to an interpretation closer to the original sense by changing the wording of the translation. Petrus Hispanus also changes the wording, but distances himself even further from Avicenna. His Flying Man answers the question 'whether he exists' ('utrum sit') by saying 'that he exists' ('quod est'). In a second passage, Petrus lets the Flying Man say: 'ego sum', which is close to Descartes, but distant from Avicenna.

Turning to the second and third questions answered above, we find that the scholastics quote Avicenna's Flying Man for argumentative goals that were only implied by Avicenna (existence of the soul, incorporeality), but not in order to show that the soul exists independently from the body, and finally that it was impossible for the Latin readers to discern that the logical status of the Flying Man was different from a proof.

Avendauth's and Gundissalinus's translation renders intelligently the key passages concerning the independence thesis: 'expergificent habet viam evigilandi ad sciendum quod esse animae aliud est quam esse corporis', translating the Arabic: 'The one who is alerted has a means to be alerted to the existence of the soul as something other than the body.' In spite of this, the Latin writers use the Flying Man for slightly different purposes. Gundissalinus's and William of Auvergne's emphasis is on the incorporeality of the soul. 'That the soul is not a body, the philosophers prove by saying ...'. William explicitly speaks of 'showing the spirituality of the human soul' ('declaratio spiritualitatis animae humanae'). Gundissalinus puts the Flying Man next to Avicenna's arguments for the incorporeality of the soul from De anima, V, 2. Jean de la Rochelle, Matthew of Aquasparta and Vital du Four stress the fact that the soul has self-awareness. While

44. Also modern readers: cf. Verbeke, 'Avicenna im Westen', p. 6 (paraphrasing De anima, I, I in its Latin translation): 'Avicenna behauptet, dieser Mensch wisse, daß er da ist, ...'.
45. Gundissalinus, De anima, 2, p. 37, line 23. He takes over 'essentia quan affirmat esse est propria illi eo quod illa est ipsem et est praeter corpus eius' from the translation.
46. See pp. 83–4 above.
47. Jean de la Rochelle, Summa de anima, ed. Bougerol, p. 51: 'non dubitatet affirmare se esse' and 'essentia autem quam affirmat est propria illi, eo quod illa est ipsem et praeter corpus eius' from the translation.
the latter two authors do not draw any explicit conclusions,66 Jean connects the story with the thesis that the soul is existent: 'it needs to be shown that the soul exists, so that no doubt ever arises as to whether it exists.'67 Anonymous (Vat. lat. 175) also wants to prove the existence of the soul. Hence, Jean de la Rochelle and Anonymous (Vat. lat. 175) come closest to Avicenna’s original intention.68

The writer who chooses argumentative goals most different from those of Avicenna is Petrus Hispanus. His purpose is to show that the intellectual soul differs from the vegetative and animal soul in substance.69 According to Avicenna, the vegetative and animal faculties in the human soul are in fact faculties which flow from the one human (rational) soul into the organs.70 That these faculties are not identical with the human soul could indeed be inferred, it seems, from the story of the Flying Man, but Avicenna does not do this.

To turn again to the final problem, the logical status of the Flying Man, as a pointer for intelligent people, proved to be impossible to understand for Latin readers. The main reason seems to have been that Avicenna’s book al-Iṣārat wa-t-tanbīḥāt, in which he employs the ‘indicative method’ throughout, was not translated into Latin, so that it became difficult to spot that there was a methodological position involved. The only person in the medieval West to quote al-Iṣārat wa-t-tanbīḥāt was Ramón Marti (d. 1285) in his Pugio fidei; he obviously had access to the Arabic text. His translation of the title is, in fact, quite accurate (Liber Alixa-rat, id est Initiationum vel nutuum),71 whereas Avendauth and Gundissalinus in De anima choose the metaphorical verbs exigilare and expergificare, obviously unaware of the fact that they were translating technical terms, even though Avicenna gives an explanation of them.63

57. Jean de la Rochelle, Summa de anima, 1.1, p. 50: ‘ostendendum est ipsam <seil. animam> esse ut numquam contingat de ea dubitare an sit’.
58. He uses the Flying Man as an argument for answering the question an sit anima.
59. Petrus Hispanus, Quaestiones libri de anima, 2.6.1, p. 650: ‘... utrum anima vegetabilis et sensibilis et intellectiva in homine sint una substantia vel differentiam secundum substantias. Et ostenditur quod differentiam secundum substantias, quia sicut vult Avicenna: si quis homo...’. The passage in 2.4.10, p. 622, is not as explicit, but also emphasizes the need to acknowledge the existence of the intellectual soul (anima intellectualis).
60. De anima, 1.1, ed. Rahman, p. 31, line 11; ed. Van Riet, p. 64, line 13.
63. De anima, 1.1, ed. Van Riet, pp. 36–7: ‘et debemus innuere in hoc loco aliquid quo afferetur esse animae quam habemus ad similidinem evigilandi (tambili) et reminiscendi, ut hoc mutum prope sit in quo est virtus inspicendi veritatem per seipsum’. And: ‘ideo expergificatus habet viam evigilandi ad sciendum quod...’. The words innuere and reminiscendi in the first sentence, which translate sīāra and

In the adaptations of the Latin writers, Avicenna’s pointer becomes a ratio (Petrus Hispanus, Jean de la Rochelle), a probatio (Matthew of Aquasparta) or a declaratio (William of Auvergne).64 In these versions, therefore, Avicenna has proved (probare)72 or shown (ostendere)73 whatever the writers attribute to him—the soul’s incorporeality or existence or difference from the vegetative and animal soul—whereas in fact he had only hinted at it.

In the final analysis, we should like to know whether the Flying Man had any impact on the doctrine of the scholastics. Does any of them take over Avicenna’s three-step scheme, the soul as perfection, as existing independently from the body, as a substance? No. The influence on Matthew of Aquasparta and Vital du Four is rather small: the Flying Man appears only in support of the minor premise of one of a group of arguments. The case is a little different with the other writers, Gundissalinus, William, Jean and Petrus, who have in common that they agree with the conclusions drawn from the story of the Flying Man. In William of Auvergne’s De anima the Flying Man is listed among many other arguments in favour of the incorporeality of the soul.75 Petrus Hispanus uses Avicenna’s story to answer two questions concerning Aristotle’s Peri psychē,76 the first of which is settled directly by the force of this quotation alone, whereas in the other case the Flying Man is only one of nine arguments.

The significance of the Flying Man for Western psychology lies in the fact that three early writers quote the thought-experiment at prominent places in the opening questions of their books: Gundissalinus, Anonymous (Vat. lat. 175) and Jean de la Rochelle. Gundissalinus employs the Flying Man as the first in a series of arguments to support ‘Plato’s’ definition of the soul (drawn from Costa ben Luca) as ‘an incorporeal substance which moves the body’77—a definition with which he agrees.78 Anonymous (Vat. lat. 175) quotes it in the very first question, ‘an sit anima’; the same does Jean de la Rochelle in his Summa de anima in support of his own conviction that the soul exists; to prove this, he adds yet another argument of Avicenna, coming from the beginning of De anima, 1.1, and a quotation from sūkōr respectively, are good translations.

64. Petrus Hispanus, Quaestiones libri de anima, 2.4.10, p. 622; Jean de la Rochelle, Summa de anima, 1.1, p. 51; Matthew of Aquasparta, Quaestiones disputatae selecte, 1, p. 324; William of Auvergne, De anima, 2.13, p. 82.
69. Gundissalinus, De anima, 2, p. 37, line 8: ‘Plato animam sic definitt dicens: anima est substantia incorporea corpus movens’.
70. Ibid., p. 40, line 11: ‘Vera est igitur definitio animae secundum Platonem quam anima est substantia incorporea corpus movens’.
Pseudo-Augustine’s *De spiritu et anima*, which is also in Anonymous (Vat. lat. 175). The thought-experiment of the Flying Man was thus one the earliest Peripatetic theories to become known in the West; it was obviously understood to be a very forceful argument in proving the existence of the soul and its incorporeality. But even these three writers, who use the Flying Man so prominently, do not employ the three-step scheme embodying Avicenna’s pointer for intelligent people.

This result should make us suspicious about the influence of Avicenna’s concept of the soul in general. It has recently been maintained that Avicenna influenced the Latin West with his criticism of the substantiability of the soul — i.e. he helped to disseminate the Aristotelian definition of the soul (as an actuality of the body) and to eclipse the Platonizing definitions of the soul (as an immaterial substance) which were widespread before the translation of Aristotle’s works on natural philosophy. It would be more correct to say that Avicenna does not criticize the notion of the substantiability of the soul, but holds that in relation to the body the soul is the perfection (*kamai*) of the body, whereas considered essentially and in itself, it is immaterial and a substance. As to the influence of this theory, it is indicative that the index of Latin quotations from the first four chapters is comparatively short (see the Index locorum for chapters 1, 1-4), except for the phrase ‘ex qua defluunt hae vires’ (I,3,g), which is a favourite of Albertus Magnus. In fact, Avicenna’s discussion of the soul as a perfection and a substance remained relatively un influenced in the West. The real impact of Avicenna’s psychology has to be sought for in other areas, which are worth a more extended treatment and will be discussed in the following chapters.

2. SHELLFISH AND NERVES

**Shellfish**

There are two items in Avicenna’s theory of touch which are particularly significant for the success and later decline of *De anima* in the West: the shellfish and the nerves. The first because the theory was successful, the second because it was controversial. The first item (we shall come to the nerves later) is best introduced by Albertus, who is the only writer among those examined — apart from Vincent of Beauvais who quotes Albertus — to point to the disagreement between Aristotle and Avicenna on the topic of local movement of animals.

Furthermore there is the question of the disagreement which seems to exist between Aristotle and Avicenna. Avicenna says that all animals move in the way of local movement. But Aristotle says that many animals are immobile in regard to place.

In such cases, Albertus’s usual procedure in *De bonâ ine* is to explain that the disagreement is not a real one, but that Aristotle and Avicenna are talking about two distinct things. The same happens here:

To this shall be said that Avicenna thinks of the motion of contraction and dilation, which every animal has. But Aristotle thinks of the motion which is from one place to another and which is properly called progressive motion (‘qui proprié dicturus processivus’), and this motion not all animals have, as is said in the book on animals.

Albertus’s analysis is correct: Avicenna indeed modified Aristotle’s theory that the sense shared by all animals is that of touch, and that even animals that do not have movement are able to perceive by the sense of touch. In Avicenna’s view, it is impossible that an animal should possess the sense of touch but no voluntary movement. For even animals that do not have the ability to move from one place to another are able to perform the movement of contraction and dilation. It is because we see it contracting and dilating that we discover that a creature is able to perceive an object of touch.

Albertus is also correct in emphasizing that Aristotle speaks about local movement and that Avicenna does not. However, the disagreement between the two still remains, because Aristotle seems to maintain that local movement is the only kind of movement which the soul imparts to the living creature. In contrast, Avicenna says that there is a kind of voluntary movement (and he insists on the ‘voluntary’ whenever he speaks about the topic) different from local movement.


73. See *Bonitz, Index Aristotelica*, p. 127, s.v. *quâ‘* Aristoteles, *Peri psychê*, II,2, 410b1: ‘Because of this principle all animals have life, but they are animals primarily because of the faculty of sensation. For even those which do not move or change their place but have sensation, we call animals and not merely living. The primary *off* sensation, which is shared by all, is touch’.

74. *De bonâ ine*, 62,1, 410b19: ‘For not everything which has sensation has movement as well, because there seem to be some animals which are stationary in regard to place. Yet the soul seems to move the animal only in this kind of movement’.

75. See *Avicenna, Compendium on the Soul*, ed. Landauer, p. 351, line 3; *Mal’rnjivm*, MS Ahmet, f. 667v, line 6: ‘For everything which has the faculty of touch has voluntary movement in itself either in regard to the whole or to some parts’. For *De anima*, see the passage quoted below.
which can be found in all animals: the movement of contraction and dilation which is needed for the sense of touch.

Let us then see how Avicenna introduces the example of shellfish in this context. The text in *De anima* goes as follows:80

It appears possible to say81 that movement is a cognate of touch in animals and that as there is a primary kind in the case of sense-perception,82 likewise it seems that there is a primary kind among the faculties of movement.

It is commonly believed (however) that there are some animals that have the sense of touch but not the faculty of movement, such as certain shellfish (*saddaf*). But we claim that voluntary movements are of two kinds: movement from one place to another and movement of contraction and dilation of the animal’s parts83 even if the whole <animal> does not move from its place. For it is absurd that there should be an animal which has the sense of touch but not the faculty of movement in it at all, since how would it be known84 that it had the sense of touch if not because one can see in it a kind of fleeing from something touched and some striving for something touched. Regarding what some people thought85 about shellfish and sponges and other beings, we find in the case of shellfish that in their shell there is some movement of contraction and dilation and of curving and extending in their interior86 even though the shellfish do not leave their location. Through this we know that they perceive the touched thing. Thus it is apparent that everything which has touch also has some voluntary movement in itself, either of the whole or of its parts.

The shellfish are then brought in as an objection (‘it is commonly believed ...) by the exponents of the traditional Aristotelian doctrine, i.e. those maintaining that it is touch which is the only faculty shared by all animals and not touch and movement.

The shellfish are then brought in as an objection (‘it is commonly believed ...') by the exponents of the traditional Aristotelian doctrine, i.e. those maintaining that it is touch which is the only faculty shared by all animals and not touch and movement. Avicenna says:87 In his early *Compendium on the Soul*, Avicenna tells his readers that he saw with his own eyes that the shellfish contract and dilate in the interior of their shell. He goes on:

81. *li-qu-lin en yaqūla in ... ‘It may appear to someone to say that ...’. The text of the *Makāriqiyun* does not have this phrase, which introduces Avicenna’s own theory.
82. The text of the *Makāriqiyun* adds: ‘there is a primary kind which all animals have to have’.
83. *a‘lā* parts of the body, limbs.
84. *ya‘lam* (it is known) or *na‘lamu* (we know) or *ta‘lamu* (you know) or *ya‘lam* (it knows). The last alternative is the least probable; the problem is not how the shellfish knows that it has the ability to touch.
85. *tammazula* to imagina, fantasize.
86. *ba‘gafū-ha‘* hollow, cavity, interior, belly.
87. Aristotle himself does not use the shellfish as an example. See Bonita, *Index Aristotelicus*, p. 195b, s.v. *kargaselou*. Cf. Philoponos, *In De anima*, p. 216, line 22: ‘For many diving beings which share touch do not share any other <senses>, like sponges, oysters, the so-called “snails with a spiral shell” and shellfish generally’.

88. The passage is introduced as follows (Avicenna, *Compendium on the Soul*, p. 351, line 7): ‘Someone may object to this that the shellfish (*saddaf*) <are animals> that have sense perception, but do not move voluntarily. But this objection can be solved easily by experiment. For even though the shellfish do not move voluntarily from their place in any kind of locomotion, they contract and dilate in the interior of their shell, as we have seen with our own eyes. I tested it more than once ...'88

One might argue against Avicenna that this is a kind of local movement: The shellfish rocks in the interior of the shell until it reaches its former position. However, the main point for Avicenna is that it does not leave its location, the shell stays where it is. He rather seems to subsume the movement of the shellfish under ‘striving for the object of touch’ which he mentions in the passage in his *De anima*.

This passage is not open to the objection that the movement of the shellfish is a kind of local movement: here he seems to think of what happens when you touch the shellfish. They obviously move, but they do not move from their place.

Avicenna thus has a different, non-Aristotelian criterion for the demarcation of plants from animals: in animals we can find not only a primary kind of sense perception but also a primary kind of movement, in plants we cannot find either of these.

Albertus Magnus is not the only scholastic writer who was intrigued by the topic: Jean de la Rochelle, Vincent of Beauvais, Roland of Cremona, Petrus Hispanus, Albert von Orlamünde (Pseudo-Albertus Magnus), Anonymous (Vennebusch) also made use of the passage in Avicenna’s *De anima*89 None of these writers except Albertus Magnus and Vincent of Beauvais (as we have seen) remarked upon the disagreement between Aristotle and Avicenna.

Jean de la Rochelle and Petrus Hispanus are more interested in the new kind of voluntary movement introduced by Avicenna than in the shellfish and the demarcation of plants from animals. They both cite Avicenna as an authority on the movement of contraction and dilatation, and Petrus even devotes a whole chapter to it: ‘De motu proprii corporis secundum dilatationem ac constrictionem’.90 The chapter opens with a rephrasing of the passage in Avicenna’s *De anima* and goes on to explain the two physiological processes as reactions to delightful or abominable (or dangerous) objects. Petrus partly deviates from Avicenna by classifying this kind of motion repeatedly not only as a voluntary movement (‘voluntarius’) as Avicenna did, but also as a local movement (‘motus localis’).91 Other writers drop the qualification ‘voluntary’ completely, as Jean de la Rochelle, who picks up the phrase...
phenomenon. The systolic and diastolic movement of the heart (or of that organ which takes the place of the heart), he says, is present in every animal, whereas local movement is not. The influence of Avicenna's example of the shellfish, which are not mentioned, is still to be felt in Albertus's remark that animals contract when they are pricked with a needle: 'si enim pungantur acu, constringuntur'. This movement, he says, can be found even in embryos before one can discern any other kind of sense or movement in them. Obviously Albertus takes Avicenna only as a starting point for his own theory, which differs from that of his Arabic predecessor. Avicenna would not accept the movement of the heart as an example since it is not a voluntary movement. He would also argue that the movement found in embryos before any sense perception is not a voluntary movement and that the first voluntary movement is connected with the sense of touch.

These alterations of Avicenna's doctrine are significant. It is more than a matter of vocabulary whether one says 'motus voluntarius' or 'motus animalis'. Involuntary movement can be found in plants: some turn their leaves towards the sun, some open and shut their blooms. The shellfish, on the contrary, are able to touch something by force of their voluntary movement of dilation. If, then, the Latin tradition glosses over the voluntary aspect of Avicenna's theory, it misses the gist of his argument.

There are several reasons why Avicenna's theory was so successful in spite of this misunderstanding: first, because the theory is in disagreement with Aristotle, which made Albertus interested in the problem; second because it created a new kind of movement, which interested all those writers mainly concerned with the classification of the faculties of the soul (Jean de la Rochelle, Vincent of Beauvais, Petrus Hispanus).

We shall encounter a third reason if we turn to the source for Albertus's passage in De motibus animalium (which we have just discussed). For Albertus is not as original as it may seem; he is influenced by, perhaps even draws on, a passage in Roland of Cremona's Summa theologica. The Summa dates from the mid 1230s, whereas Albertus's De motibus animalium was written in the late 1250s. Roland brings in Avicenna's example as an argument against Aristotle's thesis that there are many animals which do not have heads. 94 But all animals have touch, which derives from the brain, Roland argues. He refers to the sea sponge (spongia marina) 'in which only touch and no other sense' is found. That it has touch is proved by the fact that if fire is brought close to it or if it is pricked ('pungitur'), it contracts, as Avicenna says. 95 That Roland uses the sponges instead of the shellfish is curious since the Arabic original of Avicenna's passage mentions both sponges and shellfish, while the Latin has only the conchylia. 96 In the immediately following solutio to the problem, Roland argues that just as the heart, which is the starting-point of all spiritus, is indispensable, so is the brain, and that Aristotle is wrong. 'We have more belief in the medical scholars on this point', Roland says, suspecting that perhaps Aristotle wanted to say that in some animals such as the sea sponges the head – or that organ which takes the place of the head – cannot be distinguished.

This passage has obvious parallels in wording with the one in Albertus ('pungitur – pungitur; loco cordis – loco cordis; principium omnium spirituum – principium aliorum; non potest distingu– occultum sit'), so that either Albertus is drawing on his Dominican predecessor or both are drawing on a common source, but one which is not among the works examined.

93. Vincent of Beauvais, Speculum naturae, 25.104, p. 1840: 'motus animalis duplex est ...
94. Albertus, De motibus animalium, 2.1.1, pp. 283b–284a: 'Est autem animalium motus duplex in genere. Unus quidem qui in omni animali inventur sit sive perfectum sit sive imperfectum, et hic est motus constrictionis in praesentia temporis et tristitiae et generaliter in praesentia nocentum et motus dilatationis in praesentia conferentium et voluptatis. Per hunc enim motum animal cognoscitur esse animal. Alius autem motus est qui est de loco ad locum, qui tamen non omni convenit animali. Est autem motus cordis primus in constrictione et dilatatione secundum systolem vel diastolcm vel eius membro quod est loco cordis. Quamvis enim hoc aliquando occultum sit, tamen [non] convenit hoc esse necessarium in omni animali quia aliter non transmutaretur spiritus ab uno membro ad omnia membra quod est principium aliorum sicut in aliis liberis et in isto dictum est. Hic autem motus qui est dilatationis et constrictionis inventur in omnibus animalibus. Si enim pungantur ac[ulu, constringuntur. Et hunc motum etiam embriones habere inventurant antequam alius senus vel motus apprehendi possit in eis'.
95. Roland of Cremona, Summa theologica, f. 33va, line 18: 'In spongia marina non inventur nisi tactus, et quod habet tactus probatur quia quando ei admovetur ignis vel pungitur, contrahitur ut dict Avicena'.
96. Averroes's commentary on Peri psyches mentions spongia moris four times, but always as an example for animals which have only one faculty of sense perception: touch. See Averroes, Commentarium magnum in Aristotelis de anima libris, pp. 111, 155, 163, 177.
97. Rolando, Summa theologica, f. 33va, line 20: 'Mhi videtud quod sicut non potest esse animal sine corde vel aliquo loco cordis quia tunc esse sine spiritume ergo esse sine obiecti sensu, quod est impossi- bile, cor enim secundum omnes Physicos est principium omnium spirituum, ita impossible est animal esse sine capite quare et sine cercho per rationes dictas et multis alias quae possent dici. Et illud quod dixit Aristoteles quod multa sunt animalia capita non habentia, dicimus esse falsum salva reverentia ipsius. Magis credimus Physicos medicinae de re ista quam sibi, nisi forte vellemus dicere quod hoc idem dicet qui inventur quaedam animalia in quibus non potest capit distinguir vel illud quod est loco capitis, sicut potest esse in spongia marina'.

96. I was not able to trace this theory in Aristotle (cf. Bonitz, Index Aristotelicus, pp. 383b–387a, s.v. κοφατ%). There is one passage in his De partibus animalium where Aristotle says that all animals that have blood have a head, whereas in some bloodless animals, such as crabs, the part which represents a head is not clearly defined (683b36).
97. Roland of Cremona, Summa theologica, f. 33va, line 18: 'In spongia marina non inventur nisi tactus, et quod habet tactus probatur quia quando ei admovetur ignis vel pungitur, contrahitur ut dict Avicena'.
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AVICENNA'S *DE ANIMA* IN THE LATIN WEST

In contrast to Albertus and to all other writers, Roland is primarily interested in the example of the sea sponges, and in the fact that they have the faculty of touch; he does not mention the theory that there are two kinds of voluntary movement. Rather Avicenna's example is used by him to show that even animals which do not seem to have the faculty of touch display it if they are pricked. What is interesting about Roland, is that he explicitly states that the theory about the missing heads of many animals is false — *pace* Aristotle ("salva reverentia ipsius") — and that he agrees with the medical writers. Roland does not refer to Avicenna's example of the sea sponges in the *soluto*, but to his theory that estimation can be found in all animals. Nevertheless, Roland's attitude is the same for both Avicennian theories, which he finds convincing on scientific terms. Here, perhaps, is a third reason for the success of Avicenna's *De anima*: apart from being a philosophical treatise of high standard in itself, it also offers scientific knowledge which seemed to be more advanced than Aristotle's.

**Nerves**

This is even more obvious in the case of the nerves, because the contrast between Aristotle, who did not yet know of their existence, and Avicenna, in whose philosophical and medical works the nerves figure prominently, could not escape medieval readers. Among these, Averroes is a particularly interesting case because his treatment of the matter testifies both to his profound knowledge of the Aristotelian corpus and to his deep-rooted belief in the truth of Aristotle's words, even when they seem in conflict with the scientific knowledge of Averroes's time:

> And therefore it is necessary to believe that Aristotle wanted the sense of touch to be more than one and that flesh is like its medium.

This statement, however, is contrary to what Aristotle said in his book on animals. But perhaps the latter statement in *De animalibus* was made according to what appeared then, that is, what he knew about the limbs of the animals in that time. For then he did not yet know the nerves and said that the organ of *touch* is flesh.

The former statement in *Peri psychē* says that the organs of animals, which have what came out later (under Aristotle's death through anatomy, namely that the nerves play a part in touch and movement. Therefore, what Aristotle knew in theory (rationes), was later apparent through experience (sensus).

***Averroes here carefully observes that Aristotle's position is not the same in his different writings. In *Peri psychē* Aristotle argues that just as the objects of the other senses, so the object of touch does not come into contact with the sense organ directly, but via a medium. From this he deduces that the organ of touch is located within (ἐντὸς) and that flesh is the medium.***

Averroes is correct in pointing to the fact that Aristotle in his *De partibus animalium* seems to acknowledge the possibility that flesh is the organ of touch, and he explains this by a development in Aristotle's knowledge about animal anatomy: Aristotle, Averroes says, had in the meantime, i.e. after the composition of the book on animals, grasped the right solution without actually knowing about the nerves, and that is why he decided that the organ of touch should lie 'within'.

This attempt to rescue Aristotle seems hardly convincing given that the differentiation between organ and medium (in *Peri psychē*) is introduced by Aristotle for reasons of philosophical consistency and does not seem to be due to an instinct for the right anatomical solution. Also, to locate the organ of touch in close proximity to the heart, is again a philosophical decision, which links up with Aristotle's conviction that the heart is the centre of sensation. It is in other parts of his scientific corpus, namely the discussions of the *pneuma*, that Aristotle displays a certain awareness of problems that foreshadow the later discovery of the nerves.

This discovery was made in Alexandria in the third century BC, and may be counted among the significant breakthroughs in the history of anatomy. The physicians Herophilus and Erasistratus carried out dissections, and probably also vivisections of human subjects, which enabled them to distinguish between nerves, veins and arteries. This finding not only disproved Aristotle's theory that the organ of touch is located close to the heart, it also decided the long-lasting dispute about the localization of the centre of sensation in favour of the brain and against the heart, as Aristotle had maintained.


102. Aristotle, *De partibus animalium*, 647a19, 653b25. However, in 656b34, Aristotle expresses the view of *Peri psychē* that the organ of touch lies internally.


104. Solmsen, 'Greek Philosophy', pp. 184-93; Nutton, 'Medicine in the Greek World', pp. 33-35. For a detailed treatment, see von Staden, *Herophilus*, pp. 139-53, on dissection and vivisection, and pp. 196-90 and 250-5, on the discovery of the nerves.

the two topics – organ of touch and brain versus heart – also plays a role in medieval discussions.

If we make a leap from third-century BC Alexandria to eleventh-century AD Persia, we find that the nerves have become part of common medical lore, as have the cavities of the brain, which were also discovered by the Alexandrian physicians; both appear in Avicenna’s philosophical and medical writings. Avicenna displays his adherence to the Peripatetic tradition in reserving a prominent role for the heart: it is the organ which is generated first in a human being, and it is from the heart that the faculties flow to the brain and liver. The rest of Avicenna’s theory, however, owes much more to the medical tradition than to Aristotle: the brain is the centre of sensation, where the motor and sensory nerves originate. With regard to the sense of touch, Avicenna decides – against Aristotle – that there is no medium:

One of the peculiarities of touch is that the natural organ with which it perceives, namely nervous flesh or flesh and nerves, perceives by contact, even though there is no medium at all. For without doubt it is changed by the touching things which have qualities, and when it changes, it perceives. It is not the case that the relation of all senses with their objects is like this.

And in another passage in De anima, II,3 (which was not translated into Latin): ‘It occurs in the case of touch that the natural organ itself is the medium’. In contrast to the other senses, the organ of touch is affected and changed directly by the object and its qualities. Avicenna goes on to explain that what perceives cannot be the nerve alone, because then some parts of the skin would not perceive, but others would. Therefore, both flesh and nerves are the perceiving organs of touch, the nerves having the special task of receiving and conveying the information to the brain:

It is not necessary to think that the perceiving thing is the nerve alone, because the nerve in fact is the conveyer of the sense of touch, the process of generations to a different organ, namely flesh. If the perceiving thing were the nerve alone, then the perceiving thing in the skin and flesh of the human being would be something spread out like fibres (fīf) and its perception would not concern all parts of the skin, but only the parts with fibres in it.113

As is Avicenna’s usual procedure, the definition in chapter I,5, which gives an overview of the whole system of faculties of the soul, is a condensed version of the discussion of the sense in later chapters. Thus, in contrast to the other senses, no medium is mentioned, but nerves and flesh are given as the place where the faculty of touch is located and where a change in quality is directly received from the object of touch:

Among the five senses is touch, which is a faculty located in the nerves of the entire skin of the body and in its flesh, perceiving what touches it and what has an effect on it by means of a contrariety which changes the mixture or the disposition of the composition.114

This definition proved to be very successful in the West, as in fact did most definitions in chapter I,5. Even though they look innocent, they were responsible for a wide dissemination of Avicenna’s views, which often differed from those of Aristotle. In this case, Aristotle would oppose the view that there is no medium and that the organ of touch is affected directly by the object. Also, he would not locate the organ in the nervous flesh, but inside the body, close to the heart. Many writers quote Avicenna’s definition without giving a second thought to the fact that it does not agree with Aristotle’s doctrine: e.g. Gundissalinus, John Blund, Michael Scot, Jean de la Rochelle, Anonymous (MS Siena), Vincent of Beauvais and Petrus Hispanus.116

The nerves are a helpful example to understand the reasons for the success of Avicenna’s psychology, because one of the reasons certainly is that the way was paved already by the influence of the Arabic medical literature on twelfth-century writers. Writers who do not yet betray the impact of the Salernitan translations and adaptions, like Cassiodorus, Hrabanus Maurus, Hugh of St-Victor and also Adelard of Bath, write about the five senses and the sense of touch, but do not mention the nerves.117 It is in the works of William of Conches and William of St-Thierry that the

109. ‘even though there is no medium at all’: ‘wa-in lam yakan bi-tawassītun al-battatā’ (De anima, ed. Rahman); ‘wa-in lam yakan mutawassītun al-battatā’ (Masriqiyun, MSS Nu and Av; ‘even though there is nothing mediating at all’), ‘wa-in lam yakan mutawassītun min-hu’ (ibid., MS Ah, I. 667v; min-du (i) without dot; the underlined letters seem to be a misreading of al-battatā). The Latin translation has ‘quamvis non sit hui medium aliquo modo’ (De anima, I,3, ed. Van Riet, p. 118, line 4).

115. See Index locorum, I,5.
116. See Index locorum, I,5:q (definition of touch).
nerves enter the discussion of the five senses.119 The source of these writers is Constantine the African's Panegyri,120 which is a reworking of the first part of 'Ali ibn al-'Abbās al-Magūsi's Kitāb Kāmil at-ṣinā'a at-tibbiyya ('The Complete Book of the Medical Art'), written in the tenth and adapted into Latin in the eleventh century.121 Apart from William of Conches and William of St-Thierry only few writers on the soul incorporated the new knowledge. Thus we find rather traditional accounts of the faculty of touch in Isaac of Stella, Pseudo-Augustine and Thomas of Cantimpré.122

If we compare the situation before and after the appearance of Avicenna's De anima in the West, we see that its impact is considerable in two respects: first, it is responsible for the wider dissemination, even popularization, of a physiological knowledge of the soul, which, although being available before, was picked up by only few writers; secondly, it adds a philosophical dimension to the otherwise rather straightforward medical discussion of physiology. Twelfth-century writers, for instance, do not make much use of the distinction between organ and medium.

The first point can easily be demonstrated in the case of the nerves, which appear in most discussions of the faculty of touch of the first half of the thirteenth century.123 The second point may be illustrated by a comment of Jean de la Rochelle, which follows his discussion of the five senses according to Avicenna:

Note that the aforementioned definitions «by Avicenna» are necessary to a high degree, because they explain whatever is necessary for each sense to be the sense in actuality, namely the faculty (potentia), the organ, object and medium, the disposition of the organ, object and object and perhaps more things, for example the action of the sense and its function. But because their description requires a very long treatise, we shall pass over it.124

120. Constantine the African, Panegyri, Lib. IV, cap. 15: 'Tactus aliis sensibus similis, quia mutatur in rei substantiam quae tangitur quae mutatio menti mandatur per nervos, et sua illam mutatiorem sensum habent membra unde sentient. Tactus enim in membris totius est corporis praetar in unguibus atque pilis, ... pili et ungulae, quia nervis caruere, nullum sensum habere ...'.
121. See Burnett and Jacquart, eds., Constantine the African, p. v., and the article in it by Ronca, 'The influence of the Panegyri on William of Conches’s Dragnetiones', pp. 166–85, for a general assessment of the influence (without specific reference to the nerves).
122. Isaac of Stella, Epitola de anima, p. 1881; Pseudo-Augustine, Liber de spiritu et anima (p. 802), is more modern than Isaac in that he mentions the brain and the spine: '... visum videlicet, auditum, gustum, odoratum, et tactum. Qui tantundem sensus ab anteriore parte cerebrī ad posteriorem transiens, et inde per cervicem et medullam spinae descendens per totum corpus diffunditur', Thomas of Cantimpré, Liber de natura rerum, 2.15, p. 95.
123. See the writers listed in Index locorum, 1.5.q.
124. Jean de la Rochelle, Traactac, 2.1.4, p. 74: 'Nota quod diffinitiones praeclarae valde sunt necessariae quia expirant quicquid est necessarium ad unumquemque sensum ad hoc quod sit sensus in effectu, scilicet potentiam, organum, objectum et medium, dispositionem organi, medi et obiecti et

Jean obviously has realized that Avicenna's definitions are not only useful to pillage, but contain in nuce many features of Avicenna's philosophical standpoint.

The question, then, is how the scholastics deal with the fact that Aristotle says something different on the topic. Principally, there are three different kinds of reaction: to take the Aristotelian or the Avicennian side, or to develop a compromise. John Blund's position is (whether deliberately or not) to make such a compromise: he takes over from Avicenna the idea (among a number of other points) that the nerves are the organ of touch, and he adopts from Aristotle the theory that the flesh or skin is the medium.125 A similar standpoint can be found in the anonymous Lectura in librum de anima (1246–7)126 and in the psychological section of the Summa fratriis Alondri. The anonymous author of the latter, who is called Considerans, speaks of the flesh as the medium of touch and of the 'sensibles nervi' as its organ.127 He does not tackle the question of touch directly, but raises the topic in connection with the question of the organ of common sense. Here we see that the connection with the brain-versus-heart dispute plays a role in the West; Considerans explains that according to the physicians the sensory nerves originate in the brain, whereas for Aristotle the common sense is located in the heart. Both positions are true in different respects, he says.128

Most interesting is Albertus's attitude towards the Avicennian theory of touch, because in his early De bomine he still tries to combine it with divergent standpoints, whereas later he turns against Avicenna. To begin with De bomine: in the solutio to the respective question about the medium and the organ of touch,129 Albertus maintains that in one respect the whole body is the organ of touch and that there is no medium (which is close to Avicenna's opinion), but that touch primarily is located in the heart (which is Aristotle's view) and secondarily also in the skin and the nerves. In another respect, he says, touch is located in the brain. The spiritus is the vehicle of the information coming from the skin and the flesh. This latter part of the Summa leads the reader to believe that Albertus's reasoning is the result of the intersection of the Aristotelian, Avicennian and Neoplatonic traditions. Moreover, Albertus follows the Alexandrian line by emphasizing the difference between the nourishment of the brain as the organ of the soul and the alimentation of the body as the vehicle of sensation. The question of the organ of touch is, however, treated in the De homine, where Albertus follows the Avicennian line with some modifications. In this section of the De homine he adheres to the naturalistic approach of the Avicennian tradition and to the Avicennian theory of touch as the vehicle of sensation, whereas later he turns against Avicenna. To begin with

126. Anonymous (Gauthier 1985), Lectura in libros de anima, 2.20.4, p. 395, line 255. Compare Anonymous (Gauthier 1985), De anima et potentia elius, who does not mention the organ of touch, but only the medium, which is flesh or something similar (p. 36, lines 209–210). Since this writer mentions the nerves in the case of the other four senses, he presumably believes that nerves play a part also in touch.
127. Alexander of Hales et ali, Summa theologica, 4.1.2.2.1, p. 43a: 'ex dispositione vero commotionis omnium, quae est in carne, est medium in tactu’. Ibid., p. 43a: 'Et videtur quod sit aliqua pars cerebrī in qua conveniunt sensibles nervi et hoc argument medici ...'.
128. Alexander of Hales et ali, Summa theologica, 4.1.2.2.1, p. 43b: 'Et potest utrumque esse verum, quod dicunt medicini et quod dicit Philosophus; sed medicinis causam prorsus respicient, et ideo dicent originem nervorum esse cerebro et ramificari motuum differenter, ut fibrae et motus Philosophus vero respect ad causam primum ...'.
of the solutio is a blending of Avicenna, Algazel130 and the twelfth-century medical tradition.

Over a decade later, Albertus develops a much clearer view of the differences between the standpoints of his predecessors. As usual, Albertus’s knowledge of the tradition surpasses by far that of his contemporaries. Let us quote the relevant passage from his De anima:

Now, it has been proven through anatomy that flesh does not have sense perception unless it is ministered by the nerve, and therefore the Aristotelian statement seems to be wrong. For not only in flesh do we find sense perception but in some bones such as in teeth. This is proved by experience.

And that is why Avicenna and many others despised following the statement of Aristotle and said that the nervous flesh is the organ of touch ... and they said that touch does not have any medium ...

But we, wishing both to save the truth and to give reverence to the father of the philosophers, Aristotle, we say that flesh is the medium of touch ...131

Albertus’s attitude towards Aristotle has obviously seen a remarkable change. This is also reflected in the language he uses to attack people like Avicenna: ‘sentientiam Aristotelis imitari contemperunt’. However, Albertus is not as strict as he seems. For in the following sentences he modifies his statement substantially, and defines Aristotle’s term ‘flesh’ as referring either to flesh itself or to organs which take the place of flesh in bloodless animals or to organs which have a similar complexion to flesh, like teeth, or organs which are mixed with flesh, like nerves. Albertus also seems to imply that the organ of touch is the nerves, which originate in the brain.132

Albertus therefore rejects the Avicennian idea that there is no medium, but he also sees that Aristotle’s theory of flesh cannot account for all phenomena connected with touch and hence interprets it along medical and Avicennian lines.

For a modern reader, the medieval problems related to the topic of touch are difficult to understand. Aristotle’s idea that there has to be a medium for touch amounts to forcing a philosophical distinction upon phenomena. Also, it does not seem to make any sense to insist on Aristotle’s term ‘flesh’ if it has to be reinterpreted entirely in order to uphold his theory.

It has been shown above that the nerves are a helpful example in understanding the reasons for the success of Avicenna’s psychology. The same is true for its decline. For even though Avicenna’s theory of the nerves has great advantages over Aristotle’s, its influence diminishes significantly in the second half of the thirteenth century, as we could see in the case of Albertus. It is not only that Avicenna is not quoted any more. In some works which discuss the sense of touch the nerves have apparently disappeared completely: e.g. in Adam of Buckfield’s Sententia de anima (about 1245), Pseudo-Petrus Hispanus’s Expositio de anima (about 1250) and Thomas Aquinas’s Sententia libri de anima (about 1267).133

It is important to note that it is not necessarily the genre of commentaries which is responsible for the disappearance of the nerves. There is a number of commentaries on Aristotle’s Peri psychê which mention or even discuss them: Anonymous (MS Siena), Anonymous (Gauthier 1985), Albertus’s De anima, Anonymous (Vennebusch), Anonymous (Bazán)134—and Averroes, as we have seen.

Whether the nerves appear in a commentary or not, therefore, is an excellent index to the author’s attitude. Omitting the nerves certainly is a conscious decision in the thirteenth century: they belong to common medical knowledge, they appear in many theological and philosophical writings of the thirteenth century, including widely read books like Vincent’s Speculum naturale and Averroes’s commentary on Peri psychê.135 Moreover, the disappearance of the nerves is not restricted to the genre of commentaries: in the whole corpus of Thomas’s works only motor and visual nerves are mentioned, but no sensory nerves.136

We have discussed the deeper reasons for the decline of Avicenna’s De anima as a whole in the chapter on the later thirteenth century.137 The conclusion we can
draw from the present investigation is that there is a tangible decrease in interest in the physiology of touch among philosophers of the later thirteenth century. This decrease in interest is reflected either in the author’s silence about the nerves (as in the case of Adam, Pseudo-Petrus Hispanus and Thomas) or in physiological nonsense (measured by the standards of the time) and open contempt for non-philosophical matters. The latter attitude can be found in the anonymous author of Quaestiones de anima (1272–7), edited by Bazán. The author — in an obvious attempt to rescue Aristotle — not only maintains that the nerve, which is the organ of touch, is rooted in the heart,138 but directly attacks the medical writers on a related subject, i.e., the brain as the location of common sense. He confines blood vessels with nerves, and finally comes down on the side of the Aristotelian view that the heart is the centre of sensation:

If it is said on the authority of Avicenna that common sense is some organic faculty, I will agree with this part of the premise. But if it is said: existing in the first part of the brain, I will deny this following the natural philosophers, although the physicians maintain this view following Avicenna. To this it has to be remarked that the physicians are given up to the senses. Because the physicians see that all blood-vessels (venae) of the body come together in the first part of the brain and because they think that the common sense is some organic faculty, therefore according to them the common sense is in the first part of the brain, so that the conjoining blood-vessels may assist the common sense. And because the physicians are more subtle than the physicians, they speak much more subtly about the organ of the common sense, saying that the common sense is in the heart as its organ, in the way of a faculty and of something spiritual, because the common sense is an organic faculty and has a subtle and spiritual organ. Therefore the common sense is rather around the heart than the brain (‘magis est circa cor quam circa cerebrum’).139

philosophers, n. 363.

138. Anonymous (Bazán), Quaestiones De anima, 2.31, p. 451: 'Unde ... dico tamen quod organum tactus est quidam nervus cordis ventriculosus habens se per modum rei extendentis se per totum corpus, et iste nervus principipliter et originaller radiatur in corde'.

139. Anonymous (Bazán), Quaestiones de anima, 2.40, p. 465, line 34: 'Ad primum, cum dicitur auctoris Avicennae quod sensus communis sit quaedam virtus organica, concedo illam partem maioris. Et cum dicitur: in prima parte cerebri existens, hoc nego secundum naturales, quamvis tarnen medici maintain illam viam cum Avicenna. Laxa quod notandum quod medici sunt sensuales; quia medici vident quod in prima parte cerebri concurrunt omnes venae corporis et iudicant sensum communem esse quondam virtutem organica, ergo sensus communis est in prima parte cerebri secundum ipsos, ut ille ticeae concurrentes ipsum possint coadiuare. Et quia philosophi sunt subtiliores medicis, ergo modo magis subdules loquuntur de organo sensus communis, dicentes quod sensus communis virtualiter et spiritualiter est in corde tamquam in organo quia sensus communis est quaedam virtus organica et habet subtile et spirituale organum. Ergo sensus communis magis est circa cor quam circa cerebrum ...

3. THE THEORY OF VISION

‘Verborum lux, lumen, radius, color, splendor significantur emessum sensum distinctum Avicenna’. This complaint about Avicenna’s obscure optical distinctions does not come from a scholastic writer, but was uttered some years ago by a Western scholar.140 But although these distinctions, which appear in the third book of De anima, the book on vision,141 are not easy to understand, they were to become the most popular part of Avicenna’s optics. There is no other passage in the third book which was drawn upon as often. As a whole, however, the book on vision is one of the parts of De anima most neglected both by the scholastics and by modern writers142 — ironically, for it is the longest book of the five and presents Avicenna’s most refined discussion of a single topic. But Avicenna’s optical theories and their reception in the West deserve much more attention, not the least because they show that Avicenna consciously turned against Aristotle’s science, and that the story of the Latin reception of Avicenna’s complicated, but by no means obscure, theory is a story which contains elements of both complete misrepresentation and excellence of understanding.

Book three of Avicenna’s De anima is marked by length and argumentative convolutions. Here the text of Avicenna’s Ma‘riqiyün is of great help. Its optical section is an abridgement of book three: Avicenna dispenses with arguing against divergent opinions and concentrates on his own theories.143 Sometimes he inserts sentences that explain the structure of the argument, for instance at the very beginning where we learn that the whole text is designed to fall into two parts, a fact that is not apparent in De anima:

A chapter on this topic needs to have two parts. The first is on light, the translucent and colour, the second on the way of connection which exists between the percipient and the perceived object of vision.144
In this examination we shall follow Avicenna in his bipartite division and analyse his theory of the key notions of optics (chapters III, 1–4 of De anima) after which we shall move on to his views on the process of sight (chapters III, 5–8). Avicenna’s other works are less informative than the Mātāriqiyyīn. In the Compendium on the Soul, the Nağat and the Dāneḵnāme, he says very little on vision (though still more than on the other senses): The Compendium on the Soul discusses three theories of vision which resemble those discussed in De anima, III, 5. The Nağat contains a refutation of the four possible ways in which light can issue from the eye, which again is similar to a passage in De anima, III, 5. The Dāneḵnāme treats the same topic, adding a comparison of the eye to a mirror which does not have an equivalent in De anima.

The Doctrine of Light

A key passage for understanding the development of Avicenna’s optical theory is to be found in his correspondence with Birûnî, the famous polymath and scholar, which dates from around AD 1000 when Avicenna was still very young and had not yet written any of his major works. One of the questions which Birûnî sends to Avicenna concerns the nature of the rays of the sun. Avicenna’s answer contains a definition of light, which is based on the authority of Aristotle:

Light (dau’) is the essential colour of the translucent insofar as it is translucent. This has been defined by Aristotle in the second part of the book on sensation, saying that light is the perfection of the translucent insofar as it is translucent.

This a correct description of Aristotle’s standpoint. Birûnî answers:

You say that light is colour received by the air or another translucent body. But I say the opposite, namely that light is seen on that which is not translucent, and it is not seen on the translucent and is not received by it.

Twenty years later Avicenna had changed his mind. In his De anima he draws a distinction that was to become very influential in the West: the distinction between two kinds of light, dau’ and nīr, which Gundissalinus and Avendauth translate as lux and lumen. This is a sensible translation, for both Arabic words can be used interchangeably for ‘light’. They only acquire their specific and technical meaning through the definitions that Avicenna attaches to them. Unfortunately, we do not have two words for light in English, and hence dau’ and nīr are translated as ‘natural light’ and ‘light’ respectively in what follows. Some studies use the French term clarté for lumen, but the problem with this translation is that the meaning ‘brightness’ is too specific, given the fact that both nīr and dau’ mean ‘light’. The translation of dau’ as ‘natural light’, on the other hand, rests on passages in the Arabic.

In order to understand what Avicenna means with his famous distinction, let us go through the first half of the Mātāriqiyyīn text, which is an abbreviation of De anima chapters III, 1 to III, 4. Avicenna starts with definitions of dau’ and nīr:

There are two kinds of light, one of them is the quality which sight perceives in the sun and in fire, but it is not said to be black or white or red or any other colour; it is something possessed in itself. It is called natural light (dau’).

The second is something which radiates from this thing, so that one thinks that it falls on the bodies, with the effect that the colour white, black and green appear; it is acquired (mustafāḳ) by a thing different from it. It is called light (nír).

The keyword for the differentiation between natural light (dau’) and light (nír) is istafāda ‘to acquire’. Natural light, on the one hand, is the light of the sun and of fire. If we look at it, we cannot distinguish any colour. Light, on the other hand, is acquired from the sun or fire. Note that both kinds of light are defined as qualities of certain bodies, but not as the actualization of the translucent medium, as Aristotle would have said. Avicenna proceeds with a justification of his theory; there is a systematic difference between something seen by itself and something seen only if covered by light:

That which we call natural light is for instance what the sun and fire have. But it is not said to be black or white or red or any other colour; it is something possessed in itself. If we look at it, we cannot distinguish any colour. Light, on the other hand, is acquired from the sun or fire. Note that both kinds of light are defined as qualities of certain bodies, but not as the actualization of the translucent medium, as Aristotle would have said. Avicenna proceeds with a justification of his theory; there is a systematic difference between something seen by itself and something seen only if covered by light:


148. For the dating see Strohmaier, Al-Bīrūnī, p. 11; Gutas, Avicenna, pp. 97–8.
149. Bīrūnī, al-Asfāl wa-l-agwiba, p. 34, lines 6–9. For a German translation see Strohmaier, Al-Bīrūnī, p. 57. The references are to Aristotle, Peri psychē, II, 7, 418b4–13, and De sensu et sensato, 3, 439a18–19.

150. For an introduction to Aristotle’s optics, see Lindberg, Theories of Vision, pp. 6–9.
AVICENNA'S *DE ANIMA* IN THE LATIN WEST

is something which is seen by itself. For if something like air and water are between a body which carries this quality <on the one hand> and sight <on the other>, then this body is seen necessarily. There is no need for the presence of that which, for instance, a wall needs; for in order that the wall may be seen in the state in which it is, it is not sufficient that there is air or water or something similar between the wall and sight, but it is necessary that something we called light (nur) falls on it so that it is seen. This light is an effect of a body possessing <natural> light (dun) on the walls, when it is facing <the body with natural light>, given that there is a body between them which is not of the sort that it prevents the effect of the <naturally> luminous thing on the receiver of light. Air and water are of this kind, because they transmit and do not prevent.\(^{163}\)

After having stated that there is a principal difference between the qualities of bodies, bodies that are seen by themselves, and coloured bodies. The terms 'coloured' and 'having acquired light' are used interchangeably, since acquired light is the condition for colour:\(^{164}\)

Bodies, according to a first distinction, are of two kinds: a body which is not of the sort to prevent <the light from reaching a body placed behind it> in the above mentioned way — this body shall be called translucent —, and a body of the sort to do this, such as a wall and a mountain.

Among the <bodies> of the second category, there is (1) something of the sort that it is seen without the need for the presence\(^{165}\) of anything else but the existence of the translucent medium and this is the <naturally> luminous <body> like the sun and fire, which is not translucent but prevents the perception of what is behind it. This becomes clear from the overshadowing of a lamp by <another> lamp. For one of them prevents the other from having an effect on what is between both of them. It also prevents the vision from seeing what is behind it. And there is among these <bodies> (2) something which needs the perception of something else which makes it having a property and this is the

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\(^{159}\) 'and water, ... is seen': wa-l-ma'ru'ya (MS Ay and *De anima*); wa-t-ma'ru'ya (MS Nu); wa-l-ma'ru'ya (MS Ah).

\(^{160}\) 'similar': yudh-hu-ba-ma (MSS Nu and Ay and *De anima*); yudh-hu-ba (MS Ah).

\(^{161}\) 'something': al-lo'yik (MSS Nu and Ay and *De anima*); om. (MS Ah).

\(^{162}\) 'on <the wall>': fi-hi (MS Ah and *De anima*); min-bu (MSS Nu and Ay).

\(^{163}\) Māris̄iyyūn, MS Ah, f. 670r. CE *De anima*, III,1, ed. Rahman, p. 91, line 19, ed. Van Riet, p. 171, line 23.

\(^{164}\) See *De anima*, III,1, ed. Van Riet, p. 172, line 37 to p. 173, line 45, where he differentiates between things that have natural light and those that have *lumen* and thus are *coloratus*. (The second *guidām* in this passage is very misleading (line 39). Avicenna still speaks about the bodies that have natural light.)

\(^{165}\) 'presence': hadūr (MSS Nu and Ay and *De anima*); šabūr ('appearance': MS Ah).

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coloured thing (*al-mulawwan*).\(^{166}\)

One can see that Avicenna takes an approach very different from his early letter to Birūnī. There he had defined light as the colour of the translucent. Now, in contrast to Aristotle and in accordance with Birūnī, he maintains that the medium is not visible at all, and defines light with regard not to the medium but to bodies that are not translucent. Avicenna has not, however, simply accepted Birūnī's position but adds his own theory of bodies and their luminous qualities.

The central notions of Avicenna's theory are further developed in chapter *De anima*, III,1, which the Māris̄iyyūn repeat almost entirely. One passage, on actualization, is of special interest since it shows how Avicenna's theory of the translucent differs from that of Aristotle. For both writers, the condition for any perception of an object is that the medium becomes actualized. But because Avicenna accepts two kinds of light, he finds that there are two ways to actualize the translucent: a fire may do it, but also an illuminated wall. Or, as Avicenna puts it, actualization happens either through a change (*al-istikbāl*) in an object such as a wall, or through the appearance or movement (*al-ḥaraka*) of a body such as the sun or fire:

As to change, the change which the translucent in potentiality needs in order to become translucent in actuality, is the change of the coloured body towards being illuminated and the presence of its colour in actuality. As to movement, the body which has <natural> light moves towards it <oil. the translucent> without a change in it. If one of these two <i.e. change and movement> occur, then that which is seen is conveyed and <the translucent in potentiality> becomes translucent in actuality because of the presence of something else.\(^{167}\)

What is Aristotelian in this passage is the emphasis on the need for the actualization of the medium, but what is not Aristotelian is the fact that light, being the quality of certain bodies, exists independently of the medium. Where Aristotle says that light is the actualized state of the translucent, Avicenna relegates this actualization to an effect of the movement or change of bodies.\(^{168}\)

Before coming back to his own theory, Avicenna now (in a passage that corresponds to *De anima*, III,2) switches to a refutation of divergent opinions, starting with the atomists:

There are some people who maintain that the light (nur) which shines from the luminous upon the objects, is not a disposition which comes about in <the

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\(^{166}\) Māris̄iyyūn, f. 670r. CE *De anima*, III,1, ed. Rahman, p. 92, line 10, ed. Van Riet, p. 172, line 33.


\(^{168}\) CE also Avicenna, *De anima*, III,1, ed. Van Riet, p. 175, line 79: 'translucens autem non est visible ullo modo'. Ibid., p. 174, line 62: 'non est in eo aliquid lucidum'.
AVICENNA'S *DE ANIMA* IN THE LATIN WEST

objects>, but is small bodies, which are separated from the luminous in <different> directions and which are moved through <the luminous body's> movement, so that <the objects> shine because of them.

In the kitâb al-Šifâ‘I have laid out the arguments they attached to it, and I have presented a refutation of them. 169

Here follows a refutation of the doctrine that light is the manifestation of colour (from *De anima*, III,2). Avicenna then returns to the presentation of his own standpoint (from *De anima*, III,3), explaining again the difference between natural and acquired light, emphasizing that only bodies with acquired light have colours that can be seen; the planets Mars and Saturn are exceptions since they have natural light but are also coloured. Note his explicit use of the terms 'natural' (taḥrīf) and 'acquired' (mustafāf).

It seems that it is true that (1) some things have colour in themselves. If they illuminate, their illumination becomes so strong that the <natural> light (<daw‘> ) overwhelms170 vision and no colour is discerned. This thing has <natural> light (<daw‘> ) naturally and necessarily, not acquired. Some of them have the possibility for <having> colour. (2) Some things have a mixed substance: either a mixture of the composition of the luminous parts and of the parts capable of colour, such as fire, or a mixture of the complexion of the qualities, such as Mars and Saturn. It is not possible that I decide anything at the moment about the case of the sun.

The dispositions of <natural> light (<daw‘> ), of light (<nūr> ), of colour and of the translucent have now become known. 171

Avicenna is obviously willing to admit exceptions, but on the whole his theory of light emerges as being very systematic. It rests on exclusive definitions of the qualities that different bodies have, as the following diagram shows:

<table>
<thead>
<tr>
<th>natural light</th>
<th>acquired light/colour</th>
<th>translucent</th>
</tr>
</thead>
<tbody>
<tr>
<td>sun, fire</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>wall</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>air, water</td>
<td>no</td>
<td>no</td>
</tr>
</tbody>
</table>

Avicenna sums up his theory with a set of conclusions, which appear both in *De anima* and the *Majrīqīyūs* and were to become well known in the Latin West. In striking contrast to the definitions with which he had opened the book on vision, Avicenna now seems to include a concession to Aristotle by inserting sentences saying that both natural light and acquired light, in certain respects, are the perfection of the translucent:

1. <Natural> light (<daw‘> ) is a quality which by itself is the perfection of the translucent as a translucent in actuality, while it is also a quality which a visible object, for example the sun, 172 has by itself and not because of an external cause. There is no doubt that the visible by itself also prevents vision of what is behind it. (2) Light (<nūr> ) is a quality which the non-translucent body acquires from a thing which has <natural> light, so that the translucent becomes perfect through it as being translucent in actuality. (3) Colour is a quality which becomes perfect through <natural> light in the sense that the <coloured> body becomes an obstacle for the action of the <naturally> luminous on <another body> which has the <coloured> body between itself and the <naturally> luminous.

Thus the bodies are <naturally> luminous and coloured and translucent. 173 The colours therefore are existent. Their existence <does not imply> that they are <natural> lights (<nūr> ) or that <natural> lights are the appearances of them. Still, they are not what they are in actuality without <natural> lights. 174

The Aristotelian ring of these definitions is misleading. From the very opening of his book on vision, Avicenna had described kinds of light as qualities of bodies. When these bodies move or when they are changed through the acquisition of light, the medium becomes translucent in actuality and thus perfect; actualization is relegated to an effect of these qualities. This is obvious in the second definition above, that of acquired light (<nūr> ), but in the first definition Avicenna mentions the perfection of the translucent first even though it comes second in the chain of cause and effect. The root of disagreement between the Greek and the Arabic philosopher lies in the fact that Aristotle's theory starts with the philosophical distinction between actuality and potentiality whereas Avicenna starts with the heavenly and earthly bodies and their luminous qualities. It is therefore not correct to say that Avicenna 'accepts the Aristotelian doctrine of light as the actualization of the potentially transparent medium' 175 or that he 'conceives of light as the actuality of the transparent as such and as the actuality of colours'. 176 It is rather the other way around: Avicenna has turned his back on this very part of Aristotle's theory – very consciously, as we know from the fact that as a young man he had defended Aristotle against Birûnî.

The Latin translators, Avendauth and Gundissalinus, had their difficulties with

170. ‘overwhelms’: taḥrūr (MSS Nu and Ay and *De anima*); no <daw‘> (MS Ah).
172. ‘for example the sun’: ka-t-lumāsi (MSS Nu and Ay); om. (MS Ah and *De anima*).
173. Here there is a leap from the middle of *De anima*, III,3 to the end of *De anima*, III,4, ed. Rahman, p. 115, line 12, ed. Van Riet, p. 212, line 23.
Avicenna’s optics. They wisely decide to use the terms lux and lumen for the two kinds of light, but unfortunately do not employ them consistently. They usually use lux for natural light (dau’) and lumen for acquired light (nír), but sometimes exchange the terms, most notably at the beginning of book three, with the effect that one is led to misattribute the definitions which follow upon this sentence. Nor are the translators consistent in their translation of the terms ‘acquired’ (mustafa’d) and ‘acquire’ (istafa’d) the importance of which they do not seem to have recognized. Compare the three examples:

1. Sit autem una earum ... lux, et utilitas eius sit lumen.
2. ... et haec est res cui lux est naturalis comes, non adveniens aliunde.
3. Lumen vero est qualitas quam mutuat corpus non translucens a lucido ...

A further source of major confusion was that in version B of the manuscript Arabic. One may observe that Avendauth and Gundissalinus had a liking for the term splendor, which they sometimes use instead of lux or lumen, notably in De anima; III,2 where Avicenna refutes the theory that light is the manifestation of colour. This may have induced the redactor of version B to add the gloss ‘scilicet splendor’. Perhaps he also wanted to clarify the definition ‘secunda est id quod resplendet ex his ...’ by adding a word which was similar to the preceding ‘resplendet’. The term resplendere, however, is a not very convincing translation of the verb sata’a which means ‘to shine’ or ‘to diffuse itself, radiate’. Whatever its origin, the addition misled a number of readers.

John Blund was the first of these. He writes:

In <Avicenna’s> commentary a distinction is made between lux and lumen and splendor. The commentator calls lux the perfection of the translucent; he calls lumen an effect created in the translucent such as in the air; he says that splendor is an effect created of colour in something translucent, such as of red or something similar.

There are several remarkable features about this passage. Firstly, the definition of lux is quoted in an abbreviated version which omits the core concept of lux as a natural quality of certain bodies. What remains is the part of Avicenna’s definition which sounds most Aristotelian. Secondly, lumen is defined as an effect created in the translucent — instead of, correctly, the non-translucent — which turns Avicenna into an Aristotelian. Thirdly, the definition of splendor is an adaptation of the corrupted silicet splendor passage in De anima, III,1 — which means that what appears as a definition of splendor is in fact Avicenna’s definition of lumen. Blund further blurs the meaning by saying that splendor is an effect created in something translucent — instead of non-translucent. This amounts to a complete misrepresentation of the key notions of Avicenna’s optics. It seems that John Blund was misled by the assumption that Avicenna agrees with Aristotle and that he therefore understood Avicenna’s different kinds of light as being defined in relation to the translucent medium.

The authority of Aristotle is only one of several obstacles for understanding Avicenna’s optical distinctions. Another obstacle is that in the West there already existed an indigenous tradition of differentiating between the entities involved in vision, the theory of the trium necessarum: Calcidius, Macrobius, William of Conches, the Sigtuna commentary on the Timaeus and other writers discuss the necessary conditions for vision, usually naming interior light, an illuminated medium and an illuminated object. This discussion, based on the theory of extramission, already operated with the terms lux, lumen and splendor. In addition, there is also the well-known distinction between lux and lumen drawn by Robert Grosseteste in his treatise De luce seu inchoatione formarum (dating from the 1220s). What Grosseteste calls lux is not visible but is the perfection of the first body of the universe, the firmament; lumen, on the other hand, is the spiritual body (or bodily spirit) which issues from the first body and creates further bodies, such as the spheres, by multiplying itself. Grosseteste’s theory therefore is less concerned with vision than with creation.

There is hardly any Western reader who does not give an Aristotelian or Grossetestian bent to Avicenna’s concept of acquired light (lumen). Roger Bacon, for example, writes that, according to Avicenna:

180. It originally means ‘to ascend’. Cf. Lane, An Arabic-English Lexicon, part 4, p. 1358. There is no need to assume with Van Riet (De anima, III,1, p. 170, n. 14) that the Arabic word behind the alternative reading ‘descendere’ was something different from sata’a, the translators probably thought of the sun, from which natural light issues and descends upon the bodies on the earth.
181. John Blund, Tractatus de anima, 10, pp. 32-3: ‘Distinguiatur autem in commento inter lucem et lumen et splendorem. Lucem appellat Commentator perfectionem translucents; lumen vero appellat passionem generatam in translucente, ut in aere, splendorem autem dicit esse passionem generatam ex colore aliquo in re translucente, ut ex rubore vel aliquo consimilii’.
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lumen is that which is multiplied and created by lux; it comes about in the air and in other fine bodies which are called media, because the species are multiplied through the mediating activity of these bodies. 185

This is a strange mixture of Grosseteste's theory of the creation of species and of Avicenna's optical theory of acquired light. Also, Roger Bacon, just as John Blund, misrepresents Avicenna's theory of lumen by saying that it is an effect created in the translucent medium - instead of non-translucent objects. This is, in fact, a very common mistake among Avicenna's Latin readers. Whenever they mention the Avicennian distinction between lux and lumen they Aristotelianize the definition of lumen:

Anonymous (ed. Gauthier): 'lux ... in diaphano id est in transparenti lumen est'. 186

Anonymous (ed. Callus): 'lux ... derelinquit in corpore transparenti effectum lumen'. 187

Bonaventura: '... dicit Avicenna ... quod lumen est affectio corporis habentis lucem cum oppositum fuerit illi, scilicet pervium'. 188

Thomas, Scriptum super sententias: 'Avicenna dicit quod ... lumen est qualitas quam mutuat corpus diaphanum a corpore lucido'. 189

Thomas, De anima: 'Ipsa igitur participatio vel effectus lucis in diaphano vocatur lumen ... Lumen autem commune est ad omnum effectum lucis in diaphano'. 190

John Pecham: 'Secundo de lumine in radio quod proprie lumen dicitur'. 191

The mistake is so common 192 that it may have its root in a corrupted textual tradition of De anima. There is evidence for such a corruption: Simone Van Riet's apparatus lists a manuscript (V) which omits the word 'non' before 'translucens' in the definition of De anima III,3: 'Lumen vero est qualitas quam mutuat corpus [non] translucens a lucido ...'. It seems more likely, however, that the Aristotelian understanding of Avicenna's non-Aristotelian theory came first and was followed by textual corruption.

Some of the confusion goes back to careless citation of the Avicennian text. If Bonaventura quotes Avicenna's definition 'lumen is the effect of a luminous body if it is opposite to it' and adds 'namely the translucent <is opposite to its>', 193 he ignores the next sentence in Avicenna's text: 'and if there is a body between them which does not prevent the effect of the luminous thing ... as just as air ...'. 194 What is opposite to lux is not the translucent, but a non-luminous body which acquires light, such as an illuminated wall. Bonaventura's gloss 'scilicet pervium' therefore is wrong. There are two reasons for this mistake, apart from the above-mentioned tendency to read Aristotle into Avicenna. Firstly, the passage in question is difficult to understand because it is badly translated: Avicenna gives an example for an illuminated object, the wall, which Gundissalinus and Avendauth render with the pronoun id. 195 Secondly, it may well be that Bonaventura did not read Avicenna but repeated what others had quoted before him. This is likely because he says 'lumen est affectio' just as Albertus Magnus before him 196 instead of quoting Avicenna literally as 'lumen erit in eo affectio'.

Thus the story of the reception of Avicenna's optical distinctions is a story of misleading translations, of a partially corrupt textual transmission, of careless citation, and of the readers' tendency to confl ate Aristotele and Grosseteste with Avicenna. 197 It is all the more impressive to see that one person stands out: Albertus Magnus. In his De bonum (1242-3), he juxtaposes a number of key passages of Avicenna's theory 198 and adds his own interpretation:

With regard to the last question one has to say that according to the meaning of the words, just as Avicenna says, lux is in <something's> own nature, whereas lumen is the receiving thing ... 199

185. Roger Bacon, De multiplicatione specierum, 1.1, p. 4: 'Avicenna dicit ... quod lux est ... Lumen vero est illud quod est multiplicatum et generatum ab illa luce quod fit in aere et in ceteris corporibus raris quae vocantur media quia mediabantur illis multiplicantur species.'


188. Bonaventura, In quattuor libros sententiarum, 2.8.3, p. 328.

189. Thomas, Scriptum super sententias, ii.13.3.sc, p. 332 (I have changed mistranslation to match).


191. John Pecham, Tractatus de perspective, 2, p. 28.

192. For a modern example see Sturlese, 'Opuk', p. 1420: 'Avicenna ... folgte der aristotelischen Théorie und führte die in der Scholastik klaschisch gewordene Unterscheidung zwischen "lux" und "lumen" hinzu, wobei er lux als eine Qualität der lichstrauchenden Körper und lumen als deren Effekt auf das optische Medium verstand'. Cf. also Lindberg, 'Opuscs, Western Europe', p. 249: 'Ibn Sina's distinction between lux and lumen was widely (but not universally) employed, lux being viewed as the luminous quality of the fiery body and lumen as its effect propagated through the surrounding transparent medium. Lux was light in the body; lumen was light in the medium'. Cf. id., 'The Western Reception', p. 722.

193. See n. 188 above.

194. Avicenna, De anima, III,1, ed. Van Riet, p. 172: '... et fuerit inter ea corpus quod non solet tegere affectiores lucidi ... sic aut eat'.


196. Albertus, De bonum, 21.1, p. 177: 'Lumen est affectio corporis habentis lucem cum oppositum fuerit illi'.

197. Exceptions are the physiciens Tadddeo Alderotti (d. 1295), Expositio in logogas Antimateras, f. 392v, and Pietro d'A Banco (d. 1315), Conciliator, diff. 64, f. 95b; see also, 'Pietro d'A Banco's Conciliator and the Theory of the Soul in Paris', in press.


199. Albertus, De bonum, 21.1, p. 184b: 'Ad id quod ultimo quiseritur dicendum quod secondum
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This is correct. Unlike his contemporaries, Albertus does not force the Aristotelian concept of the translucent upon Avicenna’s definitions. Albertus’s phrase ‘receiving thing’ (‘subjectum recipiens’) does not refer to the translucent but (rightly) to an illuminated object, as one can see from a remarkable passage in his treatise *Super Dionysium de divinis nominibus* (c. 1250):

To elucidate the present question one first has to note how *lux*, *lumen* and *radius* differ according to Avicenna. For he says that it is *lux* insofar as it is in a body which is luminous (*lucidus*) in actuality, but that it is *lumen* insofar as it occurs as a result of reflection in an illuminated body. \(^{200}\)

This is an intelligent and elegant rephrasing of Avicenna’s theory: Albertus takes up the Avicennian word *lucidus* (*mqā‘*) – having natural light) as the adjective corresponding to *lux* – without confusing it with the Greek-Latin translation *lucidus* for the Aristotelian translucent medium – and uses the term *illuninatus* to describe the status of a body whose light is acquired. Remember that the translators did not choose a consistent translation for the term *mustafād* (‘acquired’). \(^{201}\) Albertus has not only grasped the central idea of Avicenna’s optics but also found an adequate way to express it. He repeats it in other works, for instance in his commentary *Super Iohannem* (c. 1252): ‘Avicenna calls *lux* the light (*lumen*) in its own nature; it is not illuminated’. \(^{202}\) It is only in his commentary on the *Sentences* (and the late *Summa theologica*) which is dependent upon it that Albertus seems to misquote Avicenna: he writes *translucens* instead of *non translucens*,\(^{203}\) perhaps the problem will disappear when the commentary receives a critical edition.\(^ {204}\)

It is one thing to understand Avicenna’s theory, another to accept it. In his early *De homine*, Albertus agrees with Avicenna’s interpretation of the terms involved in optics, as we saw, but at the same time states that all natural philosophers agree as on the fact that *lux* is a *habitus* of the translucent – which Avicenna would have denied.\(^ {205}\) In *De anima* (from 1254–7) Albertus defines *lumen*, just as Avicenna, as *rationem nominum ut dicit Avicenna lux est in natura propria, lumen autem in subiecto recipiente ...*. It follows definitions of *radius*, *radius* and *splendor*, which also go back to Avicenna’s *De anima*, III,1. \(^{200}\) Albertus, *Super Dionysium de divinis nominibus*, 2, p. 63: ‘Soluto. Ad evidendam huius questionis praenotandum est qualiter differant lux, lumen et radius secundum Avicennam. Dicit enim quod lux est secundum quod est in corpore actu lucido, lumen vero secundum quod ex reverberatione fit in corpore illuminato ...’. Cf. ibid., 2, p. 83.

The term *reverberatio* probably is Albertus’s adaptation of the term *respingere* in Avicenna’s definition of *lumen*, *De anima*, III,1, ed. Van Riet, p. 170, line 14.

201. The term *reverberatio* probably is Albertus’s adaptation of the term *respingere* in Avicenna’s definition of *lumen*, *De anima*, III,1, ed. Van Riet, p. 170, line 14.


204. For a recent analysis of the development of Albertus’s optics, see Antzoulakis, ‘Perspektive und Raumvorstellung’, pp. 252–67.


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something received by a body, but immediately switches back to Aristotle’s concept of light:

*lumen* however is what is received in another illuminated body. And therefore *lumen* is the received *habitus* in the nature of the translucent.\(^ {206}\)

However, there are also indications that Albertus accepts Avicenna’s distinction, without identifying received light with light in the translucent. For example in *De intellectu et intelligibili* (c. 1258), where the distinction between issued light, *lux*, and received light, *lumen* – he uses the terms *fundere* and *recipere* – is presented as part of Albertus’s own theory.\(^ {207}\)

One can conclude that the story of the reception of Avicenna’s doctrine of light is remarkable for gross misrepresentations of the original theory and for the exceptional part played by Albertus. Still, even if Avicenna’s theory was quoted in a distorted version, it had a truly Avicennian impact, for it disseminated the conviction that a theory about the nature of light is essentially concerned with the distinction between different kinds of bodies, which have light as their property.

The Process of Sight

The traditional battlefield of optical theory is not in the concepts we have discussed so far, but in the extramission and intromission theories, i.e. the clash between writers such as Euclid and Galen, who maintain that we see because light issues from the eyes (extramission), or writers such as Aristotle who maintain that light enters the eye (intromission).

If we now turn to the topic which Avicenna calls ‘the way of connection which exists between the perceiver and the perceived object of vision’,\(^ {208}\) we will see that Avicenna has a clear opinion on the issue. He names three theories, of which the first, following David Lindberg,\(^ {209}\) may be labelled ‘Euclidean’, the second ‘Galenic’, the third ‘Aristotelian’.\(^ {210}\)

In the second part <of this chapter on vision> we say that the well-known theories about sight are three. (1) One of them is the theory of those who maintain that


208. See p. 107, n. 144 above.

209. Lindberg, *Theories of Vision*, p. 44.

This passage, an abbreviation of *media radii, aequidistans ab extremis*, is largely concerned with the adherence to the theory of intromission — or rather, his dismissal of extramission theories, which Lindberg has analysed in greater detail.

(2) The second one is the theory of those who maintain that the ray sometimes goes forth from the eyes, but that its amount is not so big that it reaches for example half of the sphere of heaven except through a diffusion which such a diffusion of sight needs. But if the ray goes forth and connects with the luminous air, then the air becomes its instrument and the ray perceives through it.

In the *kitab al-Ši'ja* we have laid out the arguments of all partisans of these two theories and we have presented a refutation of both of them and a solid verification of the falsity of the two theories.

(3) The third theory, which is the correct opinion, is the theory of those who maintain that just as the other objects of the senses are not perceived in the way that something of the senses is reflected on them, going forth towards them, connecting with them, or sending a messenger towards them, likewise vision does not happen in the way that a ray is issued at all so that it attaches to the object of sight, but in the way that the form of the object reaches the perceiver by means of the translucent transmitting it.

For if the air is translucent in actuality and the colours are colours in actuality and if the faculty of vision is healthy, then the presence of nothing else is needed in order that vision should occur.

This passage, an abbreviation of *De anima*, III,5, very explicitly states Avicenna’s adherence to the theory of intromission — or rather, his dismissal of extramission theories, which Lindberg has analysed in greater detail. But what is Avicenna’s own theory? This is difficult to discern in *De anima*, but apparent in the *Ma’rāqīyūn*, which single out a central passage in chapter III,8 of *De anima*. Whereas chapters III,6 and III,7 are devoted to a lengthy rebuttal of extramission theories passed over in the *Ma’rāqīyūn*, chapter III,8 contains an account of Avicenna’s own theory, which the *Ma’rāqīyūn* repeat. Unfortunately, Avicenna begins this chapter by saying that he is setting out to solve problems discussed by his opponents. It appears as if the whole chapter is concerned with the question of why it happens that we see things double. As a consequence, even a perceptive reader such as Albertus Magnus misinterprets the passage on Avicenna’s own theory of intromission as giving a solution to the problem of double sight. The *Ma’rāqīyūn* omit these misleading introductory sentences and begin as follows:

We say that the image of the object is transmitted through the mediation of the translucent towards the receiving member of the body, which is smooth and luminous, without the substance of the translucent receiving it in any way in the sense that the substance is this form; rather it happens in no time, when the object and perceiver face each other. *We say* that the image of the object at the moment it gets imprinted is imprinted in the crystalline humour and that the faculty of sight in fact is not situated in the humour, otherwise one thing would be seen as two, because there are two images in the two crystalloids, just as when something is touched with two hands, there are two sense perceptions of touch.

The whole of this image is conveyed in two hollow nerves towards their intersection in the form of a cross. Just as a thin cone extends — in imagination — from the external form until it lets its point fall behind the surface of the crystalloid, likewise the image, which is in the crystalloid, is conveyed through the mediation of the conveying spirit, which is in the two nerves, towards their intersection in the way of a cone, so that the two cones meet and cross there and one image-like form is formed out of the two in the part which carries the faculty of vision in the way of a spirit, which conveys the perceived form, but does not perceive a second time, otherwise perception would be divided a second time in this spirit which carries the faculty of common sense.

The faculty of common sense then receives this form, being the perfection of vision.
One cannot say, therefore, that Avicenna's account of his own theory 'seems unduly economical'.234 Avicenna certainly favours a theory of intromission, and in this he agrees with Aristotle. There are, however, also points of disagreement. In Aristotle it is light which actualizes the medium, and it is colour which sets it into motion. The air then acts upon the sense organ, since it extends continuously between organ and object.235 Avicenna, on the other hand, maintains that the medium is actualized whenever a body with natural or acquired light is present. The air does not receive the image of the object in any way nor is it moved by it. Instead of saying that colour sets the medium in motion, Avicenna maintains that the image of the object is instantaneously transmitted by the medium.

As is obvious in the above passage, Avicenna incorporates much material from the Galenic tradition, notably about the crystalline humour of the eye, about the optic nerves which carry the pneuma or spirit, and about the junction of the nerves. But there are also differences, which go beyond Avicenna's general dismissal of extramission theories: Galen and Hunayn ibn Ishāq had maintained that the faculty of sight is located in the crystalline humour.236 Avicenna, in contrast, says that the faculty of sight is located in the optical spirit (or the nerve containing the spirit)237 after the intersection of the two nerves.238 Thus, for Avicenna, the transmission of visual impressions does not stop at the crystalline humour. In fact, it does not even stop at the intersection of the nerves after an image-like form is created out of the two images: the visual form is further conveyed to the faculty of common sense, in which it is connected with other sense data. It is then stored in imagination, from where it can be recalled again by the faculty of estimation. The spirit of the ventricles of the brain serves as a transporter between the different internal faculties.239 Avicenna thus goes beyond Galen by maintaining the transmission of visual forms to the realm of the internal senses; different parts of the brain perform the systematically different tasks of receiving, storing and recalling images.

Avicenna then finishes his discussion of optics in the Maṣūqiyyān.240

Estimation presents <the perceived form> to the soul with the mediation of the cogitative and imaginative faculties and there ends the transmission of the sensible forms.241 Memory has a different function; this will be discussed later. The reasons for seeing one thing as two are four242 ...

Here follow the four reasons, taken from De anima, III,8,243 and the end of chapter III,8,244 which discusses the number of the senses and the common sensibles, arguing against the theory that there is a special sense for the perception of the common sensibles.

In the final analysis, Avicenna's theory of vision is a defence of intromission theory but not of Aristotle's version of it. It discards the notion of contact between object and medium (and medium and eyes) in favour of a theory of the transmission of images. It includes much material from the medical tradition, but disagrees with it on a number of issues, such as on the location of the faculty of sight, on the transmission of visual forms after their reception in the crystalline humour, and on the principal question of extramission versus intromission. It is therefore not fully correct to say that 'the true theory of vision, in Avicenna's opinion, is the Aristotelian',245 and it is wide of the mark to conclude that Avicenna, under the influence of Neoplatonism and Stoic theories of pneuma, offers a 'spiritualist' interpretation of vision.246 The spiritus theory that we find in Avicenna is clearly part of the medical tradition.247

If Avicenna's distinctions between different notions of light were highly successful in the West, his theory of intromission was not. The central passage in De anima, III,8 is quoted very rarely; Albertus – probably misled by the introductory phrases, as indicated above – draws upon the chapter when dealing with the problem of double vision.248 The main carrier of Avicenna's opinion was not book three, but the oft-quoted abbreviated definition of vision which is given in chapter I,5:

«visus» est vis ordinata in nervo concavo, ad apprehendendum formam eius quo modum formatur in humore cristallino ex similitudinis corpore corpororum venientibus per corpora radiosa in effectu ad superficies corporum taurorum.249

Unfortunately, this is not a good translation. Avendañau and Gundissalinus translate

234. As Lindberg maintains, Theories of Vision, p. 49.
236. See Lindberg's description of Hunain's position on this point, Theories of Vision, pp. 40-41.
237. See Avicenna's abbreviated definition of the faculty of vision in De anima, I,5, ed. Rahman, p. 41, line 19.
238. This has been pointed out by Verbeke, 'Science de l'âme', p. 85*.
239. Avicenna, Māṣūqiyyān, MS Ah ff. 672v-r, and De anima, III,8, ed. Van Riet, pp. 268-72.
241. 'Form': nūr (MSS Nu and Ay and De anima); nuwar ('forms': MS Ah).
242. 'one': al-wâhid (MSS Nu and Ay and De anima); om. (MS Ab).
243. 'four': arba'atu asbâbin (MSS Nu and Ay and De anima); arba'atu asbâbin (MS Ab).
244. Avicenna, De anima, III,8, ed. Rahman, p. 154, line 13 to 158, line 16; ed. Van Riet, p. 272, line 3 to p. 278, line 17.
246. As Lindberg says, Theories of Vision, p. 49.
247. As Verbeke claims, 'Science de l'âme', p. 90*.
248. The spiritus theory plays an important role in Avicenna's Canon. Cf. for instance the description of the brain, which mentions the different spiritus of the ventricles; Avicenna, Canon, Lib. III, Tract. I, Cap. I, ff. 165r-166r, especially f. 165vb.
249. See n. 226 above.
250. Avicenna, De anima, I,5, ed. Van Riet, pp. 83-4, lines 59-62, recension B. The most notable difference between the two recensions is optica (B) for conota (A) and balneum colorem quem venientium (B) for corporum venientibus (A).
similitudines instead of simulacra, reading aībāḥ (איבא) as aībāh (איבא). Moreover, they use the misleading term radion for saffāf; which in all other passages they render with transitus or pervius. Also, they translate venire where they usually say redi (for ta‘adda). Thus, in the standard vocabulary of the two translators, the sentence would have sounded: ‘... ex simulacris corporum coloratorum redditis per corpora translucentia in effectu ad superficies corporum tesororum’ (‘... out of images of coloured bodies which <scl. the images> are transmitted by actually translucent bodies to the surfaces of polished’ bodies i.e. the eyes’).

John Blund is one of the victims of this translation. See his quotation of the passage:

Vision is a faculty located in the hollow nerve <the function of which is> to perceive the form of that which is formed in the crystalline humour out of the likeness of coloured bodies through rays which actually come to the surface of polished bodies.

This description comes from Avicenna’s commentary on Perti psychēs.252

Here Avicenna’s theory about images which are transmitted instantaneously by the translucent medium has been transformed into a theory about rays which somehow participate in the formation of an image in the eye by travelling themselves. Nevertheless, it seems that Latin readers could still realize that this is an introversion theory.

What some of them certainly understood, was that Avicenna had a firm opinion on the location of the faculty of sight. The anonymous Quaestiones super librum de anima (MS Siena) approvingly quote Avicenna’s abbreviated definition and proceed by explaining that the act of sight is not finished with the impression in the eye, because otherwise one thing would be seen as two. The unknown author thus intelligently connects Avicennian teachings from chapters I,5 and III,8.253

Petrus Hispanus, with characteristic negligence, at first claims that the organ of sight is the crystalline humour, which is administered by the optical nerve; but later in the same book he states that the faculty of sight is located in the hollow nerve, thus turning from the Galenic to the Avicennian standpoint.254 Albertus, finally, takes an intermediate position in De homine maintaining that Avicenna is right in one respect, but that one may also say that vision is located in the anterior part of the brain and in the crystalline humour. With his usual insight, Albertus points to the different criteria behind the conflicting theories: the incipient state of the faculty of sight (in the crystalline humour), its progress to perfection (in the nerve) and its state of perfection (in the anterior part of the brain).255

A typical example of the restricted interest in Avicenna’s optics is Roger Bacon. In the fifth and optical part of the Opus maius, he says at the beginning that a study on optics has to start with the parts of the brain and the corresponding faculties.256 He then uses Avicenna’s De anima expressly and repeatedly for his account of the internal senses, drawing on chapters I,5 and IV,1. But there is no trace of Avicenna’s optical doctrine of the conveyance of visual images in the brain from chapter III,8. The theory of the eye is based, as Roger Bacon says himself,257 on Alhazen, Constantine the African and Avicenna; but the only Avicennian works used are the Canon and De animalibus. The theory of vision itself relies mainly on Alhazen.258 Therefore, with regard to the Latin tradition as a whole, one cannot say that Avicenna profoundly influenced thirteenth-century theories of the process of sight.259

There is, however, one area in which Avicenna was quite successful, namely with his refutation of theories other than his own. This is again due to Albertus Magnus, who draws heavily on the respective chapters in De anima, III. In his De homine and, more extensively, his De anima, Albertus uses Avicenna’s description of, and argumentation against, the atomists’ doctrine of corporeal particles.260 The theory that light is the manifestation of colour (III,3 and III,4) is refuted with Avicennian arguments in De homine, De anima and De sensu et sensato.261 These two theories belong – according to Avicenna – to the first part of the theory of vision, the one on the nature of the things involved. The second part – on the process of sight – is not the proper topic in Albertus’s De anima, as he says himself: ‘All this will be clearly confirmed when the process of seeing is described in the book De sensu et
senso.') Avicenna's arguments against the Galenic and the Euclidean theory of extramission can be found in De homine and De sensu et sensato; the latter work stands out in Albertus's oeuvre for drawing most heavily on Avicenna's refutations, often without mentioning him. Avicenna does not name his opponents in De anima, but Albertus does when he employs Avicenna's arguments: in De homine they are directed against Euclid, Plato and Alkindi. The exact scope of Avicenna's refutation is not to be studied, as does the influence of Albertus's optical theories on later writers. It seems to me that a significant part of Avicenna's influence consisted in the popularization of his intromission theory indirectly — through Albertus's powerful and oft-repeated refutation of non-Avicennian theories.

If we take the whole of Avicenna's optical theory into perspective, we find that it profoundly influenced thirteenth-century concepts of light, and indirectly paved the way for an intromission theory based on physiological doctrines. A striking feature of this story is that, unlike any other field of psychology, the reception of Avicenna's optics fell victim to inadequate translation. The abbreviated definition of vision in chapter 1.5 was not fully understood by the translators nor was it translated with the vocabulary they employed elsewhere; this may be due to the fact that the translators had not yet worked on book III on vision. In general, Avendaul and Gundissalinus did not recognize the significance and meaning of a number of key terms, which they translated inconsistently. Perhaps, then, it is not a coincidence that Gundissalinus's own Liber de anima displays a lack of interest in Avicenna's optics.

Of all subjects dealt with in Avicenna's De anima, it is probably the theory of vision which most obviously points to Albertus's extraordinary position in the thirteenth century: not only because he was the first and only person to make extensive use of book III, but also because of the fact that he alone did not misrepresent Avicenna's concept of acquired light. Albertus must have had an excellent ability to read literature translated from Greek and Arabic without being irritated by the many obstacles to understanding Avicenna, obstacles that proved too great for his contemporaries as well as for many modern medievalists. This extreme case is a reminder that some Latin readers were much more used to the hurdles of reading translated literature than we are today.

4. ESTIMATION AND 'INTENTIONS'

'People probably drivelled the most about this faculty', wrote Samuel Landauer in 1876. For the theory of the internal sense of estimation, wahm in Arabic, and its objects, the so-called 'intentions', ma'ani, is indeed one of the most widely known theories of Avicenna, paralleled only by the distinction between essence and existence and the theory of the separate active intellect. Modern research concerned with estimation and 'intentions' has followed very different paths. One tradition of scholarly dispute has grown out of the search for the sources for Avicenna's doctrine of wahm. Landauer, like Adam of Buckfield in the thirteenth century, maintained that it went back to the Greek ὑπομνήμα, whereas Harry Wolfsen argued that it corresponded to the faculty of 'sagacity, prudence or forethought' which Aristotle attributed to animals. This interpretation was criticized by Fazlur Rahman, who claimed that wahm 'is just as much a differentiation of Aristotle's φαντασία as the rest of the internal senses' — a position held already by Albertus Magnus. Recent research stresses the Galenic roots of the concept.

Quite independently of this debate, scholars have investigated Avicenna's theory of 'intention', especially since Herbert Spiegelberg suggested that Avicenna was the first to develop a theory about the contents of mental states like fear or hope and was thus the grandfather of modern theories of intentionality. Subsequent research has done a lot to clarify the history of the concept in ancient and medieval logic and psychology, but an investigation into Avicenna's own theory is still a desideratum; it requires a careful analysis of the complicated terminology of the Arabic and Avicennian Arabic at that.

262. Albertus, De homine, 2.3.14, p. 120, line 62: 'Haec autem omnia liquide constabunt quando modus videndi demonstrabatur in libro de sensu et sensato'.
264. Albertus, De homine, 22, pp. 221 and 227b, and De sensu et sensato, 1.8 and 1.9, pp. 17–24 and 1.10, p. 27.
266. Akdogan, 'Optics in Albert the Great's 'De sensu et sensato', p. 6.
267. Note that Gundissalinus's Liber de anima quotes almost every chapter of Avicenna's De anima, but not book III. The only exception is a quotation on colour theory. See Gundissalinus, Liber de anima, 9, p. 69, line 30, to p. 70, line 2. The passage is drawn from Avicenna, De anima, III.4, pp. 205–6, lines 17–26.
271. Rah'an, 'Avicenna's Psychology' (1952), p. 79. See the discussion of Albertus's reception of the theory in this chapter, pp. 148–50. Black points to a passage in Avicenna in which he himself seems to indicate that he divides Aristotle's concept of imagination into a number of different powers; see 'Estimation (Wahm) in Avicenna', p. 245, n. 2.
It is important not to confuse the following questions in dealing with the notion of 'intention'. Those scholars whose concern was the history of intentionality asked: what is the content of mental states like fear and hope? Those who focused on logic asked: what is the mental counterpart of a significant spoken word? In ethics we ask: what is the purpose of acts or of those who act? Avicenna displayed little interest in ethics, so we do not have to deal with the ethical notion of 'intention' in this context. But both his logical and his psychological writings contain passages about intentions, which are of interest for us because they became very well known among the scholastics and modern scholars. It will be shown that Avicenna's psychological theory of 'intentions' has hardly anything to do with intentionality, nor in fact with ethical or logical 'intentions'. Intentio is a word which appears countless times in Latin translations of Arabic texts, and the scholastics were used to distinguishing between its different meanings. They understood the Avicennian notion quite well, in sharp contrast to most modern philosophers and historians of philosophy. To retain the word 'intention' in the present investigation would be defending a hopeless case, given the many misunderstandings that the term has given rise to. It seems wiser to use the Arabic and Latin words (ma'na and intentio) and an English translation different from 'intention'. Before this translation is introduced, I shall use 'intention' in quotation marks.

The original meaning of Avicenna's theory of 'intentions' in Arabic is still obscure. The problem is not so much that there are different words underlying the Latin, but that the keyword ma'na has several technical meanings that vary according to context. In his logic, the first part of al-Sifa', Avicenna frequently uses ma'na to refer to the meaning of a word, for instance:

Likewise the word 'logical species' has two meanings (ma'ani) among the logicians: one of them is more general, the other more specific.

But when he speaks about the object of logic, he uses ma'na together with the participle ma'gül (intelligible) and then the whole phrase means 'intelligible concept' or simply 'intelligible'. Avicenna differentiates between first and second intelligibles:

The subject of logic is the secondary intelligible concepts i.e. secondary intelligibles which are based on the primary intelligible concepts i.e. primary intelligibles.

This was translated correctly into Latin as:

Subjectum vero logicae, sicut scisti, sunt intentionalis secundo, quae apponuntur intelligentissimus intellectus primo.

What exactly Avicenna means by al-ma'ani al-ma'gülāt in this context must be left to a careful examiner of Avicenna's logic. That the meaning of ma'na – or, as one might also say, the meaning of 'meaning' – is dependent upon the context in his works, is stated by Avicenna himself when he introduces the word in his De anima: 'What only the internal senses perceive without the external sense is specified in this place with the word ma'na'.

Let us start our investigation by quoting Avicenna's famous definition of the faculty of estimation, from De anima, I,5:

Then follows the estimative faculty and this is the faculty which is located in the end of the middle ventricle of the brain and perceives non-sense-perceptible 'intentions' which exist in the particular sense-perceptible objects; like the faculty existing in the sheep judging that this wolf is something to flee from and that this child is something to have affection for. It is likely that this faculty is also responsible for combining and separating the forms stored in the faculty of...

Latin index in this edition is a guide to the very many occurrences of ma'na. The Latin translation is the following: 'Et sic nomen speciei logicae continent secundum logicos duos intentiones, quorum una est communior et alia magis propria' (Avicenna, Opera philosophica, Logica (1508), f. 7ra).

275. See for instance Perler, 'Peter Aureol vs. Hervaeus Natalis on Intentionality', p. 228.

276. Not all scholars keep these questions apart. Engelhardt tries to give an overview of the whole range of the word intentio in history, but mixes together ethical, psychological and logical matters in a way that makes his article very difficult to use. Knudsen focuses on the logical side of the field in the Middle Ages and only occasionally mixes it with problems of intentionality (see Knudsen, 'Intentions and Impositions', p. 480, where he mixes Avicenna's logical with his psychological doctrines). Sorabji and Caston concentrate lucidly on the problem of intentionality. See n. 274 for the references.

277. See n. 345 below.

278. The only scholars to have studied the problem, apart from Goichon's valuable entry on ma'na in her Lexique (1938), pp. 253–5, are Black ('Estimation (Wahm) in Avicenna' (1993), pp. 219–58) and Gätje ('The Terms' (1971), pp. 32–8), who drew attention to the fact that the Latin intentio is a translation of three different words in the Arabic: ma'na, ma'qül or qād. Also helpful is Gätje's article on Averroes's internal sense, which includes a discussion of the word ma'na in Averroes's psychology ("Die 'inneren Sinne'" (1965), pp. 279–82).

279. As Gätje pointed out, see preceding note.

II.4: ESTIMATION AND 'INTENTIONS'

Avicenna's theory of estimation is elaborated in his *De anima*. The *Maláriqiyün* and the *Nağät* repeat passages from *De anima,* whereas the *Danscháme* and the *Ibrat* mention estimation only very briefly. More informative is Avicenna's account in the *Canon* where he distinguishes the estimative faculty from imagination and from the imaginative/cognitive faculty. Avicenna's early *Compendium on the Soul* (edited by Landauer) contains a theory of the internal senses which is in many parts incompatible with all the later ones; obviously, Avicenna's theory here is still in the making, and I shall therefore not use it as a source.

First, what are 'intentions'? According to Avicenna, they exist in the sense-object, e.g. the wolf in the passage from *De anima*, 1.5 quoted above. This is a crucial point since it distinguishes Avicenna's doctrine from many other theories on intentions and intentionality: the 'intention' is not in the perceiver but in the object. This view is repeated in *De anima*, IV,3: '... how <estimation> obtains the "intentions" which are in the sense-objects.' Avicenna also uses the expression that someone or some faculty 'perceives' (adraka) an 'intention' 'in' (fi) the object: the sheep perceives an 'intention' 'in' the object. This view is repeated in *De anima*, IV,1, p. 160, line 182, f. 677r (De anima, IV,3, pp. 133–5). Nağät, p. 162 (De anima, I,5, p. 43), p. 163 (De anima I,5, p. 45).

Avicenna's examples of 'intentions' are the following: 'the good, the bad, the agreeing, the disagreeing and what is like these; ... 'intentions' ... about what is harmful and what is useful' and: 'useful or harmful "intentions"'; it is something like the hostility, badness and antipathy which the sheep perceives in the form of the wolf – in sum the "intention" which causes it to shun the wolf –, and something else the sympathy which it perceives about its master – in sum, the "intention" which makes it feel at ease with the master; the 'hostility and affection'.

It is therefore not correct to say that an 'intention' is a certain knowledge which the internal sense has. It is rather an indicator pointing to the significance or meaning of an image with which this indicator is connected. In the example of the wolf, the sheep perceives the form or outer appearance 'wolf' plus the 'intention' 'bad' or 'disagreeing' or 'harmful' or 'hostile', then forms a judgement about it and acts. Neither the sheep's judgement nor its fear nor pleasure and pain are

...<estimation> obtains the 'intentions' which are not material by nature although it happens to them accidentally that they are in matter ... Estimation therefore

perceives immaterial things and takes them away from matter ... However, it does not abstract this form from <all> appendages of matter because it grasps it in particulars and according to some matter and in relation to it and connected with the sense-perceived form – which is accompanied by the appendages of matter – and with the cooperation of imagination <i.e. the storage place of forms> with regard to them.

We can deduce from this passage that 'intentions' are immaterial, but exist accidentally in matter. They are connected to a particular sense-perceptible form in such a way that they cannot be completely separated from it. After this passage, Avicenna goes on to explain intellectual abstraction. Comparing this section with the preceding one about estimation, one can infer that Avicenna conceived of 'intentions' not as universals but as particulars which either are particulars in themselves or which become individuated through something else, like the relation to matter or to the sensible form mentioned above. Thus, 'intentions' exist in sense-objects; they are mixed with them; they are particular and immaterial but accidentally linked to matter.

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AVICENNA’S DE ANIMA IN THE LATIN WEST

correct examples for ma‘nā. The ‘intention’ is something in the object and not in the perceiver, as Avicenna repeatedly stresses. It is an attribute of the object, such as ‘hostility’, which has a connotation for the perceiver. Ma‘nā is therefore probably best translated as ‘connotational attribute’. I shall use this translation from now on.

How then does Avicenna conceive of the relation between the faculty of wahm and its object, i.e., connotational attributes? The most common verb used by Avicenna is adraka, to perceive, with the word ma‘nā as the direct object, a verb which he normally uses for sense perception. Other verbs employed are nāla ‘to obtain’, ‘ājada ‘to take, grasp’, ‘āgala ‘to comprehend’, waqafa ‘āld ‘to come to know’, ra‘a ‘to see’. He also says that connotational attributes are ‘conveyed’ to the faculty of estimation, using a term for transmitting sense data from the object to the external senses (tā‘adda ṭalā). It is thus obvious that Avicenna modelled his theory of the perception of connotational attributes on the process of sense perception, so that it can hardly be called a theory of intentionality in the sense that it is concerned with the content of mental acts or states.

Perception of connotational attributes is not the only action performed by estimation. Avicenna repeatedly remarks that estimation passes judgements, the Arabic verb being bakama. Avicenna speaks of a particular, non-universal, non-rational, ‘imaginative judgement, which is connected with particularity and with the sense-perceptible form’, but goes beyond sense perception. Avicenna’s use of the word bakama poses a problem. See the following sentence, which is the only one in De anima to mention the connection between the action of making judgements and the connotational attributes:

Sometimes, we make judgements with regard to (f) perceptible objects about/by means of (f bi) connotational attributes ...

The preposition bi often introduces the object of a verb denoting a mental act, as a syntactical alternative to an accusative, and Avicenna regularly uses the verb bakama in this way. It is unlikely, therefore, that bi means ‘by means of’ as the Latin translator thought, and one could argue that it introduces the content of the judgement: ‘Sometimes, we judge connotational attributes with regard to perceptible objects ...’ that is, ‘we assign connotational attributes to perceptible objects’. This would introduce a subjectivist element into the theory. However, there are arguments against this interpretation, namely the few other passages where Avicenna speaks about the relation between judgements and connotational attributes. The first is from the Canon:

... just as sense perception in animals judges about (āld) the forms of perceptible objects, so estimation in them judges about (āld) connotational attributes ...

The second is from the Jārāt:

... the ram perceives in the ewe a connotational attribute imperceptible to the senses in the way of a particular perception which (bi) it judges, just as the senses judge what (bi) they apprehend.

In the first passage, the preposition āld indicates that the connotational attributes are the object on which a judgement is passed. In the second passage, it is impossible to construe the preposition bi as introducing the content of a judgement since what the external senses apprehend cannot be a judgement. Both passages show that Avicenna’s theory of connotational attributes is developed in close analogy to sense data. I should propose therefore the following translation for the De anima passage:

Sometimes we make judgements with regard to the perceptible objects about connotational attributes ...

Hence, estimation does with connotational attributes what the external senses (plus common sense) do with sense data: perceiving and making a judgement about them. This becomes clearer if we look at the following passage from De anima, IV,3, which gives examples of judgements about the past and the future made by the faculty of estimation:

Sometimes in the course of remembering, some grief, anger and sorrow arises which resembles the state of the soul at the time when the remembered thing was present; for the only reason of grief, anger and sorrow about the past is the imprinting of this form (ṣūrat) in the interior of the senses. If the form returns, it produces this disposition or something similar. Wishes and expectation also produce this. Expectation is different from wishing because expectation is


308. De anima, IV,1, ed. Van Riet, p. 6, line 79: ‘Deinde aliqua quando divisiuerimus de sensibilibus per intentiones ...’; cf. also Black, ‘Estimation (Waḥmā) in Avicenna’, p. 249, n. 27: ‘Then we make judgements concerning the sensibles by means of intentions ...’.

imagination of some thing with the judgement or opinion that it probably will happen, while wishing is the imagination of some thing and desire for it and the judgement that joy will ensue if it takes place. Fear is the opposite of expectation\textsuperscript{311} in the way of contradiction; despair is its absence. These are all judgements of estimation.\textsuperscript{312}

Avicenna's theory may be expressed through a scheme such as the following, in which the \textit{\textit{=}} sign stands for: 'is the result of a judgement with regard to ... about (\textit{\textit{+}}) ...'.

\begin{itemize}
  \item \textbf{grief/sorrow/anger} = form\textsuperscript{moved} + connotational attribute\textsuperscript{negative (about the past)}
  \item \textbf{expectation} = form\textsuperscript{imagined} + connotational attribute\textsuperscript{neutral (about the present)}
  \item \textbf{wish} = form\textsuperscript{imagined} + connotational attribute\textsuperscript{positive (about the present)}
  \item \textbf{fear (about the future)} = form\textsuperscript{imagined} + connotational attribute\textsuperscript{negative (about the future)}
\end{itemize}

If we turn back to the judgements concerning an object which is actually present, as in the sheep-and-wolf-example, a similar scheme may be drawn:

\begin{itemize}
  \item \textbf{fear} = form\textsuperscript{received} + connotational attribute\textsuperscript{negative}
  \item \textbf{joy/love} = form\textsuperscript{received} + connotational attribute\textsuperscript{positive}
\end{itemize}

Again, the mental states of fear and joy follow a judgement about the connotational attribute with regard to the perceived form.

These judgements happen either out of a natural instinct or through experience, as Avicenna remarks in \textit{De anima}, IV,3 in an important passage in which he provides us with a number of examples.\textsuperscript{313} I shall give the examples in translation because they tell us more than the frequently quoted one about the sheep and the wolf. For the first category (inspiration/natural instinct):

\begin{itemize}
  \item ... for instance, the disposition of the baby who at the time it is born hangs at <its mother>'s breast; and also that of the baby who when it is lifted and made to stand so that it is about to fall, immediately reacts by trying to grasp <something>, due to the nature in <its> soul which divine inspiration produces in it. If a <speck of dust> comes into contact with the pupil of its eye, it immediately shuts the lid before it understands what is happening to it.\textsuperscript{314}
\end{itemize}

\textsuperscript{311} Here one would expect Avicenna to say 'fear is the opposite of wish', and not 'of expectation'.
\textsuperscript{313} \textit{De anima}, IV,3, ed. Rahman, pp. 181–5; ed. Van Riet, p. 37, line 19 – p. 40, line 57. On this passage see Rahman, 'Ibn Sina', p. 494; and Van Riet's notes to \textit{De anima}, IV,3, p. 37, where she discusses the problematic word \textit{shām} (inspiration) which I have rendered here with 'instinct'.
\textsuperscript{314} \textit{gīdam} – 'fine dust', \textit{qādam} – 'foreign body in the eye'. The Latin \textit{lippitudo} misses the meaning.
\textsuperscript{315} \textit{De anima}, IV,3, ed. Rahman, p. 183, line 18.

Every sheep fears the wolf even if it has not yet seen any at all and it has not received any harm from the wolf. Many animals fear the lion. Eagles are feared by other birds, and without any experience the weak birds find them frightening.\textsuperscript{316}

Another example which is probably of this type is brought up in the \textit{Idārāt}:

\begin{itemize}
  \item ... just as the ram perceives a connotational attribute in the ewe which is not perceptible by the senses.\textsuperscript{317}
\end{itemize}

For the second category (experience) Avicenna has only one example:

\begin{itemize}
  \item ... dogs fear mud bricks, wood and similar things.\textsuperscript{318}
\end{itemize}

The correct explanation of this last example probably is that the dog was beaten by a stick or hit by a mud brick thrown at him and that he associates this experience with the image of the object.\textsuperscript{319} Another example, which occurs in the \textit{Canon}, presumably also belongs to the second category:

\begin{itemize}
  \item ... the faculty which judges ... that someone who takes care of the fodder is a friend from whom one does not flee.\textsuperscript{320}
\end{itemize}

Obviously, Avicenna uses the word judgement (\textit{bukm – iudicium}) very differently from us. We might say that judgement is involved in the case of the fodder and of the dog, but not when the eyelids shut. According to Avicenna, the whole process of the perception of the image and of the connotational attribute, the judgement about it and the reaction can happen instantaneously. It is different from rational judgement, as Avicenna explicitly says.\textsuperscript{321}

A modern reader of Avicenna's theory of estimation and connotational attributes might find parts of it rather problematic. One of the main characteristics of this theory is that by paralleling sense perception and the perception of connotational attributes Avicenna gives connotational attributes a very independent ontological status. But is it possible that they exist independently from the observer? In the case of sense data, one might say that this is possible. Fire has a certain temperature without our perception of it. But the connotational attribute 'harmful' or 'bad' is relational. How can it exist independently from the observer? The wolf has a 'bad' connotational attribute for the sheep, but a 'good' connotational attribute for the she-wolf.

\begin{itemize}
  \item \textsuperscript{316} \textit{De anima}, IV,3, ed. Rahman, p. 184, line 9.
  \item \textsuperscript{317} \textit{Idārāt}, ed. Dūnyā, v. 2, p. 379.
  \item \textsuperscript{318} \textit{De anima}, IV,3, ed. Rahman, p. 185, line 3.
  \item \textsuperscript{319} See Rahman, 'Ibn Sina', p. 494, and John Pecham, \textit{Tractatus de anima}, 10, p. 37: 'Quarta vis est secundum Avicennam aestimativa ... apprehendens intentiones ... vel naturaliter ... vel per experientiam siue timet canis iactum lapidis'.
  \item \textsuperscript{320} \textit{Qānīn}, ed. Būlaq, I.1.5, p. 72, lines 3–4; Latin translation: \textit{Canon}, I, 25ra.
  \item \textsuperscript{321} \textit{De anima} IV,1, ed. Rahman, p. 167, line 2; ed. Van Riet, p. 8, line 99.
\end{itemize}
But Avicenna is not as subject- or mind-oriented as a modern reader. To get a clearer concept of what his position was, let us briefly counter the arguments raised. It may be granted that the connotation of hostility or love is relational, that for instance the shepherd is ‘good’ only for a specific sheep. But that does not imply that these connotations cannot have an independent ontological status. For they can be perceived by a third observer: a girl who accompanies the shepherd may observe that the sheep trusts the shepherd and that the cause for this is the friendliness of the shepherd himself. The good relationship between him and the sheep is not only in the mind of the two, but exists and has its real basis in the manner or character of the two persons or objects. The shepherd does not flee from the wolf for the reason that it instinctively feels fear when it comes to see one, but instead because it perceives an actually existing hostility together with the various sense data it receives about the wolf.

This is the kind of theory which Avicenna developed. It seems to me a relatively strong theory about instinct, because it tries to explain how animals and human beings not only react immediately but also perceive real causes for their reactions which cannot be grasped by sense perception.

A real problem with Avicenna’s theory, however, is that he tried to put too much into the scheme he developed. This becomes clear if we introduce the modern distinction between instinct and reflex. Avicenna’s theory of the perception of connotational attributes is clearly a theory about instinct and not about reflexes, yet not all his examples are covered by his theory: the explanation that hostility or friendliness can actually be perceived cannot be applied in the case of the leg that the baby grasps and the speck of dust that gets into its eye. It seems unlikely to me that a theory of connotational attributes could be applied in these cases of reflex reactions, and it is telling that Avicenna does not mention connotational attributes in the relevant passages which are quoted above. The same is true for the example of the dog’s experience with the stick: the dog does not perceive any hostility in the stick, and hence Avicenna omits any mention of connotational attributes.

For convenience, therefore, we will call the instinct theory of the perception of connotational attributes Avicenna’s core theory. It is exactly this part of his theory which he singles out for abbreviated descriptions such as the one quoted at the beginning of this section.

A fact which is often overlooked is that the faculty of estimation has many more functions than this core function.132 In De anima, IV, 1, Avicenna remarks (in an already discussed sentence) that we sometimes:

pass judgements with regard to perceptible objects about connotational attributes which we do not perceive with the senses, be it that they are by nature non-perceptible for the senses or be it that they are perceptible by the external senses but we do not perceive them at the time of the judgment. 313

The first alternative is the one we have been speaking about. For the second alternative he gives the following example:

We see, for instance, something yellow134 and judge that it is honey and sweet.

For the perceiving sense does not convey this to estimation at this moment.225

And Avicenna explains that in this case false judgements can be made. An example of a false judgement is to be found in De anima, IV, 3, among the general remarks about estimation that open the chapter on the internal senses of memory and estimation:

This is like when a man happens to find honey abominable because of its similarity to gall. Because estimation judgements that it is e.g. gall, and the soul follows this estimation even though the intellect would deny it.126

As in the first example, there is a lack of information through sense perception: the man would find honey sweet if he tried it at that moment. The intellect knows that the judgement is wrong, probably because of previous experiences with honey.

These examples are very different from those of the first alternative because the connotational attributes involved are perceptible to the external senses. In fact, what the man in the first example should perceive is that the yellow thing has the taste of honey and (in the second example) that honey is sweet and not abominable. But

shift in focus is that she marginalizes the aspect of instinct (ibid., p. 244), which Rahman saw—correctly, as I think—as the heart of the theory (Ibn Sinä’, p. 494). Also, she goes too far in including passages with the verb tawahha’, which means ‘imagine’, an action very unlikely to be performed by the faculty of estimation (ibid., pp. 238–41). Finally, one should be careful not to understand the word wahm as always referring to the faculty of estimation. Cf. the non-technical use of it in a passage in Avicenna’s optics quoted on p. 142 in this chapter.

323. De anima, IV, 1, ed. Rahman, p. 166, line 5; ed. Van Riet, p. 6, line 79.

324. Rahman’s text has sayyin—‘thing’, whereas the Māthāʾiqīyīn text of MS Ahmet (but not the other two MSS which agree with De anima) reads minā—‘blue stone, enamel’, see Dozy II p. 639b (email); Wehr (1966), p. 936; the Latin translator (IV, 1, ed. Van Riet, p. 7, line 89) obviously had a MS with the MS Ahmet reading, because he translated orādonum—something blue. But since all MSS have afer (including MS Ahmet) and since a blue stone or a blue enamel cannot be thought to be yellow, it seems that Rahman’s reading is the correct one.


'taste of honey' and 'sweet' are not connotational attributes of the first kind but rather sense data. Why then did Avicenna add this puzzling statement? Could these judgements not be ascribed to common sense? Common sense, according to Avicenna, is the place where all sense data come together and where, for instance, a certain image is connected to the taste of sweetness. This is what enables animals to find their food.\(^{327}\) Thus, he would probably respond to the questions we raised by saying that judgements made on the grounds of similarities (the similarity of honey to gall, of something yellow to honey), and especially false judgements involve a different kind of 'estimation' than the pure connection of sense data achieved by the faculty of common sense and that therefore this task must be performed by a different faculty. The problem remains, however, that this function of estimation cannot be compressed into a single scheme with the core function described in Avicenna's abbreviated definitions of estimation, where the objects are connotational attributes that are not perceptible to the external senses.

There are also other functions of estimation which do not involve non-perceptible connotational attributes. The first is about presenting the visual form (or image) to the soul, a function described in *De anima*, III, 8:

> Thus the <visual> form which is in imagination is imprinted in the spirit of the estimative faculty ... (p. 154) Estimation presents the form to the soul through the mediation of the cogitative or imaginative faculty. There <cit. at estimation> ends the transmission of the sensible form.\(^{328}\)

The connection of the theory of the internal senses to the theory of vision is a truly Avicennian idea which we have discussed above in the chapter on optics. Nevertheless, the idea that a visual form is transmitted by estimation does not agree with what we know already from Avicenna about the faculty of estimation.

A second task is the perception of perception. Avicenna at one point hints at the fact that this job is done not by sense perception but by the intellect or estimation; however, to the best of my knowledge, it is only the intellect which gets mentioned again in connection with the topic of introspection:

> As for the perception that <the perceiving faculty> perceives, it is not done by sense perception, because the perception is not colour so that it could be seen or sound so that it could be heard. Instead, this is perceived by means of an act of the intellect or <by means of> estimation.\(^{329}\)

A third function is to assist the intellect in abstracting universals, a task also performed by imagination, as Avicenna says in V, 3.\(^{330}\) The relation between the intellect and estimation, however, remains largely unexplained. It may be that estimation, like imagination, prepares the intellect to receive the intelligibles from the separate active intellect, as explained in *De anima*, V, 5.\(^{331}\) We are also told that the internal senses in general are different in human beings and in animals because of the assistance of the intellect. The intellect has a certain influence on the internal senses, especially on memory, Avicenna says, with the result that human beings are able to develop sciences.

Apart from these functions, however, the faculty of estimation is very well integrated into the whole psychological system. This becomes clear when we look at Avicenna's theory of decision and movement.\(^{332}\) There he gives a longer explanation of phenomena such as fear or sexual desire, in which estimation plays a vital role:

> The faculty of decision follows the previously mentioned faculties of anger and desire, for if the tending towards something becomes stronger, the decision is made. All these also follow the estimative faculties, because all desire presupposes estimating the object of desire. Sometimes there is estimation but no desire.\(^{333}\)

The theory of decision-making that Avicenna develops\(^{334}\) involves the following steps:

1. *sense perception of the form (external senses, common sense)*
2. *perception of its connotational attribute (estimation)*
3. *judgement about the connotational attribute with regard to the form (estimation)*
4. *development of attraction or repulsion (will = irascible and concupiscible)*
5. *decision (faculty of decision)*
6. *movement performed with the help of nerves and muscles*

Some of these actions or functions are accompanied by mental states such as fear, grief, sorrow, anger, joy, greed, hunger, sexual desire and relief. We have already seen that Avicenna regards some of these as the products of the judgements of estimation. In *De anima*, IV, 4, however, he says that they are accidents (*awarid*)\(^{335}\) of the irascible and concupiscible faculties.\(^{336}\) How does that fit together? Could

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\(^{327}\) *De anima*, IV, 1, ed. Rahman, p. 163, line 14; ed. Van Riet, p. 2, line 16.

\(^{328}\) *De anima*, III, 8, ed. Rahman, p. 153, line 13 and p. 154, line 8.

\(^{329}\) *De anima*, II, 2, ed. Rahman, p. 67, line 2.

\(^{330}\) *De anima*, V, 3, ed. Rahman, p. 222, line 3; ed. Van Riet, p. 102, line 5.


\(^{332}\) Estimation also plays an important role in Avicenna's theory of remembering (in *De anima*, IV, 3).

\(^{333}\) *De anima*, IV, 4, ed. Rahman, p. 196, line 8.

\(^{334}\) Simone Van Riet has studied this theory in *De anima*, ed. Van Riet, IV, 4, p. 58 (notes) and her article 'Recherches concernant... la notion d'idjimf-voiluntas', pp. 641-8. On the same notion see more recently: Gätje, 'Zur Psychologie der Willehandlungen', pp. 357-61.

\(^{335}\) *De anima*, IV, 4, ed. Rahman, p. 196, line 1.

Avicenna's remarks are a bit sketchy: we are not told anything about the criteria for assigning mental states to certain faculties. I presume that those mental states are attributed to the paired ‘moving faculty/perceiving faculty’ which provoke an action in the subject if the mental state becomes strong enough. If the sheep’s fear increases to a certain point, it flees. Then, however, we would have to take grief and sorrow out of the ‘irascible’ section and assign them to the faculties of perception. Even immense grief does not normally trigger an action towards or away from something.

At any rate, we have already discussed the mental states which Avicenna describes as an effect of the judgement of the estimative faculty: expectation, despair, wishing, fear regarding the future. They certainly belong to the column on the left because estimation is one of the faculties of perception. In this way estimation is linked to mental states and to the faculties of decision and movement.

So much, then, for the analysis of Avicenna’s theory of estimation and connotational attributes. It should be clear now that it is not very helpful to discuss the different shades of meaning of the words ṭawbih and māḥa, because of the complexity of Avicenna’s theories. Nor does it make much sense to argue about which notion or faculty in Aristotle might have been the ultimate source for Avicenna’s doctrine of estimation. This theory is by far the most influential of all those put forward in De anhīna. Almost every writer after 1200 who wrote on the soul – and there are few scholastic writers in the thirteenth century who did not write on the soul – mentioned at least the basic ingredients of Avicenna’s doctrine: the name of the faculty, the connotational attributes and the example of the sheep and the wolf. The Latins learned these features from three works translated from Arabic: Avicenna’s De anhīna (the most important source), Avicenna’s Canon and Al-Gazalī’s Metaphysics, which reports the Avicennian theory.

The success of the theory in the thirteenth century was based on a good translation. It must have been difficult to find a translation for ṭawbih, which obviously had a very technical meaning in Avicenna’s philosophy. There are quod bestiae sunt aestimantes et non discernentes, illud quod in asino invenimus. Invenimus enim quod cum ipsi ultime sitis, si ad aquam ducatur et videat formam suam in ea aut formam alterius, terretur ex ea et refugit: et cum aqua tarnen existit eius vita et ipsius constitutio. Et cum videt leonem, intendit ad eum et quae in aliis eam visum est eum et ipsius constitutio. Et cum vidit leonem, intendit ad eum et quae in aliis eam visum est eum et ipsius constitutio. Et cum videt leonem, intendit ad eum et quae in aliis eam visum est eum et ipsius constitutio. (De definitionibus, p. 314).

340. Güte’s (Die “inneren Sinne”, pp. 282–3) has shown that Averroes’s theory of the virtus cogitativa has its roots especially in this third passage in Peri psychēs. Averroes combines Aristotelian teachings about ḥaṭṭūṭa and bidwār with the Avicennian doctrine of ṭawbih and māḥa (pp. 277–84).
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occurrences of the word. The sheep-and-wolf-example, finally, did not pose any problems of understanding for the Latin readers.

The seemingly rational behaviour of animals was not a new topic when Avicenna's theory became known in the West. It was traditionally held that animals cannot have souls because their life depends on blood and perishes with the death of the body. Against this opinion Adelard of Bath argued that animals had a soul because they make use of discernment of sensations and judge what to seek and what to avoid. Adelard's viewpoint, which entailed the immortality of animal souls, did not gain ground. But very occasionally, twelfth-century writers discuss the animal faculty of discernment, for example John of Salisbury:

Brute animals also have in some way a discerning power by which they discriminate between foods, avoid traps, jump over objects in the way, and recognize what must be done. However, they do not exercise reason, but rely on their natural appetite and especially on imagination. In no way can they examine the causes of things.

The difference to Avicenna's theory is obvious: even Adelard and John, who do not marginalize the topic of animal faculties, describe the phenomenon of discernment in animals but do not give an explanation for it. Also, Avicenna's theory sets out to explore a behaviour common to animals and human beings. It is no surprise therefore that the advent of Avicenna's Peripatetic philosophy totally transformed the discussion.

The theory of estimation was among the very first of Avicenna's doctrines to become known in the West. For the Toledan translator Gerard of Cremona (d. 1187) in annotations (if they are indeed by him) to his translation of Rhazes's Libri X ad Almanseorem already includes a reference to estimation:

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346. See, for instance, the entry qad in the "Lexique Arabo-Latin" of Van Riet's edition of Avicenna's De anima.

341. Avicenna, Maitriquin, see above, p. 121; the passage is also in De anima, II.8, ed. Rahman, p. 151, line 19, ed. Van Riet p. 268, line 45: 'in aestimacione'.

342. See Macdonald, 'Wahm in Arabic', pp. 505–21, on the different meanings of the word wahm in classical Arabic. Since his article in 1922, however, we have learned a good deal more about wahm, which still has to be put into perspective (cf. Walker, Greek into Arabic, p. 96, and above, p. 127 and n. 138). The Greek-Arabic translation literature is particularly important in this respect. "Wahm" was used to translate φατοσος in the extant translation of Peri physhes (ed. Badawi, p. 69), and wahm was used for φατοσος in the Arabic tradition of the lost Greek paraphrase of Aristotle's Peri physhes from late antiquity edited by Aruzen (Aristoteles De anima: eine verlorenep spatena我不知道的Paraphrase, p. 628).

343. It is an interesting but open question whether Gerard was influenced in his choice by Gundissalinus, Avendauth and Johannes Hispanus, and/or (Gundissalinus).

344. The term existimatio appears in the later Arabic-Latin translation of Peri physhes, rendering διακα τι (see esp. 428a18–24).


346. See, for instance, the entry qad in the "Lexique Arabo-Latin" of Van Riet's edition of Avicenna's De anima.

passages where he uses it in a non-technical way, for instance when speaking about the physiology of sight: "Just as a thin cone extends - in wahm - from the external form until its point fall behind the surface of the crystalloid, likewise ..." Fortunately, the translators did not stress this fantasizing aspect of wahm, but instead chose the terms aestimatio or aestimativa (Gundissalinus, Avendauth and Johannes Hispanus) or virtus existimativa (Gerard of Cremona). This is a good translation in view of the fact that one of the two main activities of estimation is to judge, while the other is to perceive connotational attributes. It was fortunate that the term was not used for a faculty in the Greek-Latin translation of Aristotle's Peri physhes, so that its peculiar Avicennan meaning was easier to grasp.

The word intentio for ma'nad is a less convincing translation because it does not convey the meaning 'connotational attribute'. However, the Latins probably knew the different meanings of the word very well from Arabic-Latin translation literature. According to the glossaries in modern editions (of which we still have far too few), there are countless occurrences of the word in the Arab-Latin translations of Aristotle, Avicenna, Averroes and Alhazen. Intentio usually translates ma'nad, sometimes also garad (purpose) or iibiyar (preference, choice) or qadid (intend), which in turn is sometimes used in the syntactical construction fi l-qard f al-qard ... fi l-qadad t tani ... meaning 'in the first place ... in the second place ...'. Given the widespread dissemination of the word in the new Arabic-Latin literature, it is likely that the Latin readers of Avicenna knew that in passages about estimation intentio did not mean 'purpose' but something like 'meaning' or 'concept' and that at any rate one had to pay attention to the context of the different
It is not clear whether Gerard has understood Avicenna’s theory, of which he names differentiae between no more than three types of mental damage, relating to the three ventricles of the brain. Gerard’s annotation was picked up by Raoul de Longchamps (d. after 1213) in his commentary on Alan of Lille’s *Anticlaudianum*, erroneously attributing it to Rhazes and not to Gerard. Unlike Gerard, Raoul does not say that it is the physicians who omit this faculty, but the ancients (‘antiqui’), and he does not mention intentiones. A similarly groping and inadequate attempt to understand the theory of estimation is in Alexander Neckam’s *Speculum speculacionum*.

Estimation seems to consist particularly in a certain perception deriving from sense perception and imagination together with some intention. In the following sentence Alexander gives the example of the sheep and the wolf, which shows that already around 1210 the basic ingredients of Avicenna’s theory were known – even by a somewhat conservative theologian like Alexander Neckam, who might have learnt about it from his younger countryman John Blund. The doctrine circulated without being properly understood and without being connected to the name of Avicenna.

In contrast to this groping understanding, one cannot help but be struck by the masterly manner in which John Blund, around 1204, takes up the issue. He quotes what was to be become the *locus classicus* on estimation (Avicenna’s *De anima*, I,3), names the author, and adds the following explanation:

By *intentio* the commentator <i.e. Avicenna</i> means a singular quality (‘qualitas’) which does not reach the senses and is either harmful or good for the thing: harmful like the attribute (‘proprietas’) which is in the wolf on account of which the sheep flees the wolf; good like the attribute which is in the sheep and on account of which it is approached by its lamb.

John Blund’s understanding of intentiones as qualities and attributes of perceived objects is very accurate, more accurate than most modern interpretations. Blund proceeds to lay his finger on the very core concept of Avicenna’s theory by asking: if intentiones pass through sense perception and through the imagination until they reach estimation which is located behind them in the brain, why are they imperceptible to the senses and to imagination? And he develops this objection in the following argument, which witnesses to Blund’s understanding of intentiones as an equivalent of sense data:

Since the wolf is a thing separate from the sheep, how does a likeness of the *intentio* which exists in the wolf come about in estimation if there has not been a change, affected by the *intentio* existing in the wolf, in the sense perception of the sheep? For sense perception is in the middle between the object and estimation. How could fire warm a man from the distance if the air, which is in the middle, had not received heat from the heat of the fire?

Avicenna’s *De anima* does not have an answer to this question: it is left unclear how exactly connotational attributes reach the perceiver. But John Blund tackles the problem and defends Avicenna’s theory by saying that estimation directly perceives intentiones without any intermediate perception by other senses. He adds:

But because this could appear difficult to understand for someone, one can say that a likeness of the *intentio* comes about in sense perception and in imagination, but that the soul does not perceive them with these faculties, since sense perception and imagination do not have a nature which is in accordance with the original carrier of the *intentio*. But the organ of estimation is similar in nature to that which is *per se* and originally the carrier of the *intentio*, and therefore the
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perception of the *intentio* happens through the estimative faculty. 357

Note that John Blund in order to discuss and further develop this tenet of Peripatetic psychology – which had hardly touched western soil – coins his own language: he speaks of the ‘original carrier of the *intentio*’ (*proprium subiectum intentionis*), e.g. the wolf, and the likeness or image of the *intentio* (*similitudo imaginis*) which comes about in the faculty of estimation. These terms are new. They show us that Blund is radicalizing Avicenna’s theory: *intentiones* are nowhere else than in the object; what is perceived is only representations of them. Blund concludes the passage by insisting (with Avicenna) that estimation discerns only particulars, not universals, and that it does not differentiate between the true and the false; several decades later, Albertus Magnus will argue in the same vein.

The quality of John Blund’s discussion is exceptional. Most writers of the first half of the thirteenth century simply adopt the doctrine of the estimative faculty, usually in a correct quotation. Michael Scot is one of those who add a qualification of their own:

Estimation is the perception of non-perceptible attributes through perceptibles. By means of this estimation, the lamb perceives that the wolf is its enemy and a man gets to know spiritually about the potential harmfulness of a thing which later happens to do him some <harm> of that kind. 358

Michael fills a gap in the theory of Avicenna, who does not give any examples for the perception of human beings, apart from those concerning the babies’ reflexes. Michael gives a more specific example in another passage where he says that we avoid dangerous things like pits and obstacles in our way and reach things we like because we follow our estimation. 359 We are able to sense danger, Michael Scot seems to claim, and in this he goes further than Avicenna, who does not speak about objects present in the future: the wolf, the shepherd, the lion – they are all perceptible to the senses at that moment. Michael develops the Avicenian idea more in the direction of a *ratio sensibilis*, as he himself says, which enables us to foresee things. Here we encounter a noticeable astrological tone and one might say that he has rather cleverly bent the sense. 360

If we turn to works of the 1230s and 1240s, we will find that many writers mention the estimative faculty, often without a reference to Avicenna: e.g. William of Auvergne, Robert Grosseteste, Hugh of Saint-Cher, Roland of Cremona. 361 Jean de la Rochelle (whose account is particularly comprehensive), 362 the *Summa fratis Alexandri*, and Vincent of Beauvais. 363 The *virtus existimativa* was common philosophical knowledge at the time – perhaps the greatest success that a philosophical theory can have. It thus surpasses the other famous Avicennian theories which, like the separate active intellect, were commonly known but not commonly accepted.

But even though Avicenna’s doctrine of estimation would survive well into the sixteenth century, especially in handbooks, 364 its fortune declined in the second half of the thirteenth century when its compatibility with Aristotle’s philosophy became an issue. Often, the first step towards a conflict among authorities is knowledge about the origins of a tradition. One of the earliest works to betray such a knowledge is the anonymous *De anima et de potentissim eius* from about 1225. Its author, a Parisian master of arts, mainly quotes Avicenna on the faculty of estimation, 365 but also draws on a passage in IsaacIsraeli, which comes from the same Arabic tradition on animal instinct, 366 and, more importantly, knows Aristotle’s viewpoint: “That is why Aristotle says that imagination in irrational beings is the equivalent to reason in human beings.” 367 This quotation from Aristotle could have served as a starting point for a reduction of the Avicennian theory to its Aristotelian roots, but this is not what the Parisian master is interested in.

Many subsequent writers are not aware of the potential danger of a clash of authorities, but simply mention that ‘all philosophers’ agree on the existence of

357. Ibid., p. 70, line 2: ‘Sed qua ille illud ali cui videbitur difficiil ad intelligendum potest dici quod similitudo intentionis fit in sensum et in imaginazione, sed anima secundum eam non apprehendit, quia sensus et imaginatio non sunt naturae concordantis cum proprio subiecto intentionis. Sed instrumentum estimationis est consimilis naturae cum eo quod est per se et propri subiectum intentionis, et ideo secundum vim estimativam fit apprehensio intentionis’.


359. Michael Scot, *Liber introductorius*, f. 60ra: ‘Vis existimativa sive ratio sensibilis est illa qua in praecavendis malis nobis et in delectabilibus consequimur, ut est quando imaginati sumus rem aliqum et virtute rationis tamen sententia iudicis eligimus quod melius est. Et postea nos abstinentemus a re periculosae quae adhuc non est in acta velut nosis eset in opposito ut lignum in via vel fossa et cetera’.

360. See pp. 25-26 above.

361. Roland of Cremona, *Summa theologica*, f. 33rb, line 43: ‘Consequenter dicendum est de vis existimativa. Sensit inimicum et hater et dilitgiam amicum et congregaut illi sicut dicunt philosophi quod munin catum et hater et fugit et hoc est ex vis existimativa. Et ivo esti non videat quodammodo sensit lupum et hater et fugit et ivo congregaut ali ovi et agno suo’. Phrases such as *et ivo muninam videint*, which can be found in many writers, ultimately derive from Avicenna *De anima*, IV,3, p. 38, line 35.


363. See Index locorum, I.5, II.2.8, and IV.3 be references to these writers. I was not able to trace a passage about animal instinct with Avicennian vocabulary in Bonaventura.

364. See Farke, *The Organic Soul*, pp. 471, 480-81, and Salzhoff, *Die Lehre von den Hirnventricellen*, pp. 149-50, 175-6, 180, figs 4, 5, 6, 7, 8, 9, 10, 14 (drawings of the human skull).

365. Anonymous (Gauthier), *De anima et de potentissim eius*, p. 46, line 372. He even mentions that *appetitio*, *fuga*, *timor* and *audacia* follow upon the estimation or imagination of something (p. 47, line 390); this may be a faint reflection of Avicenna’s theory of mental states.


estimation (thus Roland of Cremona),\textsuperscript{368} or criticize the physicians for not recognizing the faculty (thus Jean de la Rochelle, like Gerard of Cremona before him).\textsuperscript{369}

After what has been said about Albertus Magnus in the previous chapter, it is perhaps not surprising that he (in his \textit{De homine} from 1242–3) is the first to pinpoint the differences among the authorities. This time, however, he does not align himself with the Peripatetic tradition, but with Aristotle. On the one hand, Albertus names all five of Avicenna’s internal faculties, with slight changes in terminology: he includes common sense among the external senses; adopts the Avicennian theory of imagination; calls the imaginative/cogitative faculty of Avicenna of a number of Avicennian faculties back to passages about "phantasia". (1974), pp. 193-211.

He includes common sense among the external senses; adopts the Avicennian theory himself with the Peripatetic tradition, but with Aristotle. On the one hand, Albertus establishes recollection as a separate faculty — following either Aristotle or himself with the Peripatetic tradition, but with Aristotle. On the other hand, he forces the complex Avicennian theory into the tight corset of Aristotle’s philosophy. This he does by tracing the functions of a number of Avicennian faculties back to passages about "phantasia". He also says that "phantasia" is true

We should say that if "phantasia" is understood in a broad sense, there will be only a slight difference between "phantasia", imagination and estimation with regard to function, object and organ. In this way "phantasia" seems to be understood by Aristotle, who says that "phantasia" is the faculty according to which a phantasm occurs to us, and that it is a motion produced by sense perception in actuality, all of this applies to the imaginative faculty. He also says that "phantasia" is true

368. Roland, \textit{Summa theologica}, f. 33va, line 5: "Si in esset, decepti sunt omnes philo­spi­phi qui locuti sunt de hac materi­a qui dicunt quod ex­st­timativa est una de viribus animalibus — existe­tiva est in cerebro secundum au­tore­s ..."


370. Cf. Albertus, \textit{De homine}, 38.1, p. 330a: "Aliam differentiationem dixit Albertus dicens "phantasia est virtus quae operatur componendo et dividendo ...", and Al­gazel, \textit{Metaphysica}, pp. 170–71, esp. p. 170, lines 19–21. In fact, the definition from Al­gazel (not in Avicenna’s \textit{De animal}) for "phantasia imagina­tiva" (or "phantasia imaginis"), the storage-place of sense data — but of "phantasia cogitativa" (or "phantasia intelligentia") — is the same as Al­gazel’s text (which is Al­gazel’s Vorlage) in \textit{Dænume}, tr. Achen­ha/Mas­se, pp. 62–3, and the original Arabic of Al­gazel’s text, \textit{Masqild al-falsafa}, pp. 356–7. The Latin trans­lator is consistent. Hence, Albertus’s understanding of the Peripatetic tradition of "phantasia" rests partly on a misunderstanding by himself.

371. Albertus, \textit{De homine}, qu. 35–41, pp. 306–56. Albertus’s theory of the internal senses has been examined by numerous writers (Schneider, Reilly, Wolfsen, Klubertanz, Michael-Quan­tum, Sten­eck, Mahoney, Park), who have not reached a consensus either about questions concerning particular senses or about whether Albertus had a coherent system or not. See Ste­nec­k, \textit{The Problem of the Internal Senses}, pp. 20–26 for a good overview of the discussion before 1970, and his article ‘Albert the Great on the Classification’ (1974), pp. 191–211.


373. Ibid., 428b10–429a2.

This is a fine piece of source analysis which nevertheless does not do justice to Avicenna: the doctrine of estimation is not an amplification of one or the other sentence in Aristotle, it is not simply the practical branch of "phantasia", as Albertus says (just as the practical intellect is an extension of the theoretical intellect).\textsuperscript{379} Again, this is an attempt to harmonize Aristotle and Avicenna. It leads to a misrepresentation of the theory of connotational attributes, since for Albertus even intentions such as ‘harmful’ and ‘useful’ are not perceived in the object, as Avicenna maintains, but ‘in perceived images’, in "phantasia apprehensio". The faculty of "phantasia" (in the broad sense) derives intentions from sense data by combining and separating these data — a theory special to Albertus.\textsuperscript{380} He has a favourite term for extracting intentions which reappears throughout his œuvre: \textit{eicere ex imaginibus}.\textsuperscript{381} Thus, Albertus’s concern is only with the ‘connotation’ aspect, not the
treatise *Scientia libri de anima* he quotes every passage on the topic he could find in Avicenna’s *De anima*, among them sentences never cited elsewhere, such as the example of the baby who at the time it is born hangs on to its mother’s breast. Petrus is not the person to discuss theories carefully, and when he comes to his own remarks on the faculty of estimation they sound familiar:

In these ways estimation, starting with the imaginative faculty, receives sense-perceptible forms and extracts from them imperceptible *intentiones*, just like nuts from their shells,...

The phrase ‘elicere intentiones a formis sensibilibus’ comes from Albertus, as does Petrus’s differentiation between individual and universal *intentiones*, which follows this passage: the former are objects of estimation, the latter objects of the intellect. Petrus may not have realized that what he is adopting is an Aristotelianized version of Avicenna’s theory.

All the writers discussed so far, from Avicenna to Petrus Hispanus, agree in their understanding of estimation as an important part of animal and human psychology. Thomas Aquinas also reserves a place for estimation – others drop the concept completely, as we shall soon see – but he relates it to animal psychology. He says in *De veritate* (around 1259):

In other living beings <i.e. not human beings> some specific notions, which are necessary for them, are implanted according to natural estimation, such as in the sheep <the notion> that the wolf is its enemy and similar things ...

The Avicennian roots are still apparent here, but the theory growing out of them takes a very different form: the negative notion of the wolf is inborn and not perceived, and it only exists in animals, not in human beings. In the later *Summa theologiae* and *Sententia libri de anima* (dating from the late 1260s) Thomas develops his theory more fully. Natural estimation (*aestimativa naturalis*) – he repeats this phrase from *De veritate* – exists in animals only; it perceives individual *intentiones*,

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388. Ibid., p. 322: ‘Per has igitur vias aestimatio incedens ab imaginativa formas accepit sensibiles et ab ipiss intentiones elicit insensatas, sicut grana a corticibus, et ad thesauros memoriae discurrunt formas et intentiones in ea repositas considerat, et circa ipsas iudicium deliberat’.


390. This was seen by Rohmer, ‘La Théorie de l’abstraction’ (1928), p. 108. For the extensive literature on Thomas’s psychology of the internal senses see Mahoney, ‘Sense, intellect, and imagination’ (1982), pp. 606–7.

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such as the harmful and useful. Note that Thomas drops the theory of inborn notions and returns to the Avicennian idea of the perception of intentiones—without any further elaboration. The counterpart to estimation in human beings is the cogitative faculty, which likewise perceives individual intentiones.392 The concept of a human cognitive faculty is taken over from Averroes;393 Thomas transforms it into a theory about human rational power which derives singular conclusions from universal sentences and gives orders to the faculty of striving.394 Thomas's interest is a systematic one; it is only of secondary concern for him whether a theory is compatible with Aristotle or the Peripatetic tradition or both. In the Summa theologiae he argues for the existence of four internal senses and dispenses with Avicenna's cogitative/imaginative faculty.395 In contrast, in his commentary on De sensu et sensato (c. 1269) he uses Avicenna as an authority to justify Aristotle's group of three faculties:phantasia, memory, and common sense—but at the same time manages to mention his concept of natural estimation in animals.396 For his own theory, the authority of Aristotle is not needed.

Other writers, however, cautiously avoid Peripatetic notions in commenting on Aristotle. Some proceed like Albertus and reduce the internal senses to an extension of Aristotle's philosophy. Thus the anonymous Lectura in librum de anima (1246–7) describes estimation as a kind of common sense, and claims that all internal senses are one in substance;397 Adam of Buckfield (c. 1245) identifies the Aristotelian faculty of opinio with estimation;398 and the anonymous Quaestiones in tres libros de anima (c. 1268) maintains that Aristotle included all internal senses under imagination, except for common sense.399

Finally, there are also writers on the soul who completely dispense with the notion of the estimative faculty. The first, to the best of my knowledge, is Pseudo-Petrus Hispanus, Expositio de anima, who does not seem to mention any faculty of estimation, but instead closely following Aristotle—attributes the role of the suprema virtus in animals to imagination.400 Other examples are two anonymous authors of questions on the soul from the 1270s, edited by Bazán and Van Steenbergen; the latter treatise adopts the notion of the virtus cogitativa from Averroes (via Thomas Aquinas), extends it to animals and thus eliminates any mention of the faculty of estimation.401

These writers very probably know what they are doing when they omit estimation: the faculty has long been a Peripatetic commonplace, and it continued to be quoted by writers such as John Pecham and Roger Bacon.402 What we observe here is a gradual loss of interest in Peripatetic, i.e. non-Aristotelian, teachings among the masters of arts. To be sure, there are authors of commentaries who discuss the notion of the estimative faculty, among them Albertus Magnus and the anonymous Siena commentary.403 But from the early 1240s onwards, most of Avicenna's Western readers felt the need to reconcile the teachings of the Arabic philosopher with Aristotle's. The effect was not only one excellent (Albertus) and many simplistic theories about the sources of Avicenna's theory, but a general misunderstanding of its central idea: the perception of connotational attributes. This time, part of the blame goes to Albertus Magnus.

392. Thomas, Summa theologiae, L78.4.c, and L81.3.c id., Sententia libri de anima, 2.13, pp. 121–2, lines 191–222. The term naturalis aestimativa appears again p. 190, line 198 and also in De veritate, 22.7, p. 629, line 44, and 24.3, p. 686, line 111.
394. Thomas, Summa theologiae, L81.3.c: ‘Loci autem aentimativae virtutis est in homine sicut super dictum est, vis cogitativa; quae dicitur a quibusdam ratio particularis, eo quod est collativa intentionum individualium. Unde ab ea natus est moveri in homine appetitus sensitivus. Ipsa autem ratio particularis nata est moveri et dirigi secundum rationem universalum: unde in syllogistikos ea universalibus propositionibus concludentur conclusiones singulares. Et ideo potet quod ratio universalis imperat appetitu sensitivo ...’.
395. Thomas, Summa theologiae, L78.4.c. Thomas calls Avicenna's second faculty phantasias (instead of imaginatio). Goichon has claimed that the reason for this lies in the occurrence of the word phantasias for imaginatio in de anima, IV, I in some manuscripts (Directives, pp. 320–21). The intrusion of the term phantasias, however, may well go back to Albertus; see pp. 148–50 above.
396. Thomas, De sensu et sensato, 2.2, pp. 109–10.
397. Anonymous (Gauthier 1985), Lectura, p. 94, line 468, and p. 441, line 423: ‘Et secundum eos dicendum est sic quod istae virtutes, sensus, phantasias, imaginatio, aestimatio, opinio particularis et memoria sunt idem secundum substantiam, differunt autem secundum rationem’.
398. Oxford, Bodleian Library, Ms. Canon misc.322, f. 48rb: "intendit hic per opinionem virtutem aestimativam".
399. Anonymous (Vennebusch), Quaestiones in tres libros de anima, 2.55, p. 248, line 152: ‘... Aristoteles determinando de virtutibus sensitivis interioribus omnes comprehendit sub imaginacione; praeter sensum communem quern distinguist ab alius, quia solum apprehendit ad praesentiam sensibilium extra’.
400. Pseudo-Petrus Hispanus, Expositio, p. 300, line 12: ‘imaginatio est suprema virtus et nobilissimam eorum’.
402. Both cite the basic ingredients of the Avicennian theory. In his Tractatus de anima, John Pecham adds a new example of a hare fleeing from a dog and about wounded animals that find the right cure (p. 37). In the Quaestiones de animo we find a curious mixture of passages by Avicenna and Averroes (p. 78). Roger Bacon avoids the word intentio and replaces it with forma transitua (Opus maius, 5.1.4, pp. 7–8).
403. Anonymous (MS Siena), Quaestiones, ed. Garinardi, p. 399. The passage about estimation is very close to the text of Avicenna's De anima.
AVICENNA'S *DE ANIMA* IN THE LATIN WEST

5. PROPHECY

Avicenna’s theory of prophecy and connected teachings about the imaginative faculty, will-power and the highest level of human powers, the ‘sacred faculty’, count among the famous parts of his philosophy. Not without reason, for they play a central role in his thinking, as is obvious for instance in his last philosophical summary *al-Ibarāt wa-t-tanbihāt* (‘Pointers and Reminders’), which gives prophecy a prominent place at the end of the book. From recent studies we know that Avicenna wrote his well-known autobiography as an illustration of the powers of intuition (*ḥādīd*), which is Avicenna’s core concept of the theory of extraordinarily powerful souls, and that he used the concept of intuition to find a methodological standpoint within the Aristotelian tradition which enabled him to go beyond Aristotle.404

Among the different treatises that Avicenna devoted to prophecy, *De anima* is particularly important because it is the only text (apart from the *Maʿārifīyyan*) which distinguishes and describes three405 different kinds (or levels or conditions – this will be investigated below) of prophecy: one connected with the imaginative faculty, one with the motive faculties and one with the intellect. Avicenna does not discuss prophecy in a chapter of its own, but in the different parts of the book which deal with the respective faculties (IV,2, IV,4 and V,6). His theory can be outlined as follows:

1. The imaginative faculty separates and combines sense data, which it retrieves from their storing-place, i.e. the faculty of imagination.406 The soul can impede this function of the imaginative faculty either by occupying imagination with the storing of sense data407 or by a direct order not to produce anything unreal.408 In sleep both impediments are removed, whereas in illness and in great fear the first impediment remains.409 Then unreal images are presented to imagination and common sense as if they existed outside.410 In some persons, the imaginative faculty and the soul are so powerful that they have visions in waking life.411 This is the prophecy which belongs to the imaginative faculty.412 Such people either have very powerful souls and imaginative faculties or do not employ their faculty of discernment.413 A vision only comes about if there is a connection between the divine realm, the soul and the imaginative faculty.414 The external senses and the intellect may impede the soul in its capability to connect to the divine realm.415

2. The soul can produce a change of the temperament in the elements of its own body.416 This is because of the origin of the soul from higher principles.417 Therefore it is also possible that the soul effects these changes without any physical contact.418 Often the soul produces an effect in a different body, such as in the case of the Evil Eye.419 If the soul is particularly noble and powerful, matter throughout the world obeys it.420 Such a soul does not incline to its own body, and its body is of a pure nature.421 By sheer will-power, it is able to heal the sick, make evil persons ill, turn something into fire or earth, produce rain and fertile seasons.422 These are properties of prophetic powers which belong to the faculty of movement and decision.423

3. People differ a great deal in their ability to acquire knowledge,424 that is, to make contact with the active intellect. In general, the ability to acquire an intelligible form depends upon whether the middle term of the corresponding syllogism is obtained.425 Some people need much training and instruction until they hit upon a middle term, others obtain it directly through intuition (*ḥādīd*).426 Those who possess a very high degree of intuition are able to receive all forms (including the middle terms) from the active intellect in almost no time.427 This faculty is called the ‘sacred faculty’ (*qiṭwāt ʿuddiya*) and is a kind of prophethood, in fact the highest of the prophetic powers.428

In spite of recent advances in scholarship, we still do not know enough about the first and second kinds of prophecy.429 Are there different conditions for prophets or...
different kinds or levels of prophecy? Our examination starts with this question and
then explores the three kinds of prophecy in sequence. Special attention is paid to
the vocabulary used for the imaginative faculty (bayāl, qiwa mutahayyila or tabayyul),
to the ambiguous role of this faculty in the prophetic process, to the connection of
the faculties to the divine realm, to the doctrine of the purification of the soul, and
to naturalistic traits in Avicenna’s theory of prophecy.

Let us first consider the question of conditions versus kinds. Louis Gardet
maintained that:

three conditions, according to al-Šībī’, are required in order that someone may be a
prophet: clarity and lucidity of the intellect, perfection of the imaginative
faculty, the power of making the external matter obedient to oneself.430

Other scholars have repeated this interpretation.431 I could not trace Gardet’s
quotation in Avicenna, and I suggest that the passage in fact is a reworking of
a sentence by Thomas Aquinas. Thomas does not quote Avicenna but gives his own
summary of the Avicennian theory:

Præterea ad prophetiam non requiruntur nisi tria, scilicet claritas intellectus;
perfectione imaginativæ facultatis, potestate imaginativæ ut ei materia exterior obediatur ut
Avicenna ponit in. vi. de naturalibus.432

In fact, Avicenna himself does not mention conditions which have to come together
in one prophet. Instead he speaks of different kinds (qarb) of prophethood, each
having different properties (bawifus).433 In only one passage does he explicitly address
the topic of combining two kinds of prophethood in one person, in De anima, V,6,
where he deals with the theory of intuition:

accepted (Prophecy in Islam, pp. 30–52). His opinions about the Greek and particular Stoic sources have
been challenged convincingly by Gutas (pp. 169–70). Marmura drew attention to the fact that Avicenna
usually speaks of the possibility of prophecy, but that he only once to prove its existence, namely
in Fi ibīth an-nabiwīt (Proof of Prophethood) (‘Avicenna’s Psychological Proof of Prophecy’ (1963), pp.
54–5). Davidson, who gives the most recent account of Avicenna’s theory, doubts that Fi ibīth can be
attributed to Avicenna (Al-Farabi, Avicenna, and Avicenism (1992), p. 87, n. 56). Elamrani-Jamal devoted an
article to the connection between the theory of prophecy and the hierarchy of the faculties (De la

430. Gardet, La Pensée religieuse, p. 121: “Trois conditions, enseigne le Shīfī‘, sont requises pour qu’un
homme puisse être prophète: c) la clarté et la lucidité de l’intelligence, perfection de la vertu imaginaire,
pouvoir de faire obéir la matière extérieure”. And in the note: “De Am., IV, 4, 4.20, r. b. et ss. (L, p. 343–5)”.
432. Thomas, De veritate, 12.3, p. 374, line 82. It is not clear whether Thomas’s term requiruntur
implies what Gardet made of it. In his reply to the Avicennian statement (12.3, pp. 378–9) Thomas
argues that the last of the three does not exist and that the other two bring about (causatur) natural
prophecy, but not divine prophecy. He himself thus conceives of them as conditions in the sense of
causes which do not necessarily have to come together. In the further discussion, he uses the distinction
between viso intellectualis and visio imaginativa (see 12.12, p. 404, lines 1–4).
433. Elamrani-Jamal, “De la multiplicité”, p. 127, gives the relevant passages in French translation (De
anima, IV,2, ed. Rahman, p. 169, line 9; IV,2,p. 173, line 21; IV,4, p. 201, line 6; V,6, p. 250, line 3).

It is not unlikely that some of these acts pertaining to the sacred spirit because of
their powerful and overwhelming nature deluge the imaginative faculty which
then reproduces them in terms of perceptible and audible linguistic images in the
way in which we have previously indicated.434

Note that Avicenna says ‘some of these acts’: The insight gained via the third,
intuitive kind of prophethood may be accompanied by some reproduction of it by
the imaginative faculty, but the two do not go together in all cases. It seems
improbable that a prophet could at the same time have visions through a strong
imaginative faculty, produce rain through his strong will, and hit easily upon middle
terms of syllogisms through his strong intellect. One might still say that they were
thought to be necessary properties of prophets who would produce actions at
different times, but this does not seem to be what Avicenna thought. For the only
example he gives of someone with a very powerful soul is himself – not only in his
autobiography, but also in the Dāneṭmām – because of his skill in hitting on middle
terms.435 He does not report, however, that he had visions or that he provoked rain
or a fertile season. It is much more likely that any combination of strong or weak
imaginative, motive and intellectual powers is possible according to Avicenna,
and it seems to be the strength of this theory of prophecy that it is flexible enough
to account for many different combinations of prophetic properties.

A particular problem of the first kind of prophethood is its basis in the hierarchy
of faculties. Some accounts of Avicenna’s theory draw a connection to the faculty
of imagination: ‘activity of the imagination’, ‘the prophet’s imagination’, ‘an
exceptionally strong imagination’436 or ‘la prophétie par l’imagination’.437 In these
surveys the terms ‘imagination’ and ‘imaginative faculty’ are not sufficiently
distinguished. For it is not accurate to say that the first kind of prophethood is due
to an exceptionally strong imagination. Avicenna carefully distinguishes between
the two faculties bayāl and qiwa mutahayyila, which were translated into Latin as
imaginatio and virtus imaginativa. The internal faculty of bayāl (imaginatio) in fact
does not imagine. Its proper action is to store the sense data which it receives from
the common sense, as Avicenna explains in chapters I,5 and IV,1 of De anima. In
contrast, the imaginative faculty (which is called cogitative faculty, mutāfa’ira,
in human beings) is concerned with the combination and separation of sense data
and connotational attributes. This faculty is also called tabayyul, ‘imagining’ (not
‘imagination’, as it is sometimes translated), by Avicenna. With this term – which
morphologically is a verbal noun of the fifth form, mutahayyila being the active

434. De anima, V,6, ed. Rahman, p. 248, line 19 to p. 249, line 3. The translation is from Gutas,
Avicenna, pp. 161–2. I have changed ‘imagination’ to ‘imaginative faculty’.
participle corresponding to it – Avicenna emphasizes the active function (combining and separating) of this faculty, which contrasts with the passive function (storing) of the faculty of imagination.\textsuperscript{438} Again we see the advantage of Avicenna’s almost pedantic differentiation between numerous faculties. It enables him to be more precise about which properties of the human or animal soul are responsible for specific phenomena. The vocabulary in the relevant chapter (IV,2) is unambiguous, if one takes into account that tabayyul (imagining) is the action of the imaginative faculty and not of imagination.\textsuperscript{439} It is the imaginative faculty which can be as strong in some people as to give them prophetic qualities. Prophethood, or more precisely, this kind of prophethood, does not rely on a strong ability of storing data, but a strong ability of combining and separating them.\textsuperscript{440}

The role of the imaginative faculty in prophecy is ambiguous. Its primary task is to present visible and audible apparitions:

Sometimes, what is presented to such people is an apparition: they imagine that what they perceive is a speech from this apparition with audible words which can be remembered and recited, this being the kind of prophethood specific to the imaginative faculty.\textsuperscript{441}

In order to function in this way, the imaginative faculty needs to be powerful enough to be able to retrieve stored images from the faculty of imagination and to present them via imagination to the common sense – which is a difficult task since in waking life these internal senses are normally occupied with incoming sense data.\textsuperscript{442} But when the prophetic vision – which, incidentally, needs to be distinguished from visions in dreams which Avicenna does not call prophetic\textsuperscript{443} – is completed, the powerful imaginative faculty becomes a hindrance: it immediately turns to other related and unrelated images and makes the soul forget what it had seen.\textsuperscript{444} The rational soul therefore needs to stabilize the visionary images in the faculty of memory. This can only happen if the imaginative faculty is defeated and kept at rest for a certain time,\textsuperscript{445} otherwise what remains in the storing places of the brain is not the visionary images but something vaguely similar produced by the imaginative faculty.\textsuperscript{446} Hence, the two different states of the imaginative faculty, one powerful and one at rest, pertain to different phases of the prophetic process, i.e. during and after the visionary experience. Avicenna’s theory is not in contradiction with itself.\textsuperscript{447}

A final point to elucidate about imaginative prophecy is the connection to the divine realm. If this kind of prophethood is due to a highly developed imaginative faculty, i.e. the excellent combination and separation of data, how could contact be made with the divine world which is intellectual? It has been maintained that in Avicenna’s system the imaginative faculty ‘may enter conjunction with the separate active intellect and receive the emanation of the active intellect directly’.\textsuperscript{448} If this were correct – it is not – animals could become prophets as well. As we have seen, the rational soul – the terms ‘soul’ (nafs) and ‘rational cogitation’ (al-fikr an-nasqi) are used interchangeably in this context – is needed to restrain the imaginative faculty after the vision is over. And it also plays a necessary part in the actual connection with the realm above:

... the imaginative faculty exists in such people in a very strong and overpowering way, so that the senses do not dominate over it and the form-bearing faculty (al-muqawwir = bayyil/imagination) does not resist it. Moreover, their soul is powerful as well, its turning towards the intellect and towards what is before the intellect does not paralyse the soul’s application to the senses.\textsuperscript{449}

The human, rational soul plays an active role in imaginative prophecy. It needs to be powerful enough to apply itself both to the senses, or rather to the unreal sense data produced by the imaginative faculty, and to the intellect. A certain contact to the intellect is needed because the content of visions is ‘before the intellect’ and received by it from above. But the intellect’s own activity is not conducive to imaginative prophecy. Avicenna points out that both the external senses and the intellect may divert the attention of the soul and thus impede its ability to connect to the divine realm.\textsuperscript{450} He proceeds:

... if one of the two <i.e. the occupation with the senses and the intellect> ceases, then the necessary connection between the hidden realm on the one hand and the soul and the imaginative faculty on the other hand immediately comes about, and also the connection between the soul and the imaginative faculty,\textsuperscript{451} so that in it
in order to produce miracles, how do we decide who is a real prophet and who is a soothsayer? The clue to this problem lies with Avicenna's doctrine of the noble soul. He does not explain, at least not in De anima, the cause of a soothsayer's power, but he does for the person who is able to influence the matter of the whole world: 'when a soul is powerful, noble and resembles the higher principles (kabiba bi-l-mahdíti)') and 'when the soul's immersion in its inclination to its own body is not strong and powerful, while at the same time the body is lofty in its nature and powerful in its habitus'. The concept involved here is that of purification. The noble the soul is, the closer it comes to the intellectual principles, which are the separate intelligences and include the active intellect.

Avicenna's theory of purification is in fact more complex than is apparent from De anima. It rests on the idea that the unusual power of the soul is due to an extraordinary temperament of the body, which is either inborn or developed through purifying acts. This is what is meant by the statement 'the body is lofty in its nature and powerful in its habitus'. To understand this tenet of Avicenna's philosophy more fully, it is worth digressing to another book of his. At the end of his late magnum opus, the Ibarat, he provides a long discussion of prophecy by will-power. The text is relatively close to De anima, book IV, but differs in some interesting respects. Avicenna first explains why it is probable that the soul may influence the body and gives the well-known example of the tree-trunk, which can sometimes also have an effect on the imaginative faculty, as Avicenna says in the passage quoted above (p. 157) about the sacred human intellect deluging the realm above directly, as Alfarabi had maintained, since the soul — which is not identical with the intellect, but possibly employs the intellect — performs an intermediary role.

This does not preclude the possibility that intellectual prophecy of the third kind sometimes also has an effect on the imaginative faculty, as Avicenna says in the passage quoted above (p. 157) about the sacred human intellect deluging the imaginative faculty. However, this passage describes a particular case, namely when prophets of the intellectual kind also have accompanying visionary moments. The core idea about imaginative prophethood is that sense data are perceived as if they were real, whereas in fact they are produced by the imaginative faculty. Such persons connect with the realm above by means of their intellect, as has been shown, but how exactly this happens is left unexplained. It is not certain at all that such prophets would be capable of intuitive prophethood and of receiving intelligibles in syllogistic order. Note that the separate active intellect is not mentioned once in the discussion of imaginative prophecy in book IV, but that it is central for the theory of intellectual prophecy laid out in V,6: intuitive prophets 'make contact (ittasala) with the active intellect' so that the 'forms of all things contained in the active intellect are imprinted' on the soul of these people. Avicenna's approach in book IV is to explain phenomena — visions and wonders — by means of his faculty psychology, just as physicians explain symptoms; this seems to be the reason why he does not elaborate on the intellectual side of the phenomena.

When we turn to prophecy by will-power, the connection to the realm above is much less obvious. Avicenna does not mention the divine realm once, and there is no indication that a prophet of this kind needs divine assistance to act as a prophet and to produce rain or a fertile season. The main idea of prophethood by will-power is that the soul is immaterial and is in principle able to act not only on its own matter, i.e. its body, which happens every day, but also on matter outside the body — which is only possible for people with a very strong soul. But then the problem arises that according to this theory a prophet such as Muhammad and a soothsayer like the apostle of Allah, the imaginative faculty, as do the Mamāliyan, f. 67r, line 10, which however add a baina ('between') before al-qiyus al-mastabiy from the imaginative faculty). Hence there are again three (and not two) members in this connection, of which the soul is the middle one.

456. De anima, IV,4, ed. Rahman, p. 200, lines 12–13 and lines 18–19. I read: wa-kana ma'a dalika 'uluyan fi ishtat bi qasitan fi maslakati bi 'idānan. Rahman has feminine endings, which are not in the MSS. Iqbal for tabaqa is the reading of the Latin translation (narrum: ed. Van Riet, p. 65, line 47) and of the Majhisqiyih, MS Ahmout, f. 681r.
459. This is a rather tentative translation of a very difficult passage for which there does not exist a reliable Arabic edition. I have worked with the texts as given by Mehren, Traités mystiques d'Avicenne, tome fascicule, pp. 38–40, and by Dunya in his edition of the Ibarat, v. 4, pp. 897–901; Guizas has translated the passage into French (Direcrives et remarques, pp. 522–4).
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The *person* to whom this occurs in the soul’s nature and who also is virtuous, following the right way and purifying his soul, is capable of a miracle (*muğzâta*), being one of the prophets, or of a wonder (*karâma*), being one of the saints. His purification of the soul in this sense increases it *i.e.* this power* beyond the qualities of nature, so that he reaches the highest degree. The *person* to whom this occurs, but who is evil and employs it for evil ends, is a malicious sorcerer; the power of his soul in this sense is not sufficient *for him* to reach his goals and he does not attain the rank of the pure.

Affliction through the *Evil Eye* is possibly of this kind. The cause in him *i.e.* a person of this kind is a psychological state which fascinates *other persons* and produces by means of its special nature physical weakening in the person who is fascinated by him. However, this will appear unlikely to someone who postulates that something which influences *other* bodies either is in contact *with them* or sends out some part of itself or conveys a quality in a medium. *But* he who recalls what we have said before, will consider this condition as abolished.

Extraordinary events occur to the natural world because of three causes: firstly the aforementioned *powerful* disposition of the soul, secondly properties of the elemental bodies such as the attraction of iron by a magnet through the particular power of the latter, thirdly celestial forces: between them and the mixtures of earthly bodies which are specified through certain positional configurations, or between them and the powers of earthly souls which are specified through certain celestial active or passive properties, there is a correspondence (*muñasâha*) which engenders the coming about of these extraordinary effects. Sorcery belongs to the first category, or rather miracles and wonders; natural magic belongs to the second category; and talismanic art belongs to the third category.

The distinction between prophets and sorcerers is much clearer here than in *De anima*. The key concept is that of purification. The soul of the prophet is purified, that of the sorcerer is not. Whereas the prophet’s soul resembles a soul after the death of the body because of virtuous acts that have increased his purity to an utmost degree, the soul of the sorcerer has a much lower rank in terms of purity, this occurs, but who is evil and employs it for evil ends, is a malicious sorcerer; the power of his soul in this sense is not sufficient *for him* to reach his goals and he does not attain the rank of the pure.

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But what about the contact with the divine realm? In contrast to *De anima*, Avicenna in the *Ifrâh* indicates that the prophets’ souls, through their purification, come closer to God. Also, he employs religious vocabulary (‘pure’, ‘following the right way’, ‘miracle’, ‘wonder’, ‘saints’, ‘the rank of the pure’).461 But he does not say that the power emanates from above, either in *De anima*, or in the *Ifrâh*. On these points, his accounts of the imaginative and intuitive kinds of prophethood differ from the one based on will-power. In fact, *De anima* puts the emphasis on the prophet’s power to produce these extraordinary effects simply at his will.462 Even the *Ifrâh* sum up the explanation of prophetic phenomena by saying that they are due to ‘the aforementioned *powerful* disposition of the soul’, which is due to an extraordinarily developed bodily temperament. The religious vocabulary seems only employed for the sake of a naturalistic theory of prophecy.

Note Avicenna’s explicit defence of the principle of non-material causation as the basis for both true prophecy and malicious sorcery. Extraordinary effects like miracles and the Evil Eye do not rely on the usual chain of cause and effect, which implies contact or transmission or mediation. Avicenna’s argument is an induction: there are several obvious cases of a non-material cause and a material effect (the man falling from the tree-trunk, the sick person who is cured only because he believes that he is cured etc.), the inference being that non-material influence exists in general. Avicenna then applies this generalized rule to explain phenomena that cannot be explained by the usual scheme of cause and effect, such as the Evil Eye. This theory, which breaks with the Aristotelian principle that causation rests on contact, found numerous opponents in East and West, as we shall see.463

Finally, let us briefly turn to the third, intuitive kind of prophecy. What distinguishes the prophet of this sort from ordinary people is a powerful predisposition (*isti'di'd*) to make contact with the active intellect. The concept of predisposition or predisposition is distinctly Avicennian and also plays a role in his theories of the creation of souls and of the elements’ reception of forms.464 A person

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460. The reader of this passage in *De anima*, IV,4 therefore has to pay attention to the ad ("but, rather") on p. 200, line 12, which divides the section on sorcerers from the section on true prophets who are able to act upon the world’s matter. The Latin translates correctly with *immo* (ed. Van Riet, p. 65, line 38).

461. The terms *muğzâta* and *karâma* are reserved for prophets and saints respectively in Islamic theology.


463. This example is also in *De anima*, IV,4, ed. Rahman, p. 199, line 18.


with a predisposition for intellectual knowledge appears to know everything by himself:

In this state <of the highest predisposition> the material intellect ought to be called 'sacred intellect', since it partakes of the genus of intellect in habitu, except that it is so lofty that it is not something shared by all people.466

The material intellect (as will be explained later)467 is the primitive state of the intellect which exists in all human beings after birth. Therefore, prophets of the third kind have an inborn intellectual power which at birth is already in the state of an intellect which has attained knowledge (an intellect in habitus). This predisposition is called intuition (bad).468 People discover knowledge via intuition by attaining the middle terms of syllogisms. It is possible to improve this capacity after birth:

Thus there might be a person whose soul has been rendered so powerful through extreme purity and intense contact with intellectual principles that he blazes with intuition, i.e., with the ability to receive the inspiration in all matters from the active intellect ... This is a kind of prophethood – indeed its highest faculty – and the most appropriate thing is to call this faculty 'sacred faculty'.469

Other ways to enhance one's intuition are hinted at in Avicenna's autobiography: prayers, visits to the mosque, dreams, wine-drinking etc.470 Again, he gives a new meaning to traditional religious practices and vocabulary in order to formulate a naturalistic theory, which focuses on human predispositions for prophecy.

We can conclude that the second kind of prophecy differs from the two others in that it is less dependent upon divine influence. A powerful person of the first kind who has an extremely vivid imaginative faculty but does not have any contact to the realm above, is incapable of prophecy: such a person will not be able to predict anything and may even appear mad. In fact, Avicenna's theory of the imaginative faculty also covers mad, shocked or dreaming people.471 A prophet of the third and highest kind per definitionem joins with the active intellect and thus with the realm above. This faculty cannot be misused. In contrast, Avicenna's explanation of prophets that perform miracles through their will-power almost dispenses with the notion of divine influence, but only mentions the pure nature of the soul and the special temperament of the body. The emphasis is on the prophet's will-power and on a naturalistic explanation of the phenomena: a non-material cause of a material effect. It is only in the Ilārat that Avicenna describes the purification of the soul in religious terms and more clearly distinguishes between true prophets and sorcerers. But this addition was unknown to the Latin readers, who, with a few exceptions, were very critical of Avicenna's theory of prophecy.

The Latin Reception
The Latin reception of Avicenna's theory of prophecy is of special interest not only because the scholastic writers differed in their judgement about it, but also because the topic is foreign enough to Aristotle's philosophy to be treated as an Arabic contribution to intellectual history. This is said without denying that Aristotle's treatises De inominiis and De divinatione per somnum formed the ultimate basis for the philosophical discussions of veridical dreams, divination and prophecy in the Arabic language. There are obvious connections between the Parva naturalia and the Arabic tradition,472 but also important differences: Aristotle was highly sceptical of the possibility of prophetic dreams and in particular of their divine origin, whereas for the main Arabic philosophers prophethood was a source of knowledge.473 The two aforementioned treatises by Aristotle are very short and tentative and thus did not form a serious obstacle to the development of independent theories in the Peripatetic tradition which grew in Islamic culture and were at least partly prompted by it.474 The Christian tradition, of course, also accepted prophecy. Consequently Latin readers could not argue against Avicenna's theory by simply quoting Aristotle. It is therefore in this part of the broad field of psychology that the reception of Avicenna's De anima came close to becoming a philosophical and theological dialogue between Avicenna and his readers.

These readers were few, however, since it took a careful reader to realize that the diverse passages about the imaginative faculty, will-power and intuition contain a fully-fledged theory of prophecy. By far the most popular and well-known passage was the one about the Evil Eye and the connected teachings about non-material causes. It is quoted or referred to by Robert Grosseteste, Roland of Cremona, Gagtje, 'Philosophische Traumlehren', pp. 258-85. Rahman's attempt to interpret Avicenna's theory of miracles and the Evil Eye as an 'interpretation of the Stoic-neo-Platonic doctrine of Symphathy' (Prophecy, pp. 45-52), is problematic for two reasons. Firstly, the question of Avicenna's textual (Stoic or Neoplatonic) sources seems to be unsolvable. Secondly, Avicenna's concept of non-material causation is radically different from antique concepts of Symphathy, as Rahman himself admits (p. 48: '...substitutes the soul itself for the theurgic magic of later Hellenism'). Given Avicenna's special interest in problems of causation (e.g. in Metaphysics, book VI, see Wessely, Avicenna on Final Causality) which were discussed by many Peripatetic philosophers, it may be more promising to look for his sources in this area.


474. The intriguing question of the influence of Islamic theology and belief on the theory of prophecy in general shall not be tackled in this study. Rahman has discussed some aspects of it in his Prophecy, pp. 52-64, 82-109.
Another reason for the limited success of Avicenna's overall theory is the existence of different kinds of prophethood. Albertus and Thomas Aquinas are in fact the only writers among those examined who have understood that the Avicennian theory is threefold. Albertus describes the three kinds in De somno et vigilia, but is surprisingly silent about it in his main psychological works, De bonumne and De anima. I have already referred to Thomas's remarkable sentence which summarizes the entire Avicennian doctrine (and which was pillaged by Gardet):

Only three things are required for prophecy, namely clarity of the intellect, perfection of the imaginative faculty and the soul's power to make external matter obedient to it.

Another reason for the limited success of Avicenna's overall theory is the existence of a strong Western tradition on the same subject. Following Augustine, twelfth-century theologians distinguish three kinds of visions, one corporeal, i.e. sight; one spiritual, which is a perception of images; and one intellectual, which is a perception imaginativa. Grosseteste, Roland and Petrus do not discuss Avicenna's theory of prophetic properties, using Avicennian vocabularies. What the Latins were truly interested in, is Avicenna's explanation of the Evil Eye and miracles. It did not prove easy, however, to understand how this theory was linked to the Avicennian system of faculties. To my knowledge, Albertus is the only author who does not misrepresent Avicenna's theory of the Evil Eye in this respect, since he acknowledges that the 'potencia animae operativa' is its cause. The misrepresentation found among the other authors is strange given that the Latin text is not ambiguous on this point:

Hae autem est proprietas pendens ex virtute sensibili motiva desiderativa, quae provenit ex anima prophetae digniori prophetiae.

Avicenna's theory of different kinds of prophethood thus met with a Western counterpart which rested on the high authority of Augustine. Avicenna's doctrine of imaginative prophecy, to start with the first kind of prophethood, interested very few readers. The translation displays a certain negligence: neither Gundissalinus (who quotes the passage in his Liber de anima) nor Avendauth recognized the connection between qiwa mutabaya (imaginative faculty) and tabayyul (imagining), and often translated the latter with imaginatio, which is their term for the faculty storing sense data.

Hence, Latin readers had no means of discerning that this kind of prophecy is rooted in the virtus imaginativa (qiwa mutabaya or tabayyul) and not in imaginatio (bayād). Nevertheless, some authors seem to be influenced by Avicenna's doctrine, as has long been pointed out. Albertus Magnus, followed by Thomas Aquinas, interprets the Augustinian visio imaginativa in the following way: 'It should be said that it is likely that forms are arranged and composed in the imagination, rather than that new forms are imprinted.' This may well be a reflection of Avicenna's thesis that imaginative prophecy rests on a strong capacity to separate and connect sense data.

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Hae autem est proprietas pendens ex virtute sensibili motiva desiderativa, quae provenit ex anima prophetae digniori prophetiae.
misrepresentation may be due to the fact that voluntas is not one of the faculties presented with an abbreviated definition in De anima, I,5, but appears only in an unpopular passage of book IV as the root faculty for the irascible and desiring powers.489 Roger Bacon comes closer to Avicenna’s theory when he says that through ‘strong desire, firm intention and great confidence’ external matter may be influenced.490 Even Albertus, who usually points to the role of will-power with phrases such as ‘per solum imperium’ or ‘imperii voluntas’, once mentions that powerful people move matter ‘only through reasoning and imagination’.491

Thus, one of the strengths of Avicenna’s theory, namely that it is rooted in a refined hierarchy of faculties, was not appreciated by his Latin readers. This did not prevent a number of scholastics from understanding basic tenets of the theory. Robert Grosseteste is among the first to quote Avicenna’s explanation of the Evil Eye. In fact, his quotation in the Expositio in epistolum Sancti Pauli ad Galatas, which dates about 1225, is the only direct quotation from Avicenna’s De anima in Grosseteste’s entire work.492 St Paul’s question to the Galatians: ‘Who hath bewitched (fascinati) you that ye should not obey the truth?’493 had prompted commentators since Basil and Jerome to discuss the phenomenon of the Evil Eye and the question of whether demons or the devil are involved in it.494 Thus the Glossa ordinaria explains: ‘Someone who harms children is commonly called a fascinator (fascinus). For the eyes of some people are called burning by sight (ralone).495 Grosseteste, in his commentary on Galatians, first relates Avicenna’s theory and then adds the example of the camel from Algazel’s Metaphysica.496 The example is about a man who sees an excellent camel which is not his own, and driven by jealousy wishes (‘estimat’) its fall, which happens immediately and presumably ruins the camel.497 The combination of Avicenna’s explanation of the Evil Eye and Algazel’s example of the camel also appears in Roland of Cremona and Petrus Hispanus.498 In contrast to Roland, who quotes Avicenna as an authority on the topic (‘as Avicenna, who was a physician, says’),499 Grosseteste does not want to decide whether Avicenna and Algazel arrived at the truth with their theory and simply says that Paul used the word fascinatio metaphorically.500

In his Opus maius, from about 1266, Roger Bacon accepts Avicenna’s explanation of the Evil Eye and also his theory that an extraordinary soul with a strong desire may change external matter.501 He adds, however, that God’s grace plays a certain role in the production of miracles.502

Petrus Hispanus is more critical of Avicenna’s theory, which is remarkable given that he usually follows the Arabic philosopher in his psychology. He repeats the Avicennian explanation of the Evil Eye and gives Algazel’s example of the camel (without mentioning any names, as usual), and adds: ‘But this does not seem to be in accordance with the truth.’503 He slightly misrepresents Avicenna’s theory by saying that a substance which is very similar to the superior substances may participate in their power (‘virtutem participare’). Avicenna would agree that extraordinary souls resemble the higher principles, but he does not maintain that this power in fact comes from above. Petrus proceeds to discuss other phenomena of this kind of prophecy, namely the production of rain and wind, and then gives his own view on the subject: these effects are not caused by the person’s own power (‘ex sui industria’), but through the power of him who reigns over the whole world.504

Albertus Magnus, who follows Avicenna in so many respects, is sceptical about this theory from the start. Already in his commentary on the Sentences, which dates from the mid 1240s, he says explicitly that he does not approve of Avicenna’s and Algazel’s theory ‘because I believe that fascinatio does not harm people with a firm belief in God.’505 Stronger and more philosophical arguments are employed in his

498. See Index locorum, IV.4-4.9.
later writings. In De sensu et sensato (c. 1258) Albertus distances himself from Avicenna’s theory of non-material causation by saying that it does not agree with Aristotelian philosophy, according to which there is no causation between things separated without any mediation; it is, however, in accordance with what is said in necromancy, the art of spells and talismans.\(^{506}\) The Aristotelian argument about the necessity of mediation is repeated in De somno et vigilia, but here Albertus adds another objection, which again is based on Aristotle. Avicenna had argued that the soul is not imprinted in the body, but resembles the higher principles in being able to influence matter. Albertus objects that the soul has to be in the body, otherwise it could not be said (as Aristotle says) to be the form of the body.\(^{507}\)

Albertus goes beyond these Aristotelian arguments and defines his own standpoint in De motibus animalium, which contains the most comprehensive discussion of the problem. Here he explains that he agrees with what Avicenna has said about the influence of certain forms on matter (hoc quidem Avicennae dictum est verissimum). Among these forms are God and the intellectual substances which are close to him, i.e. angels, also souls. Intellect and imagination influence the soul’s body without any instruments but only by giving orders (per solum imperium).\(^{508}\) However, Albertus is strictly against the thesis that the soul may also move bodies other than its own and produce rain and fire. If human beings could change external matter without recourse to the movement of the world and the stars, he says, then the science of horoscopes (nativitates), developed by so many physicists, would not be possible. Moreover, one had to assume that the intellectual forms would disturb the normal movement of the stars so that they would abandon their orbit.\(^{509}\) He proceeds to argue that the phenomenon of the Evil Eye relies on a different cause, namely a power produced by the movement of the stars. When there is a certain constellation of stars, this power is transmitted to persons born in that moment (quae ... similium virtutem inducit in natum) and thus becomes their instrument. This does not happen without contact, because the power reaches the influenced object through a medium, as in the case of the magnet moving iron. The celestial bodies in general move the air through light and move the earth through fire and air.\(^{510}\)

It is obvious that Albertus’s main argument is neither theological nor straightforwardly Aristotelian. He argues against Avicenna in favour of a scientific worldview which is rooted in the concept of an undisturbed and undisturbable movement of the stars and their effects on the sublunar world. Powerful souls who have the power to interfere in this system cannot have a place in Albertus’s theory. He nevertheless accepts Avicenna’s theory of non-material causes for the soul’s influence on its own body.\(^{511}\)

It may not be surprising to find that Thomas used different arguments. In his early Scriptum super sententias (around 1255), he still refers to an opinion close to that of Albertus.\(^{512}\) He remarks that other philosophers than Avicenna argue that angels do not exert any influence on the earthly world except by means of the movement of the stars\(^{513}\) But Thomas’s own line against Avicenna’s theory is set out in detail in the Summa contra gentiles (around 1264) and later picked up again in the Summa theologiae and De malo.\(^{514}\) The main argument is Aristotelian and is based on a passage in Aristotle’s De insomniis.\(^{515}\) The Greek philosopher relates that it happens to very clean mirrors that their surface becomes a blood-like fog when women look into the mirror during menstruation. The reason, according to Aristotle, is that the woman’s eyes move and affect the air, which in turn affects the surface of the mirror.\(^{516}\) Thomas adopts this as a model to explain the phenomenon of the Evil Eye, the existence of which he takes for granted: if someone is moved deeply by jealousy, anger or hatred, as happens often with old women, says Thomas, the spirits of the body get infected (inficicuntur spiritus). This infection reaches the eyes, which in turn infect the surrounding air and ultimately the body of some person, primarily children because of their weakness. Thomas thus prefers an explanation which implies the locomotion of some body between the eye and the object (per motum localem aliquius corporis) and he rejects Avicenna’s theory of non-material causation in the case of the soul’s influence on its own body. Even in this case, he says, some kind of locomotion of a medium takes place – which is in

506. Albertus, De sensu et sensato, 1.10, pp. 27-8: ‘... haec sententia dictis Aristotelis non concordat, quia Aristoteles vult quod separata numquam agant in aliquid nisi per aliud coniunganrur illi, et ideo magis intelligibile est diccum Aristotelis quam dictum Avicennae, sed cum necromantia et incantationibus et arte imaginum magis concordat dictum Avicennae’.
507. Albertus, De somno et vigilia, 3.1.6, p. 186a: ‘Si enim nullo modo sit in corpore, non esset aliquo modo corporis forma et hominis’.
509. Albertus, De motibus animalium, 1.1.3, p. 262b.
510. Albertus, De motibus animalium, 1.1.3, p. 263a: ‘De fascinatione autem et praestigiis nos omnino aliam diximus esse causam. Dicimus enim ex virtute constellationum innasci virtutem his omnibus, quae motu caeli producuntur, quae cum constellationi prodigiosa est, similim virtutem induct in natum. Quod

511. For further information on Albertus’s theory of prophecy, see Torrell, Recherches sur la théorie de la prophétie, pp. 169–204.
512. Thomas’s commentary on the Sentences was written in the mid 1250s, thus some years before Albertus set down his theory about the influence of the stars in his Parsa naturallia treatises. However, Thomas may have heard this theory directly from his teacher Albertus.
513. Thomas, Scriptum super sententias, ii.7.3.1.c, p. 194 and iii.16.1.3.ad 3, pp. 515-16.
514. See Index locorum, IV.4.k.
515. Aristotle, De inomnis, 495b,23a:460a23.
516. See van der Eijk, Aristoteles, De inomnis, De divinat ac per somnum, pp. 169–93, for a recent interpretation of the passage and a discussion of its authenticity.
sharp contrast to Albertus’s standpoint. Thomas nevertheless accepts Avicenna’s theory that extraordinary effects like the Evil Eye are produced by the person’s own power (‘propria virtute’) and thus distances himself from the explanation of the philosophers like Albertus, who connect these effects with the power of the celestial bodies, a position which Thomas himself had preferred in his earlier commentary on the Sentences.

If Thomas is in partial agreement with Avicenna regarding the theory of fascinatio, he is strictly against an application of this theory to true prophetic miracles. Thomas distinguishes between deeds which only appear miraculous, but which are performed *propria virtute* through physical contact (like fascinatio), and deeds which are true miracles, because they are performed in *virtute divina*, also through physical contact (like angelic miracles). Avicenna, one must recall, explained both cases as effects performed by will-power and without physical contact. The Avicennian distinction mentioned above between the deeds of purified persons and those of malicious sorcerers was not known to Thomas, because the *Bahr* were not translated into Latin. It is unlikely that Thomas would have accepted Avicenna’s more secular doctrine which says that prophetic miracles are performed by the power of a purified person and not by divine power.

Turning to the third kind of prophecy in Avicenna’s system, we find that the relevance of the doctrine of intuition to the theory of prophecy was realized by almost no one except Thomas Aquinas. Admittedly, Albertus Magnus knows the doctrines of the varying ability to acquire knowledge, of intuition and of the sacred intellect – in fact, he adopts these Avicennian doctrines, but only in the context of his intellect theory. Thomas, on the other hand, delves into the matter because he is highly sceptical of Avicenna’s naturalistic approach to prophecy. In *De veritate* (dating from c. 1259), Thomas delivers his finest piece of Avicennian exegesis by singling out a core concept of the Arabic philosopher: *isti’dad – preparedness, aptitude – aptitude*. He uses the terms *dispositio* and *habilitas* instead. With similar insight, he later finds that the theory of non-material causes agrees very well with other tenets of Avicenna’s philosophy, since the doctrine of matter which is prepared to receive the influence of the soul (as with the Evil Eye) corresponds to the doctrine that the emanation of intellectual forms depends upon the aptitude or receptibility of the human intellect.

Thomas’s main attack on Avicenna’s position is in question 12 of *De veritate*, which is one of the two treatises he devotes to prophecy (the other being *Summa theologiae*, II–II, q. 171–4). He differentiates between divine prophecy and natural prophecy, the former being a gift of the Holy Spirit which is received by the prophet’s mind without any mediation of natural causes. Natural prophecy, on the other hand, relies on the contact of the imaginative and intellectual faculties with the celestial bodies and separate intellects (i.e. angels) – not with the divine power directly. Thomas argues that Avicenna’s theory of prophecy covers only natural prophecy. This is not strictly correct. We have seen in the first part of this chapter that Avicenna hints at the fact that imaginative prophets establish contact to the divine realm. Also, the sacred intellect, the highest power of the human soul, surely goes beyond Thomas’s description of natural prophetic properties. What Thomas dislikes and refutes is Avicenna’s approach from below, which indeed is very different from his own: according to Avicenna, prophecy (at least imaginative and intuitive prophecy) does not depend only on an emanation from the higher principles, but – to a high degree – on the preparedness (*isti’dad*) of the prophet. In other writings than *De anima*, Avicenna recognizes a number of means to enhance this preparedness by increasing one’s purity, using his own life as an example. Thomas would certainly have disapproved. In *De veritate*, 12, 1, he takes an explicit stand against theories which describe prophecy as *habilitas* of the prophet: prophecy happens in a passive way, Thomas maintains, ‘just as the light of the sun is in the air’. He admits that prophets through repeated inspirations will more easily receive inspirations than others, and he compares this *habilitas* with Avicenna’s theory of the preparedness or aptitude of the prophet to join with the active intellect. But this reception is natural, says Thomas; whenever such a person
wishes, he may join with the intellect. And he adds: 'But the prophetic influence depends upon divine will alone. Therefore, how great the preparedness (habilitas) in the prophet's mind may be, it is not in his power to employ prophecy'.

Here we are at the heart of the disagreement between the central concepts of Avicenna and his Latin reader, which is, in the final analysis, characteristic for the reception of the theory of prophecy. The explanation of the Evil Eye as based on non-material causation prompted various reactions: Roger Bacon accepts the doctrine, Albertus Magnus finds it in conflict with his own theory about the stars, and Thomas Aquinas adopts an Aristotelian position. Roger Bacon, Petrus Hispanus and Thomas safeguard the divine origin of prophetic miracles against Avicenna's naturalistic interpretation. And finally, Thomas rejects the theory of intuitive prophecy on the basis of Christian belief, which reserves a more prominent role to God. In view of these clashes between core beliefs, it is no surprise that the theory of prophecy is among the very few doctrines from De anima included in Giles of Rome's list of Avicenna's errors. He erred, says Giles, in believing that the effect of the Evil Eye exists and in giving a naturalizing explanation of prophecy.

6. THE INTELLECT

The influence of Avicenna's theory of the intellect in the West is one of those topics which have perhaps received too much attention from scholars. As has repeatedly emerged in the course of this study, the result of such a predilection for the topic of the intellect is a historically unbalanced picture of why the scholastics read Avicenna, and of what the theory of the soul comprised up to the time of Thomas Aquinas. Roland of Cremona, Jean de la Rochelle, Vincent of Beauvais, et haec habilitas potest habitus prophetiae dici, sicut eisiam Avicenna dicit in vi de naturalibus quod habitus scieniatur in nobis nihil aliud sunt quam habilitates quaedam animae nostrae ad hoc quod recipiat illustrationem intelligentiae agentis et species intelligibiles ab ea in se effluentes'.


531. That Avicenna and Averroes as Muslim authors challenged Western theories of prophecy with the doctrine that universal natural prophecy has found its final form in the prophet Muhammad (Laarmann, 'Prophezie als erkennstheoretisches Problem', p. 255), does not agree with my findings. See Zambelli, 'L'Immaginazione e il suo potere', pp. 188-206, for a discussion of Avicenna's influence on Renaissance authors.

532. Giles of Rome, Errrors philosophorum, 6.11, p. 30: '... credens fascinationem veram esse et quod anima non solum operatur in corpore proprio sed etiam in alieno'; and 6.16, p. 32 and 34: 'Ulterius erravit circa prophetiam ••• male dixit quia visus est velle prophetiam esse naturalem, et voluit quod secundum ordinem quem habet anima nostra ad animas supercaelestes et ad intelligentiam ultimam derivatur ad nos prophetia'. This draws also on Avicenna's Liber de prima philosophia, X, 1, p. 323, lines 21-34. The other psychological theory listed by Giles is that bliss consists in the contemplation of the active intellect (16.18, p. 34). See Hase, 'Aristotle versus Progress', pp. 872-4. Petrus Hispanus and the young Albertus Magnus were intrigued not only by the theory of the active intellect but also e.g. by the argument of the shellfish and connected doctrines about touch.

This preliminary cautela should not, of course, obscure the importance of Avicenna's intellect theory both systematically, as a key to his entire philosophy, and historically, as the predominant theory of the intellect for centuries in Islamic culture, and as the source of major reverberations in Western and Jewish thought. Any interpretation of Avicenna's theory of the intellect depends upon the understanding of a number of main doctrines and upon the way in which they are brought into relation with each other. Among them are: first, the doctrine of the four intellects (material intellect, intellect in habitus, intellect in effectus, acquired intellect); second, the theory of the different grades of abstraction which ascend from sense perception via the internal senses to the intellect; third, the theory of the human intellect's contact with the separate active intellect; and fourth, the theory of intuition.

It seems sensible to start with an outline of the basic tenets of Avicenna's theory as presented in De anima, book V and chapter I,5.

There is in human beings a substance which grasps the intelligibles, which is called the theoretical (natürlich) intellect, in distinction to the practical intellect (amalhi) which relies on the body. This substance is not a body, nor does it subsist in a body. The bodily (or animal) faculties like imagination and estimation assist the intellectual soul (also called the human soul) to a certain degree, but after the acquisition of the universals, these faculties distract rather than assist. The human soul does not exist before the body, but rather has a beginning in time together with its particular body. It is individuated by certain dispositions or attributes which ensure that the souls will not become one soul after the death of the body, for the human soul does not die with the death of the body — it is immortal.

The cause of the appearance of abstracted universal forms in the soul is the active intellect (al-iyal al-fa'âd) which in other works of Avicenna is identified with the

542. De anima, V,5, ed. Rahman, p. 234, line 17. The term 'an intellect in actuality' (al-iyal al-fa'âd) mentioned in this sentence surely refers to 'the active intellect' (al-iyal al-fa'âd) mentioned a few lines later for the first time in the book (p. 235, line 8).
last of the incorporeal intelligences of the universe. Through contact or conjunction (istidal) with the active intellect the human intellect is turned from potentiality, of which there are three different kinds (material, in habitus, in effectu),443 to actuality,444 the latter status is called the ‘acquired intellect’ (al-‘aql almumtafa).445 However, the intelligibles do not remain in the human intellect, because there is no storing-place for intelligibles in the soul. The intelligible form is present only as long as the human soul wishes to receive it.446 That does not mean that a universal form once acquired has to be learnt again from the very beginning, for the soul develops a certain skill or predisposition (istid) to receive this form. Learning, therefore, consists of developing this skill.447 People differ a great deal in their ability to acquire knowledge,448 that is, to make contact with the active intellect. In general, the ability to acquire an intelligible form depends upon whether the middle term of the corresponding syllogism is obtained.449 Some people need much training and instruction until they hit upon a middle term, others obtain it directly through intuition (hada).450 Those who possess a very high degree of intuition are able to receive all forms (including the middle terms) from the active intellect in almost no time.451 This faculty is called the ‘sacred faculty’ (qiwla quttiya) and is a kind of prophethood.452

Some maintain that there are different souls in one living being. But this is wrong, for the vegetative and animal faculties are two different faculties related to a single, immaterial, conjoining essence. The soul reigns over the body by means of the heart,453 from which the faculties flow (fida) into the organs.454

Modern scholarship would probably agree with this brief description. We leave this common ground when we enter the discussion of more particular points. Two seem particularly important: the meaning of Avicenna’s doctrine of the four intelligents, and the role of the separate active intellect in human intellectuality. Both topics proved to be very popular in the Latin West.

To start with the first of these two topics: it was said that through contact with the active intellect the human intellect is turned from potentiality, of which there are three different categories, to actuality. The three different categories of intellect in potentiality are called ‘material intellect’, ‘intellect in habitus’ and ‘intellect in effectu’, whereas the actualized intellect is named ‘acquired intellect’. What is the ontological status of these intelligents? Modern scholars differ in their answer: some call them ‘stages of development’, ‘powers’, ‘different intellectual levels’, others say ‘parts or stages of the rational soul’, or ‘levels’ and ‘degrees of human intellect’. The Arabic for ‘power’ or ‘faculty’ would be qiwla, for ‘stage, level or degree’ daraja or marjaha, for ‘part’ rasa’. Let us see how Avicenna first introduces the theoretical faculty of the intellect in De anima, I.5, when he has just completed his description of the practical intellect:

As regards the theoretical faculty, it is a faculty of the sort that it receives an impression of universal forms which are abstracted from matter. If these forms are abstract in themselves, the faculty’s grasping of their form is itself easier. If they are not, they become abstracted by force of the faculty’s action of abstracting them so that no attachments of matter are left in them; we will explain how this happens later on.

This theoretical faculty has different relations (nizab) to these forms, because something which is of the sort that it receives something else, sometimes is receiving it in potentiality and sometimes in actuality. Potentiality has three different meanings ...

(48.18) Therefore the relation (nizab) of the theoretical faculty to the abstracted forms, which we mentioned, sometimes is a relation in absolute potentiality; ...

544. De anima, I.5, ed. Rahman, p. 48, line 18 – p. 50, line 12: material intellect (‘aql haylihini, line 49, line 2). The Arabic for ‘stage, level or degree’ is daraga, but ‘part or stage of the rational soul’, or ‘levels’ and ‘degrees of human intellect’.
545. De anima, V.5, ed. Rahman, p. 234, line 15. Cf. Van Riet’s definition (nibah), published in his Prophesy in Islam (1958), pp. 14-20, 30-36, and ‘Ibn Sina’ (1963), pp. 492-501. From Gutas we have pp. 15 and 20 (stages, powers, levels); Gutas, Avicenna, pp. 159-176, which was described in its entirety recently by Davidson, again in a fruitfully close reading of the Arabic texts (Alfarabi, Avicenna, and Averroes) (1992), pp. 74-126. Meanwhile, Gutas emphasizes the development in Avicenna’s thought on the subject, Davidson singles out the common features in the Arabic philosopher’s many different works. An earlier and now for the most part outdated interpretation was given by Gardet, La Pensee religieuse d’Avicenne (1951), pp. 150-157.
546. See n. 544 above for the Arabic terms.
547. Rahman, Prophesy, pp. 15 and 20 (stages, powers, levels); Gutas, Avicenna, p. 172 (parts, stages); Davidson, Alfarabi ..., pp. 85, 86, 87 (stages, degrees, levels).
(49,5) sometimes a relation in possible potentiality ...;
(49,16) sometimes a relation in perfect potentiality ...;
(50,2) sometimes a relation in absolute actuality ....

The last part of this quotation contains Avicenna’s description of the four categories of intellects we are talking about. Note that Avicenna introduces them as different relations (nisab) of the theoretical faculty to the universal forms. He does not use the words for level, part or faculty. There is another passage in De anima which uses a similar vocabulary:

All intellectual perception is some relation (nisab) to forms separated from matter and its material accidents in the way mentioned. This is possible for the soul in virtue of it being a substance which receives and accepts the impression of something else. It is possible for the <separate> intellect in virtue of it being a substance, a principle, acting and creating.

According to these passages, therefore, the four intellects are four different categories of intellectual perception, that is four different categories of relating to the universal forms. It is, however, not without cause that scholars labelled them ‘degrees’ and ‘powers’, because Avicenna sometimes also uses the terms qīwāt (‘faculties’) or marātib (‘levels’, ‘degrees’), for instance in the Istābāt, but in De anima too: ‘These are also the levels (marātib) of the faculties that are called the theoretical intellects’.566

Avicenna’s doctrine of the four intellects (and its ambiguous vocabulary) is best understood if taken as presenting a theory about syllogistic intellection in the first place, and a theory about the gradual development of the intellect in the second place.567 In the locus classicus on the issue in De anima, I,5, Avicenna defines the four categories as follows:568

(1) The first intellect, called the ‘material intellect’, has not yet received any object, but is only predisposed to reception. This primitive state of the intellect exists in all human beings after birth.

(2) The intellect in habitus is characterized by having primary intelligibles (al-niṣba qīlāt al-wāda) present. Such intelligibles, for which Avicenna gives the example ‘The whole is bigger than the part’ and ‘Whatever things are equal to each other, are the premises of a syllogism from which one can proceed to secondary intelligibles.

(3) The intellect in effectus has acquired secondary intelligibles but does not consider them at the moment.569

(4) The acquired intellect comes about when the intelligible forms are actually present in the soul, which happens when the potential intellect (identical with the third intellect) connects with the separately existing active intellect.

An original feature of Avicenna’s doctrine is that all four intellects are categories of the human intellect. In this he differs from his predecessors. The separate active intellect is the fourth intellect in the theories of John Philoponus, Alkindi and Alfarabi, whereas IsaacIsraeli and Avencebrol count three intellects, among them the ‘intelligentia qua semper est actu’.570 This alteration makes it possible for Avicenna to distinguish in greater detail between the various phases of the human intellect. Hence he not only names an entirely potential first intellect and a fully actualized fourth intellect, but also two further intellects, one in habitus and one in effectus. What is their function? Here the key terms are the primary and secondary intelligibles.571 As to the primary intelligibles or axioms, about which we are not told very much by Avicenna, it is unlikely that they are implanted by the separate active intellect,572 for three reasons: first, Avicenna usually maintains that intellectual forms granted by the active intellect are perceived only if the human intellect is actualized, but the intellect in habitus by definition is a status of potentiality; second, Avicenna emphasizes that primary intelligibles are not ‘acquired’ (istāfāda), whereas he regularly uses this term for intellectual forms that come from the active intellect; third, the intelligibles mentioned in the chapters on the active intellect all seem to be secondary intelligibles and not axioms.

563. Or: ‘this happens to the soul ... ’ 11-n-nafī n-dālīka bī-an-nā-hā.’
569. Avicenna does not say anything about the number of secondary intelligibles present in the intellect in effectus: ‘In this case there are in the souls also the secondary intelligibles which are acquired after the primary intelligibles, without however being considered at the moment’ (De anima, I,5, p. 49, lines 16-18). He does not maintain that the intellect in effectus is ‘the level where <man> has a full repertoire of concepts and derivative scientific propositions’ (as Davidson says, Alfarahi ..., p. 94).
572. As to the Greek and Arabic tradition on primary intelligibles before Avicenna, see Walzer, Al-Farabi on the Perfect State, pp. 406-7.
573. For the thesis that in Avicenna’s epistemology primary intelligibles are infused by the active intellect, see Marmera, ‘Plotting the Course’, p. 337; Davidson, Avenebrrol, pp. 86-7. For the thesis that (in Avicenna’s major works) primary intelligibles come about through ‘the spontaneous and instinctive activity of the material intellect’, see Gutas, Avicenna, p. 171.
text of a syllogism, or by the more cumbersome way of searching for the right combination of concepts.\textsuperscript{79} Thus, the intellect which moves from the phase in \textit{habitu} to the phase in \textit{effectu} has gone through an act of syllogistic reasoning. An example, which comes from Aristotle's \textit{Analytica posteriora}.\textsuperscript{80} is given in the above-mentioned treatise on demonstration in Avicenna's \textit{al-Šifā\textsuperscript{1}} (but unfortunately not in \textit{De anima}).

Intuition is the accurate movement of this faculty <i.e. the mind> towards tracking down the middle term on one's own. For example: if a person sees the moon and <realizes> that it only shines, according to its phases, on the side which faces the sun, then his mind by means of intuition tracks down the middle term, which is: the cause for the shining of <the moon> is the sun.\textsuperscript{81}

The syllogism Avicenna is thinking of can be reconstructed as follows: Everything whose cause of light is the sun, shines only on the side facing the sun. The moon has the sun as the cause of its light. Ergo: the moon shines only on the side facing the sun. This is a scientific syllogism in the Aristotelian sense, i.e. a syllogism in which the middle term gives the real cause of the phenomenon described in the conclusion.\textsuperscript{82} In this example, the middle term is 'having the sun as the cause of light', the secondary intelligible is the proposition 'the moon shines only on the side facing the sun' – which is not an observation but knowledge resting upon understanding the cause. For Avicenna, true knowledge relies on the intelligibility of intelligibles in syllogistic order, this order reflecting the structure of reality.\textsuperscript{83}

Since the premises in the example of the moon are not axioms, it is unclear whether Avicenna would count them among the primary intelligibles. Instead, the example's starting point for the formation of secondary intelligibles is sense perception, namely the observation of the moon. The way in which forms deriving from sense data come about is the topic of Avicenna's doctrine of intellectual abstraction as laid out in \textit{De anima}, II,2 and in the \textit{Nağāt}.

The faculty in which the fixed forms are either the forms of existents which are not at all material and do not occur in matter by accident, or the forms of material existents but purified in all respects from material attachments – such a faculty obviously proceeds the forms by grasping them in the way of abstraction from matter in all respects. This is evident in the case of existents which are in

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\textsuperscript{77} Avicenna, \textit{Dīnānāmān, tr. Achenbach/Masson, p. 69. For the passages in \textit{al-šifā\textsuperscript{1} wa-t-tanbihāt} and \textit{Fi n-nāfi an-nātiqa} see Gutas, Avicenna, pp. 164 and 166.

\textsuperscript{78} Aristotle, \textit{Analytica posteriora}, I,34, 896a11.


\textsuperscript{80} Andreas, \textit{Analytica posteriora}, I,34, 896a11.


\textsuperscript{82} On Avicenna's opinion on causality in natural things see Marmura, ibid., pp. 92-8.

\textsuperscript{83} On Avicenna's concept of the syllogistic structure of reality see Gutas, Avicenna, p. 174 (followed by Marmura, 'Plotting the Course', p. 337).
AVICENNA'S DE ANIMA IN THE LATIN WEST

themselves free from matter. As to those existents which are present in matter, either because their existence is material or because they are by accident material, this faculty completely abstracts them both from matter and from their material attachments and perceives them in the way of abstraction; hence in the case of 'man' which is predicated of many, this faculty takes the unitary nature of the many, divests it of all material quantity, quality, place, and position. If <the faculty> did not abstract it from all these, it could not truly predicated of all.\(^{584}\)

Avicenna does not give examples for forms that do not need to be abstracted, but it may well be that the concepts of the whole and the part in his example 'The whole is greater than the part' are such forms. Much more frequently Avicenna speaks about forms that have to be abstracted, and in fact abstraction is a prominent topic of his psychology, as will appear later.\(^{585}\)

To return to the example of the moon and the doctrine of the four intellects: the intellectual state of the person who observes the moon is that of the intellect \textit{in habitu}. Due to some natural inspiration he knows the primary intelligibles, but he can also work with the various sense data, which he may combine and separate with the help of the internal faculty of cognition.\(^{586}\) In this phase, the soul can acquire an intelligible form 'if it actually begins to search for it'.\(^{587}\) Perhaps the observer of the moon has already attained a number of secondary intelligibles, which he may retrieve and consider again at will through contact with the active intellect; in this case, his intellect would be in the phase \textit{in effectu}. He now observes the moon and sees that it shines only on the side facing the sun. Then follows an act of intellectualisation: the person abstracts universal forms from matter, i.e. he attains the concepts 'being a moon', 'shining on one side' etc., he finds the middle term 'having the sun as the source of light' and finally establishes the above mentioned syllogism in which the intelligibles are put in the syllogistic order that corresponds to reality. The moment of this intellection is called 'acquired intellect'.

One can conclude that the four intellects certainly are not 'powers' or 'parts of the soul'\(^{588}\) in the same way as the other human faculties, such as the internal senses. These exist independently of each other, they have their own organs, their own action and often also their own object. This does not hold for the four intellects: they are different relations (\textit{nisab}) of one faculty, the theoretical faculty, to the intelligibles, characterized by different states of actualization. Each time a new relation is reached, the older intellect is transformed into or replaced by a new intellect. If Avicenna calls them \textit{qüwä} ('faculties', 'powers'),\(^{589}\) then he does that only to indicate that the different intellects have increasingly higher powers of intellection. If he calls them \textit{marātib} ('levels'),\(^{590}\) he indicates that the first three intellects (material, \textit{in habitu}, \textit{in effectu}) are different grades of the development of the primitive intellect after birth towards an intellect capable of acquiring true knowledge. Avicenna's doctrine, however, is not only about the intellect's development but also about syllogistic intellection: the second and third intellects (\textit{in habitu} and \textit{in effectu}) are described as knowing different parts of the syllogism, the actual thinking of which is the fourth intellect (called 'acquired').

To turn to the second major issue of Avicenna's intellect theory, the role of the separate active intellect in human intellection. It is a standard doctrine of Avicenna's psychology that the intelligible forms flow or emanate (\textit{fāda}) from the active intellect upon the human intellect.\(^{591}\) Alternative formulations are that the active intellect gives (\textit{a'ūd}) these forms to the human soul,\(^{592}\) or that they are imprinted (\textit{insabā')} in it.\(^{593}\) How does this fit with the theory of abstraction discussed above? In the dominant interpretation of Avicenna's psychology, abstraction is 'only a \textit{façon de parler}';\(^{594}\) for emanation of intelligibles, it is 'not to be taken literally';\(^{595}\) 'intelligible thoughts ... flow directly from the active intellect and


\(^{585}\) See the passages in \textit{De anima}, I,4 (p. 36, line 17 ff.), I,5 (p. 48, line 1 ff.), II,1 (p. 61, just quoted), V,3 (p. 221, line 19 ff.), V,5 (p. 235, line 2 ff., analysed below) and V,6 (p. 239, line 3 ff.). To quote the last passage: 'We say that the soul knows by means of perceiving in itself the form of the intelligibles which is abstract from matter. That the form is abstract is either because it is abstracted by the intellect or because this form in itself is abstract from matter, so that the soul is saved the trouble of abstraction'.

\(^{586}\) See \textit{De anima}, V,3, ed. Rahman, p. 221, line 19 ff. The theory of the cogitative faculty has received special attention by Davidson (\textit{Alfarabi} ..., pp. 95–102), who overemphasizes its role and misinterprets the term \textit{fāṣ} ('intellectual reasoning') as referring to the activity of the cogitative faculty (\textit{al-maqākkara}). This faculty by definition deals only with forms and connatal attributes ('intentions') that are not completely abstracted from matter and are therefore not universal. Davidson's analysis is partly conditioned by his misunderstanding of a passage in \textit{De anima}, V,6 where it is said that 'acquiring knowledge' (\textit{ṣallām} = acquiring an intelligible form) is seeking for the perfect disposition to make contact with the active intellect (p. 247, line 3), where Davidson replaces the term \textit{ṣallām} with \textit{fāṣ} (with Muḥābātī, p. 199, line 12) and misleadingly translates with 'cognition' instead of 'acquiring knowledge' (\textit{Alfarabi} ..., p. 96).


\(^{588}\) Cf. n. 561 above.

\(^{589}\) See n. 565 above and \textit{De anima}, V,6, ed. Rahman, p. 247, line 20 – p. 248, line 3, where the third and fourth intellects (\textit{in effectu} and 'acquired') are called \textit{qüwä}. A particular problem of interpretation is posed by the passage on the hierarchy of faculties (end of L5) where the four intellects are said to serve the next higher intellect, just as they are served by animal faculties which in turn are served by the vegetative faculties. I can only propose taking this passage as a convenient but certainly not consistent way (some faculties are parts of the soul, some are not) to summarize the rather dense chapter L5.

\(^{590}\) See n. 566 above.

\(^{591}\) See e.g. \textit{De anima}, V,6, ed. Rahman, p. 247, lines 4–5, and p. 248, line 1.

\(^{592}\) \textit{De anima}, V,5, ed. Rahman, p. 234, line 17.


\(^{595}\) Davidson, \textit{Alfarabi}, \textit{Avicenna}, and \textit{Averroes} (1992), p. 94.
are not abstracted at all'; Avicenna 'was unable to explain intellectual abstraction in knowledge'; the activity of the human intellect 'can only dispose the mind to be receptive of new concepts'.

One obvious problem with this interpretation is that Avicenna's lengthy chapter on abstraction (De anima, v,2), and the passages which describe the intellect as abstracting have to be explained away as conventional lore of the Peripatetic tradition, as not being truly Avicennian. But are they a mere concession to tradition? The crucial passage in this regard is the beginning of De anima V,5 where Avicenna introduces the active intellect. He says that the active intellect is needed as the cause which makes our souls switch from potential to actual knowledge of the intelligibles. He then compares the active intellect to the sun, the human intellect to the faculty of vision and the intelligibles to the things in the world. And he proceeds:

1. When the intellectual faculty considers the particulars which are stored in the imagination and the light of the above-mentioned active intellect shines upon them in us, then the particulars are transformed into something abstracted from matter and from the material attachments and get imprinted in the rational soul, (2) but not in the sense that the particulars themselves are transferred from imagination to our intellect, nor in the sense that the concept buried in material attachments - which in itself and with regard to its essence is abstract - produces a copy of itself, but in the sense that looking at the particulars disposes the soul for an abstraction (al-mugārāt) from the active intellect to flow upon it. (3) For thoughts and considerations (al-afār wa-ta'āmmulāt) are movements which dispose the soul to the reception of the emanation, just as the middle terms in a more certain way dispose <to> the reception of the conclusion (although the two happen in different ways, as you will understand later). (4) When some relation towards this form occurs to the rational soul through the mediation of illumination (bi-tawaasnuti īrāq) by the active intellect, then from the <form> something comes about in the soul, <something> of the form's kind in some way and not of its kind in another way - just as when light falls upon coloured things, it produces in vision an effect which is not of its nature in all aspects. The imaginable things, which are intelligible in potency, become intelligible in actuality, though not themselves, but that which is collected (iltaqqa) from them. Or rather: just as the effect, which is transmitted through the medium of light from the sense perceptible forms is not identical with these forms but something different, related to them, <something> which is generated through the mediation of light in the corresponding receiver, likewise when the rational soul looks at these imaginable forms and 'whence' the light of the active intellect makes contact with them in some way, <the rational soul> is disposed to have appear in it, due to the light of the active intellect, uncontaminated abstractions from these forms.

In this passage Avicenna explains how the particular, imaginable forms which exist in the soul become universal and intelligible - in other words, he explains the process of abstraction. The first sentence states the basic thesis, i.e. that through the influence of the active intellect the particulars stored in the imagination are transformed into something immaterial which is imprinted in the rational soul. The second sentence adds an explanation of this process: neither does the particular imaginable form travel itself from the imagination to the intellect, nor is there a copy produced of its immaterial core, but there comes an abstraction of it from the active intellect, for which the soul is disposed through its consideration of the particulars. The entire fourth section is meant to explain this abstraction. Its main thesis is that the intelligible form emanating from the active intellect is 'related' to the imaginable form which is at its origin: the intellectual form is 'of its kind in some way and not of its kind in another way'. Avicenna even says that the intellectual forms are 'collected' from the forms in imagination. Note that the analogy of light is not only used to compare the active intellect to the sun, but also to compare abstraction to vision: just as the visual image resembles the object it reproduces, likewise the abstracted form resembles the particular form stored in imagination.

It is, therefore, not correct to say that for Avicenna 'human intelligible thought comes directly from the active intellect', or that 'intelligible thoughts ... flow directly from the active intellect and are not abstracted at all'. Avicenna insists that intelligible forms ultimately come from the particulars in the imagination and still resemble them. Moreover, 'thoughts' (al-afār) are movements of the human intellect produced before the reception of abstract forms, as stated by Avicenna in section three.
In the traditional reading of these passages, the human intellect's attention to particulars only disposes (a'adda) the soul to be receptive of an emanation from above. This puts the emphasis on the activity of the active intellect rather than on that of the human intellect.\textsuperscript{603} This, however, is not Avicenna's point. There is no 'only' in the text.\textsuperscript{604} What Avicenna wants to explain in section two is the process of the transformation of the imaginable form: no transmission, no copying, but an abstraction mediated by the active intellect—and Avicenna adds that the role played by the active intellect truly is that of a medium: the form occurs to the soul 'through the mediation of illumination by the active intellect'. The function of the active intellect is to illuminate the objects of abstraction and let the abstracted forms occur to the human soul. In comparison, the function of the human intellect is described in more active terms: it looks at the imaginable forms, and produces 'thoughts and considerations' which Avicenna calls 'movements'. The aptitude\textsuperscript{605} reached by this activity is similar to the aptitude to move from a middle term to a conclusion—which is a very strong disposition: what is difficult is to obtain the middle term, not the conclusion.

If, therefore, Avicenna himself does not conceive of the soul's power in abstraction as something limited, it may be said to be limited only in comparison with other theories of abstraction. It has been argued that Avicenna's theory differs from others, such as Alfarabi's, in that the separate active intellect does not enable the soul to abstract.\textsuperscript{606} But that does not necessarily entail a limitation of the human power of abstraction. In Avicenna's theory, the human intellect does not need to be enabled from outside to produce thoughts and considerations. It is only at the very end of the process of abstraction that the active intellect comes in.

So far for the role of the active intellect in the abstraction of an intelligible form. A related issue is Avicenna's doctrine of intellectual memory, or rather his denial of it (\textit{De anima}, V,6), which encountered severe criticism in the West.\textsuperscript{607} After the first acquisition of a form, the soul's disposition to acquire this form is perfect. Whenever it wishes, it can make contact with the active intellect and let the form be present in the mind. But this presence lasts only as long as the soul actually perceives the form; there is no intellectual memory. Avicenna again uses the analogy of sight:

The first acquisition of a specific intelligible form (\textit{at-ta'allum al-'awwal})\textsuperscript{608} is like the cure of an eye. When the eye is cured, it may look at the object, from which it grasps an image as long as it wishes; and if it turns away from this object, the object becomes potentially visible in a way that is very close to actuality.\textsuperscript{609}

The distinction between the first acquisition of a form and its later consideration at will is fundamental for Avicenna and also appears in his doctrine of the four intellects: the intellect \textit{in effectu} has already acquired intelligible forms, which the person does not consider at the moment but which are retrievable through contact with the active intellect. The distinction explains why in some passages about the active intellect one reads about abstraction and emanation (e.g. \textit{De anima}, V,5, quoted above) whereas others deal with emanation only (e.g. \textit{De anima}, V,6).\textsuperscript{610} The latter are about the re-acquisition of already perceived forms, for which abstraction is not needed. It seems that Avicenna makes fuller use of emanation terminology (\textit{fitrā', fitrah}) in passages about retrieving an already known concept than in passages about first acquisition.\textsuperscript{611}

A final question concerns the kind of entity the active intellect is. For Avicenna, this is a metaphysical question, since it regards existents separate from matter.\textsuperscript{612} In \textit{De anima}, he alludes to the fact that after the body's death the souls are allowed to connect perfectly with the active intellect and that they thus encounter intellectual beauty and eternal happiness.\textsuperscript{613} In works other than \textit{De anima}, Avicenna identifies the active intellect with the last of the incorporeal intelligences, which is the lowest sphere of the universe. In this role, the active intellect participates in the hierarchical emanation of natural forms and matter.\textsuperscript{614}

In this context, it is necessary to clarify a term which appears in many modern descriptions of Avicenna's theory of the intellect, but which is not always applied

\textsuperscript{603} Cf. Weisheipl, 'Aristotle's Concept of Nature', p. 150: 'According to Avicenna, human teachers and books can only dispose the mind to be receptive of new concepts from the \textit{datur formarum}, the "agent intellect" (for the term \textit{datur formarum} see pp. 188-9 below); and Davidson, \textit{Alfarabi ...}, p. 93: 'Activity leading up to the ostensible act of abstraction thus does not come to fruition in a true act of abstraction. It rather prepares the way for the reception of abstract concepts from the emanation of the active intellect'.

\textsuperscript{604} Pace Rahman, who translates (\textit{Prophesy}, p. 15): '... but only in the sense that its consideration prepares the soul so that the abstract form should emanate upon it from the Active Intelligence' (my emphasis).

\textsuperscript{605} For Avicenna's concept of \textit{inti'dād} ('disposition', 'preparedness') see pp. 163-4 above.

\textsuperscript{606} Davidson, \textit{Alfarabi ...}, p. 93.

\textsuperscript{607} Especially by Thomas Aquinas. See p. 190 below.

\textsuperscript{608} Davidson (\textit{Alfarabi ...}, p. 94) misunderstands this phrase as referring to the moment when a person's intellect reaches 'one of the stages of advanced potentiality, in which it can reestablish "conjunction" with the active intellect at will', i.e. the intellect \textit{in effectu}. But this passage clearly is not about the gradual development of the intellect in general, but about the first acquisition of a specific form, as is the entire passage (cf. the phrases 'desired intelligible form' and 'a form in potentiality', p. 247, lines 7 and 10).


\textsuperscript{610} With the exception of \textit{De anima}, V,6, p. 247, lines 8-9 (hence there emanates from it the power of the abstract intellect), where the topic is the first acquisition of 'the desired intelligible from'.

\textsuperscript{611} Cf. the references to \textit{De anima}, I,5, V,5 and V,6 in nn. 599-3 above.

\textsuperscript{612} Cf. his references to the \textit{Metaphysics} in \textit{De anima}, V,5, ed. Rahman, p. 238, line 6, and V,6, p. 248, line 8.

\textsuperscript{613} Avicenna, \textit{De anima}, V,6, p. 248, lines 6-8.

\textsuperscript{614} See the references in n. 543 above.
in the correct way: *wābīb as-*ṣawār, ‘the giver of forms’, *dator formarum*. This is a technical term of Avicenna’s philosophy, which he uses only in particular passages, namely when speaking about forms that emanate from above and are received by properly disposed portions of matter. When matter is predisposed in a perfect way and is similar to the substance of the celestial bodies, it may receive a human soul. The giver of forms (or: the ‘principles giving the form’ – Avicenna once uses the plural) is one of the celestial intelligences. It is sensible to identify the giver of forms with the last of these intelligences – the active intellect – from which flow the particular natural forms so that they are inscribed in particular matter. It is important to note, however, that Avicenna himself never seems to explicitly identify the giver of forms and the active intellect. Certainly, he does not use the term to describe the active intellect’s activity of sending out intelligible, universal forms (also called *ṣawār*), the objects of human intellection. The term *dator formarum* thus belongs to Avicenna’s theory of creation, but not to his epistemology. It may be due to Algażel that the phrase gained a certain popularity in the West, because in his *Maqāṣid* (the Latin *Metaphysica*, a reworking of Avicenna’s Persian *Dānēḵūmā*) he inserts the phrase at least four times in passages where Avicenna had not used it, for instance in passages about the transmission of sense-perceptible forms. Averroes writes that Avicenna identifies the active intellect and the giver of forms, but he clearly refers to substantial and not to intelligible forms. The scholastics hardly ever employ the term when discussing Avicenna’s epistemology. Albertus, for


The reception of Peripatetic intellect theory covers many areas, of which three are singled out in the present study, following the above analysis of Avicenna's theory of the intellect: the doctrine of the four intellects, the theory of the active intellect's participation in abstraction, and the doctrine of Avicennized Augustinianism, which identifies the active intellect with God. Of these three, the last deserves special attention, since it is one of the most significant medieval fusions of philosophical and theological doctrine.

Not examined here are Avicenna's theories of the creation of the soul and individuation. It may be briefly noted that Avicenna's proper argument, which shows that the soul does not exist before the body, is quoted only twice, by Dominicus Gundissalinus, and by Albertus Magnus in De homine. Gundissalinus, incidentally, considers the arguments to be weak ('debiles'). Nevertheless, Avicenna's theory of individuation as a whole — which says that the soul has a beginning in time together with its particular body and that it is individuated by certain dispositions or attributes, which ensure that the souls will not become one soul after the death of the body — was embraced by Thomas Aquinas in his Scriptum super sententias. A second doctrine that would deserve closer study is the denial of a human storing-place for intelligible forms, i.e. the denial of intellectual memory, which is the Avicennian doctrine most strongly objected to by Thomas Aquinas. The criticism appears in Thomas's major works (which probably prompted similar reactions in subsequent writers like Simon of Faversham), but also in his early commentary on the Sentences, where the objective is to sustain the thesis that the intelligibles remain in the soul even after death. On this delicate problem Albertus Magnus takes an intermediate position in De homine: he explicitly agrees with Avicenna that there is no intellectual memory, since the faculty of memoria is reserved for sense data, but he argues against him that the intelligibles remain in the possible intellect. Gundissalinus and Petrus Hispanus adopt the Avicennian standpoint.

The turning point in the history of the doctrine is the anonymous treatise De anima et de potentiae eius, written by a Parisian master of arts around 1225. In this text, which influenced later authors such as Jean de la Rochelle and Albertus Magnus, Avicenna's idea falls on fertile ground for the first time. The unknown author presents the doctrine as a theory about syllogistic intellection: 'unde quantum ad intellectum possibilem, eius <cuius> Avicennae opinio est quae tenemus secundum fidem catholicam, quamvis erret cum aliis de intellectu agente'. Thomas ceases to quote Avicenna on the topic in his other writings, apart from De ente et essentia, 5.68, p. 379. On matter as the principle of individuation, see Anawati, 'Saint Thomas and the Avicennian Metaphysics', pp. 21-77.

If Gundissalinus's account is a collage of extracts from Avicenna, John Blund takes a much more independent, if hardly Avicennian approach. He leaves out all passages that pertain to the theory of syllogistic intellection; and he reduces the four Avicennian phases to two, called 'intelligentia materialis' and 'in effectu', by describing the 'intelligentia adventus' as the intelligible and essential form of the material intellect and by relegating the 'intelligentia agens' to an abstracting power of the soul, a 'vis animae' hardly related to the two phases of the intellect.

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629. For a detailed analysis of the history of this doctrine see Hasse, 'Das Lehrstück von den vier Intelligenz', pp. 21-77.
630. This includes modern interpreters. See Gundissalinus, Liber de anima, p. 87, line 15, to p. 88, line 13. Cf. Avicenna, De anima, V,1, ed. Van Riet, p. 81, lines 76-83.
631. John Blund, Tractatus de anima, 25.2, pp. 92-4. Blund also mentions an intellectus in habitu, meaning the form which is understood and stored in the soul (intellectus as the participle perfect passive), not a phase of the intellect.
Much of this is reminiscent of Avicenna: for both philosophers, the first intellect is pure potentiality, the second intellect knows first propositions such as the Euclidian axiom ‘Omne totum maius est sua parte’, the third intellect proceeds to connections out of the quiddities in the form of primary propositions, hence by knowing what is a part and what is a whole, it can form the connection ‘Every whole is bigger than its part’. Then the <intelligere> is called intellectus in habitus, because with it are the principles of truth in the genus of truth. When it proceeds again from arranging these principles to knowledge of the conclusion, then it is called intellectus adeptus with respect to this knowledge derived from the principles.


The second feature that sounded familiar is Avicenna's doctrine of a status of the intellect in which the primary intelligibles are present. For the anonymous master knew a passage at the end of Aristotle's *Posterior Analytics*, where it is said that the principles and axioms of all knowledge are within the intellect. In the translation from Greek by James of Venice: 'Siigitur nihil aliud secundum scientiam genus habemus verum, intellectus utique erit scientiae principium, et principium principis'. The unknown Parisian master testifies to the knowledge of this passage when he picks up phrases such as 'genus verum' or 'principium' and when he uses the term *scientia* for knowledge derived from principles. In addition, it is likely that the master's doctrine of the composition of axioms also goes back to the *Posterior Analytics*, for later in the century the scholastics quote a key sentence from the *Analytica posterioria*, I,3 on the issue: 'Principia cognoscimus in quantum terminos cognoscimus' — 'We know the principles insofar as we know (their) terms (for subject and predicate)'. Albertus Magnus, Bonaventura and Thomas Aquinas even quote this sentence in explicit connection with the Parisian master's example of the composition of the *Omne totum* axiom. It is remarkable that the anonymous magister established the fusion of two traditions at a moment when both of them were *in statu nascendi*: the reception of the *Analytica posterioria* had not yet gathered pace, and the high tide of Avicenna's psychology was still to come. One should also note that the author goes further than simply quoting Aristotle: he adapts Aristotelian doctrines to Avicennian intellect theory. In doing this, he goes to the heart of the matter: Avicenna's doctrine of the four intelligents is indeed inspired by Aristotle's theory of the intuition of the middle term — a connection which our author may have sensed. In sum, his doctrine of the three potential intellects is not simply a perurbation of the Avicennian sequence of intelligents, but a very purposeful adaptation.

Because of the scarcity of surviving sources, we do not know whether this treatise influenced other masters of arts, but we can trace its impact on theological works, for instance on the anonymous *De potentiss animae et objectis*, which in turn influenced the Franciscan theologian Jean de la Rochelle. The latter author combines the approach of the Parisian master with a fresh reading of Avicenna. The result is on the one hand a triple sequence of Avicennian intellect names (from versions A and B of Avicenna's *De anima* and from the distinction of potentialities in the same work), in which the fourth intellect appears again, and on the other hand an interpretation of the doctrine as concerning syllogistic intellection, an interpretation indirectly influenced by the Parisian master of arts: the second intellect is *intellectus principiorum*, the third intellect *intellectus conclusionum*. Jean de la Rochelle even uses the Boethian term *communes animi conceptiones* for axioms known by the second intellect, which shows that he has understood the connection between Arabic intellect theory and Western discussion of the axiomatic method. Hence one can say that with Jean de la Rochelle the appropriation of Avicenna's doctrine is fully achieved.

In fact, the doctrine appears a second time in Jean's *Tractatus*, although this is hardly apparent. Jean here transforms the doctrine as transmitted by the anonymous theologian into a piece entirely about the intellectual function of the potential intellect. All other intellect names disappear. After quoting Avicenna on the intellect's activity of abstraction, Jean writes:

> Then follows the activity of the *already formed* possible intellect, with respect to, first, the quiddities, second, the first pieces of knowledge which are the principles of the sciences, third, the conclusions. For example: first the intellect...

647. Aristotle, *Analytica posterioria*, I,3 (p. 94-100, u. 15-89), cuius tarnen ordinem perturbavit et doctrinam alteravit magister. Rather, the names of the three intellects follow the functions given to them by the anonymous author: the first intellect has the potentiality to act and is called *intellectus principiorum*; the second intellect is *intellectus principiorum*, the third intellect *intellectus conclusionum*.
650. Albertus Magnus, *Bonaventura* and Thomas Aquinas even quote this sentence in explicit connection with the Parisian master's example of the composition of the *Omne totum* axiom. It is remarkable that the anonymous magister established the fusion of two traditions at a moment when both of them were *in statu nascendi*: the reception of the *Analytica posterioria* had not yet gathered pace, and the high tide of Avicenna's psychology was still to come. One should also note that the author goes further than simply quoting Aristotle: he adapts Aristotelian doctrines to Avicennian intellect theory. In doing this, he goes to the heart of the matter: Avicenna's doctrine of the four intelligents is indeed inspired by Aristotle's theory of the intuition of the middle term — a connection which our author may have sensed. In sum, his doctrine of the three potential intellects is not simply a perurbation of the Avicennian sequence of intelligents, but a very purposeful adaptation.

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knows what is a whole, what is a part; then it knows the sentence (which is a principle known per se) that 'Every whole is bigger than its part', and likewise in other cases; third, it knows the conclusion which follows, namely that every continuous thing is bigger than its part, and likewise in other cases. Hence, it is in the way of induction that the form abstracted from particulars is collected, through which the possible intellect is formed; it is in the way of a syllogism that the already formed possible intellect proceeds.\(^{657}\)

Although the passage still owes much to Avicenna, it is obvious that there has developed a scholastic doctrine with a character of its own. In Jean's theory, the formation of the possible intellect through abstraction precedes the act of syllogistic intellection which is described in the quoted text, whereas for Avicenna the primary intelligibles are innate knowledge, while the conclusions, i.e. the secondary intelligibles, have to be reached through contact with active intellect, which involves abstraction.

Another achievement of Jean de la Rochelle's is the care he invests in differentiating between traditions and in labeling them with reliable references. This is a first step towards mastering a seemingly boundless mass of intellect theories. It is Albertus Magnus who goes a step further. In his early De homine he enters the discussion with a magisterial cascade of distinctions of the intellect which derive from a wide range of sources that have never been distinguished before: Alexander of Aphrodisias, Alkindi, Avicenna, Algazel, Aristotle, Averroes.\(^{658}\) In contrast to his predecessors, Albertus is aware of the contradictions that exist among the Peripatetic philosophers.\(^{659}\) Many details witness to his understanding of the tradition: for instance, when he explains in passing that certain intellect names are alternative expressions of the same intellect in Algazel and Avicenna,\(^{660}\) or when he remarks that Avicenna's theory of intuition is related to Aristotle's doctrine of syllogism (σωφρονεῖν) from the Posterior Analytics, or when he gives detailed references to sources.\(^{661}\) As to the doctrine of the four intellects: the point is that it still has a place in the psychology of De homine. This is remarkable because Albertus seems to give Aristotle the lead when admitting only two intellects, the active and the possible intellect, plus a third intellect drawn from Averroes, the intellectus speculativus, which he interprets as the possible intellect at a high level of potentiality. It is quite clear, however, from various passages in De homine that Albertus conceives of the speculative intellect as being identical with Avicenna's third intellect (the intellect in effectu) and with the intellectus adeptus of the scholastic tradition initiated by the Parisian master.\(^{662}\) As a result, the door is open again for the doctrine of the four intellects, which he adopts in the scholastic version: he omits the fourth intellect, and names three different stages of the possible intellect, one which composes intelligibles, one which is the habitus principiorum, and one which has attained knowledge.\(^{663}\) The theory of syllogistic intellecction appears – just as in Jean de la Rochelle – in a separate passage:

The intellect in habitus is the possession of those principles which the pupil does not acquire from a teacher. For we know the principles insofar as we know the terms, as Aristotle says. For, knowing what is a part and what is a whole, one knows that the whole is bigger than its part, ... Therefore the intellectus adeptus and the intellect in habitus are not identical, since the former is the possession of those principles which we acquire from a teacher through teaching or through finding them on one's own.\(^{664}\)

Much in this text is traditional: the quotation from Aristotle, the Omne totum example, the use of the term intellectus adeptus for the intellect of the conclusions, and in general the connection of Avicennian intellect theory with the theory of...

\(^{657}\) Jean de la Rochelle, Tractatus, 2.22, p. 94: 'Et tunc subsequitur operatio intellectus possible, prima circa quidditates, secunda circa comprehensiones primas, quae sunt principia scientiarum, tertia circa conclusiones. Verbi gratia: Primo cognoscit quid totum, quid pars; secundo propositionem, quae est principium per se notum: omne totum maius est esse sua parte, et sic in ceteris; tertio conclusionem, quae consequitur, sit intellect quod omne totum continent est maius sua parte, et sic in ceteris. Per viam ergo inductionis colligitur ipse forma abstracta a singularibus, quae formatur intellectus possible; per viam vero syllogismi proficit operatio intellectus possible iam formatum'.

\(^{658}\) Albertus, De homine, 54, p. 449a: 'Dicet Alexander philosophus in libro De intellectu et intellectibili quod tres sunt intellectus, scilicet ... Ex hoc accipitur quod intellectus non sunt nisi tres distinctiae. Cuius contrarium videtur dicere Alkindus in suo libro De intellectu et intellectibilla, qui dicit quatuor species intellectus. Quadrum prima ... Secundum Avicennam autem et Algazelem quatuor sunt differentiae intellectus, alia a praedictis in parte, scilicet ... Secundum Aristotelcum autem videtur esse duas speciees intellectus ... Averroes vero videtur ponere tres speciees intellectus ...'

\(^{659}\) That means, he continues to develop Peripatetic philosophy, but on a different level of understanding. It would be wrong to see the intellect theory of De homine as turning from Platonizing and mystic Arabic theories to logical Aristotelian theories, as maintained by Michaud-Quantin, 'Albert le Grand et les puissances', p. 73.

\(^{660}\) Albertus, ibid., p. 451b.


\(^{662}\) Albertus, ibid., p. 518a–b: 'sic autem habetur in fine primi Posteriorium'.

\(^{663}\) Albertus, De homine, 54, p. 451a (solutio), 452b and 451b: '... et ille est speculativus sub quo comprehensurum intellectus in habitu et adeptus et demonstrans'.

\(^{664}\) Albertus, De homine, 54, 3, pp. 481b–482a: 'Dicendum quod tres sunt gradus intellectus possibili, ac sciantem, sed ad intelligibile non sunt nisi duo. Scientia enim est habitus constitutus ex compositione intelligibilium et propter hoc primus gradus potentiae ad ipsam est intellectus humanus hylealis, qui de sua natura est talis ut sit secundum secundum autem est habitus principiorum, quae sunt quasi instrumenta acquirandam scientiam. Tertius autem gradus habet scientiam et potest considerare quando vult. Ad intelligibilem autem non sunt nisi duo gradus, scilicet ante intelligibilem et sub ipsa, quae quid intelligibile non habet dispositionem praecedentem se in intellectus possibili'.

\(^{665}\) Albertus, De homine, 54, ad 1, p. 452a: 'Ad aliud dicendum quod intellectus in habitu est habitus principiorum quae discipulus non accipit a magistro. Principe enim cognosceus in quantum terminus simus, ut dicit Aristoteles. Sciendum enim quid est pars et quid est totum, scio quod totum est maius sua parte, et scito quid affirmato et quid negatio, scio quod de quilibet est affirmatio vel negatio vera et de nullo simul, et ideo non incidit in idem cum intellectu adepto, quia igitur non est habitus eorum quae scipinum a magistro per doctrinan vel inventionem'.
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axioms. The distinction between _doctrina_ and _inventio_ may well come from Avicenna's _De anima_, V,6 – where the topic is finding the middle term – which testifies to Albertus's awareness of the Avicennian character of the doctrine.

Nevertheless, Albertus's reluctance to employ the many intellect names he has found in the sources and his insistence on the two Aristotelian intellects indicates that he is slowly turning against the Peripatetic tradition. Many years later this tendency was to find full expression in his _De anima_ and _De intellectu et intelligibili_. In the early _De homine_ he had offered his readers a Peripatetic version of the doctrine of the four intellects, he now presents two very different readings: one being a reduction of the doctrine to its Aristotelian roots, the other a transformation into something surprisingly new. The first appears in the treatise _De anima_ when Albertus comments upon a passage in Aristotle on different kinds of potentialities (417a21 ff.). He quotes bits and pieces from the Avicennian and the scholastic doctrine of the four intellects, such as the _Omne totum_ example, the principles which are at the origin of knowledge, and the distinction between learning and finding. In addition, he juxtaposes Aristotelian and Avicennian examples for the degrees of potentiality. He thus successfully links Avicenna's doctrine to its roots, with the effect that it loses its independent existence and its coherence. The reason, of course, is that there is no proper place for the doctrine in a commentary on Aristotle, who acknowledges only two theoretical intellects.

Regardless of whether it is a theory about gradual development or a theory of syllogistic intellection, the doctrine of the four intellects can only be inserted if one is ready to include something distinctly non-Aristotelian in one's commentary. Thomas Aquinas, for example, will not include it. Following Albertus, he contents himself with quoting parts of the doctrine when commenting upon Aristotle's passage on potentiality, omitting the intellect names.

Albertus himself, however, opens a back door to the theory of the four intellects. In his commentary he once mentions a sequence of four intellects: _possibilis_, _universaliter agens_, _speculativus_, and _adceptor_, and speaks of an ascension to the _intellectus adceptor_. In a related passage, he spins out this theory of ascension: the speculative intellect is the formation of the possible intellect through forms which are acquired with the help of the active intellect. The increasing formation of the possible intellect through the active intellect (both being parts of the soul) due to these acts of intellection eventually leads to a status in which _possibilis_ and _agens_ are connected like matter and form. The different degrees of this formation are the different stages of the speculative intellect. The last stage is the _intellectus adceptor_, that is, the total connection between _possibilis_ and _agens_ and the perfect and God-like knowledge of immaterial forms.

An ascension of the soul to a divine state – this is a surprising turn in the history of the doctrine of the four intellects. The two main sources for Albertus's theory are, first, a rather obscure passage in Averroes's long commentary on _Peri psychê_, in which the degree of conjunction between _agens_ and _possibilis_ as form and matter is described as constantly increasing; it ends with a quotation from Themistius about the marvellous and God-like state of the soul. The second source is Avicenna's doctrine of the _intellectus sanctus_, which is a prophetic intellect capable of intuiting all middle terms at once and in no time – a theory often quoted in Albertus's œuvre. But neither of the two authors understands the various intellects as stages in a process of intellectual ascension to God-like knowledge. This is Albertus's transformation, which rests on early medieval traditions. In Avicenna's philosophy, the doctrine of the four intellects is held together by the above-mentioned criteria, that is, potentiality/actuality and principles/conclusions. This will change with the doctrine's alteration into a theory of ascension: there can be many steps in an _accessus_ to divine knowledge.

How many becomes clear when Albertus returns, soon after _De anima_, to his new theory in _De intellectu et intelligibili_:

Note that in all these intellects the possible intellect is, as it were, the foundation and starting-point. The light of the active intellect in it is the disposition and, as it were, the base for the intellect of the principles, and the intellect of the principles is the base for the intellect which is called _in effectu_, and the intellect _in effectu_ is the base for the acquired intellect, especially insofar as the soul acquires knowledge of itself, and this acquired intellect is the base for the assimilated intellect, which through the degrees of the application of inferior light ascends to the superior light until the light of the divine intellect, and in it it stops as in _accessus_.

666. The passage is therefore an echo of a longer tradition rather than of Averroes (Commentarium magnum, 3.36, p. 496, lines 490–93, as de Libera proposes in _Albert le Grand_, p. 262).

667. Albertus, _De anima_, 2.3.2, p. 98, line 48 ff.

668. Thomas Aquinas, _Sententia libri de anima_, p. 113, lines 225–42.


670. Albertus, _De anima_, 3.3.11, p. 221, line 89, to p. 222, line 84. For a definition of the speculative intellect, see ibid., 3.2.19, p. 205, lines 76–81.

671. Averroes, _Commentarium magnum_, III,36, pp. 496–501. On this passage see Davidson, _Aforismi_, _Avicenna_, and _Averroes_, pp. 334–5. Averroes does not offer a proper doctrine of the four intellects (as does Avicenna); he acknowledges many intellect names and favours in particular a tripartition in _intellectus agens_, _possibilis_ and _speculativus_ in habitus, employing these terms throughout, but not in a specific doctrinal account. It is, therefore, not correct to speak of an Averroistic scheme of the four intellectuals, as does Craemer-Ruegenberg, 'Alberts Seelen- und Intellektlehre', p. 108.

672. See Albertus, ibid., 3.3.11, p. 223, lines 19–38, and the Index locorum, V,6 for further passages.

673. Cf. for example Pseudo-Augustine, _Liber de spiritu et anima_, 38, p. 808 (which describes an ascension via _imaginatio_, _cogitation_, _meditatio_, _ingenium_, _ratio_, _intellectus intelligibilis_; cf. ibid., 11, p. 786). For a different interpretation see de Libera, _Albert le Grand_, p. 262: 'Aucune doctrine d'Albert n'est plus "péripatéticienne" que sa doctrine de la divinisation par l'intellect.'
Albertus's treatise is full of reminiscences of the Arabic and Latin Peripatetic tradition. It integrates, for instance, the theory of syllogistic intellect and the Avicennian doctrine of the intellectus sanctus.675 But essentially it is a development of the idea proposed in De anima to transform the doctrine of the four intellects into a scheme of ascension. Albertus now employs a rich set of intellect names to designate the many stages of the ascending soul. The bounds which once ensured the coherence of the doctrine are transgressed: what was Peripatetic has become Christian.

This, of course, is not the end of the doctrine's history. It remained popular and even entered Vincent of Beauvais's encyclopedia twice, as quotations from Jean de la Rochelle's Summa de anima and from Albertus's De homine.676 One encounters all three kinds of reception that had been displayed in Albertus Magnus's writings: as a Peripatetic doctrine, for example in Petrus Hispanus and John Pecham677 as part of the exegesis of a passage in Aristotle, for example in Thomas Aquinas;678 and as a scheme of intellectual ascension, for example in Ulrich of Strassburg.679 The theory of naturally known axioms survives in the theological doctrine of principles, for instance in the works of Bonaventura, Thomas Aquinas and Petrus Aureoli.680

Comparing the fate of this Avicennian doctrine with that of others, notably theories of the external and internal senses, one finds that it was transformed rather than accepted, even as a piece of Peripatetic teaching. The same holds true for the doctrine of the separate active intellect, with which we shall soon be concerned.

**The Active Intellect's Participation in Abstraction**

Before we turn to the superior realm, a few words may be said against the prejudice that Avicenna's theory of intellect is primarily concerned with emanation and illumination and that it influenced Western thought in this Neoplatonic fashion.681

Possibilibis est quasi fundamentum et primus: lumen autem agentis in ipso est dispositio et quasi stramentum ad intellectum principiorum, et intellectus principiorum est stramentum ad intellectum qui dicitur in effectu, et intellectus in effectu est stramentum ad intellectum aedemptum, praecipue in quo adspicitur anima notitiam suiipsius, et iste intellectus adeptus ad intellectum assimilativum, qui per gradus applicationis luminis inferioris ad lumen superius ascendit usque ad lumen intellectus divini, et in illo stat sicut in fine'.

677. Albertus, ibid., 1.3.3, p. 501a and b.
680. See n. 668 above.

In fact, the Avicennian idea analysed above - that the active intellect plays an intermediary role in abstraction - found many readers in the West. One of the first was John Blund:

The soul has to turn its attention to the body which it has to rule, to <the body's> dispositions and to the similes of the images stored in memory, and <then> the intellectus formalis will be imprinted in the soul through the mediation of the first giver of forms.682

This is a free rendering of Avicenna's De anima, V,5 (pp. 127–8), the key passage on the issue. Notable changes are the introduction of the dator formarum and the term intellectus formalis, which may well be John Blund's creation and which denotes both an intelligible and a natural form.683 There follow some sentences about angels, which bear a similarity with the following testimony from Roland of Cremona, which presents an Avicennian theory of abstraction:

Therefore the philosophers said that knowledge of abstraction comes about in the human being through the mediation of the active intelligence. The philosophers call those angels 'active intelligences' which we say are responsible for the protection of the souls.684

Given that both authors mention the identification of intelligences with angels and also the Avicennian phrase 'mediante luce intelligentiae agentis', it is likely that they belong to the same tradition.685

Other authors locate the active intellect inside the human soul but still quote the Avicennian doctrine of the active intellect's intermediary role in abstraction. This is the case with the anonymous author of De anima et de potentissi eius (whom we witnessed above combining Avicenna with Western logical traditions).686 What is
significant is that the Parisian master adds a qualification, saying that only some
forms are abstracted through the active intellect; other forms, such as justice
and prudence, are acquired through correct behaviour, still others are acquired
through illumination from above, such as forms that concern God and divine things. 688 The
distinction between forms abstracted and forms illuminated was to travel through
the anonymous De potentii animae et objectis (ed. Callus)689 to Jean de la Rochelle
and the Summa fratris Alexandri.

Jean de la Rochelle uses the distinction to differentiate between what is above,
next to, and below the soul. With respect to the first, God is called the active
intellect (we shall come back to this); with respect to the second, it is angels which
receive this name; with regard to the third, it is an internal light.690 Jean quotes
Avicenna on this last function of the active intellect:

It should be noted, following Avicenna, that the function of the active intellect is
to illuminate – or to shed the light of the intelligence upon – the sense-
perceptible forms which exist in imagination or estimation, and by illuminating
to abstract them from all material appendages and to conjoin the abstract forms
with or place them in the possible intellect, just as through the action of light
the form of colour is somehow abstracted and joined to the pupil of the eye.691

If one compares the analysis of Avicenna’s doctrine given above,692 one will see that
this is a faithful interpretation, which surpasses much of what has been said on
Avicenna’s theory of abstraction in modern times.

Albertus Magnus’s theory of the active intellect's role in abstraction is indebted
to Avicenna, both in De bonâ in693 and in De anima,694 although he does not
acknowledge his source.695 And even Thomas Aquinas, who, like Albertus, places
the active intellect in the soul and usually describes Avicenna’s theory of intellect
in illuminationist language, on one occasion betrays his knowledge of the
Avicennian theory of abstraction.696

Avicennian Augustinianism revisited

Others adhere to the second opinion; they maintain that the active intellect has
a substance different from the possible intellect, and that the possible intellectual
substance is inside <the soul> whereas the substance of the active intellect is
outside. Many theologians (‘multi theologi’) hold this opinion; they say that the
active intellect in us is the intellect of the First <God>. This intellect is light
according to what is written: ‘there was the true light which lighteth every man
coming into the world’. <They say> that this light seems to be a light more
intimate to our soul than the soul to itself.697

This statement from Adam of Buckfield’s commentary on Aristotle’s Peri psychê698
is one of the earliest references (dating to roughly 1245) to a group of theologians
who identify God with the active intellect. There is further external evidence for
this doctrine. Around 1250, Bonaventura writes in his commentary on the Sentences:

The other way of understanding this is that the active intellect would be God
himself and that the possible intellect would be our soul. This way of speaking is
based on the words of Augustine who in many passages said and showed that the
light which illuminates us, the teacher who teaches us, the truth which directs us,
is God.699

et universales, et secundum est illuminare possibilium intellectuum, sicut lumen se habet ad disphanum,
qua oportet quod species universalis quondam est universalis semper sit in lumine agentis; et ideo
quando recipit in possibili intellectu, oportet quod in lumine agentis recipiat, et ideo possibilium
operum illunimare lumen intellectus agentis'.

695. Of course, he knows the sources, cf. De anima, 3.3.9, p. 219, line 43 ff.: ‘... Avicenna et inscutor
et alia gentes quod ... cum addiscit homo, acquriit formas intellectus per hoc quod roguis denet et
conirigiet eas intellectus possibili'.

696. Thomas, Sententiae super sententiam, IV,50.1.2.c. See the translation on p. 73 above.

concedunt secundum modum concedentes aliam esse substantiam intellectus agentis et possibilis,
dentes substantiam intelligibillem possibile esse intra substantiam autem intellectus agentis extra. Et
hisopiniones sunt multi theologii qui ducunt intellectum agentem in nobis esse intellectum primi, qui
quoden intellectus est lux scilicet secundum quod dictur “erat lux vera quae illuminat omnem hominem
venientem in hunc mundum” (John 1:9) et quod lux ista lux videtur intimior animae nostrae quam sit
ipsa illa'.

698. It was Grabmann who first pointed to this sentence about the multi theologii (‘Mitteleuropische
Debatten und Umbildung’), pp. 9-10), which seems to have not received much attention afterwards,
except from Salmen’s Note sur la premiere influence’, pp. 210-11.

699. Bonaventura, In quartum libros sententiarum, II,24.1.2.4, p. 568b: ‘Alius modus intelligendi est
quod intellectus ager esset ipsum Deus, intellectus vero possibilium esset noster animus. Et iste modus
dicti super verba Augustini est fundatus, qui in pluribus locis dictum est et ostendit quod lux quae nos
illuminat, magister qui nos docet, veritas quae nos dirigat, Deus est'. The appearance of the Bonaventura...
And he makes clear that this opinion is also based on the teachings of philosophers who hold that the rational soul is illuminated by the tenth intelligence and is perfected through conjunction with it. Similarly, it is not convincing to speak of an independent or even heterodox 'Avicennist movement', as Roland de Vaux proposed. Nevertheless, Gilson's criterion for the application of the phrase 'Avicennized Augustinianism' is still helpful: the term is appropriate if a medieval thinker (1) teaches that God is the active intellect, and (2) affirms that this can be proved by establishing the concordance of Augustine with Aristotle as interpreted by Avicenna. This is a sensible double criterion for a modern label referring to a medieval doctrine: not only should the doctrine be held, but it should also be explicitly based on the authorities who give their name to it.

Finally, in the early fourteenth century, an anonymous collector of opinions on the question of whether happiness is to be found in the active intellect refers to the theory with the phrase 'the doctrine of some theologizers', 'opinio quorundam theologizantium'.

The doctrine attested by these external testimonies has received much scholarly attention. In 1926, Etienne Gilson, following earlier research by Otto Keicher, pointed to the crucial role played by Avicenna and the Avicennian theory of the active intellect in the history of this doctrinal complex. It has since become a much-debated commonplace of the histories of thirteenth-century philosophy that a number of Western authors combined Augustinian and Avicennian ideas on intellect. The standard term for this, coined by Gilson, is Avicennized Augustinianism ("augustinisme avicennisant"). The term is useful only if we understand it to signify a specific doctrine rather than an entire school of thought, as Gilson had maintained. Similarly, it is not convincing to speak of an independent or even heterodox 'Avicennist movement', as Roland de Vaux proposed. Nevertheless, Gilson's criterion for the application of the phrase 'Avicennized Augustinianism' is still helpful: the term is appropriate if a medieval thinker (1) teaches that God is the active intellect, and (2) affirms that this can be proved by establishing the concordance of Augustine with Aristotle as interpreted by Avicenna. This is a sensible double criterion for a modern label referring to a medieval doctrine: not only should the doctrine be held, but it should also be explicitly based on the authorities who give their name to it.

704. The term is first introduced in Gilson, 'Pourquoi saint Thomas', p. 102, n. 3. Gilson studied the phenomenon in three articles between 1926 and 1933: 'Pourquoi saint Thomas a critiqué saint Augustin' (1926/27), pp. 5–127; 'Les Sources gréco-arabes de l'Augustinisme avicennisant' (1929), pp. 5–149; 'Roger Marston: un cas d'Augustinisme avicennisant' (1935), pp. 37–42. The important article of the three is the first (although the term 'augustinisme avicennisant' does not appear in the title) because it discusses the traces of the doctrine in many thinkers of the 13th century. Gilson's article on Duns Scotus from 1928 does not concern Avicennized Augustinianism proper.


706. Gilson, 'Les Sources gréco-arabes', p. 103: 'Nous avons montré d'ailleurs que la critique de l'Augustinisme médiéval par saint Thomas supposait l'existence d'une école dont la doctrine combinait ... l'influence dominante de saint Augustin au néoplatonisme d'Avicenne'.


708. Gilson, 'Roger Marston' (1933), p. 42: 'Quel que soit le nom auquel on s'arrête, on peut dire que l'existence existe toujours ... le philosophe médiéval, 1° enseigne que Dieu est l'intellect agent; 2° affirme qu'on peut le prouver en établissant l'accord de saint Augustin avec Aristote tel qu'Avicenne l'interpréte'.

709. Hence, Gauthier's 'First Averroism' is not an appropriate term for a doctrine or a doctrinal current: the doctrine — saying that the active intellect is a power of soul — is held, but it usually is not based on the explicit authority of Averroes (cf. Gauthier, 'Les Débuts', pp. 334–5). In fact, I find it hard to believe that anything else than Aristotle's text itself is the basis for this doctrine, especially since it is often expressed in Aristotelian terms: the active and possible intellects being two differentiae of the rational soul. Cf. Avicenna, First Sentences, III, 5, 430a14b (both translations), with Jean de la Rochelle, Traita, n. 91, line 747; Alexander of Hales et al., Summa theologica, II.II.2.3.1, p. 452a; Bonaventura, In quintum libros sententiarum, II.24.1.2.4, p. 570a; Adam of Buckfield, Sententia, II.53v–54r (see Salaman 'Note', p. 210). The case is different with the well-known 'Averroism' of Parisian masters later in the
Who, then, are the adherents of the doctrine? Let us briefly review four indisputable cases which all date from after 1260: Roger Bacon, John Pecham, Roger Marston and Vital du Four.\footnote{Roger Bacon’s position on the active intellect changed over the years, and it is only in his Opus tertium (late 1260s) that he identifies the active intellect with God;\footnote{earlier, in his Opus maius (early in the 1260s) he had only maintained that the active intellect is not a part of the soul, but a separate substance whose functions only God can perform.} Bacon teaches that Alfarabi and Avicenna had maintained that the active intellect is separate;\footnote{He does not refer to Augustine explicitly.} In contrast to Roger Bacon, who does not present the doctrine in the context of systematic psychology but in order to show that all philosophical wisdom ultimately derives from God, John Pecham writes proper Quaestiones tractantes de anima (dating from about 1269–77), and develops a theory which includes a created active intellect in the soul and a true active intellect which is identified with God.\footnote{Pecham explicitly prefers Avicenna to those who maintain that the active intellect is a part of the soul. He also states that Augustine’s lumen aeternum increatum is identical with the separate active intellect, so that Gilson’s second condition is fulfilled.} Roger Marston’s theory of the intellect has been shown to be influenced substantially by Roger Bacon’s Opus maius.\footnote{He thus teaches, like Bacon, that everything at all times in actuality, which only applies to God. The thesis, therefore, is in agreement with the doctrine of Augustine and Catholic truth (on this point he is more explicit than Bacon).}\footnote{He says straightforwardly that ‘the doctrine of saint Augustine about the light common to everything and the doctrine of about the active intellect are thus brought into agreement’. He also maintains that Augustine’s doctrine accords with Avicenna’s concept of the soul’s conjunction with the separate active intellect.} Vital du Four, like Roger Marston himself, does not develop his own position, but draws on the text by Roger Marston. He thus comes to the same conclusion: Augustine’s theory of the divine light can be equated with the Aristotelian notion of the active intellect. Avicenna’s theory of conjunction is in accordance with the epistemological tenets of Augustine. Vital explicitly identifies God with the active intellect: ‘Et sic lux increata quae est Deus videtur agens intellectus, secundum quod Augustinus dicit ...’\footnote{It’s a remarkable feature of the history of Avicennized Augustinianism that these four authors postdate the testimonies of Adam of Buckfield, Bonaventura and Thomas Aquinas from the 1240s and 1250s quoted at the beginning of the present section: who then are the ‘multi theologi’ and ‘quidam catholicci doctores’ Adam, Bonaventura and Thomas refer to? They themselves do not adhere to the doctrine of Avicennized Augustinianism, nor does Albertus Magnus.}\footnote{Henry of Ghent}

13th century this modern label derives from the medieval term ‘Averroista’.\footnote{Many of these sentences derive from Bacon’s Opus maius, 2.5, p. 39; see Keicher, ‘Der Intellectus Agens’, pp. 306–307.}

710. Roger Marston, Quaestiones disputatae, III, pp. 238–9: ‘... necesse est dicere quod sit substantia separata per essentiam ab intellectu possibili, propt hoc sentiunt Alfarabius in libro de Intellectu et intellectu, et Avicenna in multis locis et alii expositores Philosophi quampulum. Necnon et ipsi Philosophi videtur velle quod intellectus agens est separatus a possibili secundum esse et substantiam ... Dicitatem quod intellectus agens scit omnia semper et in actu, quod nec animae rationali nec angelo convenit sed soli Deo. Cum igitur haec sententia sit doctrinae sancti Augustini et veritati catholicae multum consona ...’. Many of these sentences derive from Bacon’s Opus maius, 2.5, p. 39; see Keicher, ‘Der Intellectus Agens’, pp. 306–307.


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This special illumination explains the fact that philosophers 'from time to time said things that were employed by Augustine to describe God. The rest is left to speculation: one may say Ghent, right'. 'H theory on the authority of Au comparatio solis ad visus nostros'.

208 in the essence of the form abstract an active intellect as part of the soul, as well as an active intellect which is God. The first is needed for opinion that the active intellect does not differ non videbatur in effectu, sie est <dispositio huius intelligentiae quantum ad nostras animas'.

undecided ('Avicenne en occident', p. 97, n. 9). There is one passage where Henry seems to acknowledge would be in conflict with other convictions of Henry ('lntellect and Knowledge', p. 710, n. 137).

726. Augustine, Soliloquiorum libri duo, I,VI,12, p. 19, line 23.

that he implied that the active intellect is God? or that he suppressed the mention of God in order not to identify him with the active intellect. The second passage reports Avicenna's oft-quoted theory of the duae facies:

Quae duae vires sive duo intellectus sunt animae rationalis quasi duae facies; una quae (ar gua) respiciat deorsum ad regendum suum inferius quod est corpus ... ; et aliam qua respiciat sursum ad contemplandum suum superius quod est Deus

Gundissalinus draws on a passage in Avicenna's De anima, I,5. The text of the seven manuscripts used by Simone Van Riet in her edition reads: 'et aliam faciem sursum, versus principia altissima' (al-mabādī 'al-āliya). It has been concluded that Gundissalinus changed the text of his own translation of De anima in order to fit it into his treatise and that he deliberately added the gloss 'quod est Deus'. However, the oldest extant manuscript of De anima also mentions God in this context ('... quod est supra eam, ut ... recipiat ex illo scilicet Deo'), so it is possible that the phrase 'quod est Deus' is part of Gundissalinus's exegesis of Avicenna rather than an attempt to harmonize Christian theology and Arabic philosophy. In any case, neither Avicenna nor Gundissalinus speak about the active intellect in this rather general passage, which in both works precedes the introduction of the idea of the separate active intellect. Gundissalinus therefore does not fulfill either of the two conditions for Avicennized Augustinianism: he does not regard the active intellect as God, and he does not claim Augustine and Avicenna (or Aristotle) as authorities for such a thesis.

The second candidate is the anonymous author of the Liber de causis primis et secundis, edited by de Vaux (daring from the turn of the thirteenth century). It has been argued that in this treatise 'Avicenna's active intellect (dator formarum) is identified with St Augustine's illuminator-God'. Others have interpreted the relevant passage, the tenth chapter, as only a modest attempt at conciliation with Augustine.

734. I do not agree therefore with Dales, The Problem ..., p. 14: '... the intellect agent, which Gundissalinus identifies with God'.
In this tenth chapter, after describing the system of emanating intelligences originating from the primary cause, the author sets out to show that the 'intellect of the human soul is illuminated only by the light of the primary cause'. He mentions briefly the distinction between the intellect in potentiality and the intellect in actuality and the Avicennian *duae facies* theory. He then explains that when the human intellect conjoins with the active intelligence, it is illuminated and receives a form from it. The author is clearly drawing on the opening of Avicenna's *De anima*, V,5, without, however, mentioning Avicenna by name. There follows a longer passage with a literal quotation from Augustine's *Soliloquia*, ending with the explanation that in analogy to the sun, 'there are three things in the most secret God: something which exists, something which knows and something which makes everything else know'. This quotation from Augustine is introduced and concluded by the following sentences, which are crucial for the present investigation:

Let us express what we have said above about the relation of the intellect towards reason and about its preeminence over it, and what we have claimed also about the primary light, speaking with authoritative words ('verbi autenticis dicentes')...

These are the words of Augustine, through whom we absolve ourselves especially from that in which we were engaged (or: free ourselves from that by which we were imprisoned).

And at the end of the passage:

See, now our intentions above are apparent through the authority of Augustine, which we have applied.

This is followed by a further explanation of the relation of the human intellect to the active intelligence, including a literal quotation from Avicenna's *De anima*, V,5 about the conjunction with the active intellect. The unknown author therefore comes close to the doctrine of Avicennized Augustinianism, for he implies that the theory of the illuminating active intellect can be expressed in Augustinian terms and can be justified in this way. The Augustinian theory is an unimpeachable authority for him and serves as the background to his thoroughly Avicennian treatise. It is difficult to see, however, how the author could have identified the trinitarian God of Augustine with the active intellect, which is only the last intelligence that emanates (indirectly) from the primary cause. In fact, he does not try to equate the two theories, and that is the reason why it would not be correct to attribute the doctrine of Avicennized Augustinianism to him. Augustine is only quoted as a justification, and the author nowhere says that God is the active intellect. Nevertheless, the author of the *Liber de causis primis et secundis* should be regarded as a forerunner of Roger Bacon, John Pecham, Roger Marston and Vital de Four.

In many respects, William of Auvergne is a crucial figure in the history of doctrine. It was on his testimony that de Vaux based his thesis of the alleged, and now refuted, existence of a heterodox Avicennist movement. What concerns us here is the question of whether William was an exponent of Avicennized Augustinianism. Gilson originally claimed that William taught a theory only equivalent to Avicennized Augustinianism; later, he counted him among the exponents, but only on account of a testimony of Roger Bacon (discussed below), thus implying that William's own writings do not reflect such a position. Many readers of Gilson's highly speculative interpretations ignored his reservations and read Gilson as including William among the indisputable adherents of Avicennized Augustinianism—usually implying that he was correct.
There are two long discussions of the *intelligentia agens* in William's treatises *De universo* (1233–5) and his later *De anima* (about 1240). The *De universo* passage devoted to the intelligences is substantial: it stretches from page 807 to page 844 in the Paris edition of 1674. William's standpoint is best understood if attention is paid to the author's overall intention in this part of the treatise. In an introductory passage, William states that the following section is about abstract intelligences the existence of which had been maintained by Aristotle and his followers. He announces that he is going to argue against their errors: 'contra errores in parte ipsa ... disputare intendo'. This introduction with its negative intention is in accordance with the concluding passages on p. 841: 'Suffice it for you to know for the time being that the reasons which prompted Aristotle to postulate the intelligences and their hierarchy and to postulate also a unique active intelligence were not sufficient'. In the long discussion in between, William had refuted many different tenets of Aristotle's theory – which in fact are mostly Avicennian, as we have noted above: the number of nine intelligences, the love or striving that can be found in them, the theory that all human souls become one soul after death, the location of the intelligences, the postulation of a separate active intellect, the unity of the active intellect for all human beings, the returning of the souls to the active intellect after death, the active intellect as the highest perfection of the soul, the active intellect as the creator of the souls. He proceeds to argue (p. 838) that, according to the 'lex, doctrina fidesque Christianorum', the exemplar of all beings is the wisdom called the son of God or God himself, and that illuminations and revelations occur by means of angels (p. 841).

We can deduce from this that William takes the theory of the separate active intellect much more seriously than his predecessors, but that it would be a misreprésentation of his position to say that he somehow implied that the active intellect was God. Rather, he confronts the Peripatetic doctrine, which in his opinion had not yet been developed sufficiently, with Christian theological positions and clearly takes the side of the latter, denying the existence of an active intellect.

A similar procedure can be observed in William's later work *De anima*. The two main passages are pages 112–14 and 205–16, the first of which is a harsh refutation of the theory that the active intelligence is the creator of the human souls, a theory which he attributes to Aristotle and his followers: 'Aristoteles et sequaces eius, videlicet Alpharabius, Algazel et Avicenna et plures alii'. William's disagreement is based on the conviction that the active intelligence would be a rival to God. As for the second passage, William first refutes the thesis (which he attributes to the followers of Aristotle) that the active intellect is a power, a part or even the essence of the soul itself. Aristotle himself had maintained, says William, that the active intelligence is separate and that it shines upon the human intellect like an intelligible sun and thus produces knowledge in it. It can be observed that William attributes to Aristotle what is Avicennian and to the 'sequaces Aristotelis' what is Aristotelian. As in the previous passage, William stresses the 'infidelitas' of the standpoint postulating the creation of the human souls through the active intelligence. Then, he introduces the distinction between universals abstracted from particulars and principles which are eternally true. For the first, he says, we do not need the active intellect, whereas for the second the human intellect needs assistance. Afterwards follows the crucial confrontation of Aristotle's theory – in which this task is performed by the active intelligence – with Christian teaching, 'which necessarily is most true in everything and is entirely free of any falsity and error'. According to Christian belief, the universal forms are imprinted in the human intellect by the creator.

Avicenna's influence on William's description of the different Peripatetic positions is considerable, because both theories – the one that the active intellect is part of the soul and the one that it is separate – are described in Avicennian terms. But we have to bear in mind that it is the description of the refuted theory which is Avicennian and not William's own position. William is much less Avicennian than the contemporary theologians Jean de la Rochelle and Considerans, the author of book II of the *Summa fratis Alexandri*, who take a mediating standpoint by saying that the active intellect in one respect is a light innate in the soul, in another it is angelic revelation (only in Jean) and in a third respect it is God. William, on the other hand, does not accept *any* active intellect, but regards only the soul and God as involved in the process of intellection. 747


748. William, *De universo*, 2.1.42, p. 841a: 'Interim autem submitit cognoscere quia causa, quae induxerunt Aristotelis ad ponendum intelligentias et ordinis eorum et ad ponendum intelligentiam etiam agentem et illam unicum, non fuerunt cause sufficientes ad hoc'.

749. See pp. 45–6 above.

750. William, *De universo*, 2.1.41, p. 840b: '... et quoniam non omnis veritas circa substantias spirituales abstractas adhuc declarata est, nec philosophia in his adhuc completa, suo loco tentabo investigare de hoc, si deus voluerit'.

751. William, *De anima*, 7.5, p. 210a: 'Iam igitur scire te feci per hoc, intellectum agentem non esse apud animam humanam vel vel partem animae ipsius vel ipsam essentiam eius ...'.

752. William, *De anima*, 7.6, p. 211a–b.

753. William, *De anima*, 7.6, p. 211b: '... hoc est quod Aristoteles postulavit intelligentiam agentem intendens eam esse formam plenam formis ... Secundum doctrinam autem Christianorum quam esse per omnia et in omnibus esse verissimum et ab omni falsitate et errore deparatus omnem, ponendum est animam humanam velut in horizonte duorum mundorum naturaliter esse constitutam et ordinatam. Et alter mundorum est eis mundus sensibilium ... Alter vero creator ipse ..., ab illo igitur sunt impressiones de quibus agitur ... in virtute nostra intellectiva'.

754. William therefore does not take the view that the active intellect is a separate substance, as maintained by Gilson ('Avicenne en occident' (1969), p. 102), but attributes it to Aristotle.
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The conclusion is that William does not fulfill either condition for Avicennized Augustinianism: he does not say that the active intellect is God, and he does not appeal to Augustine and Avicenna (or Aristotle) as authorities for such a position (pace Gilson and his followers). If William did not assent to the doctrine of Avicennized Augustinianism in writing, did he do so orally? This seems to be suggested by the aforementioned testimony of Roger Bacon, which, however, cannot be pressed so far. For the statement in the *Opus maius* says only that William twice taught (like Robert Grosseteste and Adam of Marsh) that the active intellect cannot be part of the soul: 'quod intellectus agens non potest esse pars animae'. The more ambiguous passage in the *Opus tertium* refers to the same two instances ('his audivi ...'), since in this work Bacon uses the same vocabulary as in the *Opus maius* to describe the scene, and again relates the incident under the heading: 'Sed falsum est quod agens sit pars animae'. It is not altogether clear whom Bacon includes within his sweeping and historically incorrect statement: 'All wise men of ancient times and <those wise men> who still remain up to the present time, said that <the active intellect> was God'. Whereas Bacon maintains that Adam of Marsh hinted at his conviction that the active intellect is God, the only thing he says about William is that he refuted the opinion of others. It seems more likely (considering the testimony of the *Opus maius*) that the opinion at issue is that the active intellect is a part of the soul.

That Robert Grosseteste is an exponent of Avicennized Augustinianism is the least probable of all, since he does not even mention the distinction between the active and the possible intellect. The only hint in this direction would be Bacon's story, which says much less than that, as we have seen, and which is further weakened by the fact that his statement does not agree with what we now know about Grosseteste and William. Gilson, however, speculated that Grosseteste, supposing that one had forced him to use the distinction between the active and the possible intellect, could have answered only that it is God who is our active intellect. Hypothetical statements like this can never be disproved, which is why they are of little value historically. Surely it is wrong to say that Grosseteste 'developed' the theory that 'the active intellect is God'.

The next two authors to consider are Jean de la Rochelle and Considerans, the author of *Summa fratr. Alexander*, book II, who have both been ruled out as exponents of Avicennized Augustinianism for the reason that they accepted both an active intellect outside the soul and a created active intellect (*a lumen naturale*) in the soul. However, neither Gilson's double condition nor the external testimonies by Adam of Buckfield, Bonaventura and Thomas preclude the possibility that authors identify the active intellect with God and also acknowledge an additional active intellect inside the soul.

From recent scholarship we know that Jean de la Rochelle's works predate the
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II.6: THE INTELLECT

Summa fratris Alexandri.\(^765\) In his earlier Tractatus de divisione multipliici potentiarum animae (about 1235–5) he cites Avicenna as the authority to prove that there exists an active intellect; and he goes on to ask the question whether this intellect is separate from the human soul or a part of it, and if separate, whether it is a created intelligence like an angel or an uncreated intelligence, that is, God. His conclusion is to accept all three alternatives – God, angel and 'lumen internum' – but in respect to different objects of knowledge, using a distinction explicitly attributed to Augustine: objects that are above the soul ('supra animam'), next to the soul ('iuxta animam') and in the soul ('infra animam').\(^766\) In his later Summa de anima (about 1235–6), which is designed less as a collection like the Tractatus than as a work of his own, Jean literally repeats his own text.\(^767\) It is therefore clear that Jean maintains – among other doctrines – the doctrine of Avicennized Augustinianism. He identifies the active intellect with God and builds up this solution on the explicit basis of Augustine and Avicenna. In fact, the argument used to interpret Avicenna's active intellect as being identical with God refers to the same passage in Augustine's Soliloquia as did the anonymous Liber de causis primiti et secundii.\(^768\)

Concerning the position of the unknown author of book two of the Summa fratris Alexandri (dating from the 1240s) there is considerable disagreement. Some scholars say that he develops the theory that the active intellect is God;\(^769\) others maintain that he hesitantly accepts this doctrine;\(^770\) while still others assume that he makes the active intellect a part of the soul.\(^771\) It has been demonstrated above that the unknown author who is referred to as Considerans took over the structure of Jean's Summa de anima. However, he abridges the part based on Augustine and omits the part based on John of Damascus, with the result that he inherits the structure of Avicenna's psychology from Jean's treatise. Nevertheless, he is independent from Jean in his solutio. The question then is: what does he do with the material on the active intellect? Jean's quotation from Avicenna about the existence of the active intellect appears with similar wording, but without reference to Avicenna, in Considerans (p. 451a), who goes on to say: 'someone may doubt whether the active intellect is separate in its substance from the soul or a part of the soul itself'. The editors refer to the aforementioned testimony by Roger Bacon, but it is more likely that Considerans means Jean de la Rochelle:

Jean de la Rochelle, Summa de anima (p. 277) Summa fratris Alexandri (p. 451b)

Utrum autem intellectus agens sit separatus a substantia animae vel sit separatus secundum substantiam ab animae differentia... quae rerum est an sit pars ipsius animae

Considerans relates the argument that for knowing intelligible forms relating to the divine ('sciv anteriora sunt in divinis'; Jean had said: 'sciv anteriora sunt de divina essentia et trinitate personarum intelliguntur.\(^772\) a separate active intellect is needed. It is Considerans's response to this argument which has produced disagreement about his position. There is no disagreement about the fact that the author in general supports the view that the possible and active intellects are two differentiae (the same expression as in Jean)\(^773\) of the rational soul, and that the active intellect in the soul is a 'lumen quoddam naturale' (lumen internum in Jean), the perfection or actus of the intelligible forms. It is rather Considerans's answer to the in divinis argument which is controversial:

As regards the objection that some intelligibles are above the intellect and that it is thus necessary that intellection happens through an active <intellect> which is above the intellect, it shall be said that the active <intellect> is not said to be in actuality because it knows all forms from the beginning, but because it is illuminated by the first agent <intellect>\(^774\), however ('et iam') not in respect to all forms but in respect to certain forms, and when <the active intellect> is illuminated, in this way also perfects the possible <intellect>. It is therefore not necessary to postulate a separate active <intellect> in respect to all intelligible objects of knowledge.\(^775\)

Note that Considerans argues only against the thesis that all <intellect> (or

765. See p. 52 above. On his theory of the active intellect, see e.g. Keicher, 'Zur Lehre der ältesten Franziskanertheologen', pp. 177-80; Gilson, 'Pourquoi saint Thomas', p. 87; Dales, The Problem ..., p. 89.
766. Jean de la Rochelle, Tractatus. 2.1.19-20, pp. 88-91. The distinction can often be found in early medieval literature: see Alcuin, De animae ratione, p. 641; Isaac de Stella, Epistola de anima, pp. 1879, 1886; Pseudo-Augustine, Liber de spiritu et anima, p. 781. Jean remarks that in the present context he will be speaking about the active intellect in the soul (p. 91, line 746). This should not be mistaken for his conclusion, which consists in the whole passage leading from 'responsio sine praecidio' (line 706) to line 746, with the résumé in the last paragraph: 'dicendum igitur quod ...' 2767. Jean de la Rochelle, Summa de anima, ed. Bougerol, 116, pp. 277-80.
768. See n. 739 above.
769. Marenbon, Later Medieval Philosophy, p. 116 (see n. 763 above).
intellection in general) happens through a separate active intellect. He concedes that in some cases intellection depends on it. Whether one calls this tentative or not, Considerans certainly acknowledges here the existence of a separate agent, as Jean did. Considerans does not explicitly identify this entity with God, but an agent that informs human beings about divine things can hardly be something other than God or his messengers.

It has been argued that this concerns only prophetic knowledge, that is, a very special case of knowledge. But the case is not as special. Considerans calls the intelligible objects at issue 'intelligibila supra intellectum', which is a phrase taken from Jean de la Rochelle, who in turn uses Augustinian vocabulary. Jean gives the Trinity only as an example; he is thinking of eternal and uncreated objects ('aeterna' and 'increata') in general, in contrast to the natures of bodies. It is therefore likely that Considerans also means universal intelligibles which are abstract as such. William of Auvergne, in fact, had attributed to 'Aristotle' the idea that a separate active intellect is needed exactly for 'universalia per se'. In contrast to the Summa fratrum Alexandri, he refuses to accept the Aristotelian concept of an active intellect and insists on the illumination of the 'regulae primae ac per se notae' by God. We see here the difference between William and Considerans: the former still prefers the theological theory of intellection, whereas the latter has taken over the conceptual framework of the Peripatetic tradition and does not speak of God but of the active intellect.

Two reservations have to be made: Considerans's primary solution is, as mentioned, that the active and possible intellects are two differentiae in the rational soul, and this is how Alexander is later classified by Gonsalvus de Vallebona in his Quaestiones disputatiae. Secondly, Considerans certainly grants the doctrine of Avicennized Augustinianism, but he does not refer to Augustine or Avicenna explicitly, thus not fulfilling the second condition, although their names appear in his source, the Summa de anima of Jean de la Rochelle.

Because of his strong Avicennian leanings, Petrus Hispanus Portugalensis has long been counted among the adherents of Avicennized Augustinianism. Against this interpretation, it has been argued that Petrus 'does not reduce the separate Intelligence to the God of Saint Augustine', but describes it entirely in Avicennian terms, so that this is 'the only known case of strict "Late Avicennism"'. The disagreement is not about the analysis of Petrus's doctrine, but only about which label to attach to it. In chapter 10.6 of his Scientia libri de anima (dating from 1250–60), Petrus introduces the distinction between the possible and the active intellect, which are both called powers of the soul but differ in many respects. There are no traces of Avicenna's De anima in this chapter. Chapter 10.7, however, deals with the separate active intelligence ('de intelligentia agente separata'), described in purely Avicennian terms: from it emanate the universal forms if the human intellect is prepared for this; the forms, however, do not remain in the intellect, but emanate to the soul whenever it requests them; learning consists in the preparedness to make contact with the active intelligence; after death, the intellect will be joined to the intelligence.

It has been claimed that chapter 10.6 is influenced by Augustine and chapter 10.7 by Avicenna, and that this juxtaposition makes Petrus an adherent of Avicennized Augustinianism. A juxtaposition, however, is not enough to fulfill Gilson's (or Bonaventura's) criteria for Avicennized Augustinianism. Petrus does not identify God with the active intelligence; in fact, he does not mention the illuminator God of Augustine, but prefers terms such as 'rerum ordinatrix natura' or 'factor primus'. God comes in only as the creator, but not as the illuminator. Moreover, chapter 10.6 seems to be influenced at least as much by Aristotle as by Augustine, for Petrus's demonstration that the soul's active intellect is 'immortalis, separabilis, perpetua, immixta' recalls the vocabulary of Peri psychês, III,5: 'Et hic intellectus separatus, immixtus et impassibilis, substantia actu est... et hoc solum immortal et perpetuum est'. One can conclude that Petrus acknowledges two active...
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intelligents, one in the soul and one outside the soul.\(^790\) Admittedly, this theory is much more Avicennian than most others since it accepts the existence of a separate active intellect without identifying it with God. But it is only an Aristotelianized version of Avicenna's theory insofar as it also places an additional active intellect in the soul.\(^798\)

To conclude: who then were the 'multi theologii' and 'quidam catholici doctores' referred to by Adam of Buckfield, Bonaventura and Thomas Aquinas? Their testimonies date between 1245 and 1255, thus marking a *terminus ante quem*. They also describe the position as being based on the authority of John 1,9: 'there was the true light which lighteth every man coming into the world' ('erat lux vera quae illuminat ommem hominem venientem in hunc mundum').\(^798\) In fact there is one author who meets the criteria: he writes before 1245, among other theses he holds the doctrine that God is identical with the active intellect and he cites in this context the quotation from John 1, 9. This person is Jean de la Rochelle. His tripartite theory, claiming that the active intellect in different respects is God, angels, and innate light, occurs first in his *De divisione multiplexii* (c. 1223–35)\(^796\) and is repeated literally in his *Summa de anima* (c. 1235–6).\(^799\) It is not without influence: Considerans, the anonymous redactor of book II of the *Summa fraternis Alexandrini* (c. 1245), adopts the theory from Jean's *Summa*, putting the emphasis on innate light but still acknowledging the existence of a divine separate active intellect. The original tripartite theory reappears a few years later in Vincent of Beauvais's encyclopedia as an abbreviated quotation from Jean's *Summa*.\(^792\)

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787. My reference to Petrus in 'Aristoteles versus Progress', p. 874, needs to be corrected: Petrus and Gundissalinus differ on this issue.

788. I am not taking into account the testimony of the commentary on *De animalibus* (Biblioteca Nacional de Madrid, MS 1877, ff. 256r–299r) attributed by Grabmann to Petrus Hispanus ('Mittelalterliche ... Aristoteleskommentare', pp. 98–113), because Petrus's authorship is not certain. See Pontes, 'Un nouveau manuscrit', p. 177. Again, Gilson has not been read with sufficient care ('Les Sources latines', pp. 106–107): Gilson looks forward to seeing Grabmann's proof that Petrus Hispanus adhered to Avicennized Augustinianism, but he does not assert this adherence, as Pontes claims. Gilson later even opposed Grabmann's view, as we have seen.


792. Vincent of Beauvais, *Speculum naturale*, 27.41, pp. 1946–7: 'Nos itaque dicimus quod quia ad intelligendum ea quae supera se sunt id est divina, indiget anima irradiatione lucis divinae; sedum hanc respectum dicere Deus intellectus agens, cuius illuminatio est contemplanda divina. Ad cognoscendae vero eo quae iuxta se sunt, ut sunt angelicae virtutes, indiget anima revelatione angelica et instructione. Et in hac comparatione dici posset angelus intellectus agens, inquantum scilicet instruens, non tamen respectu superioris partis intellectus humani qui a Deo illuminatur, sed respectu inferioris, secundum quod Augustinus inter intellectivam et intellectum et rationem distinguat. Perro ad cognoscenda ea quae sunt intra se vel infra se, non indiget anima lumine extrinseco, sed haec omnis cognoscit lumine interno et innato, quod est intellectus agens, vis scilicet animae suprema de qua sit hic sermo'.


794. Alexander of Hales et al., *Summa theologica*, II.4.1.2.11, p. 451a: '... nihil potest educere formas intelligibiles de potentia in actum nisi sit actu in illo genere'. Bonaventura, *In quatuor libros sententiarum*, II.24.1.2, p. 568a: 'Et modus iste ponendii et dicendi fundatus est super multa verba philosophorum, qui posuerunt animam rationalem illustrari a decima intelligentia et perficie ex coniunctione sui ad illam'.

The answer then is that Jean de la Rochelle and Considerans (probably not the encyclopedist Vincent) can be identified as the theologians mentioned in the testimonies. There were probably others. This is shown by the fact that Anonymous (de Vaux) in his *Liber de causis primis et secundis* (around 1200?) quotes the same passage as Jean de la Rochelle from Augustine's *Soliloquia* I.8.15, where the sun is compared to God.\(^799\) This he does in support of a theory which is a fore-runner to Avicennized Augustinianism: he implies that the doctrine of the separate active intellect can be expressed in Augustinian phrases about primary light and can thus be justified.

As to the other authors: four later writers are indisputable exponents of the doctrine of Avicennized Augustinianism: Roger Bacon, John Pecham, Roger Marston and Vital du Four. In contrast, Dominicus Gundissalinus, William of Auvergne, Robert Grosseteste and Petrus Hispanus do not adhere to the doctrine. Gundissalinus's use of Augustine is too vague to influence his thoroughly Avicennian theory of the intellect. William of Auvergne argues strongly against the existence of any active intellect, either inside or outside the soul, and withdraws to a traditional Christian position. Robert Grosseteste does not touch upon the question; and Petrus Hispanus combines Aristotelian and Avicennian notions of the active intellect, but does not bring Christian ideas of God into his account.

The term Avicennized Augustinianism has proved useful as referring to a specific doctrine. The doctrine is often supported by the authority of Augustine, and the same holds true for Avicenna: the anonymous *Liber de causis primis et secundis* merely inserts Christian notions into an otherwise fundamentally Avicennian work, drawing both on Avicenna's *De anima* and his *Metaphysica*. For Jean de la Rochelle, Avicenna is the philosophical authority *par excellence*, and he quotes him by name when he introduces the notion of the active intellect. In the *Summa fratriss Alexandrini* and Bonaventura, Avicenna's name has disappeared, but there are clear signs of Avicenna's influence in their passages on the issue.\(^794\) Roger Bacon, John Pecham, Roger Marston and Vital du Four all refer to Avicenna as an authority for the doctrine of Avicennized Augustinianism.

How then did Avicenna come to be identified with the doctrine of the separate active intellect? Avicenna himself, who explores so many questions of the Peripatetic tradition in detail, does not discuss or even raise the question of whether the
active intellect is separate. It was not a specific topic for him, but rather a Peripatetic commonplace. Thus, we have the strange situation that Avicenna is often quoted as stating the proposition 'intellendum agentem esse separatum', which does not appear in his translated works. An important factor is Avicenna's analogy of the sun (Aristotle had compared the activating intellect to light). It not only served as a link to Augustine's comparison of God with the sun; it also implied Avicenna's conviction of the separateness of the active intellect. This is obvious for instance from the early testimony (1225) of Anonymous (Gauthier), De anima et de potentia eius: 'In this Avicenna erred, because he made the active intellect, i.e. the intelligence or angel, separate from the soul, just as the sun is separate from sight.' A late testimony is John Pecham's Quaestiones tractantes de anima (about 1269-77):

Further, Avicenna says in his De anima that (1) the intelligible forms are given by the intelligence in actuality, (2) the action of which on our souls is like the relation of the sun to our eyes.

In Van Riet's edition of Avicenna's De anima, there is a paragraph break between the sentences labelled (1) and (2) in Pecham's quotation. Pecham read this as one sentence, its sense being that the intelligence which delivers the forms is analogous to the sun. In William of Auvergne, the phrasing of the analogy is turned into illuminationist language: 'That is why Aristotle and his followers claimed that this intelligence is the sun of our souls and the intelligible sun itself.' Well-read scholastics also knew that Avicenna's Philosophia prima identifies the active intellect with the lowest intelligence in the hierarchy of the universe.

As such, the doctrine did not find much acceptance in the West, not even with writers such as Gundissalinus and Petrus Hispanus who come closest to the Avicennian idea of an active intellect. In the final analysis, the theory of its separateness survived only in a Christian garment; the doctrine of the four intellects was transformed and lived on in many different versions, as a footnote to Aristotle, as a theory about syllogistic intelligence, as a scheme of ascension to divine knowledge; the theory of the active intellect's mediating role in abstraction travelled as part of very different psychologies. In contrast, therefore, to Avicenna's system of the vegetative faculties and external and internal senses, which replaced the older accounts of the twelfth century, the theory of the intellect did not find a scholastic writer who would accept it as a whole. There are many reasons for this, among which is Avicenna's incoherent presentation of his intellect theory in De anima; it prevented readers from understanding the connection between the various pieces of doctrine, as for instance intuition and the four intellects. As a more decisive reason, one may point out that theories about the highest modes of intellect can be very dependent upon world views. In the case of the Arabic philosopher and his Christian readers these views were different enough to influence significantly and fruitfully the reception of Avicenna's theory.
III. CONCLUSION

In this final section, a new attempt will be made to place Avicenna and his psychology within the history of Western thought. I shall, however, begin by describing what seem to me the four most important previous approaches.

Proponents of the first position, the theory of 'Avicennized Augustinianism', maintain that the significance of Avicenna's influence has to be seen in a 'doctrinal school' instigated by him which prompted Thomas Aquinas to reject basic Augustinian teachings. The key doctrine of this school is the identification of Avicenna's 'Neoplatonic' theory of the separate active intellect with Augustine's notion of the Christian God.

For the supporters of the second position, the role and significance of Avicenna lies rather in the use of his writing as a secondary source. Avicenna's 'paraphrases' of Aristotle's works served as guides for interpreting Aristotle until they were replaced by Averroes's commentaries. As a consequence, early thirteenth-century authors had a 'distorted' picture of Aristotle's philosophy.

Those who put forward the third position maintain that in the years 1225 to 1240 there was a 'fight' between the Avicennian and the early Averroist interpretation of Aristotle. In about 1240, Avicennian Aristotelianism, the theory 'most dangerous' to Christian belief – because it makes the active intellect separate – was defeated.

According to the fourth position, Avicenna is the philosopher who introduced the West to philosophy, to reason and its use in secular contexts, to science and also to religious rationality. There are two main arguments for this view: first, Avicenna's most important works were known in the West before their Aristotelian counterparts; second, Avicenna, as both a philosopher and a mystic, went beyond Aristotle and connected philosophical and religious teachings.

In the course of the present survey of the influence of Avicenna's De anima in the Latin West I have often profited from the work of earlier scholars, and I hope it is obvious that the following criticism of some of their positions is made salutis rerum commodum. One might object to the critical conclusion I shall put forward that the afore-mentioned theories consider the entire range of Avicenna's works and not only his De anima. This is not quite true: the focus of the first three theories is on psychology, and the last one also focuses on the De anima when referring to Avicenna's very early influence. The Metaphysics, Avicenna's second most influential philosophical book (we have fifty Latin manuscripts of the De anima and twenty-five of the Metaphysics), had much less impact in the first half of the thirteenth century. It is therefore appropriate to measure the standpoints set out above against the following conclusions regarding the De anima.

Avicenna and his psychology dominated the structure and much of the content of psychological writings in the West for half a century, from John Blund to Albertus Magnus and Petrus Hispanus. Avicenna had developed a theory of the soul which combined Peripatetic philosophical argumentation with an elaborate system of faculties, based on a great deal of physiological material. Avicenna's De anima offered the latest and best in philosophical subtlety and comprehensiveness and in terms of scientific discoveries. It was for these reasons that he was preferred even to Aristotle by many writers of the period examined.

A factor which contributed greatly to Avicenna's success was the compatibility of his theory with the teachings of the medical tradition, which had begun to influence even theological discussions of the soul. Aristotle's treatise could not compete with Avicenna's on the level of physiology; it was written before, for
instance, the discovery of the nerves and of the ventricles of the brain. Moreover, Aristotle’s terminology was rather restricted, not surprisingly since it was a pioneering book in its field. The strength of Avicenna’s system, on the other hand, is that, by giving names to many different psychological faculties and their functions, he presented scholars with a language they could use to speak about the causes of numerous psychological phenomena (such as instinct or dreams or intuition). This naming of faculties and describing their physiological basis was familiar to the Latin twelfth century.

A number of theses held by previous scholarship may now be challenged. Avicenna’s *De anima* was not translated before Aristotle’s *Peri psychê*, nor was it known much earlier (as claimed by supporters of position four); John Blund and the anonymous author of Vat. lat. 175 already had both works to hand. Averroes’s commentary, on the other hand, was translated later and known from 1225 onwards, but did not attract much attention until the early 1240s. The interesting question in the years up to 1240 is not whether scholars followed Avicenna or Averroes (position three), but whether they followed Avicenna or Aristotle. The answer in most cases is that they followed Avicenna, even the masters of the arts faculty, who had to teach Aristotelian logic.

It is not true that Avicenna was read as a commentator on Aristotle (position two). If any work needed a commentator, then it was Avicenna’s huge and difficult psychological *magnum opus*. Of the about 1600 implicit and explicit references in the *Index Lociorum*, only eleven refer to Avicenna as a commentator or to the *De anima* as a *comentum* (or use a similar phrase, like *Avicenna super ii. de anima*), and even these references are ambiguous.7 Also, Avicenna’s *De anima* never appears together with Aristotle’s *Peri psychê* in the same manuscript, as did many of Averroes’s commentaries.8 These findings are confirmed by the way the *De anima* was used by thirteenth-century scholastics: as we have seen in the first part of this study, they treated the work as a primary source.

That Avicenna was preferred to Aristotle is not to say that Aristotle’s philosophy was rejected. Aristotle and Avicenna were regarded as the most eminent representatives of *philosophia*: they were the *philosophi*. A quotation from Avicenna was as authoritative as one from Aristotle; and since the material in Avicenna was more abundant and more scientifically advanced, scholars tended to quote Avicenna.

It is misleading to emphasize the fact that Avicenna was a Muslim (position four). It is true that he touched upon religious matters (though in a philosophical manner) such as the theory of resurrection, but hardly ever in the works translated in the twelfth century.9 These were all parts of *al-Šifâ‘*, which, according to Avicenna himself, follows for the most part the arrangement of the Peripatetic tradition.10 Avicenna was considered to be a *philosophus, sequax Aristotelis* or *Peripateticus*, as William of Auverge and Albertus Magnus labelled him.11

It is incorrect to say that Aristotle’s doctrine was confused with that of Avicenna, or worse, that Aristotle’s views were distorted (position two). There are not many examples of Avicennian theories being attributed to Aristotle or vice versa.12 Before Albertus Magnus, scholastic authors did not for the most part point out the many differences in doctrine between the two philosophers. But it is unlikely, given the excellent knowledge of both authors in John Blund, for example, that these differences were overlooked. Even a casual reader would notice that *Peri psychê* does not have chapters on the internal sense of estimation or on the immortality of the soul. In the fresh approach to psychology adopted in the first half of the thirteenth century, it did not matter whether a theory could be proved by quoting Aristotle; what mattered was whether it could be found in a philosophical author and whether it fulfilled certain criteria of quality, as Albertus said about a definition by Avicenna: ‘dicimus quod prehabita diffinitio bona est et physica’.13

There seem to be three major reasons for the misconceptions which have arisen among modern scholars with regard to Avicenna’s influence in the West: first, a bias in favour of the Greek philosopher Aristotle; second, a preoccupation with theories of the intellect; and third, a prevailing interest in theories that were either conducive or dangerous to Christian belief.

As to the first, historians of philosophy seem to be the only scholars of the Middle Ages who describe the translation movement in their field as a reintroduction of a single Greek author (Aristotle) supplemented by various additional works.14 Historians of medicine, of the occult sciences and of the exact sciences speak of Greek, Arabic and Hebrew works translated into Latin. Gundissalinus’s main interest was certainly not Aristotle: it has been noted above that he did not choose to translate works by Aristotle, even though his fellow translator Gerard of Cremona was doing so, at the same time and in the same city. Instead, he translated

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7. See p. 20 above.
8. This can be seen by looking through d’Alverney’s description of Latin manuscripts of Avicenna’s works (d’Alverney, *Avicenna latinus: Codices*). The same applies to Avicenna’s *Metaphysics*: there are no manuscripts (with the exception of a 15th-century codex from Basle, p. 187, that consists of two different parts) which contain both Aristotle’s and Avicenna’s *Metaphysics.*
philosophical works by Arabic and Hebrew authors, Alfarabi, Avencebrol and others. Moreover, medieval scholars were not so very eager to study the newest translation of Aristotle: a hundred years separate the translation of Peri psychēs from the first extant commentary, that by Petrus Hispanus (about 1240). The story of Avicenna’s De anima shows that readers were interested in finding out about and adopting new philosophical theories, but not necessarily those of Aristotle. Just because the works of Aristotle became the canon of university education in the middle of the thirteenth century, that does not mean that he was at the centre of attention during the previous hundred years.

Secondly, it has been shown above that the success of Avicenna’s psychology was primarily due to the reception of his elaborate system of faculties, which determined the structure of most writings on the soul in the period under review. The theory of the intellect, on the other hand, was not often mentioned by early authors such as Michael Scot and Roland of Cremona, and later authors transformed rather than accepted it. We therefore have to be careful not to base our judgement on the reception of this theory alone, for it is not representative. The theories of both Gilson and Gauthier (positions one and three) suffer from this weakness. They even link the rise and decline of Avicennian psychology to the fate of the single doctrine of the separate active intellect.

Finally, as to the Church’s condemnations of philosophy, hardly anyone in the West found Avicenna’s psychological theories a danger to Christian belief, apart from William of Auvergne and Giles of Rome. Ironically, this has led modern historians to underestimate the influence of Avicenna. Since so many admittedly interesting disputes in the thirteenth century concern theses condemned in one of the several condemnations issued by the Church, scholars thought it unlikely that an Arabic philosopher could dominate the theological and philosophical discussion of the soul for decades without provoking fierce opposition. But Avicenna did.

Turning now from the rise of Avicenna’s De anima to its decline, it seems clear that this is a topic that deserves further attention. Why did a theory with so many advantages lose most of its influence on philosophical discussion of the soul? This problem is addressed above in greater detail. Summing up the results, it can be said that Avicenna’s faculty psychology disappeared into the gap which opened between, on the one hand, the development of an increasingly theoretical and metaphysical theory of the soul among the philosophers and theologians, and, on the other hand, the advances made by the late thirteenth century by the physiologically oriented theory of the soul of medical writers. In the chapter on Albertus Magnus it was shown that after De homine, which led to the final culmination of Avicennian writing on the soul, it was possible for philosophers to take one of two courses: either to develop Peripatetic psychology in a new, post-Avicennian direction, as happened in the Arabic East, where Avicenna’s philosophy formed the starting-point for philosophical enterprises moving in different directions, or to return to the father of philosophers, Aristotle. The scholastics chose the latter course, partly because of the influence of Avicenna. Historical developments in general have advantages and disadvantages depending upon the viewpoint of the historian. The major advantage of this turn of events was an improved knowledge of Aristotelian psychology; the major disadvantage was a setback for the progress of science.

I shall now try to bring into focus the results of this study regarding the scholastics’ understanding of Avicenna’s De anima and its impact on Western thought.

On the whole, the translation of Avendaugh and Gundissalbus was a very fine piece of work; it provided the basis for the success of the book. Nonetheless, some flaws in the translation prevented readers from understanding Avicenna’s philosophy correctly. Examples of influential misrenderings are the inconsistent translation of dātābūn – twice with sen and twice with sua essentia – which hampered the interpretation of the Flying Man, and the use of the term imaginarion both for ṣayl and ṣayyul, which for Avicenna are two distinct faculties. Most inadequate is their translation of Avicenna’s optical theory: they did not correctly understand the significance and meaning of a number of key terms, in particular daw (‘natural light’), nīr (‘light’) and mustafīd (‘acquired’). In addition, the abbreviated definition of vision in chapter 15 was not translated using the vocabulary employed in the rest of the book, with the result that basic tenets of Avicenna’s optics were misinterpreted. The translators, however, were not responsible for one of the most blatant misunderstandings of an Avicennian theory: the missing non in the definition of lumen, which seems to have been due either to a faulty manuscript tradition or to a tendentious, that is, Aristotelianizing, reading. Most of the other misunderstandings were caused by the intrinsic difficulty of Avicenna’s philosophy, as in the case of the theory of the Flying Man and of the faculty of estimation. There are also, however, examples of careless interpretation: attentive readers should have noticed that Avicenna’s explanation of the Evil Eye and the prophetic capacity to produce...
wonders was connected with his doctrine of the faculty of will-power, or that the distinction between voluntary and non-voluntary movement was crucial for understanding the case of the shellfish.

This summary should not, however, give the false impression that the reception of Avicenna's psychology was beset with problems. In fact, the understanding of Avicenna's De anima in the thirteenth-century West was in many cases superior to that of nineteenth- and twentieth-century interpreters. This is particularly true for the theory of estimation and connotational attributes: medieval scholars, much more used to reading literature translated from the Arabic than their modern counterparts, were not as easily confused by the many different meanings of the word intentio.

What impact did Avicenna have on the actual content of Western psychology? The reception of Avicenna's theories varied a great deal: some were openly welcomed (e.g. the many definitions and distinctions of the faculties, the Flying Man, the example of the shellfish, the theory of individuation); others were quickly adopted and soon became common philosophical knowledge (e.g. the theory of prophecy); some found both partisans and opponents (e.g. the denial of intellectual memory, the theories about the media and instruments of the external senses); some were transformed (e.g. the doctrine of the four intellects, the theory of the separate active intellect); and some were ignored (e.g. most parts of the theories of substantiality, I, 1-4, and of the motive faculties, IV, 4).

I have, in general, refrained from pointing out the intellectual gaps between Avicenna and his Western readers, even in obvious cases such as Thomas's rejection of Avicenna's theory of prophecy and the formation of the doctrine of Avicennized Augustinianism. There are two main reasons for this approach. Firstly, the gaps were not so significant as to seriously disrupt the understanding of Avicenna's philosophy. It was a very important factor that the Latins had enough knowledge of Aristotle to understand that Avicenna had to be classified as a peripateticus, a philosopher in the tradition of Aristotle. Basically, the Peripatetic language spoken by Avicenna was comprehended by his Latin readers, who had all started their education with the Categories. Secondly, my aim in this study of Avicenna's De anima was to focus on the exact extent of its influence and on the intellectual quality of the discussion of its theories among Western writers. But the quality of the reception of a translated text is not necessarily lowered by the existence of intellectual gaps between the work and its audience: a profound misunderstanding of a theory can be of great profit to the discussion.

This may be seen with regard to the doctrine of Avicennized Augustinianism. The identification of the separate active intellect with the Christian God would certainly not have pleased Avicenna, but it reveals the sagacity of certain scholastic writers. In Jean de la Rochelle and Considerans (one of the authors of the Summa fratri Alexandri) this fusion of Avicennian and Augustinian ideas does not lead to a simple explanation of all knowledge as coming from above, but instead to a refined epistemological position which discriminates between different kinds of intellection depending on the ontological status of their object. Likewise, one may lament the scholastics' failure to understand Avicenna's non-Aristotelian criterion for the demarcation of plants from animals, i.e. the voluntary movement of contraction and dilation, but it provoked a discussion about the notion of movement which was of interest in its own right.

Looking at the issue of reception from a different angle it is noteworthy that that the range of reactions to Avicenna's theory was quite impressive, starting with Gundissalinus's De anima, which, as has been shown, was an intelligent compilation. John Blund surpasses many modern scholars in his understanding of the theory of estimation. Then there are the theologians who confronted and ultimately mastered the difficult task of integrating a complete psychological system into their theological Summæ and commentaries on the Sentences. To achieve this required not only the whole weight of Avicenna's system and the backing of Aristotle's authority, but also philosophical understanding on the part of the theologians. Thomas Aquinas stands out for his critical engagement with Avicenna's position: he did not read Avicenna as carefully as others, but investigates some of Avicenna's positions until he discovers the basic cause of his disagreement with the Arabic philosopher. Finally, there is the doctor universalis, Albertus Magnus, whose philosophical expertise and sound philological instinct have repeatedly emerged in this study.

We may now consider the cultural and intellectual gulfs that feature in this story of the transmission of an Arabic work into the Latin West. Such gulfs certainly existed. Avicenna was not a theologian, nor a university teacher, as were his Latin counterparts. Only Michael Scot, the court astrologer of Frederick II Hohenstaufen, comes close to Avicenna's position at different Persian courts, where he held various administrative posts and contributed, with his philosophical and medical skill and fame, to the rulers' standing. These differences played a considerable role in the reception of Avicenna's philosophy. Thus, Dominicus Gundissalinus, the translator, and Petrus Hispanus, an independent master of arts, were alone in accepting the idea of a separate active intellect without identifying it

21. See p. 167 above.
22. See pp. 95-6 above. Cf. also Bonaventura's reading of Avicenna's optical theory, p. 117 above.
23. See pp. 117-19, 125-7 (on Albertus) and p. 202 (on intellect) above.
24. See pp. 142-3 and 145 above.
with the Christian God. The vegetative faculties received little attention because
Christian theologians thought that this issue did not pertain to their field of
enquiry. Thomas rejected Avicenna’s theory of prophecy because he did not agree
with the Arabic philosopher’s naturalistic approach.

The theologians’ problems with Avicenna’s philosophy are obvious, but more
telling in terms of intellectual differences is the attitude of the masters of arts and of
Albertus Magnus, who in spirit was more akin to this group than to the theologians.
The gap that divides Avicenna from his Latin readers is the attitude of the latter
rather than the Church, but, in this case, Aristotle. It was the masters of
arts who chose to drop a well-developed theory of instinct estimation, to omit
the nerves in the discussion of touch, and to make the heart the centre of sensation,
because Aristotle said so. In a remarkable chapter in the history of medieval thought,
even the open-minded Albertus changed his opinion after writing De homine
and turned against Avicenna in his De anima. One of the few exceptions was the physician
Petrus Hispanus. His Scientia libri de anima from about 1255, written while he held
an independent ecclesiastical position in Portugal, indicates which direction the
philosophers might have taken: the formation of an ambitious new synthesis of
psychological learning. Petrus Hispanus, in fact, uses words that resemble those of
Avicenna: ‘After inquisitive discourses proceeding under the examination of the
disputation -method had been published by us in other books ..., in this work the
sentences of truth regarding all questions are brought to a conclusion in firm and
short summaries. Unfortunately, Petrus did not have the methodological skills to
achieve this goal, and his Summa remains a very heterogeneous piece of work. Here
then is the key factor which distinguishes the Persian court philosopher from Western
thinkers: throughout his life, Avicenna worked on a method which would enable him
to emancipate himself from the traditional body of Peripatetic teaching and, in the
end, to become another Aristotle. The method rested upon the core concept of the
intuition of middle terms, which ensured a way to establish the truth following a
logical order which corresponds to ontological reality. In the final stages of his
development, Avicenna worked and improved upon only his own texts and theories.
Aristotle was left behind.

In the West, we can discern in figures like John Blund, Albertus Magnus and
Petrus Hispanus an aspiration to establish a free approach to psychology,
independent of authoritative writings – but it remained an aspiration. Here
institutional factors seem to have been at work: the masters of arts had to teach
Aristotle, and Albertus had to lecture on theological authorities. But what was
perhaps decisive was that Avicenna could look back upon a long sequence of
Peripatetic commentators and philosophers, from Alexander of Aphrodisias to
Alfarabi. He could thus conceive of an historical tradition into which he wanted to
insert himself and which he eventually abandoned. The situation was not so
favourable for Western philosophers. When Averroes entered the scene, and with
him an advanced knowledge of the Greek commentators, he confronted the West
with an account of the Peripatetic tradition in which Avicenna had deserted
Aristotle who alone could validate the truth. Under these circumstances, it proved
extremely difficult to develop a sense of a progressive and non-authoritative history
of philosophy, as Avicenna had done, thus enabling him to enjoy an intellectual
freedom of his own devising which was unknown to his Latin readers.
INDEX LOCORUM

This Index, which is admittedly provisional, lists quotations and adaptations of Avicenna’s *De anima* from the beginning of the book (chapter I,1) to its end (chapter V,8). Each entry first gives the page number of Van Riet’s edition of *De anima*, followed by a brief description of the content of Avicenna’s passage and its opening words in Latin (in italic), and then a list of references to the scholastic authors who quote the passage, in chronological order. Silent quotations are indicated by the phrase ‘no attribution’. In some cases a few Latin words have been added to facilitate the identification of the passage in the scholastic writer.

I,1

a) pp. 14–15:
We observe that some bodies have sense-perception and voluntary movement; this is not in virtue of something corporeal but of something called ‘the soul’ – *et dicemus quod nos videmos* ...

Dominicus Gundissalinus, *Liber de anima*, I, p. 32 (no attribution; *nos videmos* ...)
John Blund, *Tractatus de anima*, I,1, p. 1, lin. 9-17 (no attribution; *nos videmos* ...)
Jean de la Rochelle, *Summa de anima*, I, p. 50 (no attribution; *cum videamris* ...)
Alexander of Hales et al., *Summa theologiae*, II,4,2.1.4, p. 547a and 548b

b) pp. 15–16:
The term ‘soul’ is not given in respect to the substance of this thing – *et hoc nomen est nomen* ...

Albertus Magnus, *De homine*, I,4, p. 34 (et ideo dicit Avicenna ... *et dat Avicenna simile dicens*)
——, 61,2, p. 530a
John Pecham, *Quaestiones tractantes de anima*, I, p. 51

c) pp. 18–19:
The soul is called faculty/power or form or perfection – *dicemus igitur nunc* ...

Petrus Hispanus, *Scientia libri de anima*, I,2, p. 59 (no attribution; *anima igitur forma ac perfectio ... dicitur*)
Thomas Aquinas, *De ente et essentia*, 5, p. 379, line 90

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j) p. 29:
Definition of the soul as the first perfection of the natural body which is equipped with instruments – *ide anima ... est perfectio prima corporis* ...

Albertus Magnus, *De homine*, 4.1, p. 32a
—, 4.5, p. 33a
Albertus Magnus, *Summa theologiae*, II.12.69.2.1, p. 11 (definitor Avicennae bona est et eodem sensum habet cum definitione quae ponit Aristoteles)

k) p. 33:
Definition of sense-perception – *similiter etiam sensus hic dicitur ...*


l) pp. 35–6:
We have determined the meaning of 'soul' in relation to something else (the body), but we still have to determine its essence – *ergo iam cognovimus ...*

Dominicus Gundissalinus, *De anima*, 1, p. 33, lin. 24 (no attribution; aliqua vis relationis est in hoc quod dicitur anima)

m) p. 36–7:
The pointer of the Flying Man – *et debentus innuere in hoc loco ...*

Dominicus Gundissalinus, *De anima*, 2, p. 37, lin. 17–32 (no attribution)
Anonymous (Vat. lat. 175), *De anima*, f. 219rb (no attribution)
William of Auvergne, *De anima*, 2.13, pp. 82–3 (ponam tibi adhuc declarationem quam adduit Avicenna ...)
—, 3.11, p. 101 (tam autem inspexeris librum Avicennae de anima, leges in eo evident ...)
Jean de la Rochelle, *Summa*, 1, p. 51 (ad hoc est ratio Avicennae tali ...)
Petrus Hispanus, *Quaestiones libri de anima*, 2.4.10, p. 622 (alia est ratio Avicennae per quam possumus animam intellectivam imaginari esset in nobis ...)
—, 2.6.1, p. 650 (quia sicem voluit Avicenna ...)
Matthew of Aquasparta, *Quaestiones disputatae selectae*, 1, p. 324
Vital du Fou, *Quaestiones disputatae*, 4.1, p. 242

I,2

a) p. 38:
The ancient authors held (four) different opinions on the subject – *dicemus igitur quod antiqui ...*

John Bland, *Tractatus de anima*, 3, p. 9, lin. 24 (multas alias opinionse de anima ponit tam Aristoteles quam Augustinum et alii auctores)
Anonymous (Vat. lat. 175), *Dubitaciones circa animam*, f. 219rb (attributed to Aristotle and Avicenna; fuerint vero circa creaturas philosophorum sententiae et habe quadripartita, alii enim recipientes ad ... — utrumque scilicet motum et apprehensionem)

b) pp. 38–43:
The different opinions of the ancients (1–3) – *qui autem voluit percerere ...*

Anonymous (Vat. lat. 175), *Dubitaciones circa animam*, f. 219rb (no attribution)
Michael Scot, *Liber introducitorius*, f. 44vb–va (no attribution; fuerunt ali qui positurum animam esse principium omnium aliorum rerum ...)

c) p. 43:
(4) Explanation in terms of life (innate heat, cold, mixture, blood) – *sed qui considererunt ...*

Dominicus Gundissalinus, *De anima*, 2, p. 37, lin. 3 (no attribution; alii quod ipse est compluxio corporis; alii quod anima est sanguis)
Anonymous (Vat. lat. 175), *Dubitaciones circa animam*, f. 219rb (no attribution)
Michael Scot, *Liber introducitorius*, f. 44va (no attribution; fuerunt ali diciens animam esse calorem natural ... fuerunt ali dicentes ipsum esse sanguinem ...)

d) pp. 43–4:
Some people thought that the soul is God – *quidam autem putaverunt ...*

Anonymous (Vat. lat. 175), *Dubitaciones circa animam*, f. 219rb (no attribution; ... fuit quaedam sententia circa creatum ... et bos vocat avicenna bereicos)
Michael Scot, *Liber introducitorius*, f. 44vb (no attribution; fuerunt ali dicentes animam esse deum ...)
Albertus Magnus, *De homine*, 5.2, pp. 67–8
Albertus Magnus, *Summa theologiae*, II.12.72.4.2, pp. 42 and 44 (ad dictum Avicennae dicendum quod ipse bene dicit)

e) pp. 44–6:
Arguments against the first opinion (in terms of movement) – *sed qui eam apprehendere voluerunt per motum ...*

Dominicus Gundissalinus, *De anima*, 1, p. 33, lin. 31 (no attribution)
—, 1, p. 34, lin. 20 and 25 (no attribution)
—, 1, p. 35, lin. 16 (no attribution)
—, 9, p. 67, lin. 28 (no attribution)
cf. Michael Scot, *Liber introducitorius*, f. 43va (quia motus est quadruplex ...)
—, f. 44rb (quia vero ambiguissatis illis est solutio quem ponit Aristoteles in libro de anima quod tres species motus ...)
Albertus Magnus, *De homine*, 3.1, p. 26 (contra hoc sest rationes Avicennae sic ...)
—, 3.1, p. 28 ( ... ut probant philosophi Aristoteles et Avicenna, Averroes, Constantinus, Alpharabius et Toltenus et multis alii naturales)
Albertus Magnus, *De spiritu et resurrectione*, 1.1.10, p. 229

f) pp. 49–53:
Against the opinion that the soul is a number – *sed qui posuerunt eam apprehendi per numerum ...*

—, 27, p. 190 (same passage)
I,3

a) p. 58:
The human soul can exist when the body does not exist, therefore it is a substance.
This is not the case for the vegetative and animal soul – *si autem constiterit quod ...*

b) p. 58:
First argument: about proximate matter – *quia materia propria ...*
Dominicus Gundissalinus, *De anima*, 2, p. 41, lin. 23 (no attribution; *nec corpus proprium ...*)
Albertus Magnus, *De homine*, 2, p. 12 (cit *Aviceena: proprium subjectum animae ...*).

c) p. 59:
Second argument: about remote matter – *sed inter subjectum remotum ...*
Dominicus Gundissalinus, *De anima*, 2, p. 42, lin. 4 (no attribution)
William of Auvergne, *De anima*, 1,2,1, p. 73 (*mップerit vern corpus animae animalis ...*)

d) p. 60:
Conclusion: The existence of the soul in the body is not like the existence of an accident in a subject. Therefore the soul is a substance – *ergo animam esse ...*
Dominicus Gundissalinus, *De anima*, 2, p. 42, lin. 4 (no attribution)
William of Auvergne, *De anima*, 1,2,1, p. 73 (*rationatio autem qua Aviceena arbitratur est se declarare animam esse substantiam et nullo modo accidens nec doctrinae nec fidei congruit christianae*).

e) pp. 61–2:
Someone might object that the animal soul arrives when the vegetative soul has already perfected itself – *potest autem aliquis dicer ...*
Albertus Magnus, *De homine*, 3,4. p. 47 (*... concludit Aviceena quod ...*).

f) p. 62:
‘Vegetative soul’ can mean three different things: specifically for plants or in a more general way for animal and vegetative souls or as a faculty of the rational soul – *debemus autem super hoc ...*
Albertus Magnus, *De homine*, 7,1, p. 95
——, 8,1, p. 103 (no attribution; *ad hoc dicendum ...*).

g) pp. 64–5:
The soul is one; from it flow vegetative and animal faculties into the organs – *postea autem declarabitur sibi quod anima una est ex qua defluunt bae vires in membras* (also p. 66, lin. 33; cf. V.7, pp. 171–2)

II,4

a) pp. 67–8:
The soul’s actions differ in intensity, habitus, relation to contrary things, genus – *dicimus igitur quod actionum ...*
Dominicus Gundissalinus, *De anima*, 9, p. 64, lin. 20 (no attribution)
Petrus Hispanus, *Quaestiones libri de anima*, 2,8,1, p. 701 (no attribution; *tertia ratio haec est ...*).
Petrus Hispanus, *Scientia libri de anima*, 2,2, p. 91 (no attribution; *septima ratione ...*).
——, 2,10, p. 115 (no attribution; *operationem vero distinctiones ...*).

b) pp. 68–71:
Introduction to the problem of how many faculties are causes of how many actions – *dicimus igitur quod actionum ...*
Dominicus Gundissalinus, *De anima*, 9, p. 64, lin. 27 – p. 65, lin. 19 (no attribution)
cf. John Blund, *Tractatus de anima*, 6, p. 17, lin. 5–7 (no attribution)

c) p. 72:
One faculty may produce opposite actions; one cannot deduce a diversity of faculties from a diversity of actions – *et quia diversitas actionum ...*
Dominicus Gundissalinus, *De anima*, 9, p. 65, lin. 19 (no attribution)
Petrus Hispanus, *Quaestiones libri de anima*, 2,8,1, p. 700.
Petrus Hispanus, *Scientia libri de anima*, 2,10, p. 116 (no attribution; *immo eadem virtus ...*).
Albertus Magnus, *Summa theologica*, 1,2,8,2, p. 30.
——, 1,7,30,3, p. 236.
Thomas Aquinas, *De veritate*, 15.1, p. 480

---, 15.2, p. 488

**d) p. 73:**
A faculty as a faculty is the cause for certain (primary) actions; in a secondary way, it is also the cause for many other actions — *dicemus igitur primum quia vis ...*

Dominicus Gundissalinus, *De anima*, 9, p. 64, lin. 3–9

Peter Hispanus, *Quaestiones libri de anima*, 2.8.1, p. 701, lin. 16

---, 2.10.6, p. 721

Albertus Magnus, *Ethica*, 2.2.2, p. 171


Vincent of Beauvais, *Speculum naturale*, 24.61, p. 1756

Thomas Aquinas, *De veritate*, 15.1, p. 480

Thomas Aquinas, *De virtutibus in communibus*, 9.12, p. 238

**Examples — sic ut virtus ...**


cf. Albertus Magnus, *De homine*, 63.3, p. 543b (on the definition of intellect)

cf. Vincent of Beauvais, *Speculum naturale*, 27.59, p. 1939 (from *De homine*)

**I,5**

**a) pp. 79–80:**
Definitions of the vegetative, animal and human soul — *dicemus igitur quod ...*

Anonymous (Gauwhier), *De anima et de potentissim eius*, p. 30, lin. 68

---, p. 32, lin. 118

cf. Michael Scot, *Liber introductorius*, f. 43va (no attribution; *quorum nomina sunt rationabilis, sensibilis et vegetabilis*)

cf. ---, f. 46ra (no attribution; *animarum tres sunt species: silicet rationalis, sensibilis et vegetabilis*)

Jean de la Rochelle, *Tractatus*, 2.1.1, p. 70

Peter Hispanus, *Quaestiones libri de anima*, 2.1.10.1, p. 740

Peter Hispanus, *Sciences libri de anima*, 2.1, p. 88 (no attribution)


Anonymous (MS Siena), *Quaestiones super librum de anima*, f. 134ra, p. 399

---, f. 134reb, p. 392

Thomas Aquinas, *De unitate intellectus*, 2.124, p. 302

**b) p. 81:**
The vegetative soul as the genus of the animal soul — *melius est autem ...*

John Blund, *Tractatus de anima*, 4, p. 12, lin. 5–7 (no attribution)

cf. Albertus Magnus, *De homine*, 6.6, p. 88b

**c) p. 81:**
The vegetative soul has three faculties — *anima autem vegetabilis ...*

Jean de la Rochelle, *Tractatus*, 2.1.1, p. 71 (no attribution; *vegetabilis dividitur ...*)

cf. Albertus Magnus, *De homine*, 8, p. 102 (no attribution; *secondum divisionem eius ...*)

John Pecham, *Tractatus de anima*, 9, p. 31

**d) pp. 81–2:**
The nutritive faculty — *anam nutritivam ...*

Dominicus Gundissalinus, *De anima*, 9, p. 66, lin. 21 (no attribution)

John Blund, *Tractatus de anima*, 5, p. 13, lin. 13 (no attribution)

Peter Hispanus, *Sciences libri de anima*, 2.3, p. 93 (no attribution)

---, 3.3, p. 131 (no attribution)

Albertus Magnus, *De homine*, 9.1, p. 108a

Vincent of Beauvais, *Speculum naturale*, 24.64, p. 1757

Anonymous (MS Siena), *Quaestiones super librum de anima*, f. 134ra, p. 390

Anonymous (*Vienneburch*), *Quaestiones in tres libros de anima*, 2.37, p. 191

---, f. 43va (no attribution; et restaurat eiam ...)

**e) p. 82:**
The factor of growth — *alia augmentativa ...*

Dominicus Gundissalinus, *De anima*, 9, p. 66, lin. 26 (no attribution)

John Blund, *Tractatus de anima*, 5, p. 13, lin. 17 (no attribution)

Peter Hispanus, *Sciences libri de anima*, 2.3, p. 93 (no attribution)

---, 3.4, p. 141 (no attribution)

Albertus Magnus, *De homine*, 13.2, p. 128a

Vincent of Beauvais, *Speculum naturale*, 24.64, p. 1757

Anonymous (MS Siena), *Quaestiones super librum de anima*, f. 134ra, p. 390

---, f. 43va (no attribution; et ducti ad quaternitatem ...)

**f) p. 82:**
The reproductive faculty — *tertiam generativam ...*

Dominicus Gundissalinus, *De anima*, 9, p. 66, lin. 29 (no attribution)

John Blund, *Tractatus de anima*, 5, p. 13, lin. 21 (no attribution)

Albertus Magnus, *De homine*, 17.1, p. 141a

Vincent of Beauvais, *Speculum naturale*, 24.64, p. 1757

---, 24.78, p. 1768

**g) p. 82:**
The animal soul has two faculties, the faculty of motion and the faculty of perception — *anima autem vitalis ...*

Dominicus Gundissalinus, *De anima*, 9, p. 67, lin. 35 (no attribution)

John Blund, *Tractatus de anima*, 6, p. 16, lin. 13 (no attribution)

Anonymous (de Vaux), *De causis primis*, 8, p. 119 (no attribution; *dicemus igitur tertiun ...*)

---, 8, p. 121 (no attribution; *ex apprehensione et motione ...*)

Alexander Negam, *Spermatum*, 3.94, p. 374 (no attribution)

Michael Scot, *Liber introductorius*, f. 46rb (no attribution; duplicem itaque potestatem habet anima sua silicet silicet apprehensam et motivam)

Anonymous (Gauwhier), *De anima et de potentissim eius*, p. 35, lin. 190 (no attribution)

cf. Hugh of Saint-Cher, *In quatuor libros sententiarum*, 2.24, f. 66ra (... alia vores tam motiva quam apprehensiva)
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h) p. 82:

The motive faculty has two kinds, one ordering the movement and one performing the movement — sed motiva est duobus modis ...

Dominicus Gundissalinus, De anima, 9, p. 68, lin. 1 (no attribution)

John Blund, Tractatus de anima, 6, p. 16, lin. 14 (no attribution)

Anonymous (de Vaux), De causis primis, 8, p. 120 (sic: ausculti in naturalibus)

Anonymous (Gauthier), De anima et de potentia eius, p. 101, lin. 15 (no attribution)

Jean de la Rochelle, Tractatus, 2.1.12, p. 79 (no attribution; imperantes et quae imperatae)

Jean de la Rochelle, Tractatus, 2.1.25, p. 102 (no attribution; primo divisi est in apprehensionibus et motibus)

Albertus Magnus, De homine, 2.2.36, p. 110 (no attribution; sed quia partium ...)

Albertus Magnus, De anima, 3.1.1, p. 166 (no attribution; prima divisi est in apprehensionibus et motibus)

Albert von Orlamünde, Summa naturalis, 5, Rec. A.3, p. 40

Vincent de Beauvais, Speculum naturale, 24.61, p. 1756

—, 25.101, p. 1837

John Pecham, Tractatus de anima, 10, p. 33

i) pp. 82–3:

The ordering faculty has two branches: one called the power of desire (quæa satiátvnia), the other the power of anger (quæa gádábiyya) — quæa habet duas partes ... vis concepücibilibus ... trascibilibus ...

Dominicus Gundissalinus, De anima, 9, p. 68, lin. 3 (no attribution)

John Blund, Tractatus de anima, 6, p. 16, lin. 15 (no attribution)
The faculty of perception has two kinds: external and internal perception

Alexander of Hales, *Summa theologica*, ii.4.2.1.1, p. 579a

Grosseteste, *De confessione*, p. 262 (no attribution; *vis efficiens mutus* ...)

Albertus Magnus, *De homine*, 68.2, p. 560b (cf. the *soletiu* on p. 563b)

Jean de la Rochelle, *Speculum naturale*, 25.101, p. 1837

---, 25.104, p. 1839 (from Jean, *Summa*, p. 166)

---, 27.76, p. 1970 (from Jean, *Summa*, p. 266)

Thomas Aquinas, *Summa parsnomina theologica*, 2.1.17.2, p. 119

k) p. 83:
The faculty of perception has five or eight senses — *vis apprehendens* ...

Dominicus Gundissalinus, *De anima*, 9, p. 68, lin. 16 (no attribution)

John Blund, *Tractatus de anima*, 6, p. 16, lin. 26 (no attribution)

Alexander Nequam, *Spiculum*, 3.94, p. 374 (no attribution)

Anonymous (Gauthier), *De anima et de potentibus eius*, p. 35, lin. 193 (no attribution)

Anonymous (Callus), *De potentibus animae et objectis*, p. 150, lin. 23 (no attribution)

Michael Scot, *Liber introductorius*, f. 46rb (no attribution; *quarum apprehensio dividitur in communem sensum sive intemum et in sensum partiallem sive externum*)

Jean de la Rochelle, *Tractatus*, 2.1.4, p. 73 (no attribution)

Jean de la Rochelle, *Summa*, 87, p. 229 (no attribution; *nam quaedam est apprehendens* ...)

Hugh of Saint-Cher, *In quatuor libros sententiarum*, 2.24, f. 66ra (no attribution; *apprehensio deintus et defortis* ...)

Grosseteste, *De confessione*, p. 262 (no attribution; *virium apprehensiorum* ...)

Grosseteste, *Exposu sana*, p. 175 (no attribution; *practer hanc potentiam* ...)

cf. Anonymous (Gauthier 1985), *Lectura in libros de anima*, 2.10, p. 268, lin. 16 (no attribution)

Petrus Hispanus, *Scientia libri de anima*, 6, p. 199 (no attribution)

---, 6.2, p. 203 (no attribution)

Albertus Magnus, *De homine*, 5.2, p. 70 (no attribution; *sicut apprehensio defortis* ...)

---, 19, p. 164 (no attribution; *quia vero iterum* ...)


---, 27.3, p. 1919 (no attribution; *nam quaedam est* ...)


Anonymous (MS Siena), *Quaestiones super librum de anima*, f. 134vb, p. 392 (no attribution; *alia apprehensio defortis* ...)

Witelo, *De causa primaria* ..., p. 162 (no attribution; *et dividitur ista in partes extrinsecas et intrinsecas*).

D) p. 83:
The faculty of external perception has five or eight senses — *apprehendens autem* ...

Anonymous (Gauthier), *De anima et de potentibus eius*, p. 40, lin. 265

Jean de la Rochelle, *Tractatus*, 2.1.4, p. 73 (no attribution)

Alexander of Hales et al., *Summa theologica*, ii.4.1.2.2.1.1, p. 431b

m) pp. 83–4:
Definition of vision — *ex quibus est visus* ...

Dominicus Gundissalinus, *De anima*, 9, p. 68, lin. 20 (no attribution)

John Blund, *Tractatus de anima*, 15.4, p. 56, lin. 1 (sicut autem sic describitur ab Avicenna ...)

cf. Anonymous (Gauthier), *De anima et de potentibus eius*, p. 37, lin. 228 (no attribution; *continens spiritum visibilium* ...)

Michael Scot, *Liber introductorius*, f. 37rb (no attribution; *vis visibilis* ...)

Jean de la Rochelle, *Tractatus*, 2.1.4, p. 73 (no attribution)

Peter Hispanus, *Scientia libri de anima*, 6, p. 219 (no attribution)

---, 6.13, p. 277 (no attribution)

Albertus Magnus, *De homine*, 19.1, p. 165

Vincent of Beauvais, *Speculum naturale*, 25.28, p. 1793

Anonymous (MS Siena), *Quaestiones super librum de anima*, f. 134vb, p. 394

n) p. 84:
Definition of hearing — *ex illis etiam est auditus* ...

Dominicus Gundissalinus, *De anima*, 9, p. 68, lin. 24 (no attribution)

John Blund, *Tractatus de anima*, 12.3, p. 39, lin. 8 (ab Aviceenna in commento de anima babetur ...)

Michael Scot, *Liber introductorius*, f. 37rb (no attribution; *vis audibilis* ...)

Jean de la Rochelle, *Tractatus*, 2.1.4, p. 73 (no attribution)

Peter Hispanus, *Scientia libri de anima*, 6, p. 219 (no attribution)

---, 6.14, p. 285 (no attribution)

Albertus Magnus, *De homine*, 23, p. 228

---, 27, p. 253

Vincent of Beauvais, *Speculum naturale*, 25.50, p. 1807

Anonymous (MS Siena), *Quaestiones super librum de anima*, f. 134vb, p. 394–5 (no attribution)

cf. Anonymous (Giele), *Quaestiones de anima*, 2.16, p. 93

o) p. 84:
Definition of smelling — *ex illis est olfactorius* ...

Dominicus Gundissalinus, *De anima*, 9, p. 68, lin. 30 (no attribution)

John Blund, *Tractatus de anima*, 14.1, p. 51, lin. 21 (babetur autem in commento super libro de anima ...)

cf. Anonymous (Gauthier), *De anima et de potentibus eius*, p. 39, lin. 247 (no attribution)

Michael Scot, *Liber introductorius*, f. 37rb (no attribution; *vis odorabilis* ...)

Jean de la Rochelle, *Tractatus*, 2.1.4, p. 73 (no attribution)

Peter Hispanus, *Scientia libri de anima*, 6, p. 219 (no attribution)

---, 6.12, p. 265 (no attribution)

Albertus Magnus, *De homine*, 28, p. 254

Vincent of Beauvais, *Speculum naturale*, 25.61, p. 1813 (from *De homine* ...)

Anonymous (MS Siena), *Quaestiones super librum de anima*, f. 134vb, p. 395 (no attribution)

p) p. 84:
Definition of taste — *ex illis est gustus* ...

Dominicus Gundissalinus, *De anima*, 9, p. 68, lin. 34 (no attribution)

John Blund, *Tractatus de anima*, 15, p. 56, lin. 1 (gustus autem sic describitur ab Avicenna ...)

Michael Scot, *Liber introductorius*, f. 37rb (no attribution; *vis gustabilis* ...)

cf. ---, f. 46vb (no attribution; *unde cum res gustando* ...)

Jean de la Rochelle, *Tractatus*, 2.1.4, p. 74 (no attribution)

Peter Hispanus, *Scientia libri de anima*, 6, p. 219 (no attribution)

---, 6.11, p. 235 (no attribution)

Albertus Magnus, *De homine*, 32, p. 272a

---, 32.3.5, p. 278 (no attribution; *dictum omnium autorum* ...)

Vincent of Beauvais, *Speculum naturale*, 25.70, p. 1819 (from *De homine*, p. 272)

Anonymous (MS Siena), *Quaestiones super librum de anima*, f. 134vb, p. 396 (no attribution)

q) pp. 84–5:
Definition of touch — *ex il]is est tactus* ...
The internal senses – virium autem apprehendentium occultarum...

The difference between the perception of a form and the perception of a connotational attribute – differentia autem inter apprehendere formam et apprehendere intentionem...

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Albertus Magnus, De memoria et reminiscencia, 1.1, p. 99 (... sensus communis et imaginatio sunt in fronte in anteriori parte cerebr): Vincent of Beauvais, Speculum naturale, 25.86, p. 1829
—, 27.10, p. 1923 (from Jean, Summa, p. 242)
Anonymous (Venicebush), Quaestiones in tres libros de anima, 2.55, pp. 246–7
Thomas Aquinas, De sensu et sensato, 2.1, p. 104 (no attribution; ... sunt aqua ...)
—, 2.2, pp. 109–110
Roger Bacon, De multiplicatione specierum, 2.3, p. 194
Roger Bacon, Opus maius, 5.1.2, p. 5
Witelo, De causâ primâriâ i... p. 162 (no attribution; secundum diversâ cerebri qualitates ...)
John Pecham, Tractatus de anima, 10, p. 35

w) pp. 87–8:
Definition of imagination – post banc est imaginatio ...

Dominicus Gundissalinus, De anima, 9, p. 71, lin. 16 (no attribution)
John Blund, Tractatus de anima, 18, p. 67, lin. 14 (no attribution)
Michael Scot, Liber introductorius, f. 37rb (no attribution; fantasia aerem senatae reddit)
Grosseteste, In posteriorum analyticorum librum, 2.6, p. 404 (no attribution; ... ad imaginativum ...)
Grosseteste, De confessione, p. 262 (no attribution; imaginatio receptiva est ...)
Grosseteste, Ecclesia sancta, p. 176 (no attribution; et quia hae sensibilis ...)
Jean de la Rochelle, Summa, 2.1.7, p. 73 (imaginatio est ...)
—, 2.5.7, p. 136
Jean de la Rochelle, Summa, 98, p. 242
cf. Petrus Hispanus, Scientia libri de anima, 2.5, p. 101 (no attribution; imaginatio vero ...)
—, 2.5, p. 103 (no attribution; imaginativa eius pars ...)
—, 7.2, p. 312 (no attribution)
Albertus Magnus, De homine, 37.2, p. 326b
—, 37.3, p. 327
—, 45.3, p. 416 (cella autem est composita cerebri ut dicit Avicenna)
Albertus Magnus, Super Dionysium de divinis nominibus, 1, p. 30
Albertus Magnus, De anima, 2.3.22, p. 131, lin. 51 (no attribution)
—, 2.4.7, p. 157, lin. 59 (Parapetasis)
Vincent of Beauvais, Speculum naturale, 25.86, p. 1829
—, 27.10, p. 1923 (from Jean, Summa, p. 242)
Albert von Orlamünde, Summa naturalium, 5 Rec.B.7, p. 80
Anonymous (MS Siena), Quaestiones super libros de anima, f. 135ra, p. 397
Thomas Aquinas, De sensu et sensato, 2.2, p. 110 (et conservantem earundem ...)
John Pecham, Tractatus de anima, 10, p. 35

x) p. 88:
Demarcation of common sense and imagination: the faculty which receives is different from the one which preserves (example: water) – debe autem scire ...

Dominicus Gundissalinus, De anima, 9, p. 73, lin. 11–14 (no attribution)
John Blund, Tractatus de anima, 9, p. 23, lin. 5 (no attribution)
—, 17, p. 66, lin. 10 (ut habeatur ab Avicenna in commento ...)
Anonymous (Gauthier), De anima et de potentis eius, p. 45, lin. 356
Jean de la Rochelle, Summa, 2.1.7, pp. 75–6
Jean de la Rochelle, Summa, 98, p. 242
cf. Anonymous (Gauthier 1985), Lectura in libros de anima, 2.26, p. 437, lin. 329 (no attribution)
Petrus Hispanus, Scientia libri de anima, 7.2, p. 311 (no attribution)
cf. —, 10.11, p. 471 (no attribution; verum virtutis receptivae ...)
Albertus Magnus, De homine, 35.2, p. 311a
Albertus Magnus, De anima, 2.4.7, p. 157, lin. 22 (no attribution)

y) pp. 88–9:
Demarcation of external senses and common sense: example of the rain drop – cum autem volueris ...
For quotations that refer to intentions in the context of the theory of abstraction see II.2.f. A number of writers also mention Avicenna's theory of intentions when quoting his theory of the different kinds of estimation; see IV.3.b–d.

**Dominicus Gundissalinus,** *De anima,* 9, p. 71 lin. 1–11 and lin. 24 (no attribution)

**John Blind,** *Tractatus de anima,* 19, p. 68, lin. 24

**Jean de la Rochelle,** *Tractatus,* 2.1.9, p. 76 (no attribution)

**Jean de la Rochelle,** *Summa,* 101, p. 248

**Vincent de Beauvais,** *Speculum naturale,* 25.86, p. 1829

**—,** 25.99, p. 1836 (from Jean, *Summa,* p. 248)

**cf. Petrus Hispanus,** *Scientia libri de anima,* 2.5, pp. 101–2 (no attribution; *aestimativa terna* ...)

**Anonymous (MS Siena),** *Quaestiones super librum de anima,* f. 135rb, pp. 399–400 (no attribution)

**John Pecham,** *Tractatus de anima,* 10, p. 37

**B. Partial adaptations**

1. Estimation is located in the end of the middle cavity of the brain — *vitam ordinata in summum medium cavitas cerebi*

   see Dominicus Gundissalinus and John Blind above (A.)

   **Alexander Nequam,** *Speculum speculativum,* 3.95, p. 374 (no attribution; *in media concavitatis cerebri*)

   **cf. Alfred of Shareshill,** *De mentis cordis,* 3, p. 12 (no attribution; *cerebrum vero sensus et motus, fantasia, aestimatio, rationis, memoriae regimine tenet*).

   **Michael Scot,** *Liber introductorius,* f. 46rb (no attribution; ... *media (crl. cellula cerebri) dictur in qua ration sensibilis sitc ejs easquam virtus principaliter dominator (i)*)

   **Grosseteste,** *De visione,* p. 262 (no attribution; ... *aestimativa in medio ...*)

   **Roland of Cremona,** *Summa theologia,* 33va (*aestimativa in cerebro secundum autem*)

   **Jean de la Rochelle,** *Tractatus,* 2.1.9, p. 76 (no attribution)

   **Jean de la Rochelle,** *Summa,* 101, p. 248

   **Alexander of Haleae et al.,** *Summa theologia,* ii.4.1.2.2.1, p. 436b

   **Petrus Hispanus,** *Scientia libri de anima,* 2.5, p. 103 (no attribution; ... *postrema pars eiusmod (crl. medi ventriculi) ...*)

   **—,** 7.4, p. 320 (no attribution; ... *in extremo mediis cellarum cerebri ...*)

   **—,** 10.4, p. 426 (no attribution; ... *in media concavitate cerebri ...*)

   **Albertus Magnus,** *De bomine,* 40.3, p. 349 (in *posterior parte eiusmod (crl. mediis partis cerebri) ...*)

   **—,** 42.2, p. 360b

   **Albertus Magnus,** *De anima,* 2.4.7, p. 158, lin. 17 (attributed to the Peripatetics in general)

   **Vincent de Beauvais,** *Speculum naturale,* 25.86, p. 1829

   **—,** 25.99, p. 1836 (from Jean, *Summa,* p. 248)

   **cf. Anonymous (MS Siena),** *Quaestiones super librum de anima,* f. 135rb, p. 400 (no attribution)

   **John Pecham,** *Tractatus de anima,* 10, p. 37

**B.2**  
The objects of estimation are connotational attributes ('intentions') which are not perceivable by the senses — *apprehendens intentiones non sensatas quae sunt in singulis sensibilibus.*

Only those quotations are listed that mention intentions in connection with the theory of estimation. Several authors make this connection by drawing upon chapter IV.1 where Avicenna calls memory a *thesaurus intentionum.* See IV.1.f for these quotations. *Intentiones* appear also in the definitions of memory; see I.5.bb.
Jean de Ja Rochelle, Anonymous (Gauthier 1985), John Blund, Roland of Cremona, John Pecham, Hugh of Saint-Cher, Alexander Nequam, This example appears twice in I,5, once in IV,1 and once in IV,3 where Avicenna animals.

The example of the sheep and the wolf – sicut vis quae est in oxe disidicant quod ab hoc lupus est fugiendum et quod husus agni est miserandum. This example appears twice in I,5, once in IV,1 and once in IV,3 where Avicenna also mentions the lion and the predatory bird which are feared by many other animals.

Dominicus Gundissalinus, De anima, 9, p. 71, lin. 5 and 26 (no attribution)
John Blund, Tractatus de anima, 19, pp. 68–9
Alexander Neckam, Speculum speculativeum, 3.05, p. 375 (no attribution)
Raoul de Longchamps, In Aristoteliam, 64, p. 61 (... aestimativa ... de hac dictis Bais in anatomia. Virtutes aestimativae praetermissa sunt antiqui, per quos percept vitis inimicam lupum)
Anonymous (Gauthier), De anima et de potentis eius, p. 46, lin. 377 (no attribution; ... hoc vii indicat ovis esse lupum inimicum et animum amicum et aquam inimicam)
Michael Scott, Liber introductionis, f. 37v (no attribution; Quae extinptiones agnis percept lupum esse sibi inimicum et homo in irasicia certificavit de domino rei quae potent sibi contingere faciantur tale quod)
Hugh of Saint-Cher, In quatuor libros sententiarum, 2.24, f. 65v (no attribution; sed illa naturalis est sicut bonorum de viso lupum quomodo ovis naturalitur fugire lupum quia malum est et esse cum lupo)
Roland of Cremona, Summa theologica, f. 33r (... de visi extinativa. Sentit inimicum et borret et diliget animum et congradet illi sicut dicit philosophi quod malum et bonum et fugit et fugit et fugit et est ex visi extimativa. et esti eti non videtur quidammodo ete lupum et borret et fugit et eique congradet alii ovi et agno inimicam)
—, f. 33v (no attribution; ... quia ex virtute formarum relitinatur in thesaurio memoriam reversatur bone ad domum paternorum svorum ... Cf. the very similar passage in Witelo)
Jean de la Rochelle, Tractatus, 2.1.9, p. 76 (no attribution)
Jean de la Rochelle, Summa, 101, p. 248
Grosseteste, De confessione, p. 262 (no attribution)
Anonymous (Gauthier 1985), Lectura in librum de anima, 2.26, p. 441, lin. 447 (no attribution)
Petrus Hispanus, Scientia libri de anima, 7.4, p. 320 (no attribution) and p. 321 (no attribution; ... omnin lupum timet ... et multa animalia hominem et aven multae acceptiones)
Albertus Magnus, De homine, 39.1, p. 336 (dictit Algezal sequens Avicennam ...)

B.3.
The example of the sheep and the wolf – sicut vis quae est in oxe disidicant quod ab hoc lupus est fugiendum et quod husus agni est miserandum. This example appears twice in I,5, once in IV,1 and once in IV,3 where Avicenna also mentions the lion and the predatory bird which are feared by many other animals.

Dominicus Gundissalinus, De anima, 9, p. 71, lin. 5 and 26 (no attribution)
John Blund, Tractatus de anima, 19, pp. 68–9
Alexander Neckam, Speculum speculativeum, 3.05, p. 375 (no attribution)
Raoul de Longchamps, In Aristoteliam, 64, p. 61 (... aestimativa ... de hac dictis Bais in anatomia. Virtutes aestimativae praetermissa sunt antiqui, per quos percept vitis inimicam lupum)
Anonymous (Gauthier), De anima et de potentis eius, p. 46, lin. 377 (no attribution; ... hoc vii indicat ovis esse lupum inimicum et animum amicum et aquam inimicam)
Michael Scott, Liber introductionis, f. 37v (no attribution; Quae extinptiones agnis percept lupum esse sibi inimicum et homo in irasicia certificavit de domino rei quae potent sibi contingere faciantur tale quod)
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—, f. 33v (no attribution; ... quia ex virtute formarum relitinatur in thesaurio memoriam reversatur bone ad domum paternorum svorum ... Cf. the very similar passage in Witelo)
Jean de la Rochelle, Tractatus, 2.1.9, p. 76 (no attribution)
Jean de la Rochelle, Summa, 101, p. 248
Grosseteste, De confessione, p. 262 (no attribution)
Anonymous (Gauthier 1985), Lectura in librum de anima, 2.26, p. 441, lin. 447 (no attribution)
Petrus Hispanus, Scientia libri de anima, 7.4, p. 320 (no attribution) and p. 321 (no attribution; ... omnin lupum timet ... et multa animalia hominem et aven multae acceptiones)
Albertus Magnus, De homine, 39.1, p. 336 (dictit Algezal sequens Avicennam ...)

cf. —, 39.4, p. 339 (determinare de fugiendo ...)
Albertus Magnus, Super Dionysium de divinis nominibus, 1, p. 30
Albertus Magnus, De anima, 2.3.4, p. 102, lin. 5 (no attribution)
—, 2.3.5, p. 104 (no attribution; ... sicut vis quae est in ovo lupum fulsum est lupus et ovo lupum et ove fuit et lupum inimicum et animum amicum et aquam inimicam)
—, 2.4.7, p. 157 (no attribution; ... sicut ovis noscit filium et illi et non aliis porrigit utera lacteacte et fugit lupum ut inimicum et canem sequitur ... Fort ubera cf. Avicentia, De anima, IV,3, p. 38, lin. 21)
—, 3.1.2, p. 167, lin. 45 (no attribution)
Vincent of Beauvais, Speculum naturale, 25.86, p. 1829
—, 25.99, p. 1836 (from Jean, Summa, p. 248)
Anonymous (MS Siena), Quaestiones super librum de anima, f. 135rb, pp. 399–400 (no attribution)
Anonymous (Venecia), Quaestiones in tres libros de anima, 2.35, p. 248
Thomas Aquinas, De veritate, 22.7, p. 629 (no attribution; ... quodam speciali conceptione eis necessariae)
—, 25.2, p. 733 (no attribution; ... intentionem non accipere per se ipsum ...)
Thomas Aquinas, De anima, 2.8, pp. 121–2, lin. 191 (no attribution; ... in animali vero irrationali fit apprehension intentionis individualis per aestimativam naturalium)
Thomas Aquinas, De sententia et sententias, 2.2, pp. 109–110 (... intentionem aliquam per se ipsum non apprehensam)

INDEX LOCORUM L5

bb) p. 89:
Definition of memory – deinde est vis memorialis ...
cc) pp. 90–91:
The relation between memory and estimation is the same as the relation between
ing the two faces of the human soul – comparatio autem virthtis memoriais ...

Anonymous (Gauthier), De anima et de potentia eius, p. 46, lin. 382 (no attribution; habe habet n al
estimationem sequuntur...
Jean de la Rochelle, Tractatus, 2.1.10, pp. 76–7
Jean de la Rochelle, Summa, 102, p. 249

cf. Petrus Hispanus, Scientia libri de anima, 2.5, p. 102 (no attribution; memoria vero ...)
Petrus Hispanus, Scientia libri de anima, 2.5, p. 102 (no attribution; est autem comparatio memoriae ...) 

Vincent of Beauvais, Speculum naturale, 25.86, p. 1829
Anonymous (MS Siena), Quaestiones super librum de anima, f. 135va, p. 400 (no attribution)
Thomas Aquinas, De veritate, 2.3, pp. 115–16 (ideo convenienter dicit Avicenna quod memoria repugnit
intentionem, imaginatio vero formatur per sensum apprehensionem)
cf. John Pecham, Quaestiones tractantes de anima, 30, p. 197

dd) pp. 90–91:
The faculties of the human rational soul are divided into a theoretical and a
practical faculty – sed animae rationalis humanae ...

Dominicus Gundissalinus, De anima, 10, p. 84, lin. 20 (no attribution)
John Blund, Tractatus de anima, 25.1, p. 91, lin. 9 (no attribution)
Anonymous (Gauthier), De anima et de potentia eius, p. 48, lin. 412 (no attribution)
Michael Scot, Liber introductorius, f. 49ra (no attribution; illa enim vis ... dividitur in duas partes videlicet
in intellectum speculativum et intellectum practicum).
Hugh of Saint-Cher, In gautier librorum sententiarum, 2.27, f. 69va (no attribution; duplex enim est intellectus
sicque speculativus ... et practicus ...)
Jean de la Rochelle, Tractatus, 2.1.13, p. 81
Jean de la Rochelle, Summa, 111, p. 168 (no attribution; sive per intellectum ...) 

Alenus Magnus, Super ethica, 6.3, p. 412
Anonymous (MS Siena), Quaestiones super librum de anima, f. 135va, p. 401 (no attribution)
Witelo, De causa primaria ..., p. 162 (no attribution; duae potentiae, speculativa et practica ...)

ee) pp. 90–93:
Definition and explanation of the practical faculty – vis autem activa est ...

Dominicus Gundissalinus, De anima, 10, p. 84, lin. 23–34 (no attribution)
—, 10, p. 86, lin. 9–21 (no attribution)
John Blund, Tractatus de anima, 25.1, p. 91, lin. 10–22 (no attribution)
Anonymous (Gauthier), De anima et de potentia eius, p. 48, lin. 413
Petrus Hispanus, Scientia libri de anima, 2.8, p. 112 (no attribution; illa vero ...)
Alenus Magnus, De homine, 63.1, pp. 538–41, passim
—, 63.3–4, pp. 543b and 544a
Vincent of Beauvais, Speculum naturale, 27.59, p. 1958
—, 27.59, p. 1959 (... mores pervertunt...)

ff) pp. 93–4:
The theory of the two faces of the human soul – mores autem qui in nobis sunt ...

Dominicus Gundissalinus, De anima, 10, p. 86, lin. 21 – p. 87, lin. 1 (no attribution)
John Blund, Tractatus de anima, 25.1, p. 91, lin. 23 – p. 92, lin. 7 (no attribution)

--- 251, p. 92, lin. 12
--- 252, p. 95, lin. 32 (no attribution)
cf. Anonymous (de Vaux), De causis primis, 10, p. 129 (no attribution; ... illuminatur intellectus seruus versus ...
William of Aukerre, Summa aurea, 4.18.4.1, p. 547 (no attribution; habet enim duas facies ...)
cf. Michael Scot, Liber introductorius, f. 37vb (no attribution; item dictur intellectus actus et intellectus
speculativus sive contemplativus. Actus est quo moveretur et ordinatur ad ea quae sunt infra nos. 
Sanguinis vero qua ordinatur ad superiorem per fidem et per spem praenuntium)
Hugh of Saint-Cher, In gautier librorum sententiarum, 2.35, f. 77va (no attribution)
Jean de la Rochelle, Tractatus, 2.1.26, p. 103 (... quod magnam habet duplitationem) 
cf. Petrus Hispanus, Scientia libri de anima, 2.7, p. 110 (no attribution; duas continas partes ...) 
—, 10, p. 112 (no attribution; ... duas habet facies ...)

gg) pp. 94–5:
Definition of the theoretical faculty: some of its objects are abstract as such, some
of them are abstracted by it – sed virtus contemplativa ...

Dominicus Gundissalinus, De anima, 10, p. 85, lin. 1–5 (no attribution)
Alenus Magnus, De homine, 54, p. 449b

hh) pp. 95–6:
Potency has three different meanings – potentia autem dicitur tribus modis ...

Dominicus Gundissalinus, De anima, 10, p. 87, lin. 4–15 (no attribution)
Jean de la Rochelle, Tractatus, 2.1.18, p. 87 (no attribution; constans est ...) 
Alexander of Hales et al., Summa theologica, ii.4.1.2.3.1.2, p. 459b (philosophus)
Petrus Hispanus, Scientia libri de anima, 6.9, p. 230 (no attribution)
Alenus Magnus, De homine, 2.5, p. 19 (una autem potentia est quae est ...) 
—, 34.1, p. 295b (no attribution; sicut supra notatur est ...)

ii) pp. 96–9:
The four intellects – perfectionis autem contemplativae ...

John Blund, Tractatus de anima, 25.2, p. 92, lin. 23 (distinguatur autem intellectus ab Avicenna quaestuormodis
et multis aliis auctoribus ...)
Anonymous (de Vaux), De causis primis, 10, p. 128 (no attribution; et quoniam luciper ...) 
Anonymous (Gauthier), De anima et de potentia eius, p. 53, lin. 469–79 (no attribution)
Anonymous (Callus), De potentis animae et obiectis, p. 158, lin. 3–10 (no attribution; from Anonymous
(Gauthier))
Michael Scot, Liber introductorius, f. 37va (no attribution; intellectus enim dividitur in intellectum posidem
sive materialem et in intellectum adaptatorium sive (...) sive dispositum et in intellectum adaptatum sive situm
aqquevis et completitum)
Jean de la Rochelle, Tractatus, 2.1.18, p. 88
Jean de la Rochelle, Summa, 115, pp. 276 (secundum Avicennam et alios)
Alexander of Hales et al., Summa theologica, ii.4.1.2.3.1.2, p. 459b (philosophus)
—, ii.4.1.2.3.1.2, p. 459b (philosophus)
Petrus Hispanus, Scientia libri de anima, 2.7, p. 110 (no attribution)
—, 2.12, p. 120 (no attribution; virtutum vero ...)
—, 10, p. 466–7 (no attribution; quoniam vero intellectus ... hardly any similarities in wording)
cf. Alenus Magnus, De homine, 2.5, p. 19 (similiter et de intellectu posidem ...) 
—, 74, p. 449 (secundum autem Algozelem et Avicennam quaeritur sunt differentiae intellectus ...) 
—, 54, p. 450 (secundum Aristotelem et Avicennam potentiae <exemptiae> in actu quaeritur sunt gradus ...)
—, 56, p. 489b
The relation of the theoretical faculty towards the abstracted forms sometimes is a relation of absolute potentiality (material intellect) — *aliquando est sicut comparatio*

Dominicus Gundissalinus, *De anima*, 10, p. 87, lin. 15 (no attribution)

John Bland, *Tractatus de anima*, 25.2, p. 91, lin. 27 (no attribution)

Jean de la Rochelle, *Tractatus*, 2.1.18, p. 88

Jean de la Rochelle, *Summa*, 115, p. 276

Alexander of Hales et al., *Summa theologiae*, ii.i.4.1.2.3.1.2, p. 459b (philosophus)


Petrus Hispanus, *Scientia libri de anima*, 2.7, p. 110 (no attribution)

John Pecham, *Tractatus de anima*, 11, p. 38

**II** pp. 97–8:

... sometimes a relation of highest potentiality (intellect in habitum) — *aliquando est sicut*

Dominicus Gundissalinus, *De anima*, 10, p. 87, lin. 28 (no attribution)


Jean de la Rochelle, *Tractatus*, 2.1.18, p. 88

Jean de la Rochelle, *Summa*, 115, p. 276

Alexander of Hales et al., *Summa theologiae*, ii.i.4.1.2.3.1.2, p. 459b (philosophus)


Petrus Hispanus, *Scientia libri de anima*, 2.7, p. 110 (no attribution)

John Pecham, *Tractatus de anima*, 11, p. 38–9

**mm** pp. 98–9:

... sometimes a relation of absolute actuality (acquired intellect) — *aliquando autem*

Dominicus Gundissalinus, *De anima*, 10, p. 87, lin. 38 (no attribution)
AVICENNA’S DE ANIMA IN THE LATIN WEST

Summary: the functions of the three vegetative faculties – omnino autem virtus nutritiva ...

INDEX LOCORUM II,1

b) p. 108:

Jean de la Rochelle, Summa, 83, p. 225 (no attribution; nota etiam quod fuerunt qui dixerunt quod ignis ...

Albertus Magnus, De homine, 17.4, p. 162 (appetitus generationis est res quae est a Deo)

Albertus Magnus, Super Ethica, 1.2, p. 11 (dictatur conservatio speciei conservatio divini esse ...) 

cf. –, 3.13, p. 207 (Avicenna et Constantinus dixent ...)

Vincent of Beauvais, Speculum naturale, 24.79, pp. 1768-9

d) pp. 105–6:

(2) The faculty of growth – augmentativa vero ...

John Blund, De anima, 5, p. 15, lin. 18 (no attribution)

Jean de la Rochelle, Summa, 83, p. 225 (no attribution; augmentativa vero tollit ...) 

cf. Petrus Hispanus, Scientia libri de anima, 3.4, p. 148 (no attribution; ... secundum longitudinem ...) a et membra radicantis ... 

Albertus Magnus, De homine, 15.2, p. 140a (praeterea videtur Avicennae in hoc contradicere sibi ipsi ...)

——, 14.2, p. 135

——, 15.2, p. 140 (videtur autem falsum quod dicit Philosophus ex dicta Avicennae supra inducto ...)

——, 43.4, p. 393a (no attribution; ut in superioribus determinatum est)

cf. Albertus Magnus, De anima, 2.2.7, p. 91, lin. 15

Vincent of Beauvais, Speculum naturale, 24.75, p. 1765 (cf. De homine 15.2, p. 140)

——, 24.77, p. 1767 (two quotations)

——, 24.77, p. 1768 (quoting p. 107, lin. 63)

John Pecham, Tractatus de anima, 9, pp. 32-3

e) p. 107:

(3) The reproductive faculty has two actions, creating the sperm and forming the parts of the body – sed generativa habet duas actiones ...

Dominicus Gundissalinus, De anima, 9, p. 67, lin. 9 (no attribution)

Jean de la Rochelle, Summa, 84, p. 227 (no attribution; consequenter est operatio ...)

Vincent of Beauvais, Speculum naturale, 24.79, p. 1768

f) p. 107:

The two other faculties assist in this – nutritiva vero servit ...

Dominicus Gundissalinus, De anima, 9, p. 67, lin. 17 (no attribution)

Jean de la Rochelle, Summa, 84, p. 227 (no attribution; in hoc etiam ministrantibus ...)

Vincent of Beauvais, Speculum naturale, 24.79, p. 1768

g) p. 107:

Different functions of the reproductive faculty at different ages – haec autem actio

Albertus Magnus, De homine, 17.3, p. 161b

Vincent of Beauvais, Speculum naturale, 24.79, p. 1768
Jean de la Rochelle, Speculum naturale, 25.7, p. 1779
—, 27.35, p. 1943 (from Jean, Summa, p. 271)

e) pp. 117–18:
Abstraction through imagination and the imaginative faculty — sed imaginatio ...

Dominicus Gundissalinus, De divisione philosophiae, 2, p. 29, lin. 2–12 (no attribution)
Jean de la Rochelle, Tractatus, 2.1.16, p. 84
Jean de la Rochelle, Summa, 113, p. 271 (sentus vero interior ...)
Anonymous (MS Siena), Quaestiones super librum de anima, f. 135va, p. 400 (no attribution)
Petrus Hispanus, Scientia libri de anima, 6.4, pp. 210–12 (no attribution)
Albertus Magnus, De homine, 37.1, p. 326a (no attribution; imaginatio autem ...)
—, 59.2, p. 515 (no attribution; cum appetitio materiae determinatur ...)
Albertus Magnus, De anima, 2.3.4, p. 101, lin. 72 (no attribution)
—, 3.1.1, p. 166, lin. 48
Vincent of Beauvais, Speculum naturale, 25.7, p. 1779
—, 27.35, p. 1943 (from Jean, Summa, p. 271)

f) pp. 118–19:
The faculty of estimation has a higher degree of abstraction: it perceives immaterial connotational attributes ('intentions') which happen to be embodied — sed aexactitio ...

Dominicus Gundissalinus, De divisione philosophiae, 2, p. 29, lin. 13 – p. 30, lin. 5 (no attribution)
Anonymous (Gauthier), De anima et de potentis eius, p. 46, lin. 374 (no attribution; ... inventorem in debito sensibilibus ...)
Jean de la Rochelle, Tractatus, 2.1.9, p. 76 (no attribution; est anima ista virtus transcenden ...)
—, 2.1.16, p. 84
Jean de la Rochelle, Summa, 113, p. 271
Alexander of Hales et al., Summa theologiae, i.4.1.2.1, p. 436a (no attribution; bonitas et malitia ...)
—, i.4.1.2.2.1, p. 436b (no attribution; unde dictus quod apprehendit ...)
—, i.4.1.2.2.1, p. 436b (... sic est dicti idem philosophus ...)
Anonymous (MS Siena), Quaestiones super librum de anima, f. 135va, p. 400 (no attribution)
Petrus Hispanus, Scientia libri de anima, 6.4, pp. 210–12 (no attribution; tertius est intentiones rerum materialium ...)
—, 7.4, p. 319 (no attribution; ... sic est sunt bonitas ac malitia ...)
Albertus Magnus, De homine, 39.2, p. 338
—, 59.2, p. 515b (no attribution; quaedam autem determinans ...)
Albertus Magnus, De anima, 2.3.4, p. 101 (no attribution)
—, 2.3.5, p. 104 (no attribution; sicut videt ovis ...)
Albertus Magnus, Super Ethica, 2.5, p. 114
Vincent of Beauvais, Speculum naturale, 25.7, p. 1779
—, 25.99, p. 1836
—, 27.35, p. 1943 (from Jean, Summa, p. 271)

g) p. 120:
The 'rational' faculty has the forms present without any accidents — sed virtus in quid ...

Dominicus Gundissalinus, De divisione philosophiae, 2, p. 30, lin. 6–16 (no attribution)
cf. John Blond, Tractatus de anima, 17, p. 62, lin. 6 (no attribution; intellectus ut abstractus ...)
cf. —, 17, p. 63, lin. 2 (no attribution; ... intellectus quidem abstractionis ...)

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AVICENNA'S DE ANIMA IN THE LATIN WEST

Jean de la Rochelle, *Tractatus*, 2.1.16, p. 84
Jean de la Rochelle, *Summa*, 113, p. 272 (virtutem comintellentia...)
Alexander of Hales et al., *Summa theologica*, II.4.2.2.1, p. 416b (philosophus)
cf. Grosseteste, *De confectione*, p. 263 (no attribution; intellectus est acceptio alcinia ab huius materia et materiae dispositionibus)
Anonymous (MS Siena), *Quaestiones super librum de anima*, f. 135va, p. 400 (no attribution)
cf. Albenus Magnus, *Lectura in libros de anima*, 1.1, p. 12, lin. 311 (no attribution)
cf. Albertus Magnus, *De homine*, 57.2, p. 490
Albertus Magnus, *De anima*, 2.3.5, p. 102, lin. 11 (no attribution)
Vincent de Beauvais, *Speculum naturale*, 25.7, p. 1779
—, 27.35, p. 1943 (from Jean, *Summa*, p. 272)

(b) p. 120:
Summary: In this way the faculties differ in abstraction — et in hoc different ...

Dominicus Gundissalinus, *De divisione philosophiae*, 2, p. 28, lin. 15 (no attribution)

(i) p. 120:
Repetition of the definition of sense-perception — sentire etenim ...

Vincent de Beauvais, *Speculum naturale*, 25.25, p. 1791

(ii) pp. 122–3:
Democritus has a wrong theory about perception — sed Democritus ...

Albertus Magnus, *De anima*, 2.3.9, p. 111, lin. 35 (no attribution; Democritus enim scilicet habuit...ex diverso sita...)

(k) pp. 125–6:
Refutation of the opinion that sense-perception is possible without medium and organs — dixerunt etiam aliquid antiquorum ...

Thomas Aquinas, *Scriptum super sententias*, II.19.1.1.c, pp. 481–2
Vincent de Beauvais, *Speculum naturale*, 25.25, p. 1791 (dixerunt autem aliquid...)
Anonymous (Van Steenberghen), *Quaestiones de anima*, 2.18, p. 223
John Pecham, *Tractatus de anima*, 4, pp. 13–14

Π.3

(a) p. 130:
Touch is the first of the senses; it makes an animal animal — primus sensuum ...

Dominicus Gundissalinus, *De anima*, 9, p. 70, lin. 2 (no attribution)
Anonymous (Gauthier 1985), *Lectura in libros de anima*, 2.20, p. 392, lin. 166 (no attribution)
—, 2.25, p. 420, lin. 68 (no attribution)
Albertus Magnus, *De homine*, 19.2, p. 168
—, 33.1, p. 282

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Albertus Magnus, *Summa theologica*, II.11.61, p. 593

(b) pp. 131–2:
Comparison with the sense of taste — gustus autem quantus ...

Dominicus Gundissalinus, *De anima*, 9, p. 70, lin. 12–19 (no attribution)
Petrus Hispanus, *Scientia libri de anima*, 6.11, p. 256 (no attribution; videtur autem animal...)

(c) p. 132:
There is a primary kind of movement such as there is a primary kind of sense-perception; objection — de motu autem potest aliquis dicere quod cognatit est sensui ...
sed divulgatum est ...

Petrus Hispanus, *Scientia libri de anima*, 5.3, p. 190 (no attribution; in animali igitur aliquid...)
—, 6.10, p. 240 (no attribution; est igitur bic motus sensi cognatus...)

(d) p. 133:
Answer: There are two kinds of voluntary movement: local movement and the motion of contraction and dilation — dixerunt ergo quod motus voluntarius duplex est

Jean de la Rochelle, *Tractatus*, 2.1.12, p. 80
—, 2.2.36, p. 112, lin. 268
Jean de la Rochelle, *Summa*, 110, p. 267
Petrus Hispanus, *Scientia libri de anima*, 6.10, pp. 239–40 (no attribution; sed motus localis est duplex...)
Albertus Magnus, *De motibus animalium*, 2.1.1, p. 281 (no attribution; est autem animalium motus duplex in genere...)
Albertus Magnus, *Summa theologica*, II.11.61, p. 593
Anonymous (Vennebusch), *Quaestiones in tres libros de anima*, 1.25, p. 150, lin. 25 (no attribution)

(e) p. 133:
All animals have the faculty of touch and the faculty of contraction and dilation, even the shellfish — impossibile est autem ...

Jean de la Rochelle, *Tractatus*, 2.2.36, p. 112, lin. 271
Jean de la Rochelle, *Summa*, 110, p. 267
Roland of Cremona, *Summa theologica*, f. 33rva (in uestione marina non inventor nisi tactus et quod habent tactum probatur quia quando et admittere ipsius vel tangere contribuit ut dicit Aristoteles)
Petrus Hispanus, *Scientia libri de anima*, 6.10, p. 240 (no attribution; bic est in omni animali...)
—, 8.1, p. 333 (no attribution; ab omnibus animalibus...)
—, 8.7, p. 349 (no attribution; sed cum eorum...)
Albertus Magnus, *De homine*, 62.1, 43.4, p. 392a
—, pp. 534a and 535b (quae sunt nobis contrarietas quae visus est ante quin dictum Aristoteles et Avicenna)
Albertus Magnus, *De motibus animalium*, 2.1.1, pp. 283–4 (no attribution; unus quidem qui in omni animali inventus...Si enim pungantur a(a) infinito contrahentes...)
Albertus Magnus, *Quaestiones de anima*, 1.6, p. 83 (absumque non sensu non est motus)
—, 2.5, p. 111 (motus sequitur sensum)
—, 7.24, p. 180 (praesterea Commentarius et Avicenna dicunt super ii de anima quod quando animalia habent
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j) p. 138:
One of the properties of touch is that its organ (flesh and nerves) perceives by contact, even though there is no medium at all — *ex proprietatis autem tactus ...

cf. Anonymous (Gauhtier 1985), Lectura in libros de anima, 2,20, p. 395, lin. 255 (no attribution)

j) p. 152:
Another property of touch is that the whole skin perceives with this sense because of the sense's role as a guard — *ex proprietatis etiam tactus est quod tota cutis ...

dominicus Gundissalinus, De anima, 9, p. 44, lin. 20–29 (no attribution)

i) pp. 141–2:
The medium of touch (which is its natural instrument) has qualities in common with its object — *omne autem medium ...

Anonymous (Gauhtier), De anima et de potentiss eius, 36, 11, p. 122 (no attribution)

n) p. 142:
Human beings have a highly developed sense of touch since among all animals they are closest to the equilibrium — *qua olim ...

Anonymous (Gauhtier), De anima et de potentiss eius, 36, 11, p. 126 (no attribution; *unde homo ...

Petrus Hispanus, Scientia libri de anima, 6,10, p. 253 (no attribution; *propriar box ...

Jean de la Rochelle, Summa, 94, p. 238 (no attribution; *notanda est erga differentia ...

Petrus Hispanus, Scientia libri de anima, 6,9, p. 244 (no attribution; *in omni operatione ...

Jean de la Rochelle, Summa, 94, p. 238 (no attribution; *notanda est erga differentia ...

Petrus Hispanus, Scientia libri de anima, 6,9, p. 254 (no attribution; *in omni operatione ...

Jean de la Rochelle, Summa, 94, p. 238 (no attribution; *notanda est erga differentia ...

Petrus Hispanus, Scientia libri de anima, 6,9, p. 254 (no attribution; *in omni operatione ...

Jean de la Rochelle, Summa, 94, p. 238 (no attribution; *notanda est erga differentia ...

Petrus Hispanus, Scientia libri de anima, 6,9, p. 254 (no attribution; *in omni operatione ...

Index Locorum II,3
The faculty of taste: It differs from touch in that it needs a medium, the humour of saliva – *gustus sequitur ...*

Petrus Hispanus, *Scientia libri de anima*, 6.7, p. 222 (no attribution; *humor salivalis*)
—, 6.11, p. 257 (no attribution; *concurrit autem ad gustum ...*)

Albertus Magnus, *Quaestio de sensibus corporis glorióis*, 2.4, p. 122

Albertus Magnus, *De anima*, 2.3.27, p. 138, lin. 47 (*est autem hoc medium non humor salivalis ...*)

Vincent of Beauvais, *Speculum naturale*, 25.73, p. 1821

cf. Thomas Aquinas, *De anima*, 2.21, p. 156, lin. 115 (no attribution; *saliva*)

b) pp. 143–4:

Question: whether the medium (the saliva) is changed by mixing with particles of the tasted object or without – *est autem hic locus ...*

Albertus Magnus, *De homine*, 3.2.4, p. 280

Vincent of Beauvais, *Speculum naturale*, 25.73, p. 1821 (from *De homine*)

c) p. 145:

Enumeration and discussion of the flavours – *sapores autem ...*

Dominicus Gundissalinus, *De anima*, 9, p. 69, lin. 8–18 (no attribution)

cf. Albertus Magnus, *De anima*, 2.3.29, p. 140, lin. 37 (cf. also Avicenna, *De anima* II,3, pp. 132–4)

d) p. 146:

The faculty of smelling: Human beings do not smell things as intensively as animals – *de olfactus ...*

John Blund, *Tractatus de anima*, 21, p. 79, lin. 27 (no attribution)

Albertus Magnus, *De homine*, 2.8.2, p. 258a

Vincent of Beauvais, *Speculum naturale*, 25.68, p. 1818 (from *De homine*)

e) p. 147:

Human beings have only few names for different smells – *et ideo apud eum ...*

Dominicus Gundissalinus, *De anima*, 9, p. 69, lin. 19 (no attribution)

f) p. 148:

The medium of smell is a body without smell like air and water – *medium autem ...*

Albertus Magnus, *De homine*, 30, p. 270a

Vincent of Beauvais, *Speculum naturale*, 25.65, p. 1816 (from *De homine*)

g) p. 148:

There are different opinions on smelling. The first says that the medium is mixed with particles issued by the smelling body like a vapor – *iam autem dissenserunt ...*


Petrus Hispanus, *Scientia libri de anima*, 6.12, p. 268 (no attribution; *primus est quod ...*)

Albertus Magnus, *De homine*, 30, p. 269b (*quæsistur ...*)

Albertus Magnus, *Quaestio de sensibus corporis glorióis*, 2.3, p. 122

Petrus Hispanus, *De anima*, 2.18, p. 370, lin. 240 (no attribution; *hominem esse autem modò ascerno ...*)

Vincent of Beauvais, *Speculum naturale*, 25.65, p. 1817–18 (from *De homine*)

h) p. 148:

The second says that smell is delivered through permutation of the medium – ... *permutationem medií ...*

Petrus Hispanus, *Scientia libri de anima*, 6.12, p. 269 (no attribution; *secondus modus est ...*)

Albertus Magnus, *De homine*, 30, p. 269b (*quæsistur ...*)

Albertus Magnus, *Quaestio de sensibus corporis glorióis*, 2.3, p. 122

Vincent of Beauvais, *Speculum naturale*, 25.65, pp. 1817–18 (from *De homine*)

i) p. 148:

The third says that something is transmitted without any change in the medium – ... *redditur sine permixtione ...*

Anonymous (Gauthier), *De anima et de potentiis eius*, p. 41, lin. 281 (no attribution)

Petrus Hispanus, *Scientia libri de anima*, 6.12, p. 270 (no attribution; *tertius modus est ...*)

Albertus Magnus, *De homine*, 30, p. 269b (*quæsistur ...*)

Albertus Magnus, *Quaestio de sensibus corporis glorióis*, 2.3, p. 122

Vincent of Beauvais, *Speculum naturale*, 25.65, pp. 1817–18 (from *De homine*)

j) pp. 148–9:

Arguments used by the partisans of the first theory (vapor), example of the apple – *debemus autem nos ...*


Anonymous (Gauthier), *De anima et de potentiis eius*, p. 39, lin. 245 (no attribution)


Petrus Hispanus, *Scientia libri de anima*, 6.12, p. 268 (no attribution; *bonos autem modò ascerno ...*)

Albertus Magnus, *De homine*, 30, p. 270 (no attribution; *hominem esse autem modò ascerno ...*)

Albertus Magnus, *De anima*, 2.3.25, p. 136, lin. 9

k) p. 149:

Arguments used by the partisans of the second theory (permutation) – *qui autem dixerunt de permutatione ...*


Petrus Hispanus, *Scientia libri de anima*, 6.12, p. 269 (no attribution; *Nam saper banc ...*)

l) pp. 149–50:

Arguments used by the partisans of the third theory (transmission without change): example of birds that fly to a distant place for prey – *qui autem dixerunt de redditu ...*
Explanation of the echo – sed tinnitus accidit ...

Petrus Hispanus, Scientia libri de anima, 6.14, p. 291 (no attribution; sic ut patet in motu pilae ...)  
Albertus Magnus, De homine, 24.5.2, p. 240a (... tinnitus scilicet echo ...)  
Albertus Magnus, De anima, 2.19.19, p. 126 (tinnitus autem ab Avicenna vocatur echo ...)  
Thomas Aquinas, De anima, 2.16, p. 138, lin. 203 (no attribution)
latter – remanisit autem ut consideremus ...

Albertus Magnus, De homine, 24.5.2, p. 240a

j) pp. 166–7:
Every sound has an echo, but often it is not heard – *omnis sonus tinnitum habet ...*

John Blund, Tractatus de anima, 13, p. 48, lin. 23–8 (no attribution)
Albertus Magnus, De homine, 24.5.2, p. 240a

k) pp. 167–8:
Hearing does not consist of many faculties: sound is the first perceived thing, the rest are accidentia – *poterit autem bis ...*

Dominicus Gundissalinus, De anima, 9, p. 69, lines 25–8 (no attribution)
Albertus Magnus, De homine, 25.3, pp. 248a and 249a

III,1

a) pp. 170–71:
The distinction between natural light, acquired light and shining – *una est qualitas quam apprehendit visus in sole et igne (= lux) ... secunda est id quod replemet ex bis (= lumen) ... tertia est ... radiositas ...*

John Blund, Tractatus de anima, 10, p. 33 (misunderstood: *splendorem autem dicit esse passionem generatam ex colore ...*)
Anonymous (Gauthier), De anima et de potentia eius, p. 37 (no attribution; *lux in corpore luminoso lux est ... radios autem ...*)
Anonymous (Callus), De potentia animae et objectis, p. 151 (no attribution; *lux quae est in corpore luminoso sit est sol ...*, influenced by Anonymous (Gauthier))
Albertus Magnus, De homine, 21.1, p. 184b
Albertus Magnus, Super Dionysium de divinis nominibus, 2, p. 63 —, 2, p. 83
Albertus Magnus, Super Iohanneum, 1,9, p. 42
Albertus Magnus, De anima, 2.3.8, p. 110, lin. 63 (no attribution)
Albertus Magnus, De intellectu et intelligenti, 3.1, p. 498b (no attribution)
Anonymous (Gauthier 1985), Lectura su librum de anima, 2,6, p. 220, lin. 474 (no attribution)
Roger Bacon, De multiplicatione specierum, 1,1, p. 4 (no attribution)
cf. Thomas Aquinas, Seripta super sententiam, II.13.1.3.c, p. 334 (no attribution)
Thomas Aquinas, De anima, 2.14, p. 129, lin. 306 (no attribution; *lux est qualitas ...*)
—, 2,14, p. 129, lin. 318 (no attribution)
Witelo, Perspectiva, V.5.1, p. 191 (no attribution)
John Pecham, Tractatus de perspective, 2, p. 28 (no attribution)

b) pp. 171–2:
Light (*lumen*) as the affection of a body opposed to natural light (*lucem*) – *hoc lumen erit in eo affectio corporis habentis lucem cum fuerit oppositum illi ...*

Albertus Magnus, De homine, 21.1, p. 177a
The example of crystals which are not translucent anymore but luminous if made dense – sic et parvisimae partes crystalli …

Albertus Magnus, *Super quartum sententiarum*, 44.C.27, p. 579

Albertus Magnus, *Super Diniyusium de cactesi hierarchia*, 13, p. 194

Albertus Magnus, *De anima*, 2.3.9, p. 112, lin. 10

Thomas Aquinas, *Summa theologiae*, II.2.2.1, p. 72

Albertus Magnus, *De anima*, 2.3.9, p. 111, lin. 50

Albertus Magnus, *De homine*, 21.3, p. 179a (color qui est in ipsa albedine est albedo)

Albertus Magnus, *Super quartum sententiarum*, 13.C.2., p. 245

Albertus Magnus, *Summa theologiae*, II.11.51.1, p. 536

Albertus Magnus, *De anima*, 2.14, p. 126, lin. 208 (no attribution)

Albertus Magnus, *De anima*, 2.3.9, p. 112, lin. 16 (no attribution)

John Blund, *Tractatus*, 10, p. 32, lin. 29 (lumen vero appellat passionem generatam in translucente ut in aere)

Albertus Magnus, *De homine*, 21.1, p. 177a

Albertus Magnus, *Super secundum sententiarum*, 13.C.2, p. 245

Albertus Magnus, *Summa theologiae*, II.11.51.1, p. 535

Albertus Magnus, *De homine*, 21.1, p. 182

Albertus Magnus, *Super Diniyusium de divinis nominibus*, 2, p. 62 and p. 64

Albertus Magnus, *De anima*, 2.3.10, p. 112, lin. 21 (no attribution)

Albertus Magnus, *De homine*, 21.3.1, p. 187a,b (two references)


Albertus Magnus, *De anima*, 2.14, p. 128, lin. 287 (no attribution; used as an argument not for but against the theory)

Thomas Aquinas, *De anima*, 2.14, p. 128, lin. 287 (no attribution; used as an argument not for but against the theory)

John Blund, *Tractatus*, 10, p. 32, lin. 15 (no attribution)

Albertus Magnus, *De homine*, 21.1, p. 179a (color qui est in ipsa albedine est albedo)

Albertus Magnus, *Super secundum sententiarum*, 13.C.2, p. 245

Albertus Magnus, *Summa theologiae*, II.11.51.1, p. 535


Albertus Magnus, *De anima*, 2.14, p. 126, lin. 222 (no attribution)

Albertus Magnus, *De homine*, 21.1, p. 182

Albertus Magnus, *Super Diniyusium de divinis nominibus*, 2, p. 62 and p. 64

Albertus Magnus, *De anima*, 2.3.10, p. 112, lin. 21 (no attribution)

Albertus Magnus, *De homine*, 21.3.1, p. 187a,b (two references)


Albertus Magnus, *De homine*, 21.1, p. 177a

Albertus Magnus, *Super secundum sententiarum*, 13.C.2, p. 245

Albertus Magnus, *Summa theologiae*, II.11.51.1, p. 535


Albertus Magnus, *De anima*, 2.14, p. 128, lin. 287 (no attribution; used as an argument not for but against the theory)

Thomas Aquinas, *De anima*, 2.14, p. 128, lin. 287 (no attribution; used as an argument not for but against the theory)
e) pp. 198-9:
One theory about colours is that white is produced by the translucent (or that it is light) — \(\text{color enim albus non fit nisi ex translucenti} \ldots\)
Albertus Magnus, De sensu et sensato, 2.2, p. 43a (no attribution; color est ipsa \ldots\)

f) pp. 200-201:
Description of three well-known theories of vision — \(\text{dicimus ergo quod sanitiae de hoc tres sunt} \ldots\)
Albertus Magnus, De sensu et sensato, 2.2, pp. 45-5a (ex omnibus autem \ldots\)

III,4
a) pp. 198-9:
One theory about colours is that white is produced by the translucent (or that it is light) — \(\text{color enim albus non fit nisi ex translucenti} \ldots\)
Albertus Magnus, De sensu et sensato, 2.2, p. 43a (no attribution; color est ipsa \ldots\)

b) pp. 200-201:
Description of the different subgroups of partisans of this theory — \(\text{guidam autem ex eis posuit} \ldots\)
Albertus Magnus, De sensu et sensato, 2.2, pp. 43-4 (no attribution)

c) pp. 201-5:
Arguments and examples against this theory — \(\text{id quod mihi difficilium est definire} \ldots\)
idem quis est sed non in corpore continuo \ldots\)
Albertus Magnus, De sensu et sensato, 2.2, pp. 44-5 (ex omnibus autem \ldots\)

d) pp. 205-6:
One of the arguments: white changes into black in three different ways — \(\text{album transit paulatin in nigrum tribus viis} \ldots\)
Dominicus Gundissalinus, De anima, 9, p. 69, lin. 30 – p. 70, lin. 2
Albertus Magnus, De homine, 21.3.2, pp. 193a and 196b
Albertus Magnus, De sensu et sensato, 2.2, p. 45a (no attribution; \ldots\)
cf. Petrus Hispanus, Scien
tia libri de anima, 6.13, p. 282 (no attribution; sunt autem duo \ldots\)

e) pp. 208-10:
Further arguments against this theory — \(\text{iam autem notum est quod sed hoc quod} \ldots\)
dixerunt quod \ldots\)
Albertus Magnus, De sensu et sensato, 2.2, pp. 45-46a (\ldots\ haec igitur est opinio Avicennae)

f) pp. 210-11:
Arguments against a second theory, namely that all bodies are coloured — \(\text{sed sententiam secundam} \ldots\)
Albertus Magnus, De sensu et sensato, 2.2, p. 46 (no attribution; sententia autem quae \text{dicunt} de poris \ldots\)

III,5
a) pp. 212-14:
Description of three well-known theories of vision — \(\text{dicimus ergo quod sanitiae} \ldots\)
Albertus Magnus, De homine, 22, p. 210 (\ldots\ Al
can nitium sunt autem duae sententiae dicentes \ldots\)

b) pp. 214:
Further arguments used by the partisans of the first two theories: comparison with the other senses — \(\text{rationum sunt autem primae duae sententiae dicentes} \ldots\)
Albertus Magnus, De sensu et sensato, 1.4, p. 8 (\ldots\ pra
erit Averroes et Avicenna et <Avicenna> in perspectiva sua)

Roger Bacon, Opus maius, 5.9.4, p. 73

Roger Bacon, De multiplicatione specierum, 1.2, p. 32 (\ldots\ Albacn et Avicenna et Averroes \ldots\ non est contra eae vero
tin)

b) pp. 214:
Further arguments used by the partisans of the first two theories: comparison with the other senses — \(\text{rationum sunt autem primae duae sententiae dicentes} \ldots\)
Albertus Magnus, De sensu et sensato, 1.4, p. 8 (no attribution; \ldots\ super nasum \ldots\)

Roger Bacon, De multiplicatione specierum, 4.3, p. 224
Roger Bacon, Opus maius, 5.9.4, p. 73

c) pp. 215:
Further arguments (the illuminated nose etc.) — \(\text{resplendet super nasum suum \ldots}\)
Cum aperit oculos, videtur videre radios coram oculis suis \ldots\)
Albertus Magnus, De sensu et sensato, 1.4, p. 8 (no attribution; \ldots\ super nasum \ldots\)

Roger Bacon, Opus maius, 5.9.4, p. 73

d) pp. 216-19:
Further arguments (the mirror, infinitely short time, pictures mirrored on the surface of the eye etc.) — \(\text{dicunt quod specula tes
tantur esse radiorum et splendorem} \ldots\)
A sequence of arguments that refute the theories of extramission (people who gather would see better, even the heaven would be influenced by vision, etc.) - ...

Albertus Magnus, *De anima*, 2.3.14, p. 120, lin. 39 (no attribution; ... quando duo homines inpicient venales suav ...)  

Albertus Magnus, *De sensu et sensato*, 1.6, pp. 12a–13a (no attribution; various arguments: de facie oculi ... de speculo ... in tanta profunditate ... tempus sit divisibile in infinitum etc.)

e) pp. 220–25:  
A sequence of arguments that refute the theories of extramission (people who gather would see better, even the heaven would be influenced by vision, etc.) - ...

Albertus Magnus, *De homine*, 22, pp. 218b–219a and 220 (no attribution; si aliquis stet ista multa ... medius visum ... etiam impressum habent ... (p. 220a) ... pleni pars vacui ...)  

Albertus Magnus, *De sensu et sensato*, 1.7, pp. 13a–14b (no attribution; almost all arguments are taken over)

f) pp. 225–34:  
Refutation of the four possible ways in which corporeal rays could be sent from the eye - ...

Albertus Magnus, *De homine*, 22, pp. 219b–220a (no attribution; three possible ways are mentioned; ... aut radius ... mens aliceps ...)  

Albertus Magnus, *De sensu et sensato*, 1.7, pp. 14b–17a (no attribution; follows Avicenna closely; ... modis quatuor ...)  

g) pp. 230–34:  
The argument of saffron thrown into a pond (as part of the refutation of the third way) - ...

Albertus Magnus, *De homine*, 22, p. 222a (no attribution)  

Albertus Magnus, *De sensu et sensato*, 1.7, p. 16a (no attribution)

III,7  
a) p. 253:  
Description of the extramissionist's claim that close objects cannot be seen and that the transmission of images is impossible - solum nunc quaequianculum pradictam ... quod ... propinquiuis prohiberet videre et quod impossibile est ... figurae moveri ...

Albertus Magnus, *De sensu et sensato*, 1.10, p. 24 (no attribution; ... res de propinquio non videtur ...)

b) p. 255:  
The examples of the image of the sun remaining in the eye and of the raindrop seen as a line (in support of Avicenna's theory of the perception of images) - ...

Albertus Magnus, *De sensu et sensato*, 1.14, p. 34b (no attribution; post excellentem qualitatem ... de gutta cadente ...)

c) p. 257:  
The argument that some animals (lions and serpents) have eyes which sent forth light - granted by Avicenna - ...

John Blund, *Tractatus de anima*, 9, p. 30, lin. 8–17 (no attribution; ... illuminat rem visum ...)  

Albertus Magnus, *De homine*, 22, pp. 215b and 225 (item, sicut supra ... dicet Avicenna dicat quod ... tamen hoc non placet nihil)  

Albertus Magnus, *De sensu et sensato*, 1.10, p. 25b (no attribution; ... ut leo, lupus, serpens, catulus ...)

d) p. 257:  
The opinion that one pupil is filled with spirit if the other eye is closed - granted by Avicenna - ...

Albertus Magnus, *De homine*, 22, p. 216b (no attribution; viceus aculo uno dio clauso ...)  

Albertus Magnus, *De sensu et sensato*, 1.10, p. 25b (no attribution; ... quando alter clausur ...)  

e) pp. 257–60:  
Three answers (one accepted, one probable, one Avicenna's own theory) to the extramissionist's theory of how images come about in mirrors - ...

Albertus Magnus, *De homine*, 22, p. 221 (no attribution; ... quae non apparent simulacra in superficiebus parvis planis ... et quae apparent in aspect ...; draws on pp. 239–40)  

Albertus Magnus, *De sensu et sensato*, 1.8 and 1.9, pp. 17b–24b (no attribution, apart from the last sentence (p. 24): hoc igitur sunt quae ex dictis Peripateticorum extramissionem et praecipue Avicennae et Averrois; Albertus Magnus follows Avicenna's text very closely and draws from every page in sequence.)

f) pp. 260–61:  
Not all action and affection happens through contact - secundo ...

Albertus Magnus, *De sensu et sensato*, 1.10, p. 26a–b (no attribution; Albertus uses Avicenna mainly in the second answer which he mixes with Avicenna's own theory: sed primus modus melior est ...)

f) pp. 260–61:  
Not all action and affection happens through contact - secundo ...

Albertus Magnus follows Avicenna's text very closely and draws from every page in sequence.)
Albertus Magnus, De homine, 22, p. 227b (non amnse agens ...)
Albertus Magnus, De sensu et sensato, 1.10, p. 27a-b (no attribution; ... non enim sportet ...)

Albertus Magnus, De sensu et sensato, 1.10, p. 27b (no attribution, but the context is a presentation of Avicenna's theory; ... in duabus distantias ... et hic est modus conversus et quem ponunt. Auctores videndarum ... magis intelligibile est dictum Aristotelis quam dictum Avicennas ...)

The example of motion which produces heat (in support of Avicenna's theory) - ... sicut est nwtus ex quo accidit in aliquod corpus calor ... sunt duo inedia ...

Albertus Magnus, De homine, 22, p. 231 (... facit calorem ...)

III,8

Albertus Magnus, De sensu et sensato, 1.11, p. 28a (no attribution; remanet autem ...)

b) p. 268:
Avicenna's own theory of intromission of images - ... verum est autem quod simulacrum visi redditur ...

Albertus Magnus, De anima, 2.3.14, p. 120, lin. 44 (Albertus Magnus misunderstands the passage as a solution to the problem of double sight: ... solvit bene Avicennam ...)

Anonymous (MS Siena), Quaestiones super librum de anima, f. 134va, p. 194 (no attribution; alter enim una res viae videtur duae ...)

c) p. 268:
The two optical nerves join in the form of a cross - ... a duabus nervis concavis ubi coniunguntur in modum crucis ...

cf. Thomas Aquinas, De sensu et sensato, 1.4, p. 29 (no attribution)

d) pp. 272-8:
There are four causes why one thing is seen doubled - ... et deinde redibimus ad nostrum propositum dicentes quod causa videndi unum duo quadruplex est ...

Albertus Magnus, De homine, 22, p. 226b-227a (no attribution; a free rewriting)
Albertus Magnus, De sensu et sensato, 1.11, pp. 28b-29a (no attribution; dicimus igitur ...)

e) pp. 273:
The second cause: movement of the optical spirit - ... secunda autem causa est motus visibilis spiritus ... ad antieora, destrorserum et sinistrorum

f) p. 279:
It is impossible to proof that there are exactly five external senses - ... nec ego intelligo illud quasi probatum ...

Albertus Magnus, De anima, 2.4.5, p. 154, lin. 71

g) p. 280:
The common sensibles - ... bacc autem sunt dimensiones, numeri ...
The faculty of imagination and its relation to the common sense

b) pp. 5-6:

The faculty of imagination and its relation to the common sense

Dominicus Gundissalinus, De anima, 9, p. 73. lin. 6-11 and 14-20 (no attribution)

Anonymous (Callus), De potentia animalium et objectis, p. 154, lin. 12 (dictor autem sensus communis

sensu formalis...)

Roland de Cremona, Summa theologia, f. 32vb (no attribution;... sensus communis sive imaginatio ut pro
codem acquiratur secundum quandam...)

Jean de la Rochelle, Tractatus, 2.1, p. 73 (nota quod Avicenna quandoque accipit sensum communem,
fantasiem, imaginacionem pro codem...)

Petrus Hispanus, Scientia libri de anima, 7.1, p. 301 (no attribution; bolet autem...)

---, 7.2, p. 312 (no attribution; dictor autem... est autem forte... virtus una...)

Albertus Magnus, De IV. quaesueri, 4.69, p. 710 (imaginatio ab Avicenna dictor formalis...)

Albertus Magnus, De homine, 37.1, p. 323 (formalis et imaginatio...)

---, 37.1, p. 323 (una virtus...)

---, 37.1, p. 324 (retinere ea quae apprehendit...)

---, 384, p. 334 (guidam auctore... distinguunt inter phantasmam et imaginativam...)

---, 41.3.3, p. 379 (formalis...)

Albertus Magnus, De memoria et reminiscencia, 1.1, p. 98a (voat formulen vel imaginativam...)

c) p. 6:

The imaginative/cogitative faculty — iam autem simus

Dominicus Gundissalinus, De anima, 9, p. 73, lin. 21-6 (no attribution)

Jean de la Rochelle, Tractatus, 2.1, p. 76

Jean de la Rochelle, Summa, 99, p. 243 (quum virtutem manifestaret sic...)

Vincent of Beauvais, Speculum naturale, 27.10, p. 1924 (from Jean, Summa, p. 243)

Alexander of Hales et al., Summa theologiae, ii.4.1.2.2.1, p. 435a (praeterea dicit... paritio rationalis;
mixed with quotation from Clesrm, ff. 24vb-25ra)

Petrus Hispanus, Scientia libri de anima, 7.3, p. 315 (no attribution; dictor autem cogitativa...)

---, 8.2, p. 336 (no attribution; virtus vero dispositiva...)

d) pp. 6-9:

Description of the faculty of estimation — deinde aliqua quod diiudicamus de sensibilibus

Dominicus Gundissalinus, De anima, 9, p. 73, lin. 6 - p. 75, lin. 13 (no attribution; aestimatio enim
operator in homine indicia...)

e) p. 8:

Estimation as the leading judging faculty in animals — quae est domina, indicia in

Dominicus Gundissalinus, De anima, 9, p. 74, lin. 3 (no attribution)

Petrus Hispanus, Nonsula super Ioannis serapio, p. 37 (in Alonso's introduction to Petrus' Scientia

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INDEX LOCORUM IV,1

(1941), p. 37) (alia est ratio quae descrivit animae sensibilis et hoc secundum Avicennam est aestimativa sive
virtus aestimativa et hoc est communis nobis et brutis)

Petrus Hispanus, Scientia libri de anima, 8.2, p. 337 (no attribution;... omnis dominatrix...)

---, 11.1, p. 490 (no attribution; aestimativa vero circa minusvalidas intentiones...)

---, f. 25vb (no attribution;... scientia... tempus... secundum quod...)

---, Thomas Aquinas, De veritate, 25.5, p. 733 (no attribution;... scientia... tempus... qua descriptum aliquud rationis...)

---, Thomas Aquinas, De anima, 2.28, p. 190, lin. 196 (no attribution;... recte indiciant de agendis per
aestimationem naturalis)

---, Roger Bacon, Opus majus, 5.1.4, p. 9 (no attribution; cogitatio... domina virtutum sensibilium et loco
rationis in bruc...)

f) pp. 8-9:

Memory is the storing-place of connotational attributes ('intentions') (imagination is the

This doctrine reappears in chapters V.6 (pp. 145-7) and V.8 (pp. 182-3). Some of the

theseus... derives from

Dominicus Gundissalinus, De anima, 9, p. 74, lin. 7 (no attribution)

Anonymous (Gauthier), De anima et de potentia eius, p. 45, lin. 357 (unde dictor ait formam ab

---, p. 47, lin. 384 (no attribution;... theseus intentionum...)

cf. Grosseteste, In posteriorum analytystarum libros, 2.6, p. 404 (He opposes imaginatio species et
memoria/intentionis, which is close also to De anima, I,5, pp. 89-90)

Michael Scot, Liber introductorius, f. 46b (no attribution;... in theseus memoriae...)

---, f. 46va (no attribution;... per quam species rerum... servavm. Unde memoria est arca vivida
rationis...)

William of Auvergne, De anima, 7.8, p. 215a (no attribution;... ad theseus memoriam...)

---, Roland de Cremona, Summa theologica, f. 33va (no attribution;... qua ex virtute formarum relatarum in
theseus memoriam revertertur bovis ad dominum possessorum suorum...)

Jean de la Rochelle, tractatus, 2.11.0, p. 77 (quia sicut imaginatio...)

cf. Anonymous (Gaufric 1985), Lectura in librum de anima, 2.26, p. 441, lin. 421 (no attribution)

cf. Petrus Hispanus, Scientia libri de anima, 7.2, p. 313 (no attribution;... nocommemor...)

---, 7.4, p. 320 (no attribution;... intentiones... in memoriae theseus repentandas...)

---, 7.5, p. 325 (no attribution;... intentiones... conservat cum sit de theseus aetimationis... and p.
326 (no attribution;... retinere formarum... retentio intentionum...)

---, 10.5, p. 435 (no attribution;... memoriae theseus depositat...)

Albertus Magnus, De IV. quaesueri, 4.23.1, p. 471 (... theseus sit theca...)

Albertus Magnus, De homine, 37.1, p. 324b (expresse dicti...)

---, 37.3, p. 327b (... inferentias...)

---, 38.3, p. 333a (no attribution;... corrupta...)

---, 38.5, p. 355a (no attribution;... corrigendae...)

---, 40.2, p. 348 (contra dictam Avicennae et Alguzel quod memoria proprie est conservativa intentionum...)

---, 57.3, p. 499a (quoting Avicenna's De anima V,6, pp. 147-9)

Albertus Magnus, Super tertium sententiarum, 23.G.14, p. 430 (sicut dictum Avicennae et Alguzel... theseus... intentionum particularium...)

Albertus Magnus, Super Dispersionem de divinis nominibus, 1, p. 30

Albertus Magnus, Super Ethica, 6.12, p. 473

Albertus Magnus, De anima, 2.4.7, p. 157, lin. 59 (reservationem ergo formarum summatarum vocavetur
Perpateice imaginationem... and p. 158, lin. 16 (no attribution;... theseus intentionis...)

Albertus Magnus, Summa theologica, II.A.14, p. 169 (... theseus formarum simulacrum... The theory is
attributed partly to John of Damascus, partly to Avicenna. The passage is close to De IV. quaesueri...
The imaginative faculty can be distracted from its proper actions in two ways — *deinde virtus imaginativa*

Dominicus Gundissalinus, *De anima*, 9, p. 76, lin. 20 (no attribution)

Albertus Magnus, *De IV coniecturis*, 4.69, p. 711

d) pp. 17–18:

If the impediments are removed (like in sleep or madness), unreal forms can be perceived as if they were real — *sed remoto* ...

Dominicus Gundissalinus, *De anima*, 9, p. 76, lin. 36 (no attribution)

Anonymous (Gauthier), *De anima et de potentia eius*, p. 45, lin. 362 (no attribution)

Anonymous (Callus), *De potentii animae et objecti*, p. 154, lin. 19 (no attribution, from Anonymous (Gauthier))

Albertus Magnus, *De homine*, 43.3.3, p. 378a

—, 44.3, p. 404a (omnia philosophi ...)

—, 44.4, p. 406a

—, 44.4, p. 409b (secundum Alpharabium et Avicennam et Alzazalem)

—, 46, p. 420a

Albertus Magnus, *Super secundum sententiarum*, 7.F.6, p. 152

cf. Albertus Magnus, *De anima*, 3.1.3, p. 169a (no attribution; ista enim vis ...)


John Pecham, *Tractatus de anima*, 10, pp. 36–7

e) pp. 18–19:

In some persons, the imaginative faculty and the soul are so powerful that they have visions in waking life — *et haec est propria prophetia virtutis imaginativa*

Dominicus Gundissalinus, *De anima*, 9, p. 77, lin. 13 (no attribution)

Albertus Magnus, *De anima*, 3.1.1, p. 167a (no attribution; a semel huialiodi bonines abstrabuntur a motibus sensibus ... efficientur prophetae)

cf. Albertus Magnus, *De somno et vigilia*, 1.1.1, p. 122

cf. —, 3.1.1, p. 178 (Averroes enim hic impugnat Avicennam)

—, 3.1.6, p. 182b (... in quarum corporibus organum imaginatioe opus est complectionatum)

cf. Thomas Aquinas, *De veritate*, 12.3, p. 374 (determinavit autem Aviceenna in iis de naturals de prophetia. Ergo prophetia est naturalis.)

—, 12.3, p. 374 (perfectio virtutis imaginativa)

—, 12.3, p. 376, lin. 231 (no attribution; ad recipiendum per actionem aliusius superioris causa praeceptiitem futurum)

—, 12.9, p. 396 (no attribution; omnia a sensibus exterioribus abstrabuntur)

Thomas Aquinas, *Secunda pars Summarum theologiarum*, ii.172.1.c, p. 799a (no attribution; perfectio virtutis imaginativa)

cf. Wiberto, *De colloca primaria et de natura daemoniorum*, p. 165 (no attribution; propheticeant antea futura ... prophetiae animae in se ipsum)

—, 26.10, p. 784 (no attribution)

Thomas Aquinas, *De malo*, 3.9, p. 86 (no attribution)

John Pecham, *Quaestiones tractantes de anima*, 18, p. 159
Often there are confused dreams, which need interpretation – saepe etiam contingit

Often there are confused dreams, which need interpretation – saepe etiam contingit

Albertus Magnus, De anima, 3.1.3, p. 169a (no attribution; ... adhibit indigent interpretatione ...)

cf. Michael Scot, Liber introductorius, f. 50rb (no attribution; ... tamen talibus siquidem ...)

Few people have true dreams – bominum autem quidam ...

Albertus Magnus, De homine, 44.1, p. 403a (no attribution; ... Herculis ...)

Most people have dreams that are interpreted in other dreams, example: Hercules – pluribus autem contingit quandoque

Albertus Magnus, De homine, 44.1, p. 403a (no attribution; ... Herculis ...)

There are two types of people who see these things when they are awake – corum autem ...

Albertus Magnus, De homine, 43.1, p. 365a (dictavit Avicenna et Alpharabius ...)

The concepts of all things are in the wisdom of the creator and the angels and may come about in dreams – dicemus ergo quod omnia ...

Albertus Magnus, De homine, 43.1, p. 365a (dictavit Avicenna et Alpharabius ...)

The best time for true dreams is before daybreak – praeter hoc etiam ...

Albertus Magnus, De homine, 47, p. 424b (dictavit Alpharabius et Avicenna)

People whose mixture is in equilibrium are most suitable for having true dreams – illi autem ...

Albertus Magnus, De homine, 47, p. 425a

The soul turns inside for three reasons: 1) tiredness or (2) worry or (3) disobeying of the organs – sed hoc quod convertitur ...

Jean de la Rochelle, Summa, 100, p. 244

Estimation is the main judge in animals – dicemus ergo quia ...

Dominicus Gundissalinus, De anima, 9, p. 77, lin. 29 (no attribution; Gundissalinus quotes the entire section from p. 35, lin. 94, to p. 44, lin. 23)
Jean de Ja Rochelle,
John Pecharn,
Jean de la Rochelle,
Jean de Ja Rochelle,
Jean de Ja Rochelle,
Jean de Ja Rochelle,
John Pecham,
Dominicus Gundissalinus,

The first kind of estimation: natural inclination – unus ex illis est cantela proveniens in omne quod est a divina clementia ...

Dominicus Gundissalinus, De anima, 9, p. 78 lin. 13 (no attribution)
Roland of Cremona, Summa theologiae, I, 33rb (... sicut dicit philosophi ... et evis esti non videat quodammodo seintis lupum ...)
Jean de la Rochelle, Summa, 101, p. 248 (no attribution; primus modus ...)
Vincent of Beauvais, Speculum naturale, 25.99, p. 1836 (no attribution; from Jean)
Petrus Hispanus, Scientia libri de anima, 7.4, pp. 320-21 (no attribution; prima est naturalis cantela ... and p. 321 (no attribution; per hos cantelas aetematio peripeti intentiones ...)
cf. Thomas Aquinas, De veritate, 22.7, p. 629 (no attribution; ... secundum naturalem estimationem ...)
cf. —, 24.2, p. 682 (no attribution; ... ex naturali aetematione ...)
cf. —, 25.2, p. 733 (no attribution; ... sicut quod vis fugit lupum eius inanimatam nunquam seint)
Roger Bacon, Opus maius, 5.1.4, p. 7 (no attribution; ... et evis si nunquam viserit lupum ...)

The second kind of estimation: in a way similar to experience – alius autem modus est sicut hoc quod fit per experimentum

Dominicus Gundissalinus, De anima, 9, p. 78, lin. 28 (no attribution; ... qui fit per experimentum ...)
Jean de la Rochelle, Summa, 101, p. 248 (no attribution; secundus modus ...)
Vincent of Beauvais, Speculum naturale, 25.99, p. 1836 (no attribution; from Jean)
Petrus Hispanus, Scientia libri de anima, 7.4, pp. 321-2 (no attribution; secunda via ...)
cf. Albertus Magnus, De incarnatione, 6.1.4, pp. 223-4
John Pecham, Tractatus de anima, 10, p. 37 (... timet canis ...)

Another kind of estimation: through similarity – aliquando autem ab aetematione adveniunt alia ictudia ad modum similitudinis ...

Dominicus Gundissalinus, De anima, 9, p. 79, lin. 1 (no attribution)
Jean de la Rochelle, Summa, 101, p. 248 (no attribution; tertius modus ...)
Vincent of Beauvais, Speculum naturale, 25.99, p. 1836 (no attribution; from Jean)
Petrus Hispanus, Scientia libri de anima, 7.4, p. 322 (no attribution; tertia via ...)

Memory is to be found also in other animals, but remembering only in human beings – memoria autem est ...

Dominicus Gundissalinus, De anima, 9, p. 70, lin. 7 (no attribution)
Jean de la Rochelle, Tractatus, 2.1.10, p. 77, lin. 273
Jean de la Rochelle, Summa, 102, p. 249 (ad quod dicitendum ...)
Vincent of Beauvais, Speculum naturale, 27.14, p. 1926 (from Jean, Summa)
Albertus Magnus, De homine, 40.1, p. 341a
(cf. —, 40.5, p. 330a (secundum Alpharabium rememoratio diciter reminiscencia et recordatio secundum Avicennam))
—, 41.1, p. 351a (... recordatio est ingenium recovandi ...)
John Pecham, Quaestiones tractantes de anima, 29, p. 195

People differ in their abilities to learn, remember and memorize – sunt autem ...

Dominicus Gundissalinus, De anima, 9, p. 79, lin. 30 (no attribution)
Jean de la Rochelle, Summa, 102, p. 250 (ad quod inelligendum est secundum Avicennam ...)
Vincent of Beauvais, Speculum naturale, 27.14, p. 1927 (from Jean)
cf. Alexander of Hales et al., Summa theologia, II.1.2.3.12, p. 450a (no attribution; siccum enim bene 
retinet ...)
Petrus Hispanus, Scientia libri de anima, 7.5, p. 328 (no attribution; proprius hic autem ...)
cf. —, 10.12, p. 486 (no attribution; observantem vero ...)
Albertus Magnus, De IV confusione, 4.73, p. 752 (vis retentiva vigorem suscepit a frigido et sicco)
Albertus Magnus, De homine, 35.2, p. 311 (...) una ... animatur ab homido et altera a sicco)
—, 40.3, p. 350a
—, 57.3, p. 498b (no attribution; ... humidi enim ...)
Albertus Magnus, De anima, 2.4.7, p. 157, lin. 22 (no attribution; bene tenens perficitor frigido sicco ...)
cf. Albertus Magnus, Summa theologiae, 1.3.15.2, p. 69
—, II.4.14, p. 168 (ex memorantibus ...)
AVICENNA'S *DE ANIMA* IN THE LATIN WEST

j) pp. 46–54:
Imagine a square with two little squares of equal seize attached to it, all imprinted in imagination. Imagination discerns between the two squares because of the matter <in the brain> in which they are imprinted – *removeamus autem fornam Socratis et ponamus fornam quadrati* …

Albertus Magnus, *De homine*, 42.1, pp. 357b–358b
Albertus Magnus, *De anima*, 3.1.4, pp. 169–70 (no attribution; the entire chapter 3.1.4 is taken from Avicenna)
Albertus Magnus, *De causis*, 2.2.4, p. 98
Thomas Aquinas, *De veritate*, 26.1, p. 748 (at a philosophiam probatur)

### INDEX LOCORUM IV,4

#### a) pp. 54–9:
The theory of motion and decision – *postquam iam locuti sumus* …

Dominicus Gundissalinus, *De anima*, 9, p. 80, lin. 24 (no attribution; Gundissalinus quotes the entire section from p. 54, lin. 81 to p. 64, lin. 33, with the exception of 55.97–56.0, 58.23–25, 59.35–36, 62.1–63.13, 64.18–19)

#### b) pp. 56–7:
The faculty of wish (*al-qūwa al-šawqiyā*) has two branches: the irascible faculty and the faculty of desire … – *huius autem virtutis voluntatis rami sunt* …

Dominicus Gundissalinus, *De anima*, 9, p. 81, lin. 4 (no attribution; *huius autem virtutis, scilicet desiderii*)
cf. John Blund, *Tractatus*, 25.4, p. 105, lin. 24 (no attribution; *sed in secundum victoriam*?)
Jean de la Rochelle, *Tractatus*, 2.1.12, p. 79, lin. 358 (no attribution)
———, 2.1.25, p. 101, lin. 97
Jean de la Rochelle, *Summa*, 105, p. 254
———, ed. Domenichelli, 2.40, p. 300 (no attribution; … *duplex est …*)
Albertus Magnus, *De homine*, 66.1, p. 554a
John Pecham, *Quaestiones tractantes de anima*, 7, p. 79

#### c) pp. 58–9:
The accidents (mental states) of the irascible and desiring faculty – *timor autem et dolour* …

Dominicus Gundissalinus, *De anima*, 9, p. 81, lin. 21 (no attribution)
cf. Alexander of Hales *et al.*, *Summa theologica*, II.4.1.2.2.2, p. 439 (no attribution; *quidam etiam provident* !)
———, II.4.1.2.2.2, p. 445a–b (no attribution; *propter mode …*)

#### d) pp. 59–61:
Interaction between body and soul – *dicemus ergo nunc quidam* …

Dominicus Gundissalinus, *De anima*, 9, p. 81, lin. 40 (no attribution)
Jean de la Rochelle, *Summa*, 109, p. 266 (no attribution; *metandum autem quod guadusm …*)
Vincent of Beauvais, * Speculum naturae*, 27.72, p. 1968 (no attribution; from Jean)

#### e) pp. 61–2:
If something frightening or delightful is imagined, the body reacts – *sed ex imaginagine et timore et dolore* …

Dominicus Gundissalinus, *De anima*, 9, p. 82, lin. 25 (no attribution)
Thomas Aquinas, *De veritate*, 26.10, p. 782 (no attribution; *ex imaginaginee territuriium* …)
Roger Bacon, *Epistola de secretis operibus*, 3, p. 530

#### f) p. 62, lin. 97:
The body reacts to forms which exist in the soul – *ex anima solet contingere* …

Dominicus Gundissalinus, *De anima*, 9, p. 82, lin. 40 (no attribution)
Albertus Magnus, *De causis*, 2.5.18, p. 184
Roger Bacon, *Epistola de secretis operibus*, 2, p. 528

#### g) p. 62, lin. 99:
Heat and cold are produced (in the body) without there being a hot or cold body – *calor aciislat non ex calido …* …

Dominicus Gundissalinus, *De anima*, 9, p. 83, lin. 2 (no attribution)
Jean de la Rochelle, *Summa*, 108, p. 263 (no attribution; *sum enim anima …*)
Vincent of Beauvais, * Speculum naturae*, 27.71, p. 1966 (no attribution; from Jean)
Albertus Magnus, *De motibus animalium*, 1.1.2, p. 260
Roger Bacon, *Opus maius*, 4, p. 402

#### h) p. 64:
Example of the sick person healed because of his belief in health – *attende dispositionem infirmi …*

Dominicus Gundissalinus, *De anima*, 9, p. 83, lin. 8 (no attribution)
Grosseteste, *Expositio in epistolam sancti Pauli ad Galatas*, iii.3.3, p. 73, lin. 56
Roland of Cremona, *Speculum theologica*, II.89vb (*sicut uidest corporalia confertatio est magna causa subhis suis dictis Aviceins mediocri aramum*);
Jean de la Rochelle, *Summa*, 108, p. 263 (no attribution; *sint nos videmus in …*)
Vincent of Beauvais, * Speculum naturae*, 27.71, p. 1966 (no attribution; from Jean)
Peter Hispanus, *Scientia libri de anima*, 10.11, p. 476 (no attribution; … *sanitate imaginatio …*);
Roger Bacon, *Epistola de secretis operibus*, 2, p. 528

#### i) p. 64:
Example of the person walking on a trunk – *potest homo ambulare super trabem …* …

Dominicus Gundissalinus, *De anima*, 9, p. 83, lin. 12 (no attribution)
Jean de la Rochelle, *Summa*, 109, p. 264 (no attribution; *et sicst patet in …*)
Vincent of Beauvais, * Speculum naturae*, 27.71, p. 1967 (no attribution; from Jean)
Peter Hispanus, *Scientia libri de anima*, 10.11, p. 476 (no attribution; … *super hoc excelsa insidiae*);
Thomas Aquinas, *Summa super sententias*, ii.7.3.1.c, p. 194 (… *ex imaginagine et timore cause the trunk is not mentioned*)
Thomas Aquinas, *Summa contra gentiles*, 3.103, p. 322a
Roger Bacon, *Opus maius*, 4, p. 402
j) p. 64–5: Comparison between the world soul and the individual soul – *si autem fuerit hoc in anima communi* ... 

cf. Albertus Magnus, *De motibus animalium*, 1.1.3, p. 261b–262a
Albertus Magnus, *De somno et vigilia*, 3.1.6, p. 185b ( ... *scire intelligentiae insunt orbes ... congnovit intelligentiae coelestis ...*)

k) p. 65: The example of the Evil Eye – *opus oculi fascinantis* ...

Grosseteste, *Esquisitio in epistolam sancti Pauli ad Galatas*, iii.3.3, p. 73, lin. 56 (Avicenna autem philosophus dicit in libro suo de anima ... he adds Alczel's example of the camel)
Roland of Compe, *Summa theologiae*, f. 62r.a ( ... ex mala assupit ... dicit dictum Avicenna qui fuit medicus; Alczel's example of the camel follows)
Peter Hispanus, *Scientia libri de anima*, 10.11, p. 476 (no attribution; sed videtur hoc dissonum veritati; he also mentions Alczel's example of the camel)
Albertus Magnus, *Super secundum sententiarum*, 7.F.7, p. 153 (hoc autem non dico approbans dictum illud)
Albertus Magnus, *De motibus animalium*, 1.1.3, p. 262a (scit fit in fascinatione et præstigii magorum)
Albertus Magnus, *De senen et senato*, 1.10, pp. 27–8 ( ... sed cum necromantia et incautationibus et arte imaginum magia concordat dictum Avicennae)
Albertus Magnus, *De somno et vigilia*, 3.1.6, p. 185a ( ... in corpus alterius hominis ...)
——, 3.2.6, p. 203 (sed hoc per philosophiam probari vis posset)
Thomas Aquinas, *Summa contra gentiles*, 3.103, p. 322
Thomas Aquinas, *Prima pars Summae theologiae*, 117.3. ad 2, p. 560b
Thomas Aquinas, *De malo*, 16.9, p. 324
Roger Bacon, *Opus majus*, 4.4.7, p. 143 (scit Avicenna docet ... per exemple et experimentis varias et certum est hoc)
——, 4, p. 198
Giles of Rome, *Errata philosophorum*, 6.11, p. 30
John Pecham, *Quodlibet in*, 30, p. 243

l) p. 65: People with a pure and powerful soul are able to influence the matter of the world – *immo cum anima fuerit constans, nobilitis* ...

Peter Hispanus, *Scientia libri de anima*, 10.11, pp. 476–7 (no attribution; ... cedit mundana machina ...)
Albertus Magnus, *De motibus animalium*, 1.1.2, p. 260 ( ... etiam quando non tangunt eadem ut dicit Avicenna licet hoc ultimum habitum dubitationem)
——, 1.1.3, p. 262a
——, 1.1.5, p. 267
——, 3.1.6, p. 184b ( ... mirabilia ...)
Thomas Aquinas, *Summa contra gentiles*, ii.7.3.1.c, p. 194
Thomas Aquinas, *Summa contra gentiles*, 3.103, p. 322
Thomas Aquinas, *Prima pars Summae theologiae*, 117.3. ad 2, p. 560b
Roger Bacon, *Opus maius*, 4, p. 396 (non solum recipius virtutem a coelo sed ab anima rationali)
John Pecham, *Quodlibet in*, 30, p. 243

m) p. 66: Powerful people can produce rain and fertile seasons – *pro voluntate eius contingunt pluviae et fertilitas* ...

Albertus Magnus, *De motibus animalium*, 1.1.3, p. 262a
——, 1.1.5, p. 267 (scit fit in hoc Alczel et Moyres Argentinos videtur consentire in idem et Acrelazid expresse dicit hoc et multi aliorum ... hic est error)
Roger Bacon, *Opus maius*, 4, p. 403 (certum est autem quod gratia dei multum facti ...)
Roger Bacon, *Opus tertium*, 26, p. 98
John Pecham, *Quodlibet in*, 30, p. 243

n) p. 66: Matter reacts on the soul much better than on something material but contrary – *muto amplius obvocit animae quam* ...

Thomas Aquinas, *Scriptum super sententian*, iii.16.1.3, p. 514
——, 1.1.1, p. 374 ( ... obvocat ...)
Thomas Aquinas, *Prima pars Summae theologiae*, 117.3. ad 2, p. 560b

p) pp. 66–7: About the corporeality of animal faculties – *dicimus autem quod* ...

Dominicus Gundissalinus, *De anima*, 9, p. 83 lin. 26–9

V,1
a) pp. 69–70: Human beings cannot live alone. If they do, they live a life worse than it could be – *non posset permanere in sua vita sine societate* ...

Albertus Magnus, *De sacramentis*, 8.8.1, p. 152
Albertus Magnus, *De homine*, 4.1.3, p. 230 (ut dicit philosophus)
Albertus Magnus, *Super quartum sententiarum*, 33.A.1, p. 289 (sed homo naturaliter est politicus)
——, 33.A.1, p. 290
Albertus Magnus, *Super Ethica*, 1.7, p. 34
——, 8.1, p. 593
——, 10.13, p. 761
Albertus Magnus, *Paschala super Isaiam*, 5.8, p. 74
Albertus Magnus, *Politia*, 1.1, p. 12 (dictum Avicennae in suo libro De animalibus)
Albertus Magnus, *Ethica*, 8.1.1, p. 516
——, 8.3.8, p. 330
Thomas Aquinas, *De regno ad regem opeii*, 1, pp. 449–50 (no attribution)
b) p. 70:
Man has to add clothes and special nutrition to nature – *hominem autem necessarium est* ...

Thomas Aquinas, *Contra impugnantes*, 5.455, p. 90
Thomas Aquinas, *De regno ad regem cyprī*, 1, pp. 449–50 (no attribution)

c) p. 72:
In the case of human beings sounds signify by positing because of the infinite aims that they have – *ad plactum eo quod humani appetitus quasi infiniti sunt*

Albertus Magnus, *De homine*, 25.1, p. 243b
Albertus Magnus, *De IV coaequaevis*, 4.60, p. 632
Thomas Aquinas, *De veritate*, 9.4, p. 287
Thomas Aquinas, *De regno ad regem cyprī*, 1, pp. 449–50 (no attribution)

d) p. 73:
In other animals there is invention as well, but by instinct. Example of the birds – *et praecipue aves habent artes, construent enim casas vel nidos*

Albertus Magnus, *De IV coaequaevis*, 4.69, p. 707
Vincent of Beauvais, *Speculum naturale*, 25.56, p. 1811
Thomas Aquinas, *De regno ad regem cyprī*, 1, pp. 449–50 (no attribution)

e) p. 74:
Teaching, learning, justice, conventions and invention are typical for human beings – *cetera animalia non habent hoc*

Albertus Magnus, *Politica*, 1.1, p. 14
Albertus Magnus, *Ethica*, 2.1.2, p. 152
—, 2.1.5, p. 157
Albertus Magnus, *Topica*, 4.3.1, p. 380

f) pp. 75–6:
Fear and hope are produced by instinct in animals. Example of the ants – *hoc fit instincту nature horrificum; hoc enim quod sum dum formica ...

Albertus Magnus, *De IV coaequaevis*, 4.69, p. 707
cf. Albertus Magnus, *De homine*, 40.1, p. 345a (... *instinctu instinc ...*)
Peter Hispanus, *Scienza libri de anima*, 10.12, p. 485 (no attribution; *verum videlicet cetera animalibus instinc ... investigatationes naturales inesse ...) Thomas Aquinas, *De veritate*, 12.3, p. 375 (no attribution; *sunt patet de formicis*)

g) pp. 76–8:
The most specific property of human beings is that they form universal intentions

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abstracted from matter – *qua autem magis propria ex proprietatibus hominis ...*

Dominicus Gundissalinus, *De anima*, 10, p. 84, lin. 4–19 (no attribution)

h) p. 77:
The human faculty which deals with particular things is concerned with knowing what is honest and dishonest – *et aitiam quae propria est ad cogitandum de rebus singularibus ...* (a parallel passage is p. 74, lin. 65 ff.)

Albertus Magnus, *De IV coaequaevis*, 4.69, p. 707
Albertus Magnus, *Super quattuor sententiarum*, 29.3, p. 206
Albertus Magnus, *Quaestio de luxuria*, 3, p. 151
Albertus Magnus, *Super Ethica*, Prologus, p. 1
—, 1.13, p. 76

i) p. 78:
Definition and comparison of the theoretical and practical intellect – *ergo prima virtus humanae animae est ...*

Dominicus Gundissalinus, *De anima*, 10, p. 85, lin. 5–15 and lin. 20–33 (no attribution)
Albertus Magnus, *De homine*, 63.3, p. 545b
Albertus Magnus, *De bone*, 4.1.2, p. 226 (ethicus ex probabilibus procedit)
—, 5.1, p. 260
Albertus Magnus, *Super tertium sententiarum*, 4.3.1, p. 416
Albertus Magnus, *Super Ethica*, 6.16, p. 491
Albertus Magnus, *Ethica*, 6.1.5, p. 402

j) p. 79:
To both intellects belong firm opinion and ambiguous opinion. Definition of both terms – *unagitatque autem harenis virtutum habet sententiam et opinionem (cf. Isaac Israeli, De definitionibus, p. 340)*

Dominicus Gundissalinus, *De anima*, 10, p. 85, lin. 9 and lin. 18 (no attribution)
Alexander of Hales, *Glossa in quattuor libros sententiarum*, 3.24, p. 286, lin. 16 (no attribution)
Albertus Magnus, *De homine*, 53.1, p. 497b (no attribution; *opinio vero ...*)
Albertus Magnus, *Super primum sententiarum*, in prologum expositioni. p. 12
Vincent of Beauvais, *Speculum naturale*, 27.54, p. 1955 (no attribution; *opinio vero ...*)
Bonaventura, *In quattuor libros sententiarum*, 3.24.2.3, p. 520 (no attribution)
Peter Hispanus, *Scienza libri de anima*, 10.10, p. 469 (no attribution)
Thomas Aquinas, *Scriptum super sententias*, prologus, p. 24 (sententia secundum Avicennam est ...)
Thomas Aquinas, *De veritate*, 14.1, p. 436 (no attribution; *cum formâdine alterius ...*)
—, 14.5, p. 437 (ut dicit Isaac et Avicenna)
—, 14.9, p. 466 (no attribution)
Thomas Aquinas, *De anima*, 1.4, p. 21, lin. 184 (no attribution)
Thomas Aquinas, *De move*, 3.9, p. 83 (no attribution)
Thomas Aquinas, *Expositio libri posteriorum*, 1.1, p. 6 (no attribution)

k) p. 80:
The practical intellect needs the body, the theoretical not always – *intellectus vero ...*
The soul has the capacity to perfect itself from the theoretical intellect and to protect itself from the practical intellect – *sed substantia humanae animae* ... — John Blund, Tractatus, 22, p. 82, lin. 7 (no attribution)

**V, 2**

a) pp. 81–2:
There is a substance in human beings which grasps the intelligibles: it is not a body nor subsisting in a body as a form or faculty – *quod in homine est aliqua substantia* ...

Dominicus Gundissalinus, De anima, 2, p. 37, lin. 33 (no attribution)
cf. John Blund, Tractatus, 22, p. 80, lin. 4 (no attribution)  
Albertus Magnus, De homine, 2, 2.2, p. 15a (et quidam *metiemes* etiam iustum ponit) *I*oTentausus et addit unam quae sumpta est ab Avicenna*

Albertus Magnus, De anima, 3.2.14, p. 196 (valorem tamen in hoc capitulo breviter decem inducere ex quibus hoc praebentur Peripateticis et praecipue Avicenna in *vi. naturalism* )

Albertus Magnus, De natura et origine animae, 2.2, p. 20, lin. 28 – 21, lin. 42 (Avicenna autem ex multibus et per alia media oncudit idem ...)

Petrus Hispanus, Quaestiones libros de anima, 2, 3.4, p. 592 (hoc autem est contra Aristotelem et contra Aquinam et contra annes auctores)  
—— 2.6.1, p. 652  
Thomas Aquinas, Scriptum super sententiarum, ii.19.1.1.c, p. 481
Matthew of Aquasparta, Quaestiones disputatae de anima, 4, p. 58

b) pp. 82–5, lin. 34:
Reason: the intelligible form would be located in either something indivisible or divisible. Refutation of the first alternative – *si enim subjectum intelligibilium* ...

Dominicus Gundissalinus, De anima, 2, p. 38, lin. 2–16 (no attribution)  
Albertus Magnus, De homine, 2.2, p. 15

Albertus Magnus, De anima, 3.2.14, p. 197, lin. 66 (attribute on p. 196, octavum autem ...)  

**c)** pp. 85–9:
Refutation of the second alternative – *restat ergo* ...

Dominicus Gundissalinus, De anima, 2, p. 38, lin. 18 – 39, lin. 5 (no attribution)  
Albertus Magnus, De homine, 2.2, p. 15

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Albertus Magnus, De anima, 3.2.14, p. 197b (attribute on p. 196; si autem recipiatur ...)

d) p. 89:
Another proof: Abstracted intelligibles do not exist locally – *quod possimus etiam probare* ...

Dominicus Gundissalinus, De anima, 2, p. 39, lin. 6–14 (no attribution)  
cf. Jean de la Rochelle, *Tractatus*, 2.1.14, p. 82 (no attribution; operatio virtutis intellectivae ...)  
cf. Jean de la Rochelle, Summa, 112, p. 269 (no attribution; operatio virtutis intellectivae ...)

Vincent of Beauvais, *Spesulum naturale*, 27.33, p. 1941 (no attribution; from Jean’s Summa)

e) p. 92:
Another proof: The intelligibles are infinite in potentiality – *item etiam probatum* ...

Dominicus Gundissalinus, De anima, 2, p. 39, lin. 17–20 (no attribution)  

f) p. 93:
Another argument: The faculty of the intellect would not have knowledge of itself – *dicens igitur quod virtus intellectiva ... oportet ut non intelligeret seipsam* ...

Albertus Magnus, De natura et origine animae, 2.2, p. 20

Albertus Magnus, Summa theologica, III.7.77, p. 104a (secondum ...)

Petrus Hispanus, Quaestiones libros de anima, quatt. questiones, 1.7, p. 71  
Thomas Aquinas, De veritate, 8.6, p. 237 (also draws on p. 96)

g) p. 96:
Sense perception and imagination do not perceive their organs and themselves – *item sensus non sensit* ...

Jean de la Rochelle, *Tractatus*, 2.1.14, p. 82 (no attribution; nulla virtus incorporata ... Also draws on p. 93)

Jean de la Rochelle, Summa, 112, p. 269 (no attribution; nulla virtus incorporata ...)

Vincent of Beauvais, *Spesulum naturale*, 27.33, p. 1941–2 (no attribution; from Jean’s Summa)

Thomas Aquinas, De veritate, 1.9, pp. 29–30  
Matthew of Aquasparta, *Quaestiones disputatae de anima*, 9, p. 156  
—— 13, p. 214  
Bernardus of Trilia, *Quaestiones disputatae de cognitione animalis separatae*, 3, p. 91

h) pp. 97–8:
Faculties that use bodily organs become tired through continuous action – *item quod hoc probat sufficienter* ...

Dominicus Gundissalinus, De anima, 2, p. 39, lin. 24–37 (no attribution)  
Albertus Magnus, De homine, 61.1, p. 519b ( ... sed ex frequenter ...; cf. p. 518: addimus hic decem *rationes* remotas ab Avicenna et Alphaza)

Albertus Magnus, De natura et origine animae, 2.2, p. 20 (intellectus autem a maxime intelligibilbus non laeditur)

Albertus Magnus, Summa theologica, III.7.77, p. 104b (quintum ...)

All parts of the body become weaker after the age of forty, but the intellect becomes stronger — *item omnium partium corporis debilitantur virtutes ...*

Albertus Magnus, *De anima*, 3.2.14, p. 197, lin. 48 (attribute on p. 196; post sexaginta anno)

Albertus Magnus, *De natura et origine animae*, 2.2, p. 20

Albertus Magnus, *Summa theologiae*, II.13.77, p. 104b (sexram ... post annos sexaginta)

Peter Hispanus, *Scientia libri de anima*, 10.4, p. 425 (no attribution; et cum origine ...)

John Pecham, *Quaestiones tractantes de anima*, 2, p. 23

Arguments against the objection that the intellect can be affected by an illness of the body — *quod autem facit nos dubitare ...*

Albertus Magnus, *De borne*, 61.1, p. 521 (obtulit: secondum sententiam Avicennae et Alghazeli duae sunt causae ... Mainly drawn from Alghazel, *Metaphysica*, p. 177)

The soul has two activities: governing the body and perceiving the intelligibles — *dicemus ergo quod substantia animae habet duas actiones ...*

Dominicus Gundissalinus, *De anima*, 10, p. 85, lin. 33 — p. 86, lin. 8 (no attribution)

John Pecham, *Quaestiones tractantes de anima*, 2, p. 25

Conclusion: The soul is not imprinted in the body — *postemus autem hoc latius exponere ...*

John Pecham, *Quaestiones tractantes de anima*, 12, p. 101

The animal faculties assist the rational soul in that they provide particulars which deliver four things — *virtutes animales adiuvant animam rationalem in multis ...*

Albertus Magnus, *De borne*, 59.2, p. 514a-b

Vincent of Beauvais, *Sprennum naturale*, 27.32, pp. 1940-41 (from *De borne*)

Peter Hispanus, *Scientia libri de anima*, 10.10, pp. 464-5 (no attribution; ad rerum vero ...)

Anonymous (MS Siena), *Quaestiones super libros de anima*, f. 136r, p. 403

cf. Thomas Aquinas, *De veritate*, 18.4, p. 538

Matthew of Aquasparta, *Quaestiones disputatae selectae*, 4, p. 302

After acquiring the universals, the animal faculties rather distract than assist. Example of the riding animal which is of no use anymore — *cum autem proficit ...*

Albertus Magnus, *De anima*, 3.2.8, p. 188, lin. 77

—, 3.2.19, p. 206, lin. 52

Thomas Aquinas, *Scriptium super sententiis*, IV.50.1.1.scc3

Thomas Aquinas, *De veritate*, 18.8, p. 557

Thomas Aquinas, *De anima*, 3.7, p. 236, lin. 90 (patet ... falsum est quod Avicenna dicit)

John Pecham, *Quaestiones tractantes de anima*, 30, p. 197

John Pecham, *Tractatus de anima*, 7, p. 25 (... sicut nauta ...)
John Pecham, *Tractatus de anima*, 4, p. 13

h) p. 109:
The soul has the principles of perfection through the medium of the body – *anima autem habet ...*

Albertus Magnus, *Super Diversum de divinis nominibus*, 6, p. 333
Alexander of Hales et al., *Summa theologiae*, II.4.3.1.2, p. 674b
—, II.4.3.2, p. 717b
Vincent of Beauvais, *Speculum naturale*, 24.41, p. 1741
Matthew of Aquasparta, *Quaestiones disputatæ de anima*, 12, p. 197

i) pp. 109-110:
The souls do not become one soul after death since they have different dispositions

*potest autem aliquis dicere quod ...*

Albertus Magnus, *De homine*, 5.3, p. 78 (sed quia Avicenna ...)
Albertus Magnus, *Super ethica*, 6.8, p. 453 (alter dicendum sic etiam dicit Avicenna ...)
Albertus Magnus, *Summa theologiae*, II.12.72, p. 49 (si quis autem dixisset Avicenna quod ...)
—, II.13.77.3, p. 75
Thomas Aquinas, *Scriptum super sententias*, 1.8.5.2.a6, p. 231 (sed quales individua animarum ...)
—, II.17.2.1.c, pp. 424 and 427
Matthew of Aquasparta, *Quaestiones disputatæ de anima*, 10, pp. 172-3
—, 12, pp. 196-7 (... conclusid ...)

j) pp. 110.7 – 111.18:
If the soul were one, it would be knowing and ignorant in all bodies – *si enim est unam in omnibus ...*

Dominicus Gundissalinus, *De anima*, 4, p. 47, lin. 11-20 (no attribution)

k) p. 111:
The soul is not one, but numerically many. Its species is one – *ergo anima non est una ...*

Albertus Magnus, *De anima*, 3.2.13, p. 195, lin. 66
Thomas Aquinas, *De unitate intellectus*, 5.344, pp. 313-14

l) p. 111:
The soul is individuated by something: a certain disposition, faculty, accident, but we do not know these – *sed sine dubio aliqvid est ...*

Albertus Magnus, *De anima*, 3.3.14, p. 227, lin. 70

The soul does not die with the death of the body – *anima non moriatur ...*

Dominicus Gundissalinus, *De anima*, 8, p. 61, lin. 4-5 (a philosophia sic probatur ...)
William of Auvergne, *De anima*, 6.9, p. 165b (multi de expostulibus Aristotelis et sequacibus ipsum in hoc concenentur ...)
Albertus Magnus, *De homine*, 6.1.2, p. 523 (probat pralibus rationibus quod ...)
Petrus de Hibernia, *De longitudine et brevitate vitae*, 4, p. 110, lin. 295 (ad hoc probandum quod non corripit sufficient rationes Avicennae)

b) p. 114:
Everything passes away because of a dependency of some kind – *quia quicquid ...

Dominicus Gundissalinus, *De anima*, 8, p. 61, lin. 5-8 (no attribution)
Albertus Magnus, *De homine*, 6.1.2, p. 527a
Albertus Magnus, *Super secundum sententiarum*, 19.A.1, p. 329a (assigitur dependet ...)
Albertus Magnus, *De anima*, 3.3.13, p. 225, lin. 82
Albertus Magnus, *De natura et origine animarum*, 2.2, p. 21, lin. 62
Albertus Magnus, *Summa theologiae*, II.13.77, p. 103a
Petrus de Hibernia, *De longitudine et brevitate vitae*, 4, p. 110, lin. 296

c) p. 114:
The soul does not depend upon the body in the way of coexistence – *si autem anima ...

Dominicus Gundissalinus, *De anima*, 8, p. 61, lin. 8-11 (no attribution)
Albertus Magnus, *De homine*, 6.1.2, p. 527a (si prima modo, aut simulabas ...)
Albertus Magnus, *Super secundum sententiarum*, 19.A.1, p. 329a (si tamquam abs ex quod est simul in ...)
Albertus Magnus, *De anima*, 3.3.13, p. 225, lin. 87
Albertus Magnus, *De natura et origine animarum*, 2.2, p. 21, lin. 67
Petrus de Hibernia, *De longitudine et brevitate vitae*, 4, p. 110, lin. 300

d) p. 114:
The soul does not depend upon the body in being posterior to it – *si autem anima ...

Dominicus Gundissalinus, *De anima*, 8, p. 61, lin. 14-33 (no attribution)
Albertus Magnus, *De homine*, 6.1.2, p. 527b (paraphrase, sic ut prius ut causa ...)
Albertus Magnus, *Super secundum sententiarum*, 19.A.1, p. 329a (paraphrase, sic ut prius ut causa ...)
Albertus Magnus, *De anima*, 3.3.13, p. 226, lin. 19 (paraphrase, sic ut prius ... per causam ...)
Albertus Magnus, *De natura et origine animarum*, 2.2, p. 21, lin. 77 (paraphrase, sic ut aliud quod est prorsus ...)
Petrus de Hibernia, *De longitudine et brevitate vitae*, 4, p. 110, lin. 306 (ad ... tamquam et prorsus ...)
That which causes the emanation of existence into the soul is something immaterial – attributae autem esse animae...

Albertus Magnus, De homine, 17.3, p. 149a (item, ibidem ...)

g) p. 118:
The soul does not depend upon the body in being prior to it – sed tertia pars ...

Dominicus Gundissalinus, De anima, 8, q. 62, l. 35 – q. 62, l. 31 (no attribution)

Albertus Magnus, De homine, 61.2 (paraphrase, sicut a posteriori ...)

Albertus Magnus, De natura et origine animae, 3.3.13, p. 37 (paraphrase, sicut a posteriori ...)

Petrus de Hibernia, De longitudine et brevitate vitan, 4, p. 111, l. 332 (... tamquam a posteriori ...)

b) p. 120:
Another reason why the soul does not perish: Simple things do not combine the actuality to persist and the potentiality to perish – dicentur igitur quod ...

Dominicus Gundissalinus, De anima, 8, q. 62, l. 33 – q. 63, l. 40 (no attribution)

Albertus Magnus, Super secundum sententiarum, 19.A.1, p. 329b (tamquam ex posteriori ...)

Albertus Magnus, De animal et origine animae, 2.2, q. 22, l. 1 (paraphrase, sicut a posteriori ...)

Petrus de Hibernia, De natura et origine animae, 3, p. 18

Matthew of Aquasparta, Quaestiones disputatae de anima, 10, p. 165

i) p. 122:
In the substance of the soul there is no potentiality to pass away – in substantia ...

cf. Anonymous (d’Alvernay), Peregrinationes, p. 284 (no attribution; sicut corpus postquam exuitur ...)

John Blond, Tractus, 24, q. 91, l. 5 (no attribution)

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Dominicus Gundissalinus, De anima, 5, q. 48, l. 21–3 (no attribution)

---, 5, q. 49, l. 1–4 (no attribution)

---, 5, q. 50, l. 33–4

Albertus Magnus, De homine, 17.3, p. 149a (two quotations)

---, 17.3, p. 152 (et tene rationes sunt ad hoc quod necece sit potest dei formarum)
cf. Albertus Magnus, Super Dionysium de divinis nominibus, 4, p. 137

cf. Vincent of Beauvais, Speculum naturale, 24.85, p. 1773

cf. Thomas Aquinas, Sermones super sententias, II.17.2.2.ad4, p. 413

Matthew of Aquasparta, Quaestiones disputatae de anima, 12, p. 198

---, 12, p. 203

f) p. 118:
That which causes the emanation of existence into the soul is something immaterial – attributae autem esse animae ...

Albertus Magnus, De homine, 17.3, p. 149a (item, ibidem ...)

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INDEX LOCORUM V.5

a) pp. 126–7:
An intellect in actuality causes the human soul to change from knowing in potentiality towards knowing in actuality – dicentur quod anima humana ...

William of Auvergne, De anima, 7.3, p. 205a (... sequaces Aristotelis ... eis (= intellectus agens) actione educantur formarum ...)

Jean de la Rochelle, Tractus, 2.1.19, p. 88 (... probatur ab Avicenna ...)

Jean de la Rochelle, Summa, 115, l. 277

Vincent of Beauvais, Speculum naturale, 27.38, p. 1945 (from Jean, Summa)

Grosestene, Commentarius in de divinis nominibus, p. 150, l. 45 (no attribution; intelligibilita ... quae coniunctae intellectus faciant earc actum intelligentem ...)

Petrus Hispanus, Scientia libri de anima, 10.7, p. 443 (no attribution; causa ignotum dandi ...)

Albertus Magnus, Super secundum sententiarum, I.12, p. 34

Albertus Magnus, Ethica, 10.2.2, p. 625

Albertus Magnus, Summa theologiae, II.1.3, p. 27

---, II.1.4, p. 63

---, II.1.4.2.3, p. 86

---, II.13.73, p. 75

Anonymous (MS Siena), Quaestiones super liberum de anima, f. 135va, p. 401 (no attribution, intellectus agentis est ...)

Thomas Aquinas, De eteritate, 10.8, p. 325 (quidam ... ponerentur, ... semper actum intelligit ...

---, 11.1.1, p. 150 (eisam ponunt ...)

Thomas Aquinas, Summa contra gentiles, 3.87, p. 267 (... facit ... intellecta in actu)

Thomas Aquinas, Prima pars Summae theologiae, 1.84.4, p. 320 (... posita <species> in intelligentia agenti)

John Pecham, Quaestiones tractantes de anima, 5, p. 60 (... intelligit in effectu des formarum intelligibilis ...)

Matthew of Aquasparta, Quaestiones disputatae de anima, 7, p. 125

Bernardus of Trilla, Quaestiones disputatae de cognitione animae separate, 1, p. 24 (... intelligit per impressionem quam recipit ab intellectu agenti ...)

b) p. 127:
The relation of this intellect to our souls is like that of the sun to our vision – cuitus comparatior ...

Dominicus Gundissalinus, De anima, 10, q. 88, l. 11 (no attribution)

cf. John Blond, Tractus, 25.3, p. 102, l. 19 (no attribution)

Anonymous (?Gauhtier), De anima et de potentia eius, p. 51, l. 464 (no attribution; talis comparatio ...)

---, p. 51, l. 453 (in hac erat Avicenna quod ponit ... separatum ... sicut est separatum a visum)

Anonymous (Callus), De potentia animae et visus, p. 156, l. 3 (... quidam philosophorum ... separatum)

William of Auvergne, De anima, 5, q. 122a (sicut animarum materiarum ... est poeniter ... Aristotelis et sequaces eius ...)

---, 7, q. 205a (philosophus ... comparationem lucit ...)

---, 7, q. 210a (Aristotelis ... intelligentiam agere separatum ... posuit tamquam solum quendam ...)

Jean de la Rochelle, Tractus, 2.1.17, p. 87 (sicut dicit Aristotelis et alii philosophi, intellectus agenti se habet ad fantomatam ut lux ad colorum)

cf. Alexander of Hales et al., Summa theologiae, II.1.4.2.3.1.2, p. 452b (no attribution; ... agente primo illuminator ...

Bonaventura, In quatuor libros sententiarum, II.24.1.2.4, p. 568a (no attribution; quidam nuncque dicere voluerunt quod intellectus agentis sit intelligentia separata ... sed iste modus dicendi fuisse est)

Petrus Hispanus, Scientia libri de anima, 10.7, p. 446 (no attribution; ut huc solis ...)

cf. Albertus Magnus, De homine, 53.3, p. 463 (in hac suntentia intelligit esse et Avicenna in ss. de naturalibus"

Albertus Magnus, Super Ethica, 6.8, q. 451 (alter dicendum quod sicut dicit Avicenna ... intellectus agentis est pars humanae animae esentialis, non quod intellectus agenti et possibilis sint diversae essentiae ...)

Albertus Magnus, Summa theologiae, II.1.4.2.3, p. 86
Vincent of Beauvais, Speculum naturale, 27.42, p. 1947
Anonymous (MS Siena), Quaestiones super librum de anima, f. 135va, p. 401 (no attribution; a quid uadem discretionem quod sit aliquod separatum ...)
Thomas Aquinas, De veritate, 11.3, p. 357 (conversum ... philosophorum qui ponunt ... separatam ...)
Thomas Aquinas, Summa contra gentiles, 2.76, p. 480 ( nec intellectus agens est vinos in omnibus ...)
Thomas Aquinas, De anima, 3.4, p. 270, lin. 89 (no attribution; separatam ... iterum autem non voluerit esse separatum ...)
Ps.-Henry of Ghent, Quaestiones in librum de causis, 21, p. 55
Anonymous (Vennebusch), Quaestiones in tres libros de anima, 3.67, p. 293 ( ... positio et Avicennae qui ponebant agentem substantiam separatam ...)
John Pecham, Quaestiones tractantes de anima, 3, p. 60 (sine operetio est ... sic ...)
Thomas Aquinas, Summa contra gentiles, 3.16, p. 332 (aliqui ponebant intellectum agentem esse substantiam separatam, ut Theophrastus et Avicenna ...)
Bernardus de Trilla, Quaestiones disputatae de cognitione animae separatae, 1, p. 24 (quem posuit substantiam separatam separatum)

Dominicus Gundissalinus, De anima, 10, p. 88, lin. 17 (no attribution)
——, 10, p. 88, lin. 27-32 (no attribution)
Anonymous (de Vaas), De causis primis, 10, p. 130 (no attribution; diciamus ergo quod ...)
Albernus Magnus, Super Dunsartius de coelestis hierarchia, 2, p. 38 (fluent formas ab intellectu agente ...)
Dominicus Gundissalinus, De anima, 10, p. 89, lin. 27-32 (no attribution)
Dominicus Gundissalinus, De anima, 10, p. 91, lin. 4-13 (no attribution)

William of Auvergne, De anima, 5.5, p. 117a (no attribution; idoneitas recipendi formas intelligibiliter ...)
Jean de la Rochelle, Tractatus, 2.1.22, p. 93
Jean de la Rochelle, Summa, 117, p. 280
Petrus Hispanus, Scientia libri de anima, 10.7, p. 447 (no attribution; ascimtuntur autem ...)
Albertus Magnus, De homine, 37.4, p. 329 (et tunc preparat imagines ...)
Dominicus Gundissalinus, De anima, 10, p. 90, lin. 40 - p. 91, lin. 3 (no attribution)

Dominicus Gundissalinus, De anima, 10, p. 90, lin. 6-18 (no attribution)

Dominicus Gundissalinus, De anima, 10, p. 90, lin. 36-40 (no attribution)
cf. Anonymous (Gicle), Quaestiones de anima, 1.9, p. 43

Dominicus Gundissalinus, De anima, 10, p. 91, lin. 1-3 (no attribution)

Dominicus Gundissalinus, De anima, 10, p. 91, lin. 4-13 (no attribution)

Bernardus de Trilla, Quaestiones disputatae de cognitione animae separatae, 4, p. 116 (sicut aculus ...)

Dominicus Gundissalinus, De anima, 10, p. 91, lin. 4-13 (no attribution)

Bernardus de Trilla, Quaestiones disputatae de cognitione animae separatae, 4, p. 116 (sicut aculus ...)

Dominicus Gundissalinus, De anima, 10, p. 89, lin. 27-31 (no attribution)

Petrus Hispanus, Scientia libri de anima, 10.10, p. 463 (no attribution; prsum vero differentiam ...)

Dominicus Gundissalinus, De anima, 10, p. 89, lin. 31 - p. 90, lin. 4 (no attribution)

Petrus Hispanus, Scientia libri de anima, 10.10, p. 463 (no attribution; intellectus enim ...)

Albertus Magnus, De homine, 59.2, p. 515a ( ... modi aduendi intelligibili ...)

Dominicus Gundissalinus, De anima, 10, p. 90, lin. 6-18 (no attribution)

The intellect is able to multiply concepts out of one and to reduce them to one – ergo intellectus habet potestatem ...
The intellect’s conception varies according to its objects – sed dicemus quod formatio intellectus differt …

Dominicus Gundissalinus, De anima, 10, p. 91, lin. 14–19 (no attribution)

Bernardus of Trilia, Quaestiones disputatae de cognitione animae separatae, 4, p. 116

V,6
a) pp. 134:
The soul comprehends by grasping the form of the abstracted intelligibles … – anima intelligit eo quod apprehendit …

Dominicus Gundissalinus, De anima, 10, p. 89, lin. 5–14 (no attribution)

Albertus Magnus, De homine, 55.5, p. 472a (quia quidem sunt per se intelligibilia ut dicit Avicenna)

—, 57.2, p. 491a (no attribution; omnia intelligibilia demodata sunt a materia … vel nuda per se ipsa)

—, 58.1, p. 499a,b (two quotations)

—, 58.1, p. 501a

Vincent of Beauvais, Speculum naturale, 27.44, p. 1948 (from De homine, p. 472)

b) pp. 134–8:
Refutation of the claim that the soul becomes identical with the forms which it comprehends – in eo vero quod intelligit ceteras formas …

Dominicus Gundissalinus, De anima, 10, p. 89, lin. 4–5, lin. 16–18, lin. 14–15

Thomas Aquinas, Sententiae super sententiis, IV.49.2.1 ad 10

cf. Albertus Magnus, De homine, 57.2, p. 491b ( … scientia et intellectus esse unus)

cf. Vincent of Beauvais, Speculum naturale, 27.50, p. 1953 (from De homine)

c) pp. 138–41:
There are three different kinds of conceptualizing – dicemus quod formari intelligibilia fit tribus modi

Dominicus Gundissalinus, De anima, 10, p. 91, lin. 20 (no attribution; p. 91, lin. 20 to p. 96, lin. 15 is a long quotation of the rest of this chapter)

Albertus Magnus, De homine, 59.2, pp. 514b–515a ( … tribus modis …)

d) p. 143:
There is no ordering or multiplication of forms in the pure <separate> intellect – debes etiam scire quod in nostro (mistake) paro intellecto …

Dominicus Gundissalinus, De anima, 10, p. 92, lin. 34 (no attribution)

Petrus Hispanus, Scientia libri de anima, 10.7, pp. 448–9 (no attribution; in anima igitur …)

e) p. 146:
Question: Are comprehended intelligibles stored in some kind of storing-place? –

dicemus nunc de humanis animabus …

Dominicus Gundissalinus, De anima, 10, p. 93, lin. 27 (no attribution)

Petrus Hispanus, Scientia libri de anima, 10.7, p. 447 (no attribution; at vero formae nudae …)

Albertus Magnus, De homine, 57.5, p. 495b (haec est quæstio Avicennae)

f) p. 146:
Refutation of two possible answers – iam autem diximus quod corpus …

Dominicus Gundissalinus, De anima, 10, p. 93, lin. 32 (no attribution)

Petrus Hispanus, Scientia libri de anima, 10.7, pp. 447–8 (no attribution; erts vero est …)

Thomas Aquinas, Summa contra gentiles, 2.74, p. 469 (primum autem hortum trivium)

Simon of Faversham, Quaestiones super tertium de anima, 9, p. 332 (… in alia virtute habente organism …)

g) pp. 146–7:
Another refuted answer: The soul is like a mirror – Aut dicitur quod …

Dominicus Gundissalinus, De anima, 10, p. 93, lin. 36 (no attribution)

Petrus Hispanus, Scientia libri de anima, 10.7, p. 448 (tamquam speculo offeratur …)

Albertus Magnus, De homine, 57.5, p. 497a (et tunc resulant in ipso sicut in speculo …)

Albertus Magnus, De anima, 3.3.10, p. 220, lin. 87 (no attribution)

Thomas Aquinas, Summa contra gentiles, 2.74, p. 469 (operet quod formae …)

Simon of Faversham, Quaestiones super tertium de anima, 9, p. 332 ( … formae per se subsistentes …)

h) p. 147:
The answer is that the form emanates from the active intellect at the will of the soul – aut ex principii agenti emanet … dicemus ergo … esse veram

Dominicus Gundissalinus, De anima, 10, p. 94, lin. 1 (no attribution)

Petrus Hispanus, Scientia libri de anima, 10.7, p. 448 (tamquam speculo offeratur …)

Albertus Magnus, De homine, 57.5, p. 496b ( … non nuncert …)

Albertus Magnus, De anima, 1.3.9, p. 219, lin. 59

—, 3.3.11, p. 222, lin. 95

Thomas Aquinas, Summa contra gentiles, 2.74, p. 469 (vel operet quod species … Haunc … unde conclusit tertium …)

Thomas Aquinas, Prima pars Sommæ theologiar, 1.84.4.c, p. 320 ( … postquam dixit actus intelligere …)

John Pecham, Quaestiones tractantes de anima, 27, p. 187

Bernardus of Trilia, Quaestiones disputatae de cognitione animae separatae, 5, p. 134 ( … flexibilis ad modum passionis …)

Simon of Faversham, Quaestiones super tertium de anima, 9, p. 332 (… religiatur ergo tertium … Opinia Avicennae veritatem non habet …)

i) p. 147:
The essence of the soul does not store intelligibles – et impossibile est etiam …

Dominicus Gundissalinus, De anima, 10, p. 94, lin. 9 (no attribution)

Albertus Magnus, De homine, 57.5, p. 498a (constitut autem Avicenna in hoc quod non est habere memoriam animam rationalem est eadem nobiscum)

Vincent of Beauvais, Speculum naturale, 27.11, p. 1924 (from De homine)

Thomas Aquinas, Prima pars Sommæ theologiar, 1.79.6.c, p. 270 (unde non poterit ponere memoria in parte intellectiva … … remanuit dictis Aristotelis …)
j) pp. 147–8:
Comparison of the intellect with imagination and memory, the storing animal faculties. The intellect does not store, but appre hends – fornis autem memoratas ...

Dominicus Gundissalinus, De anima, 10, p. 94, lin. 13 (no attribution)
Albertus Magnus, De homine, 57.5, p. 499a (et ipse distinguiz ...)
cf. Albertus Magnus, De anima, 3.3.10, p. 220, lin. 80 (no attribution)
Vincent of Beauvais, Speculum naturale, 27.11, p. 1924 (from De homine)
Thomas Aquinas, Scriptum super sententias, IV.50.1.2.c (per quem modum aliquid ...) Thomas Aquinas, De veritate, 10.2, p. 301
—, 19.1, p. 564 (red vict in quodam ...
Thomas Aquinas, Summa contra gentiles, 2.74, p. 469 (coeris autem quaerens ...
Thomas Aquinas, Prima pars Summarum theologiae, 1.79.6.c, p. 270
Thomas Aquinas, De rerum et sensuato, 2.2, p. 108 (non est sicut in potentissimis ...)
Anonymous (Van Steenberghen), Quaestiones de anima, 2.19, p. 227
—, 2.19, p. 228 (red concurrent imagine ...)
Bernardus of Trillia, Quaestiones disputatiae de cognitione animae separatae, 5, pp. 129–30
Simon of Faversham, Quaestiones super tertiam de anima, 9, p. 331

k) p. 148:
That the intelligibles are in the soul, is identical with comprehending them – hoc autem ...

Dominicus Gundissalinus, De anima, 10, p. 94, lin. 23 (no attribution)
Petrus Hispanus, Scientia libri de anima, 10.7, p. 449 (no attribution; censetur igitur ...)
Albertus Magnus, De homine, 57.5, p. 496a
—, 57.5, p. 496b (ad hoc autem quid obiicit Avicenna ...
desidem quod faciam est)
Albertus Magnus, De anima, 3.3.9, p. 219, lin. 56-57
Albertus Magnus, Scientia libri de anima, 10.7, p. 449 (no attribution; sed haec in actum ...
Dominicus Gundissalinus, De anima, 10, p. 94, lin. 23 (no attribution)

l) pp. 148–9:
Answer: Acquisition of knowledge depends on someone's preparedness to make contact with the active intellect from which the forms emanate – discere non sit nisi inquirere perfectam aptitudinem ...

Dominicus Gundissalinus, De anima, 10, p. 94, lin. 26 (no attribution)
cf. William of Auvergne, De anima, 5.5, p. 119a (no attribution; idoneitas recipiendi formas intelligibilis)
Petrus Hispanus, Scientia libri de anima, 10.7, p. 449 (no attribution; adductoriam consilia ...
Albertus Magnus, De homine, 51, p. 442b ( ... formae universales simplex ...

m) p. 149:
The preparedness which precedes the acquisition of knowledge is imperfect – aptitudo autem quae praecedet discere ...

Dominicus Gundissalinus, De anima, 10, p. 94, lin. 29 (no attribution)
Petrus Hispanus, Scientia libri de anima, 10.7, p. 449 (no attribution; sed hoc aptitu ...
Albertus Magnus, De homine, 57.5, p. 497b (dictet etiam ...)
Anonymous (Van Steenberghen), Quaestiones de anima, 2.19, p. 229 (ante addicere ...)

n) p. 149:
About turning away from the active intellect. Example of the eye which is cured – si vero avertitur ...

Dominicus Gundissalinus, De anima, 10, p. 94, lin. 34 (no attribution)
Petrus Hispanus, Scientia libri de anima, 10.7, p. 449 (no attribution; sed haec aptitu ...
Albertus Magnus, De homine, 57.5, p. 497b (dictet etiam ...)
Anonymous (Van Steenberghen), Quaestiones de anima, 2.19, p. 229 (ante addicere ...)

o) p. 150:
The intelligible form which emanates into us most truly is the acquired intellect – quaerem quae intellectus adeptus verissim ...

Dominicus Gundissalinus, De anima, 10, p. 95, lin. 10 (no attribution)
Petrus Hispanus, Scientia libri de anima, 10.7, p. 450 (no attribution; formam ab ea emanant ...
Albertus Magnus, De anima, 3.15, p. 199, lin. 31 (guidam consenti aptitum ...)
—, 3.2.19, p. 206, lin. 50
—, 3.3.11, p. 225, lin. 5 (no attribution)
Albertus Magnus, De quindecim problematibus, 1, pp. 32-3 (adoptum esse dicebant)

d) p. 150:
When the soul is freed from the body, it will connect with the active intellect in a
perfect way and will encounter eternal joys - cum autem anima liberabitur ...

Dominicus Gundissalinus, De anima, 10, p. 95, lin. 14 (no attribution)
cf. Anonymous (d’Alvemy), Peregrinationes, p. 291 (no attribution; ... intelligens agent ... ad cuius societatem cum pervenerit anima sium est assimilata et aequata ...)

William of Auvergne, De anima, 5.2, p. 112b (et quantiorem perfecta communicatio ...)
Petrus Hispanus, Scientia libri de anima, 10.7, p. 450 (no attribution; post separationem ...)

Albertus Magnus, De homine, 61.2, p. 523 (cum ergo liberatur ...)

Albertus Magnus, De natura et origine animae, 2.7, p. 30, lin. 11 (Avicenna autem et Alglassel et alii)

Giles of Rome, Errores philosophorum, 6.18, p. 34 (alterius erravit circa beatitudinem ...)

q) p. 151:
Acquisition of knowledge is of varying degrees - sapientia ... non aequaliter ...

Dominicus Gundissalinus, De anima, 10, p. 95, lin. 18 (no attribution)
Petrus Hispanus, Scientia libri de anima, 10.10, p. 467 (no attribution; in acquisitione ...)

Albertus Magnus, De homine, 60, p. 517b ( ... habet tres gradus ...)

Albertus Magnus, Super ethica, 10.17, p. 779 (application of the theory to the discussion of education and
morals)

Albertus Magnus, De intellectu et intelligibili, 1.3.3, p. 501b

Albertus Magnus, De somno et vigilia, 3.16.6, p. 185a (gradus esse in huissimodi anima intellectualis)

Albertus Magnus, De causis, 1.2.7, pp. 32-3

Matthew of Aquasparta, Quaestiones disputatae de anima, 11, p. 183

r) p. 151:
The sacred intellect – debet vocari intellectus sanctus

Dominicus Gundissalinus, De anima, 10, p. 95, lin. 26 (no attribution)

Albertus Magnus, De homine, 60, p. 518a

Albertus Magnus, Super Ethica, I.3.19 (sanctum et parum intellectum)

---, 2.1, p. 91

---, 10.17, p. 779 (quem Avicenna vocat sanctum)

Albertus Magnus, De anima, 3.3.11, p. 223, lin. 24 (intellectus vocatus sanctus a philosophis)

Albertus Magnus, De intellectu et intelligibili, 1.3.3, p. 501b

Albertus Magnus, Summa theologiae, II.4.14, p. 196 (quem intellectum Avicenna vocat sanctum et divinum)

e) p. 152:
Definition of intuition (ability to find the middle term) and of acumen – ingenium autem est actus rationis ...

Dominicus Gundissalinus, De anima, 10, p. 95, lin. 35 (no attribution)

Roland of Cremona, Summa theologica, I.33b (Secundum philosophos non est ingenium vis aliquae animae.
Immo differentiam ista ingenii quod est actus rationis ex sua propria vi inventivit medium terminus in
syllogismo. Non solum est vis animae, immo est substitutis ingentis)

Petrus Hispanus, Scientia libri de anima, 10.10, p. 467 (no attribution; verbum ingenium ...)

Albertus Magnus, De homine, 41.1, p. 351b

---, 60, p. 517a

Albertus Magnus, De anima, 3.3.11, p. 223, lin. 27 (no attribution)

---, 3.3.12, p. 225, lin. 10 (no attribution)
cf. Anonymous (Van Steenberghen), Quaestiones de anima, 2.18, p. 227 (sillogismum enim ...)

t) p. 152:
The origin of instruction is intuition – principium autem doctrinae est ingenium

Dominicus Gundissalinus, De anima, 10, p. 95, lin. 37 (no attribution)
Petrus Hispanus, Scientia libri de anima, 10.10, p. 467 (no attribution)

u) p. 152, lin. 1:
The force of intuition varies quantitatively and qualitatively in people – sed different homines ...

Dominicus Gundissalinus, De anima, 10, p. 96, lin. 1 (no attribution)
Petrus Hispanus, Scientia libri de anima, 10.10, p. 467 (no attribution; ... et in hui ...)

Matthew of Aquasparta, Quaestiones disputatae de anima, 11, p. 183

v) p. 153:
To make contact to the active intellect at will is the highest kind of prophethood: the
sacred faculty – possibile ergo est ...

Dominicus Gundissalinus, De anima, 10, p. 96, lin. 7 (no attribution)

William of Auvergne, De anima, 5.7, p. 122 (no attribution; ... in animabus prophetarum ab intelligentia
agente ...) petus Hispanus, Scientia libri de anima, 10.10, p. 467 (no attribution; intellectus communis dicetur et
existent ...)

Albertus Magnus, De anima, 3.3.11, p. 223, lin. 33 (no attribution; efficiuntur prophetantes)

Albertus Magnus, De somno et vigilia, 3.16.6, p. 185a (invenitur anima quae omnia scit per seipsum ut diciet
et est quod intellectum quem Deus incarnatum ...) 
cf. Thomas Aquinas, De veritate, 12.3, p. 374

Giles of Rome, Errores philosophorum, 6.16.16, pp. 32 and 34 (alterius erravit circa prophetiam ...)

V,7

a) p. 154:
Some people say that the soul is one essence and that it performs all its actions by
itself through the different instruments – quaedam enim ex illis est dictio ...
cf. John Blund, Tractatus, 5, p. 14, lin. 24 (dicunt pleures autores quod omnes virei animae sunt una vis)
cf. Albertus Magnus, De anima, 3.5.4, p. 248, lin. 67 (nonnulli dicunt ...)

b) pp. 156-7:
Some maintain that there are different souls in one living being – qui autem disserunt
animas esse multas ...
cf. Alexander Nequam, Speculum, 3.85, p. 350 (dicere igeret philosophi ...)
AVICENNA'S DE ANIMA IN THE LATIN WEST

---, 7.1, p. 94b and p. 97a (et hic fuit error quorundam Pythagoriciorum ... et istic error improbatus est ab
Avicenna ...)
cf. Albertus Magnus, De anima, 3.5.4, p. 248, lin. 86 (no attribution; sunt autem nonnulli ...)
Albertus Magnus, De spiritu et respiratione, 1.2.1, p. 232 (contra autem ista dicta fuit Aristotelis cum tota
Peripateticorum cuius quem sequuntur Avicenna et Avenoes ... et Platonis dogma improbantes)

---, 7.1, p. 94b and p. 97a (et hic fuit error quorundam Pythagoriciorum ... et istic error improbatus est ab
Avicenna ...)
cf. Albertus Magnus, De anima, 3.5.4, p. 248, lin. 86 (no attribution; sunt autem nonnulli ...)
Albertus Magnus, De spiritu et respiratione, 1.2.1, p. 232 (contra autem ista dicta fuit Aristotelis cum tota
Peripateticorum cuius quem sequuntur Avicenna et Avenoes ... et Platonis dogma improbantes)

...Aplice
---, 7.1, p. 94b and p. 97a (et hic fuit error quorundam Pythagoriciorum ... et istic error improbatus est ab
Avicenna ...)
cf. Albertus Magnus, De anima, 3.5.4, p. 248, lin. 86 (no attribution; sunt autem nonnulli ...)
Albertus Magnus, De spiritu et respiratione, 1.2.1, p. 232 (contra autem ista dicta fuit Aristotelis cum tota
Peripateticorum cuius quem sequuntur Avicenna et Avenoes ... et Platonis dogma improbantes)

---, 7.1, p. 94b and p. 97a (et hic fuit error quorundam Pythagoriciorum ... et istic error improbatus est ab
Avicenna ...)
cf. Albertus Magnus, De anima, 3.5.4, p. 248, lin. 86 (no attribution; sunt autem nonnulli ...)
Albertus Magnus, De spiritu et respiratione, 1.2.1, p. 232 (contra autem ista dicta fuit Aristotelis cum tota
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m) pp. 172–3:
Comparison: sun or fire = separate substance, sphere = body, etc. — cuius reiponamus exemplum in naturalibus ...

Dominicus Gundissalinus, De anima, 4, p. 46, lin. 21–33 (no attribution)

Petrus Hispanus, Quaestiones libri de anima, 1.4.2, p. 259 (hoc est exemplum Avicennae)

Albertus Magnus, De homine, 17.3, p. 158a (Summary)

Albertus Magnus, Super primam sententiam, 44.5.2, p. 392 (... et per hoc potest solutio ad totum)

cf. Albertus Magnus, De spiritu et respiratione, 1.1.4, p. 221

Albertus Magnus, Summa theologiae, I.1.4.2.3, p. 86

Vincent of Beauvais, Speculum naturale, 24.87, p. 1774 (from De homine)

Matthew of Aquasparta, Quaestiones disputatiae de anima, 12, p. 196

——, f. 33ra (no attribution;... propterea...)

Albertus Magnus, Summa theologiae, I.1.51, p. 560 (sicut dicit Galenus et Avicenna)

John Pecham, Tractatus de anima, 7, p. 26

b) p. 176:
Since the soul is one, there has to be something from which the body is reigned; this is the heart — unde si anima una est ...

Petrus Hispanus, Quaestiones libri de anima, 2.3.1, pp. 378, 379 and 384

cf. Thomas Aquinas, Expositio super Isaian, 1.5, pp. 11–12 (no attribution; cor enim primo recipit vitam ab anima ...)

Anonymous (MS Siena), Quaestiones super librum de anima, f. 134ra, p. 389 (no attribution; eis organum)

c) p. 178:
The nerves are created at the brain and the venes at the liver. The power of generation is transmitted from the heart to the brain — quapropter creati sunt ...

Alfred of Shrewsbury, De motu cordis, 16, p. 94 (no attribution; a cerebro igitur duob nervi sunt... ut...)

Petrus Hispanus, Scienia libri de anima, 12.7, p. 541 (no attribution; nervi igitur... putantur a corde ad cerebrum ...)

d) p. 178:
We do not have to decide the question of whether the nerves originate in the brain or in the heart — non debet autem nos hoc constingere ...

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a) p. 175:
The principle transporter of the animal faculties is the spiritus — primo igitur dicemus quod... veblcum est corpus subtile, spirituale... quod est spiritus

cf. Anonymous (Gauthier), De anima et de potentiss eius, p. 36, lin. 200 (no attribution; indiget obiecto, medio, organo et spiritu)

Roland of Cremona, Summa theologica, f. 33vb (Avicenna dixit quod spiritus sunt veblcum virtutum) —, f. 33ra (no attribution;... quod est spiritus...)

Albertus Magnus, Summa theologica, I.11.51, p. 560 (sicut dicit Galenus et Avicenna)

b) p. 176:
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d) p. 178:
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Albertus Magnus, De homine, 43.3.5, p. 383a (et est sententia trium philosophorum scilicet Aristoteles ... et Avicenna ... et Averrois ...)

e) p. 179:
The faculties of sense-perception and movement are transmitted from the heart through the nerves to the brain — unde cum creati sunt sibi nervi ...

Albertus Magnus, De homine et vigilia, 2.2.3, p. 142

Albertus Magnus, De motibus animalium, 1.2.2, p. 271 (... Averroes ... et Avicenna ... et aliis quamplures cor et non caput primum movetur ... esse traducere)

cf. Anonymous (Van Steenberghen), Quaestiones de anima, 2.6, p. 205

f) p. 180:
There is not only a transmision from one organ to the other, but also a retransmission with some profit — redibimus autem ad aliud dicentes ...

Petrus Hispanus, Scienia libri de anima, 7.1, p. 302 (no attribution;... cum... lucro ...)

Albertus Magnus, De homine, 35.3, p. 314b (... poste reddit ad ipsum cum lucro ... aliter tamen solvit Avicenna dicens ...)

—, 36.1, p. 320a (... cum lucro ...)

—, 43.3.3, p. 377a (... cum lucro ...)

—, 43.3.5, p. 383a (et licet bepar ...)

Vincent of Beauvais, Speculum naturale, 25.91, p. 1833

—, 25.96, pp. 1834-5 (from De homine, p. 320)

g) p. 180:
The sensibility of the heart (especially touch) is stronger than that of the brain — sensus ipsius cordis ...

Albertus Magnus, De homine, 35.3, p. 314a (sensus cordis ...)

Vincent of Beauvais, Speculum naturale, 25.93, pp. 1832–3 (from De homine)

h) p. 181:
Conclusion: The heart is the first principle from which the animal faculties emanate into the brain and the nutritive faculty into the liver — ergo cor est principium ...

Alfred of Shrewsbury, De motu cordis, 16, p. 88 (no attribution; a corde enim vita animus ...)...}

Alexander of Hales et al., Summa theologica, IV.1.3.1.2, p. 149a (no attribution; sicet ergo ...)

Albertus Magnus, De homine, 43.4.5, p. 383a (et licet virtus nutritiva ...)

Albertus Magnus, De spiritu naturali et operibus eius et oru, 1.2.2, p. 234 (in virtute spiritus naturalis derivatior a corde ...)

Roger Bacon, De multiplicatione specierum, 2.2, p. 102 (species omnium sensibilium sive aut ad caerun quisque est redactus et sive sensibilis sive Aristoteles et Avicenna determinant ...

Anonymous (MS Siena), Quaestiones super librum de anima, f. 134ab, p. 392 (no attribution; organum primum ...

i) pp. 181–2:
Enumeration of the faculties located in the brain: the external senses — de virtutibus
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autem cerebri ...

|Anonymous (Gauthier), De anima et de potentia eius, p. 37, lin. 228 (no attribution; ... continens spiritum visibilibus ...)
|Albertus Magnus, De homine, 53.3, p. 314a (av. de naturalibus in fine)
|—, p. 314b (sum ergo nervi sentiendi nascantur ...)
|Anonymous (MS Sienna), Quaestiones super libro de anima, f. 134va, p. 393 (no attribution; niemandum ergo quod ab ista anteriori parte cerebri ...)
|—, f. 134va, p. 394 (et quod virtus gustativae ...)

j) pp. 182–3:
The internal senses — virtus vero formalis ...

|Alfred of Shareshill, De motu cordis, 3, p. 12 (no attribution; cerebrum vero ... acceptionis ... regimen tenet)
|—, 15, p. 81 (no attribution; eorum autem proprietatis ...)
|Albertus Magnus, De homine, 53.3, p. 314a (av. de naturalibus in fine)
|—, 35.3, p. 314b ( ... sensus communis sit ad quem terminantur sensus proprii ...)
|cf. Thomas Aquinas, Scripturn super sententiis, IV.49.3.1.2.2 (subjectum delectationis est speciei corporalis ...)
|cf. Thomas Aquinas, De veritate, 18.8, p. 558 (no attribution; ... cerebrum autem proprietibus ...)
|aequissimae appetitio et vis imaginativa et estimativa et sua organa habent)

k) p. 183:
How is it possible to conceive of a mountain with the little organ of imagination?
Answer — potest hic aeterni aliquis opponere dicere ...

|Albertus Magnus, De homine, 42.1, p. 359a

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