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The Medical, the Philosophical, and the Theological Discourses on the Senses

Congruences and Divergences

My deliberations on how human sense perception was conceived in the medical, the philosophical, and the theological discourses of the Middle Ages will be divided into two parts. In order to illustrate the thesis that there may have been dissimilar anthropologies at play in different medieval discourses, I will present two examples, one pertaining to sense perception processes in general, the other to a subdivision of perception that was particularly problematic for Christian theology: sensory perception as a source of sensual pleasure. – The first part is by no means intended as an original contribution. It will merely serve to highlight certain components of a well-known discussion. Its function within the logic of my paper will be to substantiate the claim that the second example I will present, which may be original to some extent, is not an exception but may rather be seen as symptomatic of a more general discursive feature of the period under scrutiny.

The medieval theory of sense perception involves three descriptive levels: firstly, the external senses; secondly, the internal senses and the faculties by which they are governed; thirdly, the brain. Physicians, philosophers and theologians seem not to have differed in opinion with respect to two of these three levels. As far as the first level, the exterior senses, are concerned, this is not surprising. They differentiated the following items: *visus* (sight), *auditus* (hearing), *olfactus* (smell), *tactus* (touch), and *gustus* (taste). We still adhere to this classification today. The other level with respect to which the medical, theological, and philosophical anthropologies largely agreed was the assumption that the data collected by the external senses were processed in the brain, and that this organ was divided into three ventricles (*ventriculi*), each with a specific function in processing these data.

Physicians based this model on their findings resulting from dissections. Herophilus of Alexandria (3rd century BCE) seems to have been the first to have practiced such dissections.¹ While Herophilus distinguishes four ventricles, the

¹ His writings have not been transmitted directly; they are known to us only through Galen (2nd century CE). See D. H. M. Woollam, “Concepts of the Brain and its Functions in Classical

first two were described as forming a pair in the front part of the brain already from the very beginnings of the written medical tradition.² Accordingly, the three ventricles constituted the standard model for conceptualizing the brain in the treatises of Late Antiquity, of the Arab physicians, as well as of the occidental medical doctors of the Middle Ages.³ This model did not become obsolete until the practice of dissection was effectively renewed by Vesalius—that is, in the 16th century.

The Christian philosophers and theologians accepted this model. St. Augustine himself endorsed it.⁴ Still, the reason for Augustine's adoption of the concept was not its empirical irrefutability, or, as one should rather say, the reliability he would have attributed to Galen's report on the dissections performed by Herophilus. According to the church father's explanations in *De trinitate*, the truth of the model of three ventricles is guaranteed by the analogy of the human mind with the one who had created it *ad imaginem et similitudinem suam*, the Trinitarian God.⁵

What physicians on the one hand, and philosophers and theologians on the other, could not agree on were the post-sensory faculties of the mind. The problem this level deals with is the conversion of quantitative into qualitative data. It would be questionable, for instance, to claim that it is the ear as a bodily organ which makes the distinction between noise and sounds. In order to solve

Antiquity", in F. M. L. Poynter (ed.), *The Brain and its Functions. An Anglo-American Symposium*, London, July 15th–17th, 1957, Oxford 1958, 5–18, 12ff.

2 See E. R. Harvey, *The Inward Wits. Psychological Theory in the Middle Ages and the Renaissance*, London 1975, 10; see also Woollam, "Concepts of the Brain and its Functions in Classical Antiquity", 12.

3 As to the wide acceptance of this model see the rich material documented in U. Ernst, "Memoria und Ars memorativa in der Tradition der Enzyklopädie. Von Plinius zur *Encyclopédie française*", in J. J. Berns and W. Neuber (eds.), *Seelenmaschinen. Gattungstraditionen, Funktionen und Leistungsgrenzen der Mnemotechniken vom späten Mittelalter bis zum Beginn der Moderne*, Wien 2000, 109–168, esp. 119–126; see also the detailed characterization, from the perspective of the (disciplinary) history of medicine, in W. Sudhoff, "Die Lehre von den Hirnventrikeln in textlicher und graphischer Tradition des Altertums und Mittelalters", in *Archiv für Geschichte der Medizin* 7/3 (1931), 149–205. The ternary model may be found in Razès, Avicenna, Averroes, Albert the Great and Thomas Aquinas, to mention only the most prominent names (as to the innumerable *minores* who accepted and propagated it, see Sudhoff, "Die Lehre von den Hirnventrikeln" and Ernst, "Memoria und Ars memorativa").

4 In *De spiritu et anima* he states: "Tres namque sunt ventriculi cerebri. Unus anterior, a quo omnis sensus; alter posterior, a quo omnis motus; tertius inter utrumque medius, id est, rationalis." (Chapter XXII, PL 40, 795; it should be mentioned that the authenticity of the text is not uncontested).

5 See *De trinitate* X, xi, 18 (CCL 50, 330f.)

this problem, the pre-modern physicians postulated the existence of inward senses, which organize sensory data so as to produce an adequate image of the surrounding world in our minds.⁶

At the time, internal perception was subdivided in a manner largely analogous to the external organs of perception. But these specific *sensus interiores* should not be discussed at this point; it is rather the more abstract faculties (in Latin: *virtutes*) governing the *sensus interiores* that are of interest here.

In order to contextualize my discussion, I will briefly refer to Avicenna's model of the internal senses as expounded in his famous *Canon medicinae* (ca. 1000 CE). Because of its provenance, this model was not officially recognized in the Christian Middle Ages; with slight modifications in terminology, however, it may be considered common ground with respect to what views the different parties held concerning this aspect of perception. According to Avicenna, the first faculty of the mind is the *sensus communis*: "Common sense is the center at which all the senses converge; it distinguishes between the qualities of the different senses [that is, between sound and taste, for instance]; [and] it adds the element of consciousness to sensation". The *virtus imaginativa*, the second faculty, exists in two different variants: first, it represents "the impressions of the sensible objects received by common sense after the objects have disappeared"; secondly, it is capable of constructing new, virtual images from the elements of real ones, a golden mountain being the standard example (it is thus often called *phantasia* or *virtus phantastica*). The third faculty, the *virtus estimativa* (sometimes also termed *virtus cogitativa*), "perceives the insensible forms connected with sensible objects and knows what is to be pursued and what is to be avoided".⁷ The standard example is that, as soon as a lamb or a human being sees a wolf, the *virtus cogitativa* tells them to flee, giving the corresponding order to the legs.⁸ Finally, the *virtus memorativa*, memory, retains what has been perceived, as well as how it has been assessed.

This theory of internal perception applies to all beings endowed with sense perception, that is, to both humans and animals. Considering the implications of this statement, it is easy to anticipate what the controversy was about: if sense perception is organized in the same way for all animals—including the *animal*

⁶ See H. A. Wolfson, "The Internal Senses in Latin, Arabic, and Hebrew Philosophic Texts", in *Harvard Theological Review* 28/2 (1935), 69–133; see also N. H. Steneck, "Albert the Great on the Classification and Localization of the Internal Senses", in *Isis* 65/2 (1974), 193–211.

⁷ All quotes in the passage above: Wolfson, "The Internal Senses", 96.

⁸ "[...] estimativa: et ipsa quidem est uirtus, qua animal iudicat, quod lupo est inimicus" (Avicenna, *Canon medicinae*, lib. 1, fen. I, doct. VI, cap. 5).

rationale—does that mean that there is no basic difference between human perception and perception as experienced by beasts?

I shall now provide a short sketch of the two conflicting positions. The one held by the theoreticians of medicine is, roughly, the model I already referred to, namely Avicenna's description of the inner senses, or, rather, those parts of it summarized above, which was originally a theory developed by physicians. Medieval medical theory even tends to reduce the faculties mentioned by Avicenna to no more than three.⁹ The reason for this is the thoroughgoing somaticism of the physicians' approach. Since the internal senses have their seat in the brain, and since this organ is divided into three parts, it seems logical to assume that there are three faculties—namely, the capacity of synthesizing data so as to produce images (*imaginativa*); the faculty of evaluating these images (*estimativa*); and the faculty of remembering images after they have disappeared (*memorativa*).

Of course, the theoreticians of an anthropology based on medical findings did not claim that humans were identical to beasts; but they conceived of the difference as a gradual, not as a substantial or fundamental one. Erasistratus¹⁰ had postulated that a human being has more animal spirit (*pneuma psychicon*, the highly sophisticated form of matter transporting sensory data from one ventricle to the other); and Galen had held that “the human brain is of better-tempered substance than that of the beasts”.¹¹ So, medical anthropology would not have denied that there is in fact something we are used to calling “reason” in human beings. Yet, within this framework, there was a tendency to reduce reason “to the temperate complexion of the animal spirit, operating within healthy cerebral ventricles”. Ruth Harvey argues that, as a consequence of this view of the constitution of human beings, the physicians were led “to treat reason as subject to medication, be it by moderate consumption of wine, or by anointing with oil of violets”.¹² I would like to suggest that there is a far more important consequence, namely that a feature traditionally ascribed to human beings and to human beings only—that is, rational choice and hence moral responsibility—becomes a questionable concept.

⁹ See, e.g., Averroes's medical writings (*Colliget*); in his philosophical writings, however (*De anima*; *De memoria et reminiscencia*), he distances himself from this ternary model (Wolfson, “The Internal Senses”, 109–113). I would like to draw readers' attention to the fact that this specific constellation is echoed by the case I am presenting in a bit more detail in the above first section of this paper.

¹⁰ Ca. 300–250 BCE (one generation younger than Herophilus).

¹¹ Harvey, *The Inward Wits*, 36.

¹² All quotes in the passage above: Harvey, *The Inward Wits*, 28.

Taking this latter point into consideration, it is evident that the medical anthropology as outlined above was not acceptable to philosophers, and even less so to theologians.¹³ It was in Aristotle that they found a basis for a somatic yet not exclusively materialist theory of perception. In *De anima*, the Stagirite discusses the difference between the images of actual lines as perceived by the eyes of a human being and the notion of a Euclidean line, which cannot be grasped by sense perception, since it does not exist as a given, material particular. This leads him to differentiate between two kinds of thinking: “that kind [...] which concerns itself with concrete particulars[,] and that which deals with general and abstract notions”—or, as the two kinds were labeled later, the passive and the active intellect, *intellectus possibilis* and *intellectus agens*.¹⁴ Human reason is conceived of as an *intellectus possibilis* that, in order to become effective with regard to the cognizance of the *intelligibilia*, needs a stimulus from outside called *intellectus agens*.¹⁵

Aristotle’s remarks in *De anima* are more vague than what I have tried to summarize here for convenience’s sake. It was Avicenna who was the first thinker to develop an elaborate theory of the human mind based on Aristotle’s suggestions. After expounding on the faculties of the soul according to the medical model, Avicenna claims that human beings have at their disposal an additional faculty he calls *virtus humana rationalis*. He foregrounds the theoretical difference by stating very explicitly: “medici [...] hanc virtutem non consideraverunt.”// “The medical doctors have not taken this faculty into consideration”.¹⁶ The reason for

13 The latter had another reason for considering the medical anthropology outlined above to be unacceptable. The dogma of the Eucharist is based on the assumption that the human mind, at least that of the baptized, is capable of grasping a “real” reality which stands in overt contradiction to the actual sense perceptions. What the believer sees, smells and tastes is bread, but his mind tells him that he is absorbing Christ’s body (bodily and materially and not only conceptually).—A theory of perception acceptable to the philosophers and to the theologians, thus, would have to be able to cope with the problems of rational choice (theologically speaking: of free will) and of the human mind’s capability to cognize a reality beyond perception.

14 For details see J. S. Wilkie, “Body and Soul in Aristotelian Tradition”, in Poynter (ed.), *The Brain and its Functions*, 19–28, 20. See also: L. Spruit, *Species intelligibilis. From Perception to Knowledge, Volume I: Classical Roots and Medieval Discussions*, Leiden/New York/Köln 1994, 36–49.

15 See Albertus Magnus, *De anima*, III, tr. 2, cap. 19: “duo sunt opera agentis, quorum unum est abstrahere formas intelligibiles, quod nihil aliud est nisi facere eas simplices et universales, et secundum est illuminare possibilem intellectum.”

16 Avicenna, *Canon medicinae*, I, fen. I, doct. VI, cap. 5. As to a similar critique of the position of Razès’ *Liber continens* (10th century CE) by his translator Gerard of Cremona see Harvey, *The Inward Wits*, 13. As to Avicenna and his theory of *virtus humana rationalis* see Harvey, *The Inward Wits*, 39–53.

his introduction of this specifically human faculty is that (as Avicenna himself puts it) what characterizes humans is their ability to conceive of general concepts entirely abstracted from matter.¹⁷

Since the *intelligibilia* are not dependent on sense perception, it might have been possible to reconcile the medical and the philosophical theories. But Avicenna precludes all possibility of a compromise when he subdivides the *virtus humana rationalis* into two variants. He first mentions the *virtus rationalis contemplativa*, which is activated by a power exterior to the human soul (that is, by the *intellectus agens*), and which “looks upwards to the universals”; secondly, he introduces what he terms the *virtus rationalis activa*, which “looks downwards to the body, and considers what is right and wrong [...] in the particular incidents of human life. [...] [The] *virtus [rationalis] activa* [...] conducts the [...] [person concerned] in good morals”.¹⁸

In the final analysis, Avicenna performs the following: he “re-defines” the three faculties of medical theory so as “to exclude [...] [abstract] reason”.¹⁹ The rational component of the medical model—that is, the capacity of estimation or cogitation—is reduced to a mere instinct. He then claims that there is an additional, specifically human faculty. The advantage of this reconceptualization is twofold: firstly, Avicenna’s model provides a theoretically satisfactory answer to the problem of how to explain our knowledge of abstract concepts that have no equivalent in the material world perceivable by the senses; secondly, the “active” variant of *virtus humana rationalis* introduces a basis for the concept of rational choice, as opposed to a mere evaluation of sensation based on instinct.

Since Avicenna derives his concept of *virtus humana rationalis* from what Aristotle says concerning *nous* (intellect)—namely that it is immaterial and has no organ—²⁰ the structural identity of the human and the animal brain did not constitute a problem for his conceptualization; but it is easy to imagine that it was difficult to convince the defenders of the medical model using this line of argument. As Avicenna does not limit his idea of a specifically human faculty to the realm of pure abstraction, but rather extends it to the domain of assessing the particulars—that is, of sense perceptions—the medical doctors would have asked “how [...] an immaterial intellect [can] interact with sensible representational devices, whose material character is indubitable because they are embedded

17 “Quae autem est magis propria ex proprietatibus hominis, haec est scilicet formare intentiones universales intelligibiles omnino abstractas a materia” (Avicenna, *De anima*, V, cap. 1).

18 All quotes in the passage above: Harvey, *The Inward Wits*, 47.

19 Harvey, *The Inward Wits*, 52.

20 Aristotle, *De anima* III, 4 (429a 22ff.).

in [...] physiological structures [...].”²¹ And concerning these structures, the physicians could not find any differences between humans and beasts.

If asked to reduce the controversy to its very essence, I might do best by raising the following question: is the human faculty of appreciation a slightly more differentiated variant of the estimative faculty humans share with beasts; or is it an entirely different faculty, which animals do not possess at all, and which makes human deeds categorically different from those performed by animals? If so, this categorical difference would pertain to the set of problems concerning necessity and freedom of choice; what, in the final analysis, is at stake in this controversy, is nothing less than the question of whether a human being is to be held responsible for what he or she does; or whether his or her acts are mere reactions contingent on bodily conditions.²² Deviant behavior, within the latter model, would be explained as a consequence of a partial malfunctioning of the bodily organs, hence be curable by medicine or psychotherapy, without entailing something we call “guilt”.

The question remained unresolved during the Middle Ages. The changes introduced by Christian theology may be deemed minor. For reasons not pertinent here, Thomas Aquinas contested the notion of a transindividual *intellectus agens* as found in Avicenna’s theory. But with respect to the question of whether the processing of sensory data by humans differs from that of animals by invol-

21 Spruit, *Species intelligibilis*, 90.

22 As to human free will and the instinctive acting of animals in Thomas Aquinas see G. Morgan, “Natural and Rational Love in Medieval Literature”, in *The Yearbook of English Studies* 7 (1977), 43–52. In *Summa Theologiae* Ia IIae, qu. 1, ar. 1 corp. and I IIae, qu. 10 ar. 2 corp., Thomas argues that the spontaneous impulses triggered in any soul by a specific object of desire are supplemented in humans by an exclusive rational faculty, which has as its goal the highest beatitude (*perfectum bonum, quod est beatitudo* [I IIae, qu. 13, ar. 6 corp.]). In contrast to animals, whose sensory soul makes the limbs of the viewer take action spontaneously in order to appropriate the object of desire, in the case of the human being the will is free to follow the imperatives of the sensory soul or not to follow them (in case, e.g., the rational soul realizes that, to stay with Morgan’s example, the desired object, a beautiful woman, is committed or married); see also Ia IIae, qu. 10, ar. 1 corp. and Ia IIae, qu. 17, ar. 7.—As is well-known from the discussions revolving around the concept of *amor hereos*, a behavior the theologians would have assessed as a wilful and hence sinful indulgence in *luxuria*, was conceptualized by the physicians of the age as a malady. The common basis of these two perspectives is that the behavior in question, that is, an unbridled preoccupation with one’s sensual desires, is to be considered problematic, in the sense that it is deviant from what both discourses, medical and theological, regard as “good” behaviour; so, the divergence is not in axiology. The main point is whether or not there is responsibility, whether or not reason is in principle strong enough to control bodily impulses (as to a detailed discussion of the point, focussing on Petrarch’s lyrical poetry, see my *Petrarca. Das Schweigen der Veritas und die Worte des Dichters*, Berlin 2002, 115–161).

ving a non-bodily component, Albert the Great, Thomas Aquinas, and all other theologians of that age accepted the theory first established by Avicenna.²³

As a result, we are confronted with the remarkable situation of two divergent yet co-existing anthropologies within the medieval discourse; and, what is even more astonishing: the issue concerns an essential feature both of traditional philosophical anthropology as well as of Christian anthropology. Was there—already in the Middle Ages—a plurality, a coexistence of different modes of thinking that (logically) exclude each other?²⁴ Was there, that is, a feature we normally take to be characteristic of modernity?

23 “Ad septimum dicendum, quod in receptione qua intellectus possibilis species rerum accipit a phantasmatibus, se habent phantasmata ut agens instrumentale vel secundarium; intellectus vero agens ut agens principale et primum. [...] et ideo intellectus possibilis recipit formas ut intelligibiles actu, ex virtute intellectus agentis, sed ut similitudines determinatarum rerum ex cognitione phantasmatum. Et sic formae intelligibiles in actu non sunt per se existentes neque in phantasia neque in intellectu agente, sed solum in intellectu possibili.” (Thomas Aquinas, *De veritate*, q. 10, ar. 6, ad 7). As to the “vires interiores sensitivae partis”, Thomas differentiates *sensus communis*, *imaginativa*, *aestimativa* und *memorativa*, that is, he is in congruence with the standard model (*Summa theologiae*, Ia, qu. 78, ar. 4). See also the following quotes: “Quia igitur, ut dictum est, anima intellectiva virtute continet id quod sensitiva habet, et adhuc amplius; potest seorsum ratio considerare quod pertinet ad virtutem sensitivae, quasi quoddam imperfectum et materiale. Et quia hoc invenit commune homini et aliis animalibus, ex hoc rationem generis format. Id vero in quo anima intellectiva sensitiva excedit, accipit quasi formale et completivum, et ex eo format differentiam hominis.” (*Summa theologiae*, Ia, qu. 76, ar. 3, ad. 4). “[...] quamvis intellectus sit superior sensu, accipit tamen aliquo modo a sensu, et eius objecta prima et principalia in sensibilibus fundantur.” (*Summa theologiae*, Ia, qu. 84, ar. 8, ad. 1).—Aquinas calls this specifically human faculty, which is the basis of free will, ‘ratio particularis’ and defines it as an application (“applicando”) of the ‘ratio universalis’: “Ipsa autem ratio particularis nata est moveri et dirigi secundum rationem universalem” (*Summa theologiae*, Ia, qu. 81, ar. 3). See also *Summa theologiae*, Ia, qu. 83, ar. 1: “Iudicat enim ovis videns lupum, eum esse fugiendum, naturali iudicio [...]. Et simile est de quolibet iudicio brutorum animalium. Sed homo agit iudicio: quia per vim cognoscitivam iudicat aliquid esse fugiendum vel prosequendum. Sed quia iudicium istud non est ex naturali instinctu in particulari operabili, sed ex collatione quadam rationis; ideo agit libero iudicio, potens in diversa ferri.”

24 The scenario I have just described cannot be conceived in terms of a struggle for discursive supremacy. Throughout the Middle Ages there were quarrels or even violent conflicts about how to define truth. In the realm of theology, these quarrels usually followed the lines dividing Augustinism and Thomism, or later on between realism and nominalism. In the realm of power, such struggles for supremacy translated into the controversy between the Popes on the one hand and the Emperors and Kings on the other, as to whether the former was not only the spiritual, but also the political leader from whom all worldly power derived, or whether the Emperors and Kings received their power directly from God. In all of these conflicts the parties involved did not only consider their positions to be mutually exclusive, but were wholly convinced that only one position, i.e. their own, was right. What is fundamentally different in the anthropological

I will not attempt to answer this specific question in the present paper; my aim is simply to demonstrate the problem as such. I will now present a second, more specific example of what I would like to call a form of medieval anthropological pluralism.

The text I will refer to was written in the thirteenth century by a man whom Heinrich Schipperges, one of the leading twentieth century specialists of the history of medicine, calls the most important medical theoretician of the Middle Ages.²⁵ Like Albert the Great, like Aquinas, the author I quote from was fully aware of the theoretical controversy between medical and philosophical anthropology. He frequently foregrounds the dissent in his writings by referring to the “*controversiae inter medicum et philosophum*”.²⁶

I will limit my discussion of this author’s position to one passage drawn from a text entitled *Quaestiones de animalibus*, a commentary on Aristotle’s *Historia animalium* (known by the title *De animalibus*, after Michael Scotus’s translation into Latin); and, more specifically, to a chapter concerning the sexuality of the *animal rationale*, the human being. The author first posits that, for humans, intercourse has a twofold function: “*generatio*” and “*delectatio*”, procreation and pleasure.²⁷ Next, he provides a detailed description of coitus, and he emphasizes that foreplay—which he treats in all its possible aspects—increases *delectatio*. The pleasure accompanying sexual activities is a result of the friction—as he bluntly

scenario I have tried to describe is that we are confronted with two mutually exclusive models of the functioning of the human brain that, nevertheless, coexist. It should also be noted that the point in question has nothing to do with the so-called concept of the ‘double truth’ in Late Medieval theology. This thesis posits that there is a dimension of truth to which reason can never gain access. But the (theological) thesis of the double truth did not suggest that reason is free to construe a model of the world of its own making. It posits, rather, that an argument based on reason would never be capable of falsifying the revealed truth. The thesis of the double truth is one of the instruments by means of which medieval theology attempted to defend its pretensions to discursive supremacy within a context in which Aristotelian logic had become a sort of guideline for all thinking.

25 H. Schipperges, “Zur Psychologie und Psychiatrie des Petrus Hispanus”, in *Confinia Psychiatrica* 4 (1961), 137–157, esp. 138. Petrus was at the same time (like many professors of medicine of that age) a philosopher, or, as he puts it himself, a “*medicinalis facultatis decor*” and a “*philosophice sublimitatis gubernator*” (quoted by Heinrich Schipperges in his “Grundzüge einer scholastischen Anthropologie bei Petrus Hispanus”, in *Portugiesische Forschungen der Görres-Gesellschaft*, Reihe I, 7 (1967), 1–51, 2).

26 Schipperges, “Grundzüge einer scholastischen Anthropologie”, 15. This conscience of the theoretical differences is not exceptional at all; concerning similar passages in Avicenna see Wolfson, “The Internal Senses”, 97 and Harvey, *The Inward Wits*, 23.

27 All quotes from the text (unprinted to date) are from Schipperges, “Grundzüge einer scholastischen Anthropologie”, 23.

puts it (*confricatio*)—of the sexual organs of the partners during intercourse. And then he makes a most remarkable point, which I would like to quote: “Et quare strictura vulve plus valet ad delectationem quam largitas vulve, vulva enim larga plus valet ad generationem, sed minus ad delectationem”// “And whereas a narrow (tight) vulva is more conducive to pleasure than a large one, a large one is better suited to procreation but provides less pleasure”. On the manuscript’s following folio, he formulates the analogous idea, using these words: “Et quare quando virga est magna et vulva est stricta, maior est [...] delectatio quam si vulva esset laxius [...] et propter hec vulva lata utilior est ad generationem, minus utilis ad delectationem; de vulva stricta est contrarius, sed semper requiritur magnitudo virge.”// “And therefore, when the penis is big and the vulva is tight, the pleasure is greater than in case the vulva is somewhat large; and according to what has been said in this respect, a wide vulva is more useful for procreation, but less useful for pleasure; as to a tight vulva, it is the other way around, but what is required in any case is a big penis”.

To put it in abstract terms: in this passage the human body—or, more precisely, one of its organs—is described with respect to two different functional aspects, *delectatio* and *generatio*. The two functions are conceived as completely independent of one another. A characteristic which may be highly useful (*utilis*) for the fulfillment of one of the functions is less useful for the fulfillment of the other, and vice versa. We do not find any hints at a possible hierarchization of the two functions in the text (in the sense that one of them would be the primary one, for instance); that is, there is no suggestion as to what the optimum for the organ concerned might be. There is no optimum. There are different optima, each contingent on the functional aspect one might wish to privilege.

What seems so provocative about this passage is the following: considered from the viewpoint of Christian anthropology, one of the two functional principles here discussed—that is, generation—is the more legitimate, or rather, the only legitimate function. The other function, pleasure, is the target of reprobation, even of polemical discourse,²⁸ which begins with Paul’s *Letter to the Romans*. As Augustine explains in a famous passage of *De civitate Dei*, the motivation for this attitude is that, in a human being indulging in the pleasures of sex, the body is

28 Petrus Hispanus’s non-reprobing view of this function becomes fully clear when he argues, following Avicenna and contradicting Aristotle, that the pleasure deriving from sex is greater than that which derives from eating sophisticated food and drinking good wine (“Sed coitus est nobilissima operatio, ergo in coitu est ultima delectatio, quam concedo propter causas prius dictas”. [Schipperges, “Grundzüge einer scholastischen Anthropologie”, 21.]).

completely withdrawn from the rule of the will and of reason.²⁹ Sexual pleasure is the most conspicuous symptom of the fallen state of humankind. The “good life”, according to traditional Christian morals, therefore consists in the permanent endeavor to control—or even to annihilate—one’s longing for bodily pleasures.

I have not yet mentioned which author I have been quoting. His name is Petrus Hispanus. He was born in Lisbon between 1210 and 1215, studied philosophy and medicine in Paris, and later became *doctor in physica*—that is, professor of medicine—at the university of Siena. From 1260 on, he lived at the papal curia, was created a cardinal, and in 1276 was elected Pope, under the name of John XXI. or Johannes Lusitanus. John’s theological views were Augustinian.³⁰ It was he who—in 1277—asked the bishop of Paris, Étienne Tempier, to investigate the

29 Sexual desire originated as a consequence of the Fall (“Qua gratia remota, ut poena reciproca inoboedientia plecteretur, extitit in motu corporis quaedam inpudens nouitas [...]” *De civitate Dei* XIV, 17 [CCL 48, 440.]). The specific position of *libido* with regard to the other affects or emotions is theorized by the Church father in XIV, 19: “Quod autem irae opera aliarumque affectionum in quibusque dictis atque factis non sic abscondit uerecundia, ut opera libidinis, quae fiunt genitalibus membris, quid causae est, nisi quia in ceteris membra corporis non ipsae affectiones, sed, cum eis consenserit, uoluntas mouet, quae in usu eorum omnino dominatur? Nam quisquis uerbum emittit iratus uel etiam quemquam percutit, non posset hoc facere, nisi lingua et manus iubente quodam modo uoluntate mouerentur; quae membra, etiam cum ira nulla est, mouentur eadem uoluntate. At uero genitales corporis partes ita libido suo iuri quodam modo mancipauit, ut moueri non ualeant, si ipsa defuerit et nisi ipsa uel ultro uel excitata surrexerit.” (XIV, 19 [CCL 48, 442.]). In the well-known and somewhat pornographic passage in XIV, 16 the bishop of Hippo also gives expression to the idea that *libido* is the most intense of all sensual pleasures. But this is meant in a negative sense. Sensual pleasure submits the entire body to its laws, to the extent that at the moment of orgasm, the specifically human faculties of reason and free will are annihilated. (“Haec [libido] autem sibi non solum totum corpus nec solum extrinsecus, uerum etiam intrinsecus uindicat totumque commouet hominem animi simul affectu cum carnis appetitu coniuncto atque permixto, ut ea uoluptas sequatur, qua maior in corporis uoluptatibus nulla est; ita ut momento ipso temporis, quo ad eius peruenitur extremum, paene omnis acies et quasi uigilia cogitationis obruatur”. XIV, 16 [CCL 48, 438f.]) The private parts follow their own logic and are no longer under the command of the will (“[...] ipsa membra, quae suo quodam [...] iure, non omni modo ad arbitrium nostrum mouet aut non mouet [...]” XIV, 17 [CCL 48, 439.]), the *libido* revolts (successfully) against the mind which wants to keep her under control (“[...] cum tota plerumque menti cohibenti aduersetur [...]” (XIV, 16 [CCL 48, 439.]).—Thomas Aquinas (as the entirety of Christian theology, with the exception of continental Protestantism of the last three or four decades) upholds this position while choosing a more sober rhetorization (“Impeditur enim actus contemplationis, in quo essentialiter consistit vita contemplativa, et per uehementiam passionum, per quam abstrahitur intentio animae ab intelligibilibus ad sensibilia” [*Summa theologiae* IIa IIae, qu. 180, ar. 2]; “delectationes uenerae maxime deprimunt mentem ad sensibilia” [*Summa theologiae* IIa IIae, qu. 180, ar. 2, ad.3]).

30 For all details concerning Petrus’s biography see Schipperges, “Grundzüge einer scholastischen Anthropologie”, passim, esp. 26.

orthodoxy of the philosophy taught at the Sorbonne. The result of this investigation was Tempier's famous condemnation of 219 propositions that constituted a sort of compendium of medieval materialism and rationalism. There will be no need to elaborate on the tremendous importance of this document for the history of thought.³¹

Sexuality is not the only issue treated in Pope John's writings regarding which we might find scientific positions he himself condemned when speaking as a theologian, but it is perhaps the most conspicuous one.³² Should we regard this contemporary of Aquinas as a schizophrenic or a cynic? Certainly not. Similar contradictions can be detected in other authors, and with reference to other problems, during this age.³³

At the beginning of the present paper, I clarified that I would not attempt to resolve the problems raised by my examples. I will simply leave it at saying that, in the "official" discourse of the Middle Ages—that is, what was taught at the universities, what was written by professors, and even what was written by a scholar who later became head of the Church—one may find the sort of structures that Niklas Luhmann refers to as demonstrating (a) "functional differentiation", a term he defines as follows: "Every part of the discursive system is specialised [so] as to fulfil a peculiar function. [...] There is no relationship of functional

31 The seminal publication on this document is H. Blumenberg, *The Legitimacy of the Modern Age*, London/Cambridge MA 1991, esp. 160 and 346f. —I should like to mention in context that N. 136 of the condemned propositions reads as follows "[anathema sit] quod homo agens ex passione coacte agit." (R. Hissette, *Enquête sur les 219 articles condamnés à Paris le 7 mars 1277*. Louvain/Paris 1977, 261). So, what was at stake in the controversy (amongst other materialist assumptions) was the postulate, held by the physicians, that the longing for sexual pleasures is something "natural" that, as such, cannot be disciplined by the free will.—It is not possible to resolve the problem by assuming that Tempier would have acted in a more radical way than desired by the Pope. As a theologian, John XXI shared Tempier's positions (regarding this point see Edward Grant's commentary of a partial modern print of the decree from 1277 [E. Grant (ed.), *A Source Book in Medieval Science*, Cambridge MA 1974, 45–50]).

32 Speaking as a professor of medicine, Petrus explains in accordance with the prevalent medical discourses of the time the more or less significant inclination to the *passiones* by referring to the specific constellation of the *humores* in a given human person, the latter being contingent upon the moment of birth (see Schipperges, "Zur Psychologie und Psychiatrie", 143f.). It is, once again, interesting to observe that N. 162 of Tempier's anathematizations targets precisely this astrological determinism.

33 A parallel phenomenon is the complex of contraception and abortion. While such practices were fiercely condemned in theological and moral philosophical texts of the time, they are described in detail in "official" medical tracts, where the (only) criterion of their assessment is their utility in view of exactly the purpose mentioned, the limitation of fertility (see M. H. Green, "Constantinus Africanus and the Conflict between Religion and Science", in G. R. Dunstan (ed.), *The Human Embryo: Aristotle and the Arabic and European traditions*, Exeter 1990, 47–69).

equivalence between the different parts of the discursive system. A given part can neither substitute for another part nor supplement it”.³⁴ What Luhmann describes in his rather abstract terminology is what we are used to calling plurality or pluralism, that is, the acceptance of the fact that there are different views of the world which conceptually exclude one another, yet which are legitimate nevertheless, because they fulfil specific functions considered necessary. Luhmann claims that functional differentiation is a characteristic of modern times, of the era which begins with the discovery of the Americas.³⁵ In pre-modern times, he argues, the discursive system was stratified hierarchically, with the theological discourse on top, delimiting not only what the other discourses (the discourses of philosophy or science, for instance)³⁶ were permitted to treat, but also the way they were allowed to deal with their problems.

Trying to put the conclusions resulting from the above descriptions in a nutshell, one might be tempted to state that there is no apparent structural difference between medieval and modern discourse. The notion that the Middle Ages are radically different from modernity seems to require revision—perhaps it is even the concepts of the Middle Ages and of modernity themselves that need to be revised. As is well-known, there are more than a few medievalists who attempt to attract attention to their publications by advancing such radical ideas. I would be hesitant to go that far. Instead, I would submit for consideration the hypothesis that in the period usually called the Middle Ages, we may discern an acceptance of theoretical plurality in cases of hardly refutable pragmatic bearing. Even theologians and Church dignitaries require the assistance of physicians, from time to time. The Holy Trinity alone is not sufficient to cope with all of the problems human beings have to face; and, as to sexuality, it is a fact that it is not only conducive to procreation, but also to pleasure, whether the latter dimension is problematic or not. There is another point to be taken into account: the myth, or narrative, about this world as created by God— as a world in which he later

34 N. Luhmann, “Das Problem der Epochenbildung und die Evolutionstheorie”, in H. U. Gumbrecht and U. Link-Heer (eds.), *Epochenschwellen und Epochenstrukturen im Diskurs der Literatur- und Sprachgeschichte*, Frankfurt a. M. 1985, 11–33, 23 (my translation); see also N. Luhmann, *Gesellschaftsstruktur und Semantik. Studien zur Wissenssoziologie der modernen Gesellschaft*, volume 2, Frankfurt a. M. 1981, 177–182.

35 For a detailed argumentation concerning this claim see also my “The Traditional Cosmos and the New World”, in *Modern Language Notes* 118/2 (2003), 363–392.

36 I should like to stress that I am not dealing with different strata of discursive knowledge when I make the above claim. Common knowledge (*doxa*) and scientific or scholarly knowledge (*episteme*) are, of course, in many cases divergent, but most typically in the sense that popular discourses reproduce obsolete features of epistemic knowledge. The question at issue above is another one, as it concerns the “serious” strand of discursive knowledge only.

became incarnate, that is, lived in person—has prevented the Christian West from falling prey to an excessive spiritualization in principle implied by the assumption of a higher, non-material “real” reality.³⁷ But this acceptance of matter as one dimension (amongst others) of the world is something different from what Luhmann has in mind when he attempts to theorize modernity as the age of a pervasive functional differentiation. In modern times, not commencing prior to the 18th century³⁸, functional differentiation is not merely accepted, but is a consciously theorized feature of the dominant world model. As such—that is, as part of a given “reality as is”, and not as a symptom of a damaged and fallen world—it produces further, and constantly increasing functional differentiation. What was tolerated in the Middle Ages as a consequence of this world being irremediably imperfect, later became a theoretical device aimed at remedying this imperfect state by way of systematic human activity.

37 Do I have to remind readers to what extent this (qualified) dignifying of matter has changed, beginning in Late Antiquity, the intellectual scenario in the (Latin) West? Still invaluable to the point: E. Auerbach, *Mimesis. The Representation of Reality in Western Literature*, Princeton 2013.

38 Preliminary stages are, of course, to be found in earlier times. The most important example of this may be Machiavelli’s theorizing of the “laws” of power and state as completely independent from moral philosophy and theology. In a Machiavellian vein, the entire corpus of moralistic literature makes claims to a worldly ethics that discards the traditional philosophical and theological ethics. But, as I have argued with respect to Gracián, all of these texts, Machiavelli’s included, avoid making an explicit claim to discursive autonomy; this even applies to Descartes’s positing of reason as capable of orienting humans without the “help” of authority and tradition. The claim is tenable only under the condition of a benevolent God; were the master of the universe a “genius malignus”, all of Descartes’s theorizing would collapse, as he himself concedes. So, finally, it seems to me that it is only in late Enlightenment philosophy, especially in Kant, that we find the theoretical postulate of different autonomous discourses (as to Gracián see my “Jesuitismo y manierismo en el Oráculo manual de Gracián”, in S. Neumeister (ed.), *Los conceptos de Gracián*, Berlin 2010, 15–49).