

THE SENSES IN LATE
MEDIEVAL ENGLAND

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Chapter 2

IDEAS ABOUT THE SENSES

Throughout the Middle Ages, intellectual and popular ideas about the senses were closely intertwined and were a source of mutual inspiration. The range of senses and the manner of their operation indicated by demotic accounts all have similarities with higher, literate views of the subject. Yet there remained important distinctions, some of which can be seen from the vocabulary used to describe perception. The higher culture of cognition, laid out in encyclopaedias or works of theology and natural philosophy, or in learned disquisitions on physiology and medicine, would have been comprehensible to few, although these ideas underpinned notions that were crucial to the day-to-day operation of the Church. These concepts had to be translated into forms that were readily intelligible, in sermons or at confession, in ways that mirrored common beliefs or assimilated those practices to Christianity. Beliefs about the senses were diverse, even if the picture we have of many of them from clerical sources tends to homogeneity. This chapter examines some of the underlying ideas to show both their variety and the relationship between popular understanding and practice on the one hand, and the theoretical on the other.

We are dependent for much of our knowledge of perception in late medieval England on a small group of words that describes the senses and their operation in each of the three principal languages then in use – Latin, Anglo-Norman French and Middle English.¹ The Latin words for the senses – *visus* (sight), *auditus* (hearing), *olfactus* (smell), *gustus* (taste), *tactus* (touch) and *affatus* (speech) – had held their meanings since late Antiquity and their interpretation in medieval sources usually presents little ambiguity. They were well understood by the literate, that is, the clerical community. There was relatively little modification to the range of their meanings and that of related words. For example, *gustare* (to taste) had the sense in classical Latin of ‘to taste a little’, and it also came to mean ‘to listen to’ or ‘overhear’; in medieval England it also had the connotation of ‘to experience’.

The vocabularies of Anglo-Norman French, the vernacular used by the upper classes until the early fifteenth century, and of Middle English, used by all others,

were much more fluid as far as sense terms were concerned. In the thirteenth-century *La lumere as lais*, the five senses were listed as those by which the wicked would suffer unrelenting torment in Hell:

En veue [sight], en oie [hearing], e en guster [taste],
En fleurur [smell], en sentir par taster [sensing by touch] . . .²

The last two verbs in this group, *sentir* and *taster*, held a range of meanings. *Sentir* – here, ‘to sense’ – could also be employed for ‘to think’, ‘to taste’ or ‘to smell’ (*scentir* was a variant form). Both *taster* and its analogue in Middle English, *tasten*, could refer to the sense of touch, as intended here, or to the sense of taste. In the contemporary *Mirour de Seinte Eglyse* the five senses were described as looking with the eye (*garder de oyl*), hearing with the ear (*oyr de oreilie*), tasting with the tongue (*guster de lange*), smelling with the nose (*sentir de nes*), and feeling with the sense of touch (*tucher de tast*).³ Further, the *Mirour* defined the four levels of existence with reference to sensation: being (*estre*), like stones; being and living (*vivre*), like trees and plants; being, living and having sensation (*sentir*), like animals; and being, living, having sensation and reasoning (*resuner*), like man and the angels.⁴

Veer, ‘to see’, held wider meanings, commonly associated today with ‘seeing’, of observation, realisation, recognition, study and consideration; whereas *oir*, ‘to hear’, ‘understand’ or ‘comprehend’, *guster*, ‘to taste’, and *fleurir*, ‘to smell’, were less widely elaborated. *Parler*, ‘to speak’, was sometimes enumerated among the senses in Anglo-Norman sources, a point to which we shall return. *Tucher*, ‘to touch’, also had the sense, as it does in modern English, of ‘speaking about something’. In addition, *odurer* was used for ‘to smell’, and *puir* was used for bad smells, with the adjectives *puant*, for ‘stinking’, and *pulent*, for ‘fetid’ or ‘nasty’. *Escut*, *escout* or *escult* (cf. modern *écouter*), ‘listening’, was usually combined with a verb: ‘to receive a hearing’ (*aver escut*), ‘to give ear to’ (*doner escut*), ‘to pay attention’ (*faire escut*) or ‘to be all ears’ (*estre tut en escut*).

The use of sense words in Middle English is marked by some important differences from the modern language. If *heren*, ‘to hear’, *listen*, ‘to listen’, *seien*, ‘to say’, *sen*, ‘to see’, *smellen*, ‘to smell’, and *speken*, ‘to speak’, all had meanings similar to the present, other words exhibit significant variations and/or wider meanings. *Sense* was not generally employed before the sixteenth century to mean ‘a faculty of perception’: texts speak of the ‘five wits’. *Sensibilite*, however, did have this meaning earlier, of sense as a faculty, as did *sensible*, ‘perceivable’. Besides the dual use of *taste*, for both touch and taste, *savour* was used for both taste and smell, as were *smak* and *smacchen*. The last two also had the meanings both of smelling or inhaling of smoke, and of giving off an odour. *Flavour* referred to odour or fragrance, or again to the smell of fire, but not to taste. *Odour* could refer to the sense of smell; the smell of an object; specifically to a sweet or fragrant smell, or to a bad one, a stench; or to

a mystic, spiritual fragrance. *Scent* was employed in the late medieval period for the sense of smell or an odour, but not before the eighteenth century to mean cosmetic perfumery. *Touch*, besides denoting the faculty of touch, might also mean 'to partake of food' or 'taste'. *Think* is an amalgamation of two similar, but distinct, words in Old English, *þincan*, 'to seem', and *þencan*, 'to think' or 'to reason', perhaps even 'to seem to oneself', the forms of which merged linguistically in Middle English *thinken*, which conveyed the meanings of both earlier words.

These words show areas where linguistic discrimination was limited in the vernaculars, or was so unless texts chose explicitly to make distinctions. Close associations between words for taste and smell have often been the subject of comment, and it has been argued that there is a general law that 'taste' words often move into the 'smell' arena, but not vice versa, as well as a tendency for words related to touch to transfer to taste.⁵ The crucial point, however, is not one of general semantic change, but that words used in common for more than one sense imply no primary division of the ideas relating to these senses in general consciousness. Perception may not generally have been as precisely allocated to a sense as the listings of the sensory faculties imply. There is much of the formulaic about the appearance of five senses in a list, albeit not always the same five. The use of some words to refer to more than one sense, and of *sentir* to refer to almost all the senses, suggests that this distinction may not have been as important in practice as it was in literary convention. Where the horizons for discrimination were limited – or expanded, as with the addition of speech to the sensorium – one has to be careful both to distinguish the context and to ask whether the writer intended a distinction to be made between sensory faculties. Ambiguity in the text, or the use of a word that may represent more than one sense, may represent ambiguity in terms of understanding perception. Although the first part of this book is organised by sensory faculty, many in medieval England may not have thought exactly in this way.

What were the characteristics of the senses commonly recognised by medieval society? Cases of sensory deprivation are helpful in delineating some of these. There is much evidence for these in miracle collections, where deficiencies were made good. Alditha, who was cured at the tomb of St William of Norwich in the 1150s, had been going deaf for a long time: she could only make out the words of those who put their mouth very close to her ear. She was effectively confined to her house, fearing the derision and disgrace that her deafness would bring if it were detected by others.⁶ The friends of Simon de Cantelu, concerned at his growing deafness, gradually had less conversation with him lest they brought shame on one they loved. He prayed to Thomas Becket.⁷ Their cure relieved both Alditha and Simon of a moral affliction as much as a physical one.

Punishment by mutilation of the sense organs inflicted moral opprobrium as well as physical pain. In the marketplace at Shefford, on 22 February 1275, Thomas Kek of Oxford was caught immediately he cut the purse of Walter Sparuwe. He was put

in the pillory. The town's catchpole later took Thomas out and cut off his ear, before leading him to the boundary of the town to send him on his way: two days later he was found dead in suspicious circumstances on the road to Shillington, three miles away.⁸

Loss of senses was often reported as a consequence of serious illness or madness. Petronilla, a nun of Polesworth, suffered epilepsy and loss of all 'human senses', until cured by the good offices of Thomas Becket.⁹ The daughter of John the Fisherman, who lived near Seaford, was partly disabled after sleeping in the open one summer, and became mad, but was restored to her full senses after visiting Reading Abbey and the hand of St James there, around 1173.¹⁰ Rose Tholus, cured of a cancer in her eye with the spiritual assistance of Simon de Montfort, had been deprived of her senses by the suffering in her head.¹¹ In the late 1490s, William Wotton, of Lingfield in Surrey, had his leg kicked badly by a horse and the injury subsequently led him to lose his senses to madness, from which he recovered miraculously.¹²

Other miracles referred to partial impairment of the senses. A series of witnesses, including Master Thomas of Chobham, the subdean of Salisbury and author of a noted guide for confessors, attested to the cure of one Simon, through the intervention of St Osmund. The event must have occurred late in the reign of King John, while England was under interdict. Simon was paralysed from the waist down and had spent more than a year in this condition at the house of Sampson the Skinner, an elderly and poor man, but it had been too much for Sampson and his wife to sustain him and Simon then moved to the gate of the castle at Old Sarum where the sick used to congregate. While he was living with Sampson, however, Sampson's wife, perhaps tried by their resident, had tested his infirmity by sticking a knife into his shins – Simon had not felt this, nor had he shed blood, nor could he feel the heat of a fire.¹³ In a similar case, a woman whose legs had been crippled, her feet drawn up to her waist, for a period of three years, could feel nothing in the lower part of her body; but, cured while keeping vigil at the tomb of St Hugh of Lincoln, felt the extension of sensation and the cracking of her bones.¹⁴

Complete loss of sensation was one of the signs of death. In July 1306 Gilbert, the infant son of a London goldsmith, was found in a container of water that had been left outside the door to the hall of the house where he lived. Beatrix le Mareschal, Gilbert's nurse, reported that it was believed that Gilbert was dead: his body was completely cold and blue, his mouth was closed and he was not breathing, his eyes were fixed like those of the dead and he appeared to have no sense or movement.¹⁵ A fifteenth-century translation of Guy de Chauliac's treatise on surgery advised what to do in the event of swooning, known widely as 'the little death' and a serious matter, as it was regarded as leading to death itself. Treatment involved stimulating the senses, pulling hair, the ears, the nose, rubbing the extremities, striking the patient and calling him by name, and dousing him in rose-water, or, failing that, cold water.¹⁶ Margery Kempe, approaching Jerusalem, was so overcome with the



2 Old Sarum. An enclosure, to keep away dogs and pigs, was constructed at the gate of the castle by a canon of the cathedral for one Simon, prior to his cure by St Osmund. The cathedral was laid out to the north-east of the castle.

sweetness and grace of God, that she was on the point of falling off her ass, but was helped by two German pilgrims. One, a priest, believing she was sick, put spices in her mouth.¹⁷ Strong stimulus to the senses assisted revival.

Loss of senses also occurred in sleep and at times it was hard to distinguish this from death. The vision of Thurkill, an Essex peasant, took place in October 1206. He remained for two days and nights insensible and immobile, as if in a great sleep or stupor. His wife could not raise him, even on Sunday morning before church, or when she returned, despite shaking him and calling his name. He was woken on the Sunday evening, when his mouth was forced open and a priest was on the point of pouring in holy water.¹⁸ A late fourteenth-century sermon noted that men had five senses and that stopping these wits brought sleep. At this point, man was half dead, unable to work or defend himself against enemies, particularly those that attacked the soul.¹⁹

These examples point to the strong moral connotation that attached to the senses; and this was true at both a popular level and among theologians and philosophers. The wits were the gift of God and they might be taken away by the Devil. The fifteenth-century sermon cycle, *Jacob's Well*, regarded the tavern as the well of gluttony, the Devil's schoolhouse and chapel. Here the Devil did his miracles: 'He takyth away mannys feet, þat he may noȝt go, & his tunge, þat he may noȝt speke, alle his wyttes & his bodyly strengthe.'²⁰ Those without particular senses, either temporarily or more permanently, were often seen as evil, evidence of the Devil at work – and they had powers that were evil. There was something shameful in disability, the loss of limbs or other faculties, as well as the literal loss of the senses in madness. The moral counterpoint to these deficiencies was their miraculous cure, although Sampson's wife showed curiosity, perhaps a desire to expose a charlatan as well as to test the operation of the senses. Practical tests or attempts at revival were of particular urgency, not only from a human point of view, but because of this moral environment.

Vision, hearing, smell, taste and touch are to be understood on most occasions 'the five senses' are referred to, especially by clerical authors. A Becket miracle, recorded by William of Canterbury, described a victim deprived of the five senses in an accident in which the tongue of a bell fractured his skull.²¹ Walter Daniel's account of the death and burial of Aelred of Rievaulx (d. 1167), reported that he retained the integrity of his five senses without diminution until his death, although his speech was very short and disjointed.²² William and Walter probably had little doubt in their minds about which senses were involved: in clerical literature the canonical five were very rarely supplemented, or reduced, and usually only to suit a specific exegetical purpose.²³

Beyond the five senses of Antiquity, there are two prime candidates for inclusion in the late medieval sensorium: speech, as noted above in the context of Anglo-Norman; and the operation of virtues and qualities of holiness in a manner closely akin to touch, which are considered together in the next chapter. In the case of speech, there was inherent confusion between the senses and the organs of sense; but we should not expect a clear distinction that matches our model of the senses. To our notions, speech is immediately different, giving out information, rather than receiving it, but we must set aside that preconception: in medieval terms, too, other senses could act in this way.²⁴

References to speech in some miracles exclude it from the senses, but this evidence is not as straightforward as it may at first seem. The report of the cure of Robert, son of Liviva of Rochester, a boy who fell into the Medway while playing, stated that when found he had neither voice nor senses;²⁵ a mad youth who was brought to Worcester for the intercession of St Wulfstan was similarly deprived of his voice and senses;²⁶ and a little child – later resuscitated by the intervention of St Osmund – who fell into the well of William West at Salisbury, was also without

voice or senses.²⁷ These miracles either occurred or were reported between c. 1180 and 1231, the last two examples in documents probably compiled with the saint's canonisation in mind. At this period the process of canonisation became more rigorous and, as far as England was concerned, it was the Papacy that was the arbiter of sanctity. Accordingly, the documentation was carefully prepared.²⁸ It might be considered that these reports of miracles presented sensory perception in ways that their authors believed would find favour with the Papacy. In this case, however, the common phraseology – *non erat vox neque sensus* – was more than accidental, repeating the words of the Vulgate preceding Elisha's revival of the Shunammite's son.²⁹ In reading these miracles, therefore, the allusion was not necessarily to a framework of sensory perception, but to one that compared the merits of a prospective saint with an established prophet.

Other texts are suggestive, but equally not definitive. Around 1499, a farmer from Malpas lost the ability to speak, as if his tongue had been clipped or pinned by a brooch. Prior to the restoration of his speech, by the miraculous intervention of Henry VI, it was noted that 'he who had been created a man was not like a man', that is, speech was one of man's defining characteristics.³⁰

There is stronger evidence connected to the practice of confession. The Third and Fourth Lateran Councils of 1179 and 1215 introduced a programme that was to reform radically the practical operation of Western Christianity. The legislation of 1215 instituted confession, for all, at least annually, to the priest of the parish. The priest, as part of the process of confession, was to examine the penitent on the principal elements of the faith and on his sins. This change spawned an instructional literature advising priests how to take confession and, in parallel, a no less vigorous production for penitents, on how to live their lives. These are of interest as one of the most common ways of examining the penitent was to look at his actions through the medium of the senses, to establish how he might have committed sins: the senses were the gateways between the external body and the internal soul.³¹ Treatises with schemas mapping the sins to the senses became common from the start of the thirteenth century.³² Although questions about the senses were absent from penitential interrogatories before the start of the thirteenth century, confession, based on the senses, had a much longer pedigree in both public rites for penance and in the literature covering the temptations of the senses, dating back to the early Middle Ages.³³

Robert Grosseteste, Archdeacon of Leicester before teaching in Oxford and becoming Bishop of Lincoln, addressed to parish priests, to monks, and possibly to his own household, several works on penance and confession which are typical of the areas covered, listing the five senses of the body – vision (*visus*), hearing (*auditus*), taste (*gustus*), smell (*odoratus*) and touch (*tactus*) – and the sins that might be associated with them.³⁴ These confessional formulas had enduring influence throughout the later Middle Ages. Without doubt all would have encountered

the five senses in sermons,³⁵ or at confession, as outlined for example in John Mirk's *Instructions for parish priests*, aiming to elicit a wide range of venial sins.³⁶

From time to time, texts in this genre encompass speech, either explicitly or implicitly, as a sense: sometimes as a sixth sense, sometimes combined with taste as 'the mouth'. It has been argued that this conflation of the senses with the activities of the sense organs originated in confusion derived from the attention given to the sins of the tongue, frequently enumerated at great length in penitential treatises. The phenomenon does not start at this point and it is driven in particular by texts in the vernacular, which may owe their model of the senses more to popular tradition than to the classical and clerical inheritance.³⁷ The fourteenth-century *Book of vices and virtues* (derived from Lorens d'Orléans' *Somme le Roi* of the thirteenth century) emphasised the need to govern the five wits of the body by reason, so that each served its office without sin and mistaking, the eyes to see, the ears to hear, the nostrils to smell, the mouth to taste and to speak, and all the body to touch.³⁸ Henry of Lancaster's devotional treatise *Le Livre de seyntz medicines*, completed in 1354, opined that all the senses that God had given him had been diverted from their true purpose and towards sin – senses of hearing, vision, smell and speaking, and other senses which he did not have time to mention. Henceforward his five senses (which he does not itemise) would be like fox-hounds, working for good, rooting out and destroying sin.³⁹ In the morality play the *Castle of Perseverance*, Mankind is shriven of the sins of the five wits, of whatever has been done, seen with the eyes, heard with the ears, smelled with the nose, spoken with the mouth and all the body's bad working.⁴⁰ John Burell, examined for heresy in April 1429 in relation to the nature of the sacrament, noted that his brother and two others had taught him that no priest had the power of making the body of Christ on the altar, that God had created all priests. He went on to list the sensory characteristics of a human body, saying that each priest had a head and eyes to see, ears to hear, a mouth to speak and all the limbs of a man; and to note that the sacrament, the true body of Christ, did not have eyes, ears, mouth, hands to feel and legs to walk, but was bread made of wheat flour.⁴¹ This popular enumeration of the senses appears, at about the same time, in the sermons of *Jacob's Well*. Describing virginal and clerical continence, it was noted that a man should be dead to the world, as a man who had lost his five (in fact, six) wits, 'as sy3te, heryng, swelwyng, smellyng, felyng & speche', and alive to God. In its discussion of chastity, it set out the common designation of the senses as the gates of the soul:

Kepe þi sy3te fro leccherous sy3tes & þin erys from leccherous heryng and þi mowth fro leccherous speche and þi nose fro dyshonest smellyng and þi lymes handys & mowth & þin oþere membrys fro leccherous towchyng. Þese ar þi v [five] wyttes & 3atys [gates] through whiche þe feendys entryth into þe herte.⁴²

These examples also show that perception was widely considered to be a two-way process. *Jacob's Well* noted that men were often overcome by the fiend because they did not keep well the sensory gates to the body. Samson, Solomon and David were overcome by women's wiles – that is, the Devil, partly through the power of women's speech, through its bad qualities, overcame good.⁴³ What was transmitted through the gates of the body was not just the sense of the words, but the moral and spiritual qualities that were associated with the speaker. An early fifteenth-century popular devotional text, *The doctrine of the hert*, copied its thirteenth-century continental exemplar (attributed variously to Hugh of St Cher or Gerard of Liège) in listing the five sensory gates of the body as 'tastyng, touchyng, seying, hiryng, and smellyng', noting that by these gates the soul went out to outward things and outward things also came into the soul. The senses both operated as receptors of information and gave out tangible and intangible information about the individual, which was capable of changing the character of the perceiver and the perceived.⁴⁴

These popular and pragmatic views of the senses need to be set alongside ideas about their operation, as understood by higher, literate culture. An overview of these can most usefully be drawn from encyclopaedias. The philosophical understanding of the senses and cognition was advanced by debate among scholastics, conducted in the universities. It was disseminated by the movement of both teachers and students across Europe, and frequently into ecclesiastical posts; but the finer points of the study of cognition would not have troubled many outside these groups. Aside from the works of spiritual writers and medical works of a practical nature, medieval ideas about the world were an amalgam of classical philosophy (largely Aristotle, Plato and the Stoics) with elements of Christian and pagan tradition. Knowledge grew by systematisation and accretion, with new material and thought built into or set alongside the ideas of earlier authorities, and with finely wrought explanations of its inherent contradictions.⁴⁵ In the medieval encyclopaedia the reader had before him a range of possibilities and an indication of the complexities of debate, much as similar works today make accessible the cutting edge of science, otherwise intelligible to a restricted range of individuals alone.

Before the twelfth century, there were very few works that were encyclopaedic in nature. The most important of these, the *Etymologies* of Isidore of Seville (d. 636), was interested not in the practicalities of life, but in explaining what words meant based on their etymology, by which he largely meant a system of homophones. Thus sight – *visus* – had that appellation because it was livelier (*vivacior*) than the other senses; taste – *gustus* – because it was associated with what came from the throat (*a gutture*).⁴⁶ The work of Rabanus Maurus, *De universo*, c. 840, repeated much of Isidore but gave it an allegorical meaning, an explanation in terms of Christianity and its morality.⁴⁷

These early encyclopaedias were based on three essential principles, ultimately derived from St Augustine: that they might demonstrate the association or presence

of morality in all things; that their purpose was to help elucidate Scripture; and that the study of things that had been created helped one to understand the Creator.⁴⁸ An educated reader would have looked to these texts to understand how the world worked, not primarily for a scientific explanation as we might conceive it, based on experience, but for an explanation drawn from metaphysics and theology, based on a systematic arrangement rather than an alphabetical one. Bartholomew the Englishman's encyclopaedia, *De proprietatibus rerum*, for example, started with God and the angels, before going on to describe all aspects of Creation, from humans (and all parts mentioned in Scripture, including the senses), the earth, heavens and all elements, lands, jewels, metals, plants and animals, concluding with a book on 'accidents' – colours, tastes, liquors and smells; that is, an attribute or quality of an object, but not part of its essence.⁴⁹

From the numbers of manuscripts that survive – there are about 900 copies of Isidore's *Etymologies*, and about 100 of Bartholomew's work, besides early printed editions and translations into English and French – it is apparent that these texts circulated widely, were used extensively in teaching in the schools of Western Europe and were consequently very influential in the diffusion of ideas.⁵⁰ Given their importance, one strand of examples in the present book is drawn from the works of the encyclopaedists.

Bartholomew's early thirteenth-century work was translated into English by John Trevisa between 1394 and 1399, although this translation was little used in the later Middle Ages: most relied on the Latin original or the French translation of Corbichon.⁵¹ Bartholomew worked through the senses from those located highest in the body, proceeding downwards: sight, hearing, smell, taste and touch. The messages from the physical senses were received and interpreted in the brain, in the front ventricle, by what was known as 'the common sense'.⁵² In Book 5, Bartholomew considered in more detail each of the features of the body. In his examination of the nose, his first source was Isidore. Isidore indicated that the nose – *nares* – was the instrument of smelling. It had this name because by it we perceive things that smell and spiritual things, and judge between sweet and stinking smells. Wrathful and rowdy men, rash and ignorant, were said to be, 'without a nose'.⁵³ Isidore used the similar-sounding word *gnarus* (knowing), and its opposite, *ignarus* (ignorant), to indicate that the action of smelling was literally 'knowing with your nose'.⁵⁴ Elsewhere Isidore explained that *spiritus* – with which the spiritual things were related – was the soul after death, what would be called *anima* in a living being. Here, then, was a physical sense which could assess what we might call an intangible quality.⁵⁵

Bartholomew proceeded to explore the physiology of smell, for which he turned to the work of Constantine the African (d. before 1099), a monk of Monte Cassino known for his translations of Arabic medical texts. Constantine held that air was drawn into the brain through the nose, one nostril for incoming air for the brain,

the other for ejecting superfluities. Bartholomew indicated that this, in his view, was not quite right; that the instruments of smell were two teats hanging inside the nostrils; they drew in the air and a sinew came from the brain, giving them the spirit of feeling (sometimes referred to as the 'animal spirit', that is, coming from the *anima* or soul). Returning again to Constantine, he noted that a 'fumosity' or dry smoke (as opposed to a vapour, a wet one) from the air that had been drawn into the nose was joined to the spirit of feeling, which took a likeness of the smoke and presented it in the brain for the judgement of the soul.⁵⁶ From physiology, the discussion has moved to the transmission of odour. Bartholomew focused on disputed territory between Platonic and Aristotelian natural philosophy as developed in the Middle Ages. Aristotle and his followers held that odour was an immaterial quality (known as a *species*) that belonged to an object and radiated from it, which was then captured by the senses and imprinted on the common sense in the brain. Bartholomew and Constantine saw smell as a smoke or vapour, as Plato had done, having a physical quality.⁵⁷

If the transmission of odour was in dispute, so was the physiology of olfactory perception. Galenic medicine had a different view of the operation of this sense. The nose was a passage to carry smell to the brain; the bone separating the nose from the brain was porous and the air passed through for smell to be sensed by two projections from the front ventricles of the brain: in the case of smell, the brain itself was a sense organ.⁵⁸ What Galen's followers did have in common with Bartholomew was the view of the operation of the senses as a form of touch, an area that will be explored in more detail later.

Smell was mapped on to another framework of classical and medieval analysis. To medieval theorists, all matter was composed from one or more of four elements, each with its own characteristics: fire (hot and dry), water (cold and wet), earth (cold and dry) and air (hot and wet). Four related humours – choler or yellow bile, phlegm, black bile and blood – were crucial to the existence of the human body. External influences, known together as the six non-naturals – air; food and drink; sleep and waking; movement and rest; consumption and excretion; and the emotions – might in turn affect the humours.⁵⁹ To Bartholomew, those smells that were similar in complexion to one's own make-up in terms of elements and humours were those that were likely to be found pleasing; those that were dissimilar were likely to be displeasing or even noxious.⁶⁰ At various times the mapping of smell against the elements was different, as the sense did not easily fit against air, earth, fire or water. Plato held that none of the four elements had smell: it arose between them as vapour, or mist, from material in a state of change. Galen, on the other hand, pointed to different characteristics in odours: the odour of roses, for example, he understood as cooling; odours produced by burning, for example asphalt, cassia, myrrh, frankincense, he saw as dry and hot.⁶¹

In this way, Bartholomew's analysis of smell – and the other senses – encompassed

a moral or spiritual standpoint, systems of natural philosophy and of physiology. We now need to turn to these areas of analysis to look in more detail at how each appraised the senses.

In mapping human existence, the Church turned to the six days of Creation to provide a framework for its theologians, in discussions that would encompass both man's soul and his body.⁶² Between 1228 and 1235, drawing on the work of Bede and other commentators, Robert Grosseteste used the days of Creation as a parallel to the life of man. The light of the world illuminated the outward senses of the babe (*infans*) as it came into the world at birth. The five senses were fixed in the body in infancy and childhood, equivalent to the first two days of God's work; and the development of the body progressed in a way that mirrored (and derived its knowledge from) the progress of Creation overall, gaining strength and memory in childhood (*puericia*: the second day); in adolescence (*adolescentia*: the third day), completing its physical growth; in manhood (*iuventus*), attaining wisdom and understanding; in its fifties and sixties (*etas senioris*), facing bodily deterioration of the outward senses, but growth in internal powers; and finally, coming to old age (*senectus*), with the further weakening of the body and death, but the strengthening of the mind, which grew more beautiful and gained control over the harmful, physical senses and desires of the flesh. To Grosseteste, this was the epitome of Creation, advanced age bringing forth the living soul and completing the process of making man in the image and likeness of God.⁶³

While Grosseteste here placed the acquisition of senses at birth, there was debate among philosophers over the point at which the foetus gained both a soul and sensation, a progression from vegetative to animal, and then to human, intellectual soul. The writer of a late fourteenth-century sermon on the conception of John the Baptist noted that the Baptist danced in the womb of his mother, Elizabeth, during the visit of her cousin Mary – and therefore in the presence of Christ. To the writer's mind, this indicated that one should not believe that it was six months into a pregnancy before the soul was coupled with the body, having before that the 'soul' of a plant and then of a beast, and that the Baptist was alive before Christ was conceived.⁶⁴

Once the senses were acquired, theology offered man a choice between the temptations of the flesh through the senses, leading to perdition, and their proper use in devotion to God, or at least in a morally acceptable way, leading to salvation. Discussion of the ethics of sensory perception had a long pedigree from patristic texts, such as Augustine's *Confessions*, onwards.⁶⁵ The senses might be the gateway between the inner and the outer man, but, by the end of the first millennium, they were regarded with rank suspicion by theologians. St Anselm noted that 'delight coming from the senses is rarely good: more often it is truly bad.'⁶⁶ At the start of the thirteenth century, Adam of Eynsham, the biographer of St Hugh of Lincoln, recalled the aptness of the hymn of St Ambrose, *Deus creator omnium*, which, as a

Carthusian monk, Hugh had sung often: 'Once divested of the hazards of the senses, the innermost parts of the heart dream of thee.'⁶⁷ Recounting Hugh's diet and his behaviour as Bishop of Lincoln, when entertaining in his household or as a guest elsewhere, Adam recalled his great detachment from acting, music or the delights of the table, 'as if only his exterior senses were charmed by these sweet delights'.⁶⁸ The snares of the external senses – and attempts to spurn or deny them, or to limit their influence – formed a prominent strand in religious thought and daily life through the later Middle Ages. The Council of London of 1268 aimed to control closely the movements of nuns in order to preserve their innocence. After specifying those places within the monastery to which the nuns might go, it was enjoined that at other times they should remain in the cloister, 'which might enclose them and the senses of her body . . . Thinking about and looking at God alone with the eyes of the mind, they might, in contemplating its sweetness, have a foretaste of eternal life'.⁶⁹ *The cloud of unknowing* noted that even the extreme position of destroying the sensory organs would fail to save the individual from sin.⁷⁰ The focus of confession on the five senses largely maintained this negative way of viewing sensation – and depriving a man of his senses could be a punishment from God.⁷¹

Although it was common among theologians and moralists, not all treatises on confession took this deleterious standpoint. The attitude of Grosseteste to the senses was positive, recognising that these were the channels, given by God, by which one could discover good and conduct oneself well.⁷² The senses might be put to good use. It was probably a representation of the good use of the senses that Langland intended by the five sons of Inwit by his first wife, Sir See-well, Sir Say-well, Sir Hear-well the courteous, Sir Work-well-with-thine-hand, and Sir Godefray Gowell. Their task was to save the Lady Anima (the Soul), until Kynde (the Creator) came for her.⁷³ A sermon, in a collection composed in the late 1380s or 1390s in the Wycliffite tradition, provided a long discussion on the senses and how they might be used for good: sight, to see God's law, that is Christ; hearing, to hear God's word; smell, which indicates to God whether a man is good or evil; taste, for by man's speech we may understand who tastes of God's sweetness, tasting it on the tongue; and touch, to feel Christ's yoke, which is sweet and soft and which draws men upwards and not down to Hell.⁷⁴

There was a long tradition of responding through the senses to the physical presence of the sacred. The early pilgrims to the Holy Places recounted how, in Judaea, they had physically seen the divine, touched it and tasted it. St Jerome made the transcendental connection to the holy, linking the events of a biblical past with his present experience, by the 'eye of faith'. Fourth-century theologians accepted that the Incarnation had legitimised sensory experience as a way of knowing God.⁷⁵ At about the same time, Augustine argued that only senses that transcended the corporeal could know the divine – making use of a set of internal senses that reflected the external ones.⁷⁶ These ideas found their correlate in the theological and devotional

practices of the later Middle Ages, especially in mystical works. The Cistercian, Baldwin of Ford, successively Bishop of Worcester and Archbishop of Canterbury in the 1180s, in his treatise *De duplici resurrectione* (on Revelation 20–1), matched the progress of the ascetic to the progress of the soul, indicating the mystical significance of the five spiritual senses.⁷⁷ *Jacob's Well* put names to the virtues that the spiritual senses described, the five watergates of the soul: understanding (the sight of the eye of the soul), desire (the ear and hearing of the soul), delight (the mouth and swallowing of the soul), the mind (the nose and olfactory abilities of the soul), and consent (the soul's ability to feel).⁷⁸

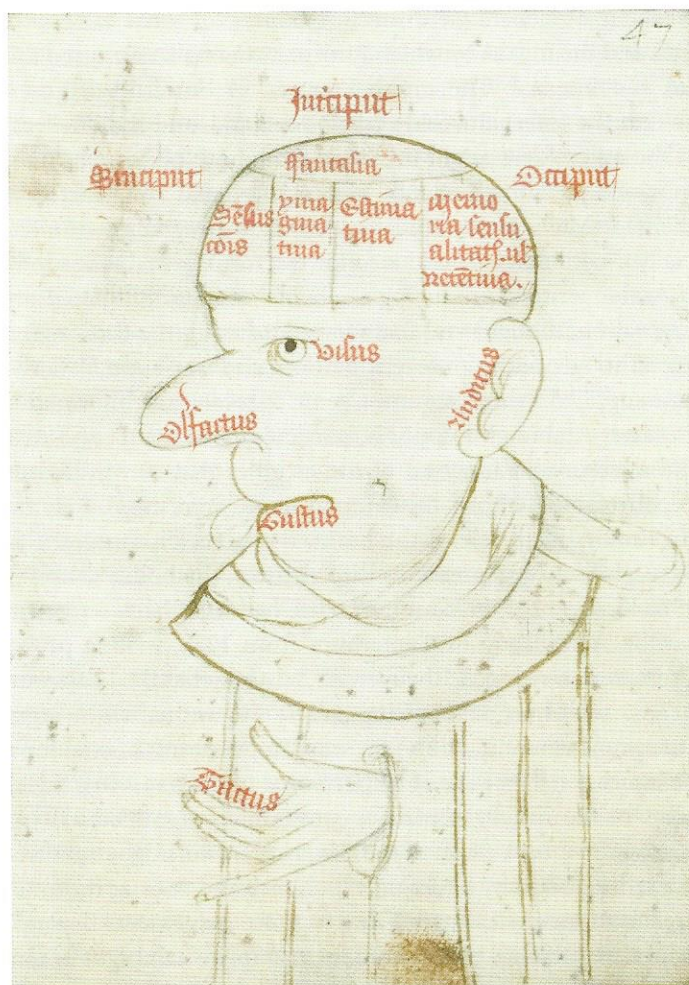
In mystic experience, the sensations of the spiritual senses became physically manifest to the believer. Those who viewed sensory devotion as their object linked their spirituality to the sensual language of passages in the Old Testament, particularly the Song of Songs. But saints are not easy companions and, as one tract alleged, those that tried this spirituality 'travayle þeire ymaginacion so undiscreetly, þat at þe laste þei turne here [their] brayne in here [their] hedes'. The Devil then had the power to 'feyne sum fals liȝt or sounes, swete smelles in þeire noses, wonderful taastes in þeire moþes, & many queynte hetes & brennynges in þeire bodily brestes or in þeire bowelles, in þeire backes & in þeire reynes [kidneys], & in þeire pryve membres'.⁷⁹

In terms of natural philosophy and the study of cognition, from the thirteenth century the emphasis of debates about the nature of the world changed to scientific explanation. This was a consequence of the availability of the full range of Aristotle's works, from c. 1260–80, present in authoritative Latin translations from the original Greek, as opposed to the limited group of works transmitted to Latin scholars through the medium of Arabic. This transition was of major importance, from an educated point of view, in the understanding of cognition and the operation of the senses.⁸⁰ As far as the senses were concerned, there was a good deal to draw on in Aristotle's work, in the *Libri naturales*, and particularly in *De anima* and *De sensu et sensato*.⁸¹ It was immediately productive of increasing and lively debate in the schools and universities of north-western Europe, particularly in the period to c. 1350, resulting from the contradictions between Aristotle on the one hand, medical and theological viewpoints on the other, and the development of rival theories of cognition. These debates centred on how the sense organs worked, the functioning of the common sense – that is, the internal sense that received the information from the external senses – and how information was transmitted to them, as well as how imagination and memory created or recalled sensations. As indicative of the general debate that would have been captured by the encyclopaedists and those trained in the schools, these arguments were important, particularly for the development of late medieval philosophy, but it is not necessary here to do more than sample a range of viewpoints, especially those that find resonances in the workings of perception as it was more generally understood.

Two major areas of debate were the functioning of what were known as the internal senses, and the means by which information was transmitted to the senses, both external and internal. The internal senses, or 'inward wits', were the link between man and the external world on the one hand, and the intellect and spiritual truth on the other. Ideas about this came from both philosophy and medicine, but philosophy accepted the evidence of the latter and constructed its theories around medicine.⁸² Medicine derived its ideas from fragments of Greek medical works, especially those of Galen and his followers, from Greek philosophy and from the works of Arabic writers, producing a scheme of cognition based on three key powers – imagination, thought and memory – located in the three main ventricles of the brain, although with some elaboration and variation.⁸³ Early medieval philosophy had supplied a single common sense to receive the information from the external senses, but Arabic philosophers, particularly Avicenna and Averroës, had elaborated the number and function of the faculties that constituted the internal senses. By the thirteenth century, the internal senses were commonly described as containing, in the first ventricle of the brain, the common sense, the function of which was to receive sense impressions directly from the bodily senses. The establishment of this location for the common sense had itself been a matter of debate. Robert Kilwardby, Archbishop of Canterbury from 1272, writing probably in the 1250s, had attempted to reconcile the view of Aristotle that the heart was the organ of common sense with that of medicine and St Augustine, which argued for the brain.⁸⁴ The common sense did not retain sense impressions; instead it passed them through – the internal senses were often portrayed in diagrams in a linear sequence – to two senses in the middle ventricle, commonly identified as two forms of 'imagination', cognitive and estimative. The former we might now recognise as imagination, a sense of fantasy based on experience and reason; the latter operated more in the realm of instinct, allowing one to make judgements beyond the information contained in the sense impression, for example what might be dangerous or otherwise. The fourth area, located in the rear ventricle, was memory. The number of internal senses that might be identified and their functions were disputed. Roger Bacon and Thomas Aquinas both enumerated five internal senses, but with differing capacities.⁸⁵

Among the earliest Englishmen to engage in detail with this new learning was John Blund (c. 1175–1248). He studied probably first at Paris, then taught arts at Oxford until the interdict of 1209–14, when he may have returned to the Continent. Writing close to 1200, his own treatise *De anima* examined the five senses and the common sense, working from Aristotle's *De anima* and the commentary upon it by Avicenna. In his discussion of taste Blund noted that, according to Avicenna, it was a force or virtue arranged in a broad nerve to receive flavours coming from the outside. To this Blund countered that the nerve was a bodily thing and bodily things cannot perceive; only the soul can. Likewise it was said that taste was a kind

3 The internal and external senses, from a thirteenth-century English manuscript of St Augustine's *De spiritu et anima*. The five external senses are each marked by the name of the sense; the internal senses are listed across the brain, starting with the common sense at the front.



of touch, as it functioned only when it touched something with flavour; but if this were the case, Blund argued, then it would be a form of touch, that is, not a sense by itself. Some said that taste was distinguished from touch in that taste detected flavours, whereas touch distinguished hot, cold, wetness, dryness, weight or lightness. Blund then analysed the action of taste by analogy with hearing and smell: air was the medium that brought both sound and odour; and according to Aristotle, it was saliva that acted as the medium bringing taste through its humidity.⁸⁶

Theories of how information was transmitted to the sense organs were of considerable importance and were reflected in popular beliefs about the operation of the senses. The work of a later writer, Walter Burley (1275–post 1344), an important commentator on the works of Aristotle, was typical of the continuing interest in

questions of cognition and sensory perception. In his *De sensibilibus* (On perceivable things) of c. 1337, he set out the view that there were five internal senses corresponding to the five external ones. The common sense distinguished the information they supplied; cognition distinguished the accidents – colour, number and shape. Burley then discussed the imagination and memory, their location in the brain, and a series of views of the operation of individual senses. He described six different opinions about the way sight functioned. The first argued that the presence of an object alone was necessary for it to be seen. To this he countered that if one looked at the sun, then closed one's eyes or turned away from it to some dark place, there would still be an image of the sun, albeit less bright, then subsequently purple and fading, an after-image. A second view was that vision was the result of the action of the object, being suffered or impressed on sight. A third opinion was that vision resulted from rays going out from the eye to the object; a fourth, that sight resulted both from the presence of the object and rays from the eye mixing together; fifthly that a repeated image (*species*) coming from the object created a visible image (*species*) or act of seeing in the eye; and sixthly, similarly, except that the visible *species* was translated into a spiritual (or intelligible) *species* for the purposes of cognition.

Burley went on to discuss how the senses worked. Sight was comprehended not by the eye, but within the front part of the brain, which was linked to the eyes by the two optic nerves. The perception of sound was not located in the ear, but within an air pocket in a membrane in the brain; smell was also located in the front part of the brain, in a web of nerves. If the operation of these three senses was located in the brain, for the other two it was not. The sense of taste was not in the flesh of the tongue, but in a fine and subtle net – that is, of nerves – within the tongue. The sense of touch was equally not in the flesh, but in a similar net stretched over the whole body.⁸⁷

Burley's discussion of sight touched on the two principal theories of its operation – extramission and intromission – which underlay more widely recognised notions of perception. Extramission was more commonly understood in the earlier Middle Ages as explaining the action of sight. The eye sent out rays of its own, gathering strength from ambient light, which were then returned back to the eye from the objects they touched with an impression of that object. The theory had its origins in Neoplatonism, reworked by St Augustine, who believed the ray was constituted from a kind of fire that gathered behind the pupil and brought back to the eye light or fire from the object. Intromission worked in a way that was in part similar. No ray came from the eye, however. Nothing was seen except as a result of light arising from the object in view, transmitted to the eye through the air by a process known as the multiplication of *species*.⁸⁸ In theory, information was transmitted from an object to the body and into the mind by *species*, a likeness, image or representation of the original. There were three kinds of *species*: *species in medio*, which multiplied

all the way from the object to the sense organs of the body; *species* in the sense organs (sensible *species*), and *species* in the common sense (intelligible *species*). The *species* took with them the accidents of the original, for example its colour. This theory of cognition was grounded in Aristotle and was developed by the 'perspectivists' (as they were known: this theory was especially appropriate to sight), notably Roger Bacon (c. 1220–92) but developing the ideas of Grosseteste, Alexander of Hales and Robert Kilwardby, and is also especially associated with Thomas Aquinas (1225–74), although it was generally accepted. Counter-theories, of Peter Olivi (1247/8–98) and William of Ockham (c. 1285–1347), held that *species* were not necessary, that cognition was intuitive, the result of an impressed quality on the senses, that it was not dependent on *species* and their transmission.⁸⁹ Some held that the visible object was able, in this way, to assimilate the eye and soul to its nature and essence – a tangible contact and change, and one that was commonly understood at a popular level.⁹⁰

A further, important dimension in the understanding of the senses came through medicine and physiology, particularly from Arabic medical works. These became more widely known through the translations of Constantine the African and the medical school at Salerno, among the first to make use of the new translations of Aristotle's *Libri naturales*. The school at Salerno developed the means of exploiting medicine based on the principles of natural philosophy, through teaching and investigation. It employed a series of questions – *questiones physiques* – as a means of teaching. They had a significant influence in England, for example on Alexander Neckham, and on the scientific works of the school based in Hereford; and in the mid-thirteenth century, at Paris, on Englishmen such as Roger Bacon and Robert Kilwardby. Beyond this, they had an enduring presence through the Middle Ages and into the early modern period.⁹¹

Many of the questions were couched as problems, rather than describing, as the philosophical texts did, how the senses worked; and the responses, where we have them, are informative. One of the prose Salernitan questions asked why the man who used cumin – which is both hot and humid by nature – remained pale. The spirits ought to have been roused by the heat and the subject ought therefore to have had a good colour. In this case the cumin was probably taken orally, rather than used purely as an aromatic, and the range of answers is an interesting illustration of how this problem might have no definitive resolution in the scheme of thought. One answer suggested that cumin made the person pale from its substance and not from its qualities. Cumin was pale in colour and, on entering the stomach and liver, it made humours of a similar essence, which nourished the limbs and made them pale following its nature. A second solution argued that cumin was naturally a subtle or fine substance and reduced the spirit – and as it was the spirit that coloured the body, the skin was discoloured. A third argued that cumin was above all wind-inducing, and as the excess of wind is expelled, so the vital spirit is dimin-

ished with it, with paleness and discoloured skin following as a consequence.⁹² Some questions related more directly to sensation: why, for example, did the brain not have feeling, when all the senses came from it? The soul, having its seat in the brain, put the virtue of sensing into the limbs through the nerves that came from the brain; the nerves operated as if they were a part of the brain. How were the nerves capable of feeling, if the brain was not? The brain did not receive movement because of its softness; but the nerves which proceeded from the brain and which were not separated from it were of a mean between hardness and softness, whence they could receive change.⁹³ Collections of these problems, originally destined for learned readers, circulated more widely, leading to the development of more popular interests in science and medicine.⁹⁴

As the senses were central to both cognition and higher truths, it was of some moment to place them in rank. This was a task for philosophers and students of physiology, as much as those of theology. Discussions about the place of vision in Western culture and the dominance of this sense over others have their roots in these exchanges; but one needs to recognise that these debates have their own temporal qualities and context and are conducted within a restricted framework, the high culture of cognition, which would have been understood by few. The debates were also a natural consequence of the great demand within medieval thought for systematisation and enumeration.

A very common order of rank placed vision at the head of the list, followed by hearing, smell, taste and touch. This mirrored the order of the sensory organs, describing them from the top of one's head downwards. It had as its authority Aristotle, in *De anima* and *De sensu et sensato*, the first Latin translations of which were available from the second half of the twelfth century. Although he had not argued explicitly for this ranking, for example recognising the importance of hearing for conveying information and understanding, and touch, Aristotle's treatment of them implied an order.⁹⁵ It was also the order employed by Cicero in his *De natura deorum* and some early Christian authors.

Another order was also current, placing taste before smell. This appeared in the works of Gregory the Great, Rabanus Maurus and, in the twelfth century, in the *Cosmographia* of Bernard Silvestris. To these medieval authors, the significance of the senses – all things had a teleological significance, in this case not very different from those assigned by Aristotle and Plato – was that they helped the inner body to move towards spiritual truth.⁹⁶

Although this order of rank was very common, it did vary if it suited the purpose of the discussion. An early thirteenth-century treatise on taste argued for the primacy of that sense, an argument that would have found favour with many physicians.⁹⁷ Taste might also, but perhaps unusually, have an especial significance in relation to divine revelation, through the physical consumption of the Eucharist.⁹⁸ An author might vary the order, again depending on purpose. Aquinas, for example,

excluded taste and smell from the senses that might appreciate things on aesthetic grounds; here he placed hearing above touch, but reversed the order when elsewhere discussing the volume of information a sense might convey.⁹⁹

The representation of the senses in images could convey an order, but this was unusual. Given the wide range of references to the senses in medieval writing and their significance in the progression of the soul to its salvation, it is both striking and surprising that the senses feature so little among iconographic evidence. The religious cosmology of the Middle Ages was filled with allegorical relationships, such as the Constellations or the Ages of Man. Although the senses had an important place in this view of the universe, they were not usually indicated by anything other than words within a diagram, even if other elements were drawn out.¹⁰⁰ Across Europe, the senses appeared as the subject of works of art very rarely, and even more rarely in England. That this is not just an accident of preservation can be seen from the analysis of the decorative cycles of wall paintings for the palaces of Henry III, based on the extensive evidence of instructions given in administrative documents. This shows other conventional summaries of knowledge, such as *mappe mundi*, for example in the Painted Chamber at Westminster and in the King's Hall at Winchester; but depictions of the senses were absent.¹⁰¹

In so far as we can tell, the senses were not a major feature of decorative art in Antiquity. This meant that few models for depiction passed through to the Middle Ages. Representation therefore took a wider variety of form, although there were some themes that recurred.¹⁰² The earliest occurrences of the motif are all secular, for example on the ninth-century Fuller Brooch, where each of the senses is depicted as a man in the central roundel.¹⁰³ It is also possible that the figure on the Alfred Jewel may represent sight.¹⁰⁴ Literary works – particularly secular works and those in the vernacular – had a longer tradition of linking the senses with a sensuality traditionally associated with women and especially with love poetry. The early fourteenth-century poem 'Annot and John' has five verses working through the senses, comparing the beloved to paragons of sensory perception.¹⁰⁵ In the play *Wisdom*, probably written c. 1465–70, the five internal wits are played by five prudent virgins dressed in white kirtles and mantles, chaplets and kerchiefs. They enter, however, singing a sensuous passage from the Song of Songs.¹⁰⁶ But in iconographical terms, the senses did not make a significant contribution to secular works until the end of the Middle Ages.

Although they were always exceptional, from the thirteenth century, when depictions of the senses occur more often, there were three principal genres of representation: depictions of human figures performing actions associated with a sense; illustrations of the sense organs, sometimes on the body, or labelled diagrammatically; or the use of animals to represent senses that might be particularly associated with them. The recovery and dissemination of Aristotle's works, particularly the *Parva naturalia*, offered new possibilities for illuminators. Texts were sometimes



4 The Fuller Brooch: a ninth-century disc-brooch, subsequently remodelled as a pendant. Made of silver and niello, it is perhaps associated with the court of Wessex. The central figure represents Sight with, top left inner circle, a figure representing Taste (with his hand in his mouth); top right, a figure with his hands behind his back, Smell, sniffing a leaf; bottom right, Touch, a figure rubbing his hands together; and bottom left, Hearing, a figure with his hand cupped to his ear.

accompanied by a series of human figures, each performing a function clearly associated with a sense, such as playing a musical instrument or smelling flowers; but it was only in a minority of books that the five senses were depicted.

Scholastic works constituted a second category. Some of these, such as the *Anticlaudianus* of Alan of Lille (d. 1203) – a poem in which the five senses were horses drawing the chariot of Prudentia towards Heaven – were illustrated by a drawing of the sense organ; others positioned both the internal and external senses on the body.¹⁰⁷ These typically labelled an illustration of the body with the names of the senses.

The third group, which employed animals to represent the senses, had different roots, associated with moralising literature. Encyclopaedias referred to those animals whose sensory features were regarded as better developed than those of man. Thomas de Cantimpré (d. 1270 or 1272) identified the boar for its sense of hearing, the lynx for sight, the ape or monkey for taste, the vulture for smell, and the spider for touch.¹⁰⁸ The earliest illustrations based on these associations occur about 1240. The most famous English example, the wall paintings in the Longthorpe Tower near Peterborough, probably executed between 1320 and 1340 but possibly as late as 1350, contains on the east wall a similar image with the beast standing for each sense located around a wheel. Here a boar represents hearing; a

5 In this fourteenth-century manuscript of the translation of Aristotle's works the figure blowing a trumpet represents sound and the sense of hearing.



cock, sight; a monkey or ape, taste; a vulture, smell; and a spider in its web, touch. Behind the wheel stands a king, with his hand resting on a spoke. He is probably to be interpreted as the common sense, or the higher reason of the soul, judging the perceptions that come from the corporeal senses.¹⁰⁹ The poor state of the bottom right-hand corner of the Longthorpe painting has led to some discussion about the identity of the cock and whether the creature should be interpreted as a basilisk or a cockatrice, but there has been no doubt that it represents the sense of sight. The positioning of the senses on the wheel – and the place of touch as the highest – may reflect a relative ranking of the senses. Touch was held by some to be more perfect in man than in other animals – in contrast to the views of Thomas de Cantimpré and others. Touch was also a model for the way in which sensory perception worked in man, with the internal senses touching the external ones.¹¹⁰ There is little dispute, however, that the picture stands in general as a model for the interpretation of man's sensory perception, with the external senses governed by the kingly figure.



6 Longthorpe Tower, near Peterborough: the wheel of the senses.

Until the later fifteenth century the senses in artistic works were personified as men, although it is just possible that the women featured in a series of tapestries owned by Henry V – ‘D’un dame qi harpe ung note’ – may have a sensory context.¹¹¹ Thereafter, the senses were more frequently depicted as women.¹¹² In high art, the first definite female association appears with the famous sequence of six tapestries known as the Lady and the Unicorn, made for the Le Viste family of Lyons,¹¹³ and the model then spread quite rapidly. Henry VIII possessed a painting of ‘a woman playinge upon a lute with a booke before her and a litle potte with lillies springinge oute therof’, which may have been intended to represent sound, sight (reading the book) and smell.¹¹⁴

These discussions and illustrations of the senses reflect only a part of the range of perception, the five senses drawn from Antiquity. The use of different vocabularies by the three languages of late medieval England – Latin, Anglo-Norman and Middle English – shows how paradigms for perception might be shaped diversely. Speech

was popularly recognised as part of the sensorium, even if it was excluded in some ecclesiastical contexts. The human body and its senses were not regimented, enclosed and exclusive in their perceptions. Many things might have effects on the body and the body might equally affect them. These effects were often explained in the medieval period as 'virtues' or 'powers' of substances and they were as much a part of the process of sensation as vision or hearing, operating in a similar twofold way. They were part of a model of perception very different from our own, what we might label 'extra-sensory perception'; and it is this that we must next discuss, along with a detailed examination of touch and of cosmic forces that might influence the body and its senses.