Whether the five exterior senses are properly distinguished?

Objection 1. It would seem inaccurate to distinguish five exterior senses. But there are many kinds of accidents. Therefore, as powers are distinguished by their objects, it seems that the senses are multiplied according to the number of the kinds of accidents.

Objection 2. Further, magnitude and shape, and other things which are called "common sensibles," are "not sensibles by accident," but are contradistinguished from them by the Philosopher (De Anima ii, 6). Now the diversity of objects, as such, diversifies the powers. Since, therefore, magnitude and shape are further from color than sound is, it seems that there is much more need for another sensitive power than can grasp magnitude or shape than for that which grasps color or sound.

Objection 3. Further, one sense regards one contrariety; as sight regards white and black. But the sense of touch grasps several contraries; such as hot or cold, damp or dry, and suchlike. Therefore it is not a single sense but several. Therefore there are more than five senses.

Objection 4. Further, a species is not divided against its genus. But taste is a kind of touch. Therefore it should not be classed as a distinct sense of touch.

On the contrary, The Philosopher says (De Anima iii, 1): "There is no other besides the five senses."

I answer that, The reason of the distinction and number of the senses has been assigned by some to the organs in which one or other of the elements preponderate, as water, air, or the like. By others it has been assigned to the medium, which is either in conjunction or extrinsic and is either water or air, or such like. Others have ascribed it to the various natures of the sensible qualities, according as such quality belongs to a simple body or results from complexity. But none of these explanations is apt. For the powers are not for the organs, but the organs for the powers; wherefore there are not various powers for the reason that there are various organs; on the contrary, for this has nature provided a variety of organs, that they might be adapted to various powers. In the same way nature provided various mediums for the various senses, according to the convenience of the acts of the powers. And to be cognizant of the natures of sensible qualities does not pertain to the senses, but to the intellect.

The reason of the number and distinction of the exterior senses must therefore be ascribed to that which belongs to the senses properly and "per se." Now, sense is a passive power, and is naturally immuted by the exterior sensible. Wherefore the exterior cause of such immutation is what is "per se" perceived by the sense, and according to the diversity of that exterior cause are the sensitive powers diversified.

Now, immutation is of two kinds, one natural, the other spiritual. Natural immutation takes place by the

form of the immuter being received according to its natural existence, into the thing immuted, as heat is received into the thing heated. Whereas spiritual immutation takes place by the form of the immuter being received, according to a spiritual mode of existence, into the thing immuted, as the form of color is received into the pupil which does not thereby become colored. Now, for the operation of the senses, a spiritual immutation is required, whereby an intention of the sensible form is effected in the sensile organ. Otherwise, if a natural immutation alone sufficed for the sense's action, all natural bodies would feel when they undergo alteration.

But in some senses we find spiritual immutation only, as in "sight" while in others we find not only spiritual but also a natural immutation; either on the part of the object only, or likewise on the part of the organ. On the part of the object we find natural immutation, as to place, in sound which is the object of "hearing"; for sound is caused by percussion and commotion of air: and we find natural immutation by alteration, in odor which is the object of "smelling"; for in order to exhale an odor, a body must be in a measure affected by heat. On the part of an organ, natural immutation takes place in "touch" and "taste"; for the hand that touches something hot becomes hot, while the tongue is moistened by the humidity of the flavored morsel. But the organs of smelling and hearing are not affected in their respective operations by any natural immutation unless indirectly.

Now, the sight, which is without natural immutation either in its organ or in its object, is the most spiritual, the most perfect, and the most universal of all the senses. After this comes the hearing and then the smell, which require a natural immutation on the part of the object; while local motion is more perfect than, and naturally prior to, the motion of alteration, as the Philosopher proves (Phys. viii, 7). Touch and taste are the most material of all: of the distinction of which we shall speak later on (ad 3,4). Hence it is that the three other senses are not exercised through a medium united to them, to obviate any natural immutation in their organ; as happens as regards these two senses.

Reply to Objection 1. Not every accident has in itself a power of immutation but only qualities of the third species, which are the principles of alteration: therefore only suchlike qualities are the objects of the senses; because "the senses are affected by the same things whereby inanimate bodies are affected," as stated in Phys. vii, 2.

Reply to Objection 2. Size, shape, and the like, which are called "common sensibles," are midway between "accidental sensibles" and "proper sensibles," which are the objects of the senses. For the proper sensibles first, and of their very nature, affect the senses; since they are qual-

ities that cause alteration. But the common sensibles are all reducible to quantity. As to size and number, it is clear that they are species of quantity. Shape is a quality about quantity. Shape is a quality about quantity, since the notion of shape consists of fixing the bounds of magnitude. Movement and rest are sensed according as the subject is affected in one or more ways in the magnitude of the subject or of its local distance, as in the movement of growth or of locomotion, or again, according as it is affected in some sensible qualities, as in the movement of alteration; and thus to sense movement and rest is, in a way, to sense one thing and many. Now quantity is the proximate subject of the qualities that cause alteration, as surface is of color. Therefore the common sensibles do not move the senses first and of their own nature, but by reason of the sensible quality; as the surface by reason of color. Yet they are not accidental sensibles, for they produce a certain variety in the immutation of the senses. For sense is immuted differently by a large and by a small surface: since whiteness itself is said to be great or small, and therefore it is divided according to its proper subject.

Reply to Objection 3. As the Philosopher seems to say (De Anima ii, 11), the sense of touch is generically one, but is divided into several specific senses, and for this reason it extends to various contrarieties; which senses, however, are not separate from one another in their or-

gan, but are spread throughout the whole body, so that their distinction is not evident. But taste, which perceives the sweet and the bitter, accompanies touch in the tongue, but not in the whole body; so it is easily distinguished from touch. We might also say that all those contrarieties agree, each in some proximate genus, and all in a common genus, which is the common and formal object of touch. Such common genus is, however, unnamed, just as the proximate genus of hot and cold is unnamed.

Reply to Objection 4. The sense of taste, according to a saying of the Philosopher (De Anima ii, 9), is a kind of touch existing in the tongue only. It is not distinct from touch in general, but only from the species of touch distributed in the body. But if touch is one sense only, on account of the common formality of its object: we must say that taste is distinguished from touch by reason of a different formality of immutation. For touch involves a natural, and not only a spiritual, immutation in its organ, by reason of the quality which is its proper object. But the organ of taste is not necessarily immuted by a natural immutation by reason of the quality which is its proper object, so that the tongue itself becomes sweet and bitter: but by reason of a quality which is a preamble to, and on which is based, the flavor, which quality is moisture, the object of touch.