

Early modern epistemologies of the senses: from the nobility of sight to the materialism of touch •

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The privileging of a particular sense in the elaboration of a metaphysics is a well-known theme, and the sense that has been most privileged in Western thought has been sight, ‘the noblest of the senses’. Radical empiricism in the early modern era does not restrict itself to political or religious considerations and tackles this sort of privileging head-on, as a challenge to idealism which culminates in proclamations such as Feuerbach’s ‘the sense of touch is atheist from birth’. This indeed sounds like a variation on earlier ‘Epicurean-empiricist’ claims such as Diderot’s ‘if you want me to believe in God I would have to touch Him’. In what follows I examine some aspects of the early modern privileging of touch, whether as a ‘dirtier’, more corporeal sense or as a foundational sense in relation to which others would be derivative, and suggest that as a contact sense, touch constitutes a materialist approach to the emergence of subjectivity.

Someone should write a book on the epistemology of the sense of touch.
(J. Bennett)¹

Les mains, méprisées pour leur matérialisme.
(Diderot)²

1. FROM SIGHT TO TOUCH

The choice of a particular sense in the construction of a metaphysical hierarchy, a rank-ordering of the world, is a fairly classic, well-known theme. The best known of all is most likely the Platonic and Aristotelian privileging of sight, the noblest of senses (here the

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¹ Jonathan Bennett, *Locke, Berkeley, Hume. Central Themes* (Oxford: Oxford University Press, 1971), p. 102.

² Diderot, *Lettre sur les sourds et muets* (1750/1751), in *Œuvres*, ed. L. Versini, vol. 4 : *Esthétique-Théâtre* (Paris: Laffont-‘Bouquins’, 1996), p. 54.

meaning of the Greek *theoria*, contemplation, takes center stage). Now, to privilege one sense is of course to downgrade others. If sight is the sense of the dominant philosophical tradition, the contemplation at a distance of the objects of perception (and perversions of this purity from Sade to Lacan and Žižek do not modify this prestige), *touch*, the contact sense, the dirty sense, whether in the libertine sense or in the sense that in early modernity barber-surgeons get their hands dirty whereas professors of medicine do not (including by touching someone's beating heart, as Alan Salter and I have described elsewhere³), is all the way at the other extreme. In yet another narrative, Martin Luther constructed an entire metaphysics of hearing, for the Word is not something to be seen or touched, but heard.⁴ In what follows I want to focus on some episodes in the construction of a metaphysics and an epistemology of touch. After all, no less a philosopher than Jonathan Bennett, that no-nonsense New Zealander who called Kant "wrong in a thoroughly boring way" and suggested that we approach Spinoza or Locke the way we would a conversation with our professional colleagues, recommended that 'Someone should write a book on the epistemology of the sense of touch'.⁵ But I won't try to reconstruct particular historical régimes of the senses, as Bakhtin once did or *mentalité*-inspired historians like Alain Corbin do today. This attempt, if fleshed out further, would go more in the direction of what John Sutton calls 'historical cognitive science': "Historical cognitive science works between two projects. One is the analysis of other and older theories of mind, of how they relate to and differ from current approaches, and of what forgotten or neglected explananda they bring into focus. The other, relating to cognitive practices rather than theories, is the task of working out how such views about mind and self reflect or partly cause different historical forms of mental activity."⁶ One might hear echoes here of Benjamin's inquiries into the historicity of perception.

³ Alan Salter & Charles T. Wolfe, "Empiricism contra Experiment: Harvey, Locke and the Revisionist View of Experimental Philosophy," *Bulletin de la SHESVIE* 16:1 (2009).

⁴ See the discussion of Luther and Kant in Reiner Schürmann, *Broken Hegemonies*, trans. R. Lilly (Bloomington: Indiana University Press, 2003).

⁵ Bennett, *Locke, Berkeley, Hume*, p. 102.

⁶ John Sutton, "Body, Mind, and Order: Local Memory and the Control of Mental Representations in Medieval and Renaissance Sciences of Self," in *1543 And All That: word and image in the proto-scientific revolution*, eds. Anthony Coronos and Guy Freeland (Dordrecht: Kluwer, 1995).

2. SIGHT

This is not the place to inquire into Platonic and Aristotelian accounts of sight, cognition and touch, and how they differ. A good candidate for a locus classicus is Aristotle's invocation of sight-as-contemplation (and thereby as basis for philosophy itself) at the beginning of the *Metaphysics*: "We prefer sight, generally speaking, to all other senses. The reason for this is that, of all the senses, sight best helps us to know things, and reveals many distinctions" (*Met. A*, 980a25). Perhaps best-known of all, Plato speaks of "the eye of the soul"⁷ and of the "light of reason."⁸ This can take on a polemical form, as in the pseudo-Aristotelian text *De sensu*, which declares that "Democritus and the majority of natural philosophers who discuss perception are guilty of a great absurdity; for they represent all perception as being by touch" (*De sensu* 4, 442a29 — by Theophrastus?).⁹

Like all major philosophers Aristotle's story can easily be complicated: after all he regularly stresses that he should be located between the *phusiologoi* such as Democritus and Empedocles, and Platonic idealism; and he regularly gets described as an empiricist. Also, "the organ of touch is the least simple of all the sense-organs. For touch more than any other sense appears to be correlated to several distinct kinds of objects" (*PA* II 1, 647a15), thus the flesh (main candidate for this organ) is "the most corporeal of the sense-organs" (a20). Stanley Rosen in an influential 1961 paper argued that thought is really constructed on the analogy of touch, for Aristotle.¹⁰

Regardless, the majority claim, the most influential claim, the way in which Aristotle and this view gets handed down, is that *sight is privileged because it is 'eidetic': it is a grasping of essences*. As Hans Jonas puts it sounding rather Aristotelian, sight alone allows the distinction between the changing and the unchanging, whereas 'all other

⁷ Plato, *Republic*, VII, 527d.

⁸ *ibid.*, 532a.

⁹ in G.S. Kirk, J.E. Raven, M. Schofield, eds., *The Presocratic Philosophers* (Cambridge: Cambridge University Press, 2nd edition, 1983), p. 428.

¹⁰ Stanley Rosen, "Thought and Touch," *Phronesis* (1961), reprinted in Rosen, *The Quarrel between Philosophy and Poetry* (Routledge, 1988); Aristotle, *De Anima*, esp. II, 11-12. For a different view, see R. Sorabji, "Aristotle on Demarcating the Five Senses," in J. Barnes, M. Schofield & R. Sorabji, eds., *Articles on Aristotle*, vol. 4: *Psychology and Aesthetics* (London: Duckworth, 1971), and the discussion of these in Cynthia Freeland, "Aristotle on the Sense of Touch," in Nussbaum and Rorty, eds., *Essays on Aristotle's De Anima* (1995). Also the work of Deborah Modrak.

senses operate by registering change and cannot make that distinction. Only sight therefore provides the sensual basis on which the mind may conceive of the idea of the eternal, that which never changes and is always present'.¹¹ (I am not approving Jonas here, just referring to him as evidence of the perennity of this fascination idealist philosophers have with sight. Sounding much like Jonas, who doubtless would have been surprised at the proximity, is Havelock Ellis: touch is “the least intellectual and the least aesthetic” of the senses.¹²)

As glimpsed in the reference to Plato above, the metaphysics of sight was frequently a ‘metaphysics of light’; the power of the eye is drawn from the sun itself. The privileging of sight runs through various prestigious moments in Western metaphysics and science, from Aquinas’ *Summa Theologica*: “Those senses are most concerned with beauty which are most concerned in apprehension, namely the sight and hearing, which ministers to reason. For we speak of beautiful sights and sounds but do not give the name of beauty to the objects of other senses, such as tastes or smells . . . what simply satisfies desire is called good, but that whose very apprehension pleases is called beautiful”¹³ to Leonardo in his *Treatise on Painting* asserting the primacy of vision, and by extension of painting over any other kind of art or science.¹⁴ Galileo, in *The Assayer* (1623), analyses the senses and secondary qualities in mechanistic terms, in order to reduce them to primary

¹¹ Hans Jonas, “The Nobility of Sight: A Study in the Phenomenology of the Senses,” *The Phenomenon of Life. Towards a Philosophical Biology* (New York: Harper & Row / Dell, 1966), p. 145.

¹² Ellis, *Studies in the Psychology of Sex: Sexual Selection in Man* (Philadelphia: F.A. Davis, 1926), p. 6.

¹³ Aquinas, *Summa Theologica*, II.1. xxvii.i.

¹⁴ Leonardo da Vinci, *Treatise on Painting* (Codex Urbinas Latinus 1270), trans. A. Phillip McMahon (Princeton: Princeton University Press, 1956). “The eye, which is called the window of the soul, is the principal means by which the central sense can most completely and abundantly appreciate the infinite works of nature; and the ear is the second, which acquires dignity by hearing of the things the eye has seen. If you, historians, or poets, or mathematicians had not seen things with your eyes you could not report of them in writing. And if you, O poet, tell a story with your pen, the painter with his brush can tell it more easily, with simpler completeness and less tedious to be understood. And if you call painting dumb poetry, the painter may call poetry blind painting. Now which is the worse defect? to be blind or dumb? Though the poet is as free as the painter in the invention of his fictions they are not so satisfactory to men as paintings; for, though poetry is able to describe forms, actions and places in words, the painter deals with the actual similitude of the forms, in order to represent them. Now tell me which is the nearer to the actual man: the name of man or the image of the man. The name of man differs in different countries, but his form is never changed but by death” (*Notebooks of Leonardo da Vinci*, Vol. I, ed. & trans. Jean Paul Richter [1888; New York: Dover Reprints, 1970], ch. IX: The Practice of Painting, §§ 653-654).

qualities; he discusses touch but is careful to repeat that sight is the “most excellent and noble of the senses.”¹⁵ Robert Hooke: “The differing ways of Sensation we find to be Five, which are provided with as many distinct Organs: the 1st and most Spiritual is plac’d in the Eye” (the fifth is “over the whole Body”).¹⁶ Slightly more mystically, Kepler writes to Galileo in 1610 that Bruno is more ‘Godlike’ than them because his insights were arrived at without even seeing the phenomena; hence they are all his followers.¹⁷ One can also think of the metaphysics of light, from Plotinus to neo-Platonism in the Renaissance, and its modern follower Goethe: “The eye owes its existence to light. Starting from secondary and indifferent animals, light produces for itself, an organ similar to itself. Thus the eye is formed by light and for light, so that the inner light may respond to the outer light.” And Goethe quotes these two verses of a “mystic from another time”: “If the eye were not solar / How would we perceive light” (*Farbenlehre*, Introduction).¹⁸

For Descartes, “c’est l’âme qui voit et non pas l’oeil” (*Dioptrique*, AT VI, 141) (and an endless number of prominent philosophers can be cited here, all making a connection between the eye and knowledge, however remote or apposite their philosophical culture and commitments, such as Locke and Fichte!); and above all, in the first lines of his treatise on optics, the *Dioptrics*: “Toute la conduite de notre vie dépend de nos sens, entre lesquels celui de la vue étant le plus universel et le plus noble.”¹⁹ (Granted, it is not clear what Descartes thinks without further examination: he sometimes gives the ‘traditional’

¹⁵ in Ariew & Watkins, eds., *Readings in Modern Philosophy*, vol. 1 (Indianapolis: Hackett, p. 2000), p. 10.

¹⁶ *A General Scheme, or Idea of the Present State of Natural Philosophy...*, in *Posthumous Works*, ed. R. Waller (London: S. Smith & B. Walford, 1705), p. 12.

¹⁷ J. Kepler, *Dissertatio cum nuncio sidereo nuper ad mortals misso Galilaeo Galilaeo...* (Florence, 1610), 10 recto.

¹⁸ Goethe, *Theory of Colors*, trans. C.L. Eastlake (Cambridge, Mass.: MIT Press, 1970), Introduction, p. liii. On the metaphysics of light see e.g. K. Hedwig, “German Idealism in the Context of Light Metaphysics,” *Idealistic Studies* (1972). Hans Blumenberg, “Licht als Metapher der Wahrheit,” *Studium Generale* 10 (1957), and Didier Ottaviani, on medieval thought: <http://www.cerphi.net/hum/lumcours.htm>.

¹⁹ Descartes, *La Dioptrique* (1637), AT VI, 81; in *Œuvres philosophiques*, vol. 1, 1618-1637, éd. Alquié, Paris, Classiques Garnier, 1998, p. 651. Stephen Gaukroger describes Descartes as part of the mechanist program to reduce all contact senses to touch (introduction to A. Arnauld, *On True and False Ideas* [Manchester: Manchester University Press, 1990], p. 17. See *Replies to Fourth Objections*, CSM II, 175 and Rule 12 of the *Rules*, CSM I, 40; of course, *contact* senses presumably don’t include sight, but still...).

statement on the preeminence of sight, but elsewhere, in keeping with what was called ‘cartésien de gauche’ traditions, he can also privilege touch on mechanist grounds – there could also be a kind of functional dualism at work here. However, it is also possible to say that contact senses reduce to touch, *without* thereby proclaiming either materialism, or at least that touch is the preeminent sense; Diderot or Charleton, respectively.)

3. TOUCH

On the one hand there is a prevalent ‘hatred’ or ‘phobia’ of touch; e.g. Ficino in his commentary on the *Symposium* says the lower senses, such as touch, are the source of ‘lust or madness’.²⁰ This doubtless builds on what in Lucretius was meant positively, in discussing touch and sensuality: touch is ‘the sense of the body, whether it be when something from without makes its way in, or when a thing, which in the body had birth, hurts it, or gives it pleasure issuing forth to perform the generative deeds of Venus.’²¹ On the other hand there will be favorable early modern judgments on touch: Robert Burton’s “this sense [touch] is exquisite in men”²²; Alexander Ross’s “Of all the creatures, the sense of tact is most exquisite in man,” in his 1651 *Arcana microcosmi, or, The hid secrets of man’s body discovered; in an anatomical duel between Aristotle and Galen*.²³ Herder, in his treatise on sculpture, argues that touch has priority over sight.²⁴

²⁰ Ficino, quoted in Sander Gilman, “Touch, Sexuality and Disease,” in W.F. Bynum and Roy Porter, eds., *Medicine and the five senses* (Cambridge: Cambridge University Press, 1993), p. 201. Gilman further comments on how emblem books of the late Renaissance most often represent touch “by an image of a woman touched or pierced by a wild animal” (p. 206).

²¹ *De rerum natura*, trans. Leonard (London 1921), p. 61.

²² Burton, *The Anatomy of Melancholy* (London: Routledge, 1931), p. 139.

²³ Alexander Ross, *Arcana microcosmi, or, The hid secrets of man’s body discovered; in an anatomical duel between Aristotle and Galen* (London 1651), cit. in Carla Mazzio, “Acting with Tact: Touch and Theater in the Renaissance,” in Elizabeth Harvey, ed., *Sensible Flesh. On Touch in Early Modern Culture* (Philadelphia: University of Pennsylvania Press, 2003), p. 159; further discussion in Mazzio, “The Senses Divided,” in *Empires of the Senses*, ed. D. Howes (New York: Berg, 2005) and her monograph, *The Inarticulate Renaissance: Language Trouble In The Age Of Eloquence* (Philadelphia: University of Pennsylvania Press, 2009).

Further discussion would have to include George Chapman’s *Ovid’s Banquet of Sense* (discussed by Alan Salter in his PhD thesis, “William Harvey. A Study in Empiricism,” University of Sydney, Unit for History and Philosophy of Science, 2010, Chapter 3).

²⁴ Johann Gottfried Herder, *Sculpture. Some Observations on Shape and Form from Pygmalion’s Creative Dream*, ed. & trans. J. Gaiger (Chicago: University of Chicago Press, 2002).

There are of course hybrid or intermediate positions such as Berkeley's, who argues in *An Essay Towards a New Theory of Vision* (1709; 4th ed. 1732) that vision cannot deliver to us the spatial properties of objects, for which we need touch (hence he rejects Descartes' description of the blind man 'seeing through his staff'), and tries to develop a theory of touch as movement.²⁵ However, he argues in *Alciphron* that vision constitutes a language because it is a *unity*; there cannot be a language of touch, smell, etc. And such non-materialist philosophers as Kant call it "the most fundamental sense," and discuss – at least on the anthropological, if not the transcendental level – how 'I am myself at my fingertips'.²⁶ Similarly, accounts in Descartes complicate our entire story, such as the theme of the blind man 'seeing with his staff' (a kind of extended touch).²⁷ Indeed, Peter Anstey also expresses surprise at the view attributed to Descartes above, since Boyle doesn't seem to hold it (and what then do we do with the mechanical philosophy?).²⁸

And there are reductionist materialist approaches to vision, most famously Hobbes' reduction of sense, cognition and vision to a type of motion, as expressed in *De Homine*, the *Leviathan* but also in his autobiography:

I thought continually about the nature of things, whether I was traveling by boat or by coach, or on horseback. And it seemed to me that there was only one true thing in the whole world, though falsified in many ways: one true thing, which is the basis of all those phenomena which we wrongly say are something (such as we fleetingly get in sleep, or with the aid of lenses can multiply as we choose) – the phenomena of sense-impressions, which are offsprings of our skull, with nothing external. And in those internal regions, there could be nothing but *motion*.²⁹

²⁵ Cf. Althusser's discussion of immaterialism in *Lénine et la philosophie*, and E.-E. Schmitt, "La question du sensualisme," *Rev. phil. de la France et de l'étranger* 109:3 (1984).

²⁶ See *Immanuel Kants Menschenkunde* (Olms, 1978), pp. 63-64; special volume of *Kant-Studien* (1971), pieces by V. Satura & P. Kitcher. Kant also discusses Cheselden's experiments in his anthropology lectures; he declares "Ich bin eben so unmittelbar in der Fingerspitze wie in dem Kopf" in *Traüme ein Geistesehers* [1764], Ak. II, 324.

²⁷ 'Les aveugles voient des mains' (Descartes, *Dioptrique*, 1^{er} Discours, AT VI, 84). For a comparison of the blind man in Descartes and in Diderot, see Véronique Le Ru, "La Lettre sur les aveugles et le bâton de la raison," *Recherches sur Diderot et l'Encyclopédie* 28 (avril 2000).

²⁸ Peter Anstey, *The Philosophy of Robert Boyle* (London: Routledge, 2000), p. 26. See the discussion of Boyle on touch in Anstey, *Boyle*, ch. 1.

²⁹ From Hobbes's verse autobiography, written when he was eighty-four (*Latin Works*, vol. 1 [1839], translated in Richard Tuck, "Optics and sceptics: the philosophical foundations of Hobbes's political thought," in Edmund Leites, ed., *Conscience and Casuistry in Early Modern Europe* [Cambridge: Cambridge University Press, 1988], p. 248). For the original English translation, see Hobbes, *Leviathan*, ed. E. Curley, with selected Latin variants (Indianapolis: Hackett, 1994), pp. lvi-lvii.

In addition one can also mention the distinction between the *via medicorum* with Galen and the *via philosophorum* with Aristotle; in the former touch is emphasized as important, especially the fingertips (e.g. for Fernel, touch is the best sense).³⁰

However, this is still not a reversal of a metaphysics of sight in favour of a materialism of touch. Prior to Diderot, this begins to emerge in a kind of Epicurean-Lucretian tradition (following Lucretius, for whom touch is the feeling, the sense of the body itself³¹). This can be seen in Gassendi's invocation of bodily experience against Descartes, in his *Objections to the Meditations*. Another Epicurean, Walter Charleton, declares that "All Sensation is a kind of Touching."³² Charleton also provides a historical theory of vision.³³ A key common theme in the Epicurean tradition, which rebuts as it were the problem of the senses as *deceivers*, is the 'infallibility of sensitivity' (from Lucretius, but also articulated in Spinoza, *Ethics* IIIp35s, IIp17s.³⁴).

But Diderot's novelty is to turn back to vision in an inverted form: blindness.

3.1. Touch in Diderot

Diderot famously creates – or recasts, since as so often he is using a real-life figure to create a subtly different fictional-philosophical figure – the figure of a blind mathematician, Saunderson in the *Letter on the Blind*: not only does he not possess the classic philosopher's sense, he lives by touch. "Ce qui sont sans yeux voient par le toucher."³⁵ Molyneux's Problem (if someone born blind is familiarized with the sphere and the cube, will [s]he spontaneously recognize them if his/her sight returns? Today, neural plasticity says that a blind person can use the sight area of the brain to deal with tangible information), but also *the ultimate form of materialism*: "If you want me to

³⁰ I thank Guido Giglioni for this suggestion.

³¹ "tactus enim, tactus, prodiuum numina sancta, corporis est sensus" (*De rerum natura*, II, 435).

³² Charleton, *Physiologia Epicuro-Gassendo-Charletoniana...* (1654; New York: Johnson Reprint, 1966), p. 248. In this sense Roselyne Rey seems mistaken to claim that Le Cat was one of the first, in his 1740 *Traité des sensations*, to reduce sight and hearing to touch (in *Teorie della Visione*, ed. M.-T. Monti, Milan, 1995).

³³ Charleton, *Physiologia*, III, iii.

³⁴ Cf. discussion by Genevieve Lloyd in Lloyd & Gatens, *Collective imaginings. Spinoza, past and present* (Routledge).

³⁵ *Éléments de physiologie*, in *Œuvres*, DPV XVII, p. 455.

believe in God, you must make me touch him” (“Si vous voulez que je croie en Dieu, dit l’aveugle. il faut que vous me le fassiez toucher”; Saunderson on his deathbed³⁶) – presumably a reference to Doubting Thomas.³⁷ And touch *qua* contact becomes the basis by which sensibility is universal: from contiguity to continuity (image of the *clavecin*, the musical strings as metaphor for the nervous system, and the possibility that this system of resonance might extend to all of matter, on the supposition that all of matter is actually living matter³⁸). All senses are converted into one another, and all into touch³⁹: “Les sens ne sont qu’un toucher diversifié” (*Enc.*, art. “Epicurisme”⁴⁰), “Les sens ne sont tous qu’un toucher” (*Entretiens sur le fils naturel*), “un toucher qui se diversifie dans la nature animée en une infinité de manières et de degrés, et qui s’appelle dans l’homme, voir, entendre, flairer, goûter, et sentir” (*Discours sur la poésie dramatique*, DPV X, 360). The *Encyclopédie* article “Sensibilité”, by the – vitalist sympathizer – physician Henri Fouquet, argues that all five senses reduce to touch (*tact*), because it is contact with the outside world which sets sensibility into motion, so to speak. The kind of plasticity at work in this non-Cartesian conception of body, mind, and sensitivity involves a recognition that touch becomes reinforced in the blind Saunderson, as evidence of an inter-organic collaboration: “infinité de points répandus sur la surface du corps touché vibrants confusément entre une infinité de points immobile.”⁴¹

Ultimately, sight is the idealist sense (it is eidetic, as noted above): “Combien l’organe de l’œil serait trompeur, si son jugement n’était pas sans cesse rectifié par le toucher.”⁴² But touch, instead of being non-philosophical, becomes “the deepest, most philosophical sense.”⁴³ This is what Diderot means when he describes the hands, in the

³⁶ Diderot, *Lettre sur les aveugles*, in *Œuvres complètes*, éd. DPV (Paris: Hermann, 1975-), vol. IV, p. 48 (hereafter DPV followed by volume and page number).

³⁷ See the analysis of Caravaggio’s 1603 ‘Doubting Thomas’ painting in Jonathan Sawday, “Self and Selfhood in the seventeenth century,” in *Rewriting the Self*, ed. Roy Porter (London: Routledge, 1997).

³⁸ “la sensibilité de la matière est la vie propre aux organes” (DPV XVII, 306).

³⁹ Amor Cherni, *Diderot. L’ordre et le devenir* (Geneva: Droz, 2002), p. 240.

⁴⁰ Cf. “On en viendra quelque jour à démontrer que la sensibilité ou le toucher est un sens commun à tous les êtres. Il y déjà des phénomènes qui y conduisent [...]” (*Éléments de physiologie*, DPV XVII, 308).

⁴¹ *Interprétation de la nature*, DPV XI, p. 58.

⁴² *Éléments de physiologie*, DPV XVII, p. 457.

⁴³ *Lettre sur les sourds et muets*, in *Œuvres*, Versini IV, p. 15.

Letter on the Deaf and Mute, as “despised for their materialism” (*ibid.*, p. 54): instead of being stupid, they are the instrument of a subversive philosophy.⁴⁴ Touch (and taste) are frequently portrayed as inferior, not just in Platonic/Christian terms because they are closer to our animal nature, but also because they are less free, being at less of a remove than sight or hearing (Schopenhauer and Jonas notably argue this way).

When Voltaire accuses Diderot of being too radical, too atheistic (and this book did after all get Diderot imprisoned in Vincennes), he assures him that ‘Saunderson’s feelings are not my own...but it might be because I see (I possess sight)’!⁴⁵ As has been noted several times, Saunderson is only missing one sense (sight), but Diderot writes as if he, Saunderson, only possessed one sense, touch; this is because of the hypertrophy of touch, its hypostatization.⁴⁶

Diderot also shows some care not to over-assert the virtues of a materialism of touch and sensitivity: in his celebrated discussion of the actor (the *Paradoxe sur le comédien*, written between 1769-1778), he speaks of the weakness of someone whose physiology would be constantly at the mercy of their sensitivity⁴⁷ and in his commentary on Hemsterhuis he criticizes the determinism of sensation the latter seems to be defending.

So what was the metaphysics of touch again?

— if you wish me to believe in God I would have to be able to touch him; from Diderot to Feuerbach’s “The sense of touch is atheist from birth”⁴⁸;

⁴⁴ Condillac’s statue, in the *Treatise on Sensations* (1754), plays a role here too: the book contains a 3-page ‘praise’ of the hand. For further discussion of Condillac and sensation see Lisa Shapiro’s essay in Charles Wolfe and Ofer Gal, eds., *The body as object and instrument of knowledge. Embodied Empiricism* (Springer, 2010).

⁴⁵ Diderot, letter to Voltaire, 11.06.1749, *Corr.* V 13.

⁴⁶ See also the theme of ‘tact’ in the aesthetic writings (e.g. *Salon de 1767* and *Essais sur la peinture*, DPV XIV, 344). Alois Riegl will develop the notion of a “haptic” dimension of art, i.e. based on touch, versus its optic dimension, in his *Spätrömische Kunstindustrie* (1901); perhaps the basis for Berenson’s idea of ‘tactile values’, in his *Florentine Painters of the Renaissance* (1896). Riegl is also discussed in Deleuze-Guattari’s *Mille plateaux*.

⁴⁷ For a brilliant and evocative discussion in contemporary neurobiological terms of why ‘it would not be a good idea’ to perceive in total, synesthetic and hallucinatory terms, see Walter J. Freeman, “The Physiology of Perception,” *Scientific American* 264:2 (February 1991), pp. 78-85.

⁴⁸ This quotation is attributed to Feuerbach in Hans Blumenberg, *The Legitimacy of the Modern Age*, trans. R.M. Wallace (Cambridge, Mass.: MIT Press, 1983), p. 445; I have been unable to find this exact line in Feuerbach.

— the argument from design is perfect for those who can *see* the order in Nature, but I Saunderson am a monster, a living disproof or counter-argument to design; and we have to remember that this really was the mood of Newtonian physico-theology, from the Boyle Lectures to William Paley’s *Natural Theology* 140 years later, in 1802: “Were there no example in the world of contrivance except that of the *eye*, it would be alone sufficient to support the conclusions which we draw from it, as to the necessity of an intelligent Creator” (p. 81).⁴⁹

— touch is the indicator that the passage, the shift from matter as something brute and insensitive, mechanistically specifiable, to matter as something alive and sensing, is not a qualitative leap, not a leap from matter to soul or mind, but from one type of motion to another: “Pourquoi ne pas regarder la sensibilité, la vie, le mouvement comme autant de propriétés de la matière : puisqu’on trouve ces qualités dans chaque portion, chaque particule de chair ?” (DPV XVII, 333).

— notice that in none of these points is the materialism of the hands opposed to the nobility of sight on the grounds of a kind of carnivalesque force, although in Bakhtin’s treatment of the sensory world of Rabelais and his time, there is this motif that “laughter degrades and materializes.”⁵⁰

As we have seen, a metaphysics requires the privileging of a sense and the casting of opprobrium on another; but Diderot goes one step further in the *Letter on the Blind*, making the true materialist move in which the senses themselves are the theorists (to borrow a phrase from Marx): they constitute their object.⁵¹ Is this a counter-history of the senses? A monstrous Deleuzian history in which touch is suddenly paramount? But which touch? Touch as embodiment, as a kind of nearly mystical ‘being-in-the-body’, or a materialism of touch?

4 CONCLUSION

⁴⁹ This is why Darwin admitted that the complexity of an organ like the vertebrate eye presented such a challenge to his theory that it could make his blood run cold (“I remember well the time when the thought of the eye made me cold all over”; letter to Asa Gray, April 3, 1860, in *The Life and Letters of Charles Darwin*, vol. II, p. 42).

⁵⁰ Mikhail Bakhtin, *Rabelais and his world*, trans. H. Iswolsky (MIT 1968, Indiana University Press 1984), p. 20. See my discussion in “Le rire matérialiste,” *Multitudes* 30 (2007).

⁵¹ Marx, *1844 Manuscripts*, ‘Private Property and Communism’, in David McLellan, ed., *Karl Marx. Selected Writings* (Oxford: Oxford University Press, 1977), p. 92.

From disembodied sight-*theoria* to materialist touch; of course the question of self-awareness emerges. D'Alembert: "Le toucher nous apprend sans doute à distinguer ce qui est *notre* d'avec ce qui nous environne; il nous fait (...) circonscrire l'univers à nous-mêmes."⁵² This would be dealt with today as proprioception: "touch is in a certain respect the most important and certainly the most primordial of the senses. The reason is, that it is scarcely to be distinguished from the having of a body that can act in physical space" (B. O'Shaughnessy).⁵³ In a recent article Christopher Perricone quotes the evolutionist Ashley Montagu: "in the evolution of the senses touch is the first to come into being... It is the sense which became differentiated into the others." Montagu goes on to add that, based on a "general embryological law" that this makes touch the most fundamental of the senses.⁵⁴

But a materialism of touch is different from a phenomenology of body, with its reliance on a foundational subjectivity!⁵⁵ As Paul Churchland has put it, we can claim to have a first-person, privileged relation to *all sorts* of physical things, including our muscles, bowels, stomach, skin, lungs, etc.: these can be studied from a third-person perspective, in terms compatible with the scientific representation of the world, but we can also claim to feel things about them which this representation cannot include. Churchland's point is that "The existence of a proprietary, first-person epistemological access to some phenomenon does not mean that the accessed phenomenon is nonphysical in nature. It means only that someone possesses an information-carrying causal connection to that phenomenon, a connection that others lack."⁵⁶ Of course, none of this

⁵² D'Alembert, *Essai sur les Éléments de philosophie* [1759], ch. VI (Paris: Fayard, 1986), p. 45. Condillac (e.g. *Traité des sensations*, II, 5, on a kind of proprioception), Bergson, Merleau-Ponty are the obvious other figures to be adduced here – and today, Shaun Gallagher and Evan Thompson.

⁵³ B. O'Shaughnessy, *Consciousness and the World* (Oxford: Oxford University Press, 2000), p. 658.

⁵⁴ C. Perricone, "The Aspiration to the condition of touch," *Philosophy and Literature* 30 (2006), pp. 229-237, here, p. 231.

⁵⁵ I have in mind thinkers as diverse as the Husserl of *Ideas* II, Merleau-Ponty, Didier Anzieu – with his notion of the 'Moi-Peau', the 'I-skin' – and Jean-Luc Nancy, with his 'secularized Christian' fascination with embodiment qua incarnation. Very different, but very useful for defending a phenomenological approach to embodiment and touch, is J.J. Gibson's 'rich' or 'thick' account of perception, in which touch is not a mere contact sense but something more dynamic, involving more 'intentionality'. See Gibson, *The Senses Considered as Perceptual Systems* (Boston: Houghton Mifflin, 1966), pp. 102, 132f.

⁵⁶ *The Engine of Reason, The Seat of the Soul* (Cambridge, Mass.: MIT Press), 1995, p. 198.

is meant to deny that physiologically we can have an ‘inner sense’: “A person has a route of epistemological access to his own body which others lack.”⁵⁷

Perhaps more relevantly to the present context, one can ask in addition, not *how* a materialism of touch deals with personhood / selfhood / individuation, but *under which historical conditions such transformations occurred* – for it is clear that from Galileo and Descartes to Locke and Hume, something has changed a great deal, that involves religion and medicine and other factors as well; and from Galileo and Descartes to someone like Diderot, and the emergence of a kind of modern Epicureanism/Lucretianism, something new has happened as well. But my point today was not to make the claim, à la Carlo Ginzburg, that a medieval Italian miller saw or ‘touched’ differently than we do, but to investigate some steps towards a materialism of touch – without which “nature remains like the delightful landscapes of the magic lantern, light, flat and chimerical” (Focillon):

La possession du monde exige une sorte de flair tactile. La vue glisse le long de l’univers. La main sait que l’objet est habité par le poids, qu’il est lisse ou rugueux, qu’il n’est pas soudé au fond de ciel ou de terre avec lequel il semble faire corps. L’action de la main définit le creux de l’espace et le plein des choses qui l’occupent. Surface, volume, densité, pesanteur ne sont pas des phénomènes optiques. C’est entre les doigts, c’est au creux des paumes que l’homme les connut d’abord. L’espace, il le mesure, non du regard, mais de sa main et de son pas. Le toucher emplit la nature de forces mystérieuses. Sans lui elle restait pareille aux délicieux paysages de la chambre noire, légers, plats et chimériques.⁵⁸

⁵⁷ D.M. Armstrong, in D.M. Armstrong & Norman Malcolm, *Consciousness and Causality. A Debate on the Nature of Mind* (Oxford: Blackwell, 1984), p. 112.

⁵⁸ Henri Focillon, “Éloge de la main” [1934], in *La Vie des formes, suivi de Éloge de la main* (Paris: PUF, 1943), p. 108.