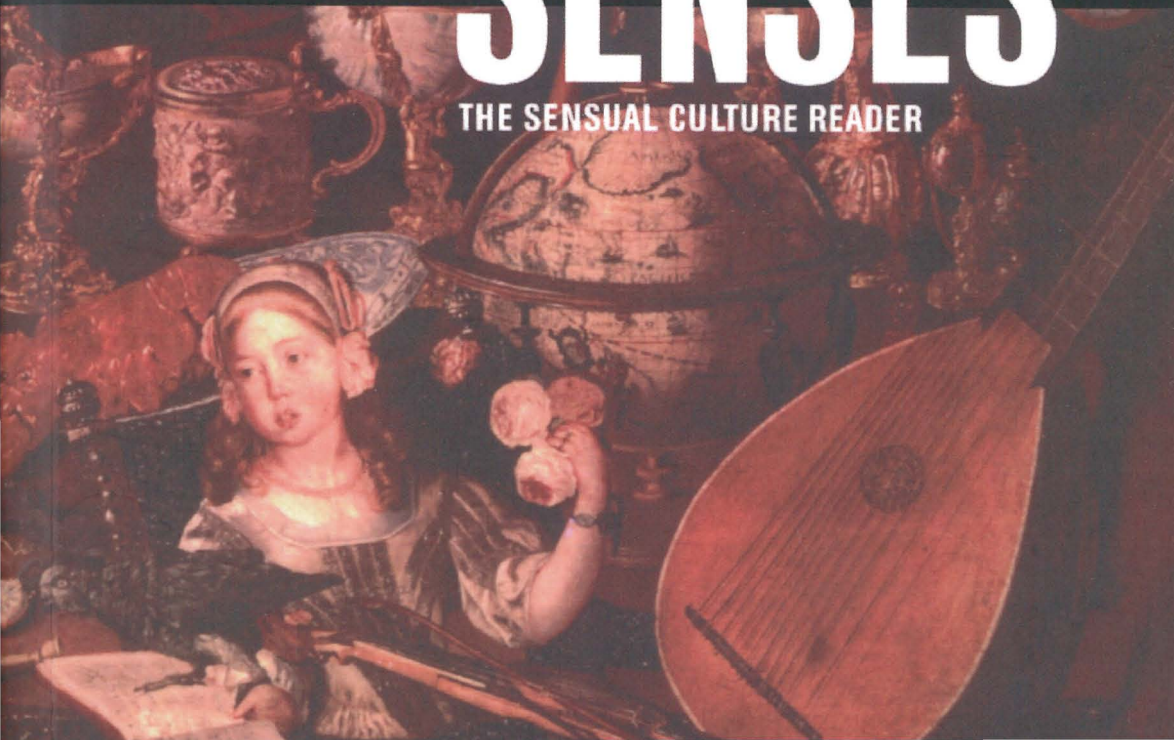


SENSORY
FORMATIONS
SERIES

EMPIRE OF THE SENSES

EDITED BY
DAVID HOWES

THE SENSUAL CULTURE READER





Empire of the Senses

The Sensual Culture Reader

Edited by

DAVID HOWES

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5

The Senses Divided

Organs, Objects, and Media in
Early Modern England

Carla Mazzio

It is precisely because [physical pain] takes no object that it, more than any other phenomenon, resists objectification in language.

Elaine Scarry, *The Body in Pain*

The history of the senses has been, essentially, the history of their objectification. Elaine Scarry (expanding on Marx's account of commodification), writes that the 'socialization of sentience,' marks a process in which 'freestanding objects,' such as the telephone or tape recorder, 'remake the live body' and 'make sentience itself an artifact' (Scarry 1985: 255). In a similar vein, Raymond Williams (1990: 158) opens his essay on the reification of 'the medium' in aesthetic theory with an example drawn from a Renaissance definition of sight:

'To the Sight three things are required, the Object, the Organ and the Medium.' Here a description of the practical activity of seeing, which is a whole and complex process of relationship between the developed organs of sight and the accessible properties of things seen, is characteristically interrupted by the invention of a third term ('medium') which is given its own properties, in abstraction from the practical relationship. This general notion of intervening and in effect causal substances, on which various practical operations were believed to depend, had a long course in scientific thought.

This example marks, for Williams, an early history of the objectification of 'process' by a focus on mediation, in which 'a constitutive human activity is... abstracted and objectified' (Williams 1990: 158). The question I wish

to address in this essay is whether such mediation extends in equal measure to all of the senses, particularly touch. For in contrast to vision and hearing (or optics and acoustics), which are, arguably, made legible by abstract logics of mediation and objectification (see Mitchell 1986: 118–19), the sense of touch proves interesting and complex to consider on account of its alleged ‘immediacy.’

The history of touch is, essentially, a history of resisting objectification. In this essay, I will show how the peculiar status of touch in relationship to representation proved problematic in the context of early modern medical and philosophical writing about the senses, but by the same token figured productively in the context of specifically literary and affective representations, as exemplified in an early seventeenth century university drama entitled *Lingua, or the Combat of the Tongue and the Five Senses for Superiority* (Tomkis 1607).

Sensory Classification and the Object of Touch

The French theorist and psychoanalyst Didier Anzieu has pointed out the centrality of touch and its cognates in the English language, noting that the tactile substrate of linguistic and psychological development is exemplified by the fact that ‘touch’ is one of ‘the longest [entries] in the *Oxford English Dictionary*’ (Anzieu 1989: 13). While Anzieu’s point is to underscore the ubiquity of touch subtending language acquisition, it is precisely the resistance of touch to definitive linguistic and conceptual categories that make it such an elusive subject of history.

The difficulty of ‘pinning down’ this sense in language is, for the historian of the senses, similarly operative in the realm of iconography. Whereas recent historical attention to the human hand as an icon of agency (see, for example, Goldberg 1990; Stallybrass n.d.; Richter-Sherman 2001) may seem to offer much to the historian of touch, it is notable that those parts of the hand considered most sensitive to touch (the palm and fingertips) cannot be fully understood within a logic of instrumentality and social agency.¹ To touch with the hand informs metaphors of interaction that are quite different from other manually inflected forms of engagement such as ‘manipulation,’ ‘grasping,’ and ‘clutching.’ ‘Wind and water press against us and move us,’ writes Susan Stewart (2002: 165), ‘but they cannot be grasped . . . we cannot contain them in our hands for more than a moment.’ The reciprocal, fleeting, and ‘non-teleological’ aspect of touch that Stewart foregrounds might be understood to call into question the ways in which scholars and theorists attempt to grasp this particular dimension of sensation. For when humans touch there is a reciprocity of sensation at once physical and psychological that may be felt but not fully grasped. The cost of a touch that ‘grasps’ in a non-reciprocal manner is embodied in the myth of Midas, whose touch, in Anne Carson’s (1998: 136) words, ‘permit[s] him to freeze his own emotional

life at the high point of desire.' For Midas, as for any theorist of touch, to get a 'handle' on touch, to reify it, may be to eclipse its power.

Elaine Scarry's work in *The Body in Pain* suggests why this might be so. According to Scarry (1985: 19, 5): 'Physical pain is language-destroying,' or more specifically, pain 'resists objectification in language.' To generalize from this principle, it is the sense of touch as much as the specific example of pain that poses problems for representation. For how might one write about a sensory mode that itself resists 'objectification in language'?

The resistance of touch to representation poses a challenge for the historian of the senses. For example, in Renaissance studies of the senses, vision and hearing have been most fully explored as dominant, and historically contingent, structures of cognition. Histories of drama, following Andrew Gurr (1996), regularly explore the sensory dimensions of what it meant to be 'audience' and 'spectator,' and studies ranging from Bruce Smith's *The Acoustical World of Early Modern England* (1999) to Michael O'Connell's *The Idolatrous Eye: Iconoclasm and Theater in Early Modern England* (2000), map out the historical contours of these particular sense perceptions.² Since Aristotle, touch has been aligned with both human and animal capacities, and contrasted with vision and hearing as senses integral to the ethical and intellectual contours of what it means to be human.³ As such, it is no surprise that sensory modes traditionally linked with the work of the mind are frequently privileged in discourses of historical phenomenology and even audience response. But what of touch as a cultural phenomenon? A word used as often as 'spectator' and 'audience' to describe playgoers in the Renaissance was the 'assembly,' a word worth reintegrating into the sensory dimensions of theatrical experience, because it implied not only a coming together of persons, but a physical touching of bodies in space. This fact alone underscores the need for a more full-bodied approach to the understanding of Renaissance representations of the senses. Furthermore, given that touch is integral to humoral physiology (as touch detects temperatures and textures), to literary allegories of the senses and to social rhetorics of persuasion, sexuality, affect, disease and public health, this need may be considered acute.⁴

So, too, with the recent focus on the material object (as textual artifact, stage property, object of exchange, cultural spectacle, sumptuary habit), we might consider what happens to the tangible object in the domain of sensory perception. We might ask with the editors of *Subject and Object in Renaissance Culture*, not only 'where is the object?' in histories of Renaissance subjectivity, but where is the object that is touched, caressed, taken in hand? It is the hand that enables production, but it also touches – and is touched by – products. In early modern representations of touch, however, I want to suggest, the question becomes less 'where is the object?' than 'why *isn't* the object there?' Putting touch into a mix of material cultures seems to gesture toward a kind of materialism without an object, or more precisely, without specific objects. It

is the resistance of touch to specificity, conceptual stasis, and rational models that is arguably at the heart of Renaissance representations of touch.

The relative marginality of touch as a subject of Renaissance history is arguably rooted in the conceptual history of touch itself. The five senses were classically defined by specific organs, mediums, and objects (for example, eye, air, and celestial objects, respectively). As Helkiah Crooke put it in *Mikrokosmographia: A Description of the Body of Man* (1615), 'Sense is a knowledge or discerning of the Object receyued formally in the Organ,' and 'in euery Sense there be three things especially to be stood vpon, the Object, the Medium and the Organ' (Crooke 1615: 653, 722). Touch, however, consistently eluded the specifics of all three categories, disrupting basic systems of classification that the senses 'stood vpon.' In terms of organs, for example, from classical to Renaissance treatises on anatomy, the entire body, the nerves, skin, fingertips, tongue, palms, the region about the heart, were alternatively imagined as the locus of touch.⁵ 'This sense is exquisite in men,' writes Robert Burton in *The Anatomy of Melancholy*, 'and by his nerves dispersed all over the body' (Burton 1631: 139). Or as Crooke put it, 'al other Senses are restrayned within some small Organ about the brayne, but the Touching is diffused through the whole body' (Crooke 1615: 648). Whereas eyes, ears, nose, and tongue symbolize the modes of sensory perception they enable, touch is more difficult to represent, localize, and demonstrate. As such, as a facet of bodily, cognitive, and psychological experience, touch tends to resist the two operations of representation so integral to early modern somatic symbolism: synecdoche and metonymy.

This is not simply a theoretical point, but one integral to the representation of touch in the visual and verbal arts of the Renaissance. Although one might think the human hand an easy metonymy for touch, this was not always or even usually the case. One early allegorical drama of the five senses features characters named 'Eye' for vision, 'Ear' for hearing, and 'Tongue' for taste, but simply 'Touch' for touch; so that, in terms of basic forms of personification, here touch remains a sense without a synecdoche, a mode without a metonymy.⁶ This sense without a metonymy itself becomes metonymic in much Renaissance drama for the psyche's approach to what the psyche cannot precisely locate or measure.

Conflict of the Faculties

The limitations of touch to be clearly represented become a source of comedy in Thomas Tomkis's 1607 *Lingua, or the Combat of the Tongue and the Five Senses for Superiority*, an academic drama about the social sensorium that was performed at Cambridge, reprinted five times by 1657, and featured a young Oliver Cromwell as Tactus in an early production. In this play, whereas Olfactus is represented by Odor (bearing Tobacco) and Auditus by Comedy and Tragedy (bearing music, poetry

and other acoustical artifacts), Tactus is represented by Mendacio (the lie), aligned from the first with qualities of elusiveness and representational dispersion. Following Aristotle, touch is positioned here as the one sense most threatening to intellectual and ethical systems. But more precisely, as we will see, touch challenges the logic of synecdoche and metonymy upon which analogies between macrocosm and microcosm depend.

Tomkis' play is part of a tradition of academic dramas of the period, where students would inhabit theatrical parts that were *also* systemic parts (for example, the senses in 'Microcosmvs,' the affections in 'Pathopolis,' grammar in 'Grammarland,' or parts of rhetoric and mathematics).⁷ Given the frameworks of knowledge these plays staged, it is no surprise that they were particularly attentive to the operations of *pars pro toto*, of the capacities and limitations of parts to represent wholes, or indeed anything at all. *Pars pro toto* is, of course, at the core of dramas of persons, props, and personifications on stage. But when the whole is elusive, mythical, or hopelessly fragmented, the representative 'part' can become an embarrassment. In *Lingua*, with the five senses at war, each sense vies for superiority by asserting his individual powers: Odor, a quality of Olfactus, claims to command such intoxicating fragrances that 'You in your heart would wish as I suppose, / That all your Body were transformed to Nose' (Sig. H3). The idea that man might be represented by such an undignified part sends up strategies of representation and dramatic conflict in allegorical drama. But it is Tactus in this drama who most powerfully represents the failure of *pars pro toto*. Of course, the body simply couldn't be all 'Nose,' but it *is* in many ways 'all touch,' and the question of how to represent that through organs and objects (and indeed, mediums) creates high points of comedy in *Lingua*.

What academic plays such as *Lingua* clearly demonstrate is that disintegration in the epistemological realm means dramatic potential in the literary and theatrical realm. This is particularly pointed in the domain of touch in Tomkis's play, which converts conceptual disintegration into comic tension. At the outset of the play, *Lingua* (the tongue) and Mendacio (the lie) conspire to undermine the pentarchy by setting the senses at odds. They plant a crown and robe for the senses to discover and fight over. Tactus is the first to discover these items, he covets them and mayhem ensues. In a formal competition for the crown, judged by Common Sense, each sense puts on a show featuring the 'objects' they bring into this little world of man. Tactus, when asked to signify his 'dignity by relation' (Sig. I2), first locates himself in that Galenic 'instrument of instruments, the hand,' but quickly dislocates himself both rhetorically and conceptually: 'I am the roote of life, spreading my virtue / By sinewes that extend from head to foot / To euery liuing part.' His narrative disperses as he proceeds to speak about every known medical and scientific commonplace about the necessity of touch, from protecting the body from danger to enabling it to feel a kiss, until Common Sense abruptly says, 'Tactus, stand aside,' and proceeds to judge on behalf of those senses

nearer to the brain. While Tactus fails to represent himself 'by relation' to a particular organ, perhaps more importantly, his actual 'show' highlights his failure to represent himself with specific 'objects.'

Whereas particular smells, sounds, sights, and tastes in Renaissance iconography quickly signify the power of discreet senses in relationship to the outside world, touch – by virtue of its sheer diversity – is not easily demonstrated by any particular object. Tactus's 'show' in fact fails miserably because his cast of objects never 'shows': 'My lord, I had thought as other Senses did, / By sight of obiects to haue proued my worth,' staging 'a Gentleman enamored, / With his sweete touching of his Mistresse lippes, / And gentle griping of her tender hands, /And diuers pleasant relishes of touch,' but his mistress has such a complex costume that after five hours 'shee is scarce drest to the girdle':

Thus 'tis, fūe houres agoe I set a douzen maides to attire a boy like a nize Gentlewoman: but there is such doing with their looking-glasses, pinning, vnpinning, setting, vnsetting, formings and conformings, painting blew vaines, and cheekes, such stirre with Sticks and Combes, Cascanets, Dressings, Purses, Falles, Squares, Buskes, Bodies, Scarffes, Neck-laces... Borders, Tires, Fannes, Palizadoes, Puffes, Ruffes, Cuffes, Muffes, Pussles, Fussles, Partlets, Frislets, Bandlets, Fillets, Croslets, Pendulets, Amulets, Annulets, Bracelets, and so many lets, that yet shee is scarce drest to the girdle: and now there's such calling for Fardingales, Kirtlets, Busk-points, shootyes &c. that seauen Pedlers shops, nay all Sturbridge Faire will scarce furnish her: a Ship is sooner rigd by farre, then a Gentlewoman made ready. (Slg I2)

The heap of absent objects clearly displaces the representational problems of touch onto the female sex. The character Fantasy responds: 'Tis strange, that women being so mutable, / Will neuer change in changing their apparell,' a comment that informs Patricia Parker's (1989) suggestion that the play stages male anxieties about the effeminizing potential of representation. But there is another realm of signification at work, for this lavish insult backfires in a particularly effective way. Like the logic of the excessive insult, where terms of abuse pile up, become detached from specific contexts, and ultimately refer to insultor rather than insultee, so here imagined objects accumulate to the point of being detached from both the specifically gendered world and, more importantly, the specifically material world. Although Tactus should be undermined by so many absent objects, in fact this works as a brilliant form of self-reference, a demonstration of the infinite diversity of touch, which subtends (and yet is not limited to) the entire world of drama. Through the absent materialization of a kiss and a couple gently touching, and the infinite world of props and objects that touch the actor's body, Tactus at once suggests his lack of dependence on any specific domain of 'objects' and asserts the dependence of the other senses at play in the theater on *him*.

That is, through their absence, the missing lovers and the missing objects work to evoke conceptions of touch subtending the domain of 'show.'

It may well be said that it is precisely the failure of a body to 'touch' the world, persons, and objects around it that underpin its ultimate power as a symbolic mode. For touch can seem all the more alluring and powerful when objects are held at a distance. Perhaps more interestingly in terms of *pars pro toto*, the failure of synecdoche is in fact the only way in which the polymorphous diversity of touch can be signified. For locating the many possibilities and powers of touch *simultaneously* is in and of itself a seemingly impossible task. If one dimension of touch is located in one part of the body, the other sensitive parts, functions, and capacities would be necessarily neglected or eclipsed: the touch of a blind man understanding depth and visual space with his hands could not also represent the force of a puncture or the unexpected touch of another; the feel of coins in a hand could not signify the place of touch in detecting temperature in and out of the body; the light sensation of a fingertip (or the fantasy of God *almost* touching Adam's finger) could not signify the rough, soft or liquid textures of food in the mouth. This is simply to emphasize that Renaissance allegories of the senses, depending as they did on synecdoche and metonymy, worked according to a logic that could not accommodate the diversity of touch.

It is important to note in this respect the recurrence of one motif in many allegories of the senses. It was a particular kind of touch (that which Tactus longs to represent): the erotic pleasures of lovers touching. The realm of the erotic, with desire always in some sense linked to what is not there, is perhaps the most powerful vehicle for representing the infinite potential and the elusiveness of touch. Lovers can touch heatedly, softly, blindly, roughly, they can touch each other's clothes, gloves, and jewels, they can devour each other, wound each other, and break each other's hearts, so the recurrence of erotic interaction as a 'specific' kind of touch implies the very antithesis of specificity and categorical distinction: the real power and danger of this sense in the early modern world.

The representational resistance of touch in terms of specific organs and objects was also operative in the theoretical realm of 'media.' Indeed, touch is hard to theorize because it is (in the most classical sense) 'unmediated,' or, to quote Aristotle, 'immediate' (Aristotle 1995: 435a, 16–20). 'Immediately,' a term that currently signifies a lack of distance between coordinates in time (simply meaning *now*), at an earlier period meant a lack of distance between objects in space. Of the five senses, touch was the most 'immediate,' at once resisting temporal stasis and having no spatial "medium" between the body and the touchable world (be it in the form of objects, bodies, textures, or temperatures). The other senses, writes Aristotle in *De Anima*, 'produce sensation by means of something else, that is, through media. But touch occurs by direct contact with its objects and that is why it has its name. The other sense organs perceive by contact too, but through a medium; touch

alone seems to perceive immediately' (Aristotle 1995: 435a, 16–20). How does one account for a sense without a medium? What happens to this 'unmediated' sense in early medical and contemporary theoretical accounts of representation that look to the 'medium' as the message (McLuhan 1962)? Not surprisingly, the messages become difficult to decipher and even detect. In the context of studies of communications that have focused so heavily on 'media' and 'sense ratios,' technologies of touch often go relatively unnoticed. This is true even in the most practical sense: as Malcolm McCullough writes about contemporary computing: "Touch technology is underdeveloped, and few interaction devices provide force or tactile feedback. Without touch, currently the most common complaint about computers is not about overload but deprivation. It is about the inability to touch one's work. Being *out of touch* is considered an occupational hazard: regular sensory deprivation turns you into a nerd" (McCullough 1996: 130).

Like so many other physiological metaphors now wandering ghostlike through the lexicon of computer interaction, 'digital' technology seems to have left those fleshly little digits in the dust. It is precisely to the question of digits (meaning both fingers and numbers) and sensory deprivation that I would now like to turn. For when the body in the Renaissance was imagined in quantitative terms, as it so often was, touch was either neglected or conspicuously disruptive. For 'touch' not only complicated categorization in medical thinking (organs, objects, and media), but the possibility of categorization as such. This sense is not only difficult to account for, but difficult to count.

Calculating Minds: From Synesthesia to the Sixth Sense

The height of Heaven is taken by the staffe: the bottom of the sea sounded with lead: the farthest coast discovered by the compasse: the secrets of nature searched by wit: the anatomy of man set out by experience, but the abuses of Plaies cannot be shoven, because they passe the degrees of the instrument, reach of the plummet, sight of the mind, and for tryall are never brought to the touchstone.

Stephen Gosson, *The School of Abuse* (1579)

Quantitatively speaking, a 'touch' is a relatively insubstantial unit: not even a piece, or a part, but rather a point so small as to almost resist quantification. If touch resists quantification, how could it possibly measure up to the standards of 'rational' inquiry that emerged during the Renaissance? The latter period is commonly thought to have been characterized by a transformation in the '*ratio* of the senses,' marked by a heightened emphasis on 'visualization' and a new 'passion for measurement' – or *ratiocination* as quantification (Ong 1982;

Howes 1991). However, 'touch,' despite its minimal quantitative content, *did* mean in the Renaissance, 'to test' (hence 'touchstone' as a commonplace for locus of meaning or truth). What I want to do, therefore, is to put touch back into the test, and see what happens when touch is factored into the 'ratio of sense', particularly in the domain of theater. Tomkis' play is an apt site for such a test, for in *Lingua* the 'passion for measurement' and the 'visual bias' of sensory perception (Howes 1991) are turned inside-out and upside-down. This academic drama is preoccupied with the question of 'sense-ratios' (what sense is valued most being the central question of the play) and, perhaps most significantly, with the limits of quantitative models in representation of affect and tactile experience.

Tomkis makes light of the quantitative disruptions at once threatening and subtending the 'five senses,' which were among the many numerically conceptualized systems of the period ('the four seasons,' 'the four elements,' 'the four temperaments,' 'the seven arts,' 'the seven deadly sins,' 'the seven ages of man,' 'the twelve months,' and so forth).⁸ This is rendered explicit from the first, as *Ladie Lingua* (the tongue and language) craves to be the 'sixth sense,' hoping to make just a slight alteration to the order of things (Sig. A3). Despite *Auditus's* discouragement ('what Sense hast thou to be a Sense / Since from the first foundation of the world, / We neuer were accounted more than fiue' [Sig. A3]), this 'vp-start' organ forges on, determined to 'increase the number' and be reclassified with the best. This urge to recalculate systems of knowledge is mirrored in the subplot by *Lingua's* culinary counterpart, *Appetitus* (a representative of *Gustus*) who hopes to expand the seven liberal arts to eight, including 'the honorable art of Cookerie' (Sig. D2). 'As for the *Academie* it is beholding to mee, for adding the eight prouince vnto noble *Heptarchie* of the liberall sciences' (Sig. D1). The link between *Lingua* and *Appetitus* recalls Plato's *Gorgias*, where cookery (as opposed to medicine) is established as an art of deception, and explicitly aligned with the deceptive powers of rhetoric. As such, Tomkis here emphasizes the moral as well as epistemological stakes of sensory unaccountability as it relates to rhetoric. But while it may be easy to discount a wagging organ and an appetitive chef as viable contenders in the '*Academie*,' the numerical unaccountability in *Lingua* expands to the work of the five senses and, beyond, to the status of memory and history to boot. While *Mendatio* alludes to 'Master Register [i.e. recorded history] trudging hether, as fast as his three feete will carry vp his foure Ages' (Sig. F1), Memory himself complains about the chaos of contemporary 'history': 'A dog cannot pisse in a Noblemans shoe, but it must be sprinkled into the Chronicles' (Sig. D3). Memory is so overwhelmed that he loses track of time and things: he forgets himself, but remembers where he left his spectacles: 'I left them in the 349 Page of *Halls* Chronicles' (Sig. F3). It is the hopelessly particular realm of number that now preoccupies even the mnemonic function in this body of man. This play stages the perils of sense perception where mis-measuring compromises historical representation and

rational modeling, but at the same time, it foregrounds the interrelationship between problems of calculative integrity and possibilities of drama.

The concept of a world that is whole or 'intact' is itself a world detached from the complexities of touch. The word 'intact' derives from *in* (not) and *tactus* (touched). The distinctly numerical failure of 'integrity' in Tomkis's allegory is part of the comedy of *Lingua*'s 'irrationality,' but it is also integral to the synesthetic ordering and disordering of experience. As the senses become divided against each other, they seem capable not only of 'duplicity' but of infinite divisibility,⁹ and importantly, it is the sense of touch that operates most conspicuously according to a logic of physiological and representational self-difference. *Tactus* is capable of taking many different forms: he lies, shape-shifts rhetorically, psychologically, and theatrically, dupes *Olfactus*, and 'schemes' against the others. It is not only *Ladie Lingua* (a would-be sense) but *Tactus* who explicitly challenges the foundation of ethical, social, and cosmic forms of 'integrity.' In the sensory domain of the play, the concept of a quantitatively challenged 'sense' is perfectly embodied in *Tactus*, whose power extends to 'euery particle of the body' (Sig I3), providing a conceptual double to the problem of memory awash in historical particulars. If 'allegories generated by the analogy of macrocosm to microcosm,' as Marshall Grossman (1998: 154) notes, 'reach synecdochic closure when the analogy assures that each and every perceived object, if viewed correctly, will produce a cosmic totality,' then *Lingua* explores the perils of synecdoche in a microcosm 'in touch' with itself.

But importantly, this drama of irrationality is less a clear inversion of the classical hierarchy of the senses than a logical extension of classical thought, where touch was impossible to accommodate within categorical systems.¹⁰ *Ladie Lingua*'s inaugural challenge to the order of five senses reflects a quantitative disorder already implicit within the 'pentarchy'. Of course in the allegorical system of the senses, the tongue can only signify *one* sense, not two. In the allegory and iconography of the period, the tongue (for example in Fletcher's 1633 allegorical poem *The Purple Island* – see Fletcher 1869) was a stand-in for all things gustatory (see Mazzio 1997). So the very idea that *Lingua* might signify another sense seems absurd. And yet, if we consider debates in the period about the fact that the tongue itself might represent not one, but two senses, and that the sense of taste and touch were difficult to distinguish, the premise becomes a little less absurd. As Aristotle put it in *De Anima*, 'The tongue perceives all tangible objects with the same part with which it perceives flavor' (Aristotle 1995: 423a, 19–20) and suggests that 'taste must be some kind of touch' (Aristotle 1995: 434b, 22).

Renaissance medical texts endlessly cited Aristotle on the debate about whether taste and touch were one and the same. Crooke, for example, argues vigorously for an affinity rather than an equivalence between the two senses: 'if hee [Aristotle] had meant that the Tast and the Touch did not differ in *Specie*, hee would neuer haue sayd that *Gustus* was *Tactus quidam*, but simply

and plainly *Gustus* is *Tactus*, hee would not have sayd that Tast is a kinde of Touch, but that Tast is a Touch' (Crooke 1615: 716). Aristotle's distinction is crucial here for Crooke as a way of maintaining that these two must be 'esteemed distinct Senses':

It may be also objected, that because both the Taste and the Touch are together in one & the same Tongue, that therefore they should be one and the same Sense. But the consequence is not good, for there is no organe of Sense, which beside his proper Facultie of Sensation is not also furnished with the Sense of Touching. But because the Sense of Tasting is not alwaies found where Touching is, and where it is found there is no other Faculty of Sensation: I conclude that not onely all the other Senses but the Taste also is a distinct and different Sense from the Touch. (Crooke 1615: 717–18)

Practically speaking, it does seem somewhat of a shame that the entire body cannot, as Crooke (following Aristotle 1995: 423a, 21) notes, experience taste. Such a conflation of senses for Crooke is 'not good,' however, not only because it marks a misreading of Aristotle and poses a problem of anatomical categorization, but because the conflation of touch and 'all the other Senses' would challenge the hierarchy of the senses that helps distinguish man from animal (Aristotle 1976: 137).

But the ideas and the vocabularies of taste and touch were deeply entwined in anatomical theories of this period, and this partnership extended into the domain of metaphor in the realms of music, rhetoric, and theology (where, for example, Eve's palm became as important as her tongue in the representation of original sin – O'Rourke Boyle 1998: 90–171). In the rhetoric of love it is the sweet touch that lingers in the memory, the beloved one devours with kisses, the gentle brush of a hand one might relish or savor. But the metaphoricisms of synesthesia (or better, sensory interanimation) become flattened by Crooke, who invokes commonplace tropes of synesthetic disorder in the political body to warn against sensory indiscretion: 'The Foote would see, and the Elbow would heare, and the sides would smell, and the crowne would taste, if in these parts there wer[e] a disposition to receiue the objects of these Senses' (Crooke 1615: 725). While Crooke hopes to restore the analytic order of thought through sensory discrimination, what is suggestive here is that debates about touch in relation to the other senses provide a kind of physiological basis for the interanimation of sensory modes (synesthesia) that surfaces so frequently in literary texts of the period. This is to say that whereas Tomkis's *Ladie Lingua*, for example, upsets the sensory system by her gender and linguistic non-sense, what is also at work is a broader question of anatomical categorization, sensory discrimination, and the distinct status of human perception itself.

The tactile substrate of sensory perception is integral to a number of early theories of sense. Despite the 'distance between organ and object'

required by visual apprehension, for example, the debate about whether eyes emanated rays or received particles through the air when visualizing objects speaks to a material process of visualization at the most basic physiological level. So too, despite the privilege given to auditory consciousness in much religious writing of the period, the force of sound and air waves was generally understood to have the power to damage the brain, hence the labyrinthine structure of the auditory canal to protect the brain from direct acoustical contact: as John Davies puts it, 'So in th'Eares' labyrinth the voice doth stray / And doth with easie motion touch the braine' (Davies 1876: 67). Given the proximity to the material world necessary for the functioning of taste and smell, these senses were more explicitly aligned with the touchable world. But the logical conclusion of the necessity of touch for the functioning of all of the other senses is, for Crooke, no less than the decay of all intellectual knowledge: 'Furthermore,' he writes,

if we will stand to *Aristotles* determination, that there can no other Sense subsist without Touching, then will it follow that this being taken away no sense can remaine. Now if the Senses be taken away, the whole family of Arts (which we said before did depend vpon their credit) must needs decay, nay you shall remooue the Sunne it selfe out of the World. If any Man doubt of this, let him seriously suruey all the Artes both Liberall and Mechanicall. (Crooke 1615: 649)

It is no surprise in this respect that Tomkis's *Tactus* aligns himself with Aristotle: 'Tell me what sense is not beholding to mee? / The nose is hot or cold, the eies do weepe / The eares do feelee, the tast's a kind of touching, / That when I please, I can command them all, / And make them tremble when I threaten them' (Sig. I3). A bit like Shakespeare's Bottom fearing he might frighten the ladies with a roar, *Tactus* takes himself just a touch too seriously. Or does he? For without him, as we have seen above, no show could possibly go on. In the synesthetic dimensions of theater, it may be that only touch can really pull things together. For Crooke, if Aristotle is correct that no sense can 'subsist without Touching,' then the absence of touch would extinguish all possibilities of sense, at once conceptual and cultural, including 'all the Artes both Liberall and Mechanicall' (Crooke 1615: 649). This threat materializes in *Lingua*, but in a slightly different way, where the presence of touch potentially *expands* the number of the arts and sciences (as *Appetitus* would have it, from seven to eight) and the senses themselves.

Indeed, what I now want to consider is the extent to which touch was not only imagined to disable ways of calculating knowledge, but to open up new possibilities for articulating and understanding the sense of things. While direct contact was integral to medical explanations of touch, such as Crooke's, the idea of touch in literature often stretched the domain of the tactile beyond the bounds of the body itself, implying conditions of hyper

awareness and cognitive sensitivity. The commonplace iconography of the spider as a representative of touch, for example, is worth exploring in this respect because it expands the realm of sensitivity from body to environment. As Davies writes, 'Much like a subtile spider, which doth sit / In the middle of her web, which spreadeth wide; / If ought doe touch the vtmost thred of it, / Shee feeles it instantly on euery side.' This passage has often been read as alluding to the spread of nerves throughout the body. But the simile also relocates touch from the physically proximate to the relatively distant space of environment, perhaps providing the closest Renaissance analogy to the contemporary notion of the 'sixth sense,' that eerily inexplicable receptivity to seemingly undetectable environmental stimuli. Francis Bacon would liken excess emotional receptivity to a whole environment of cobwebs, a 'Cob-web Lawn... so tender as to feel everything' (Bacon 1737, I: 397).

Spiders make webs to protect themselves and entrap others, but what makes them a powerful paradigm of 'sensing' in this period is that they can feel without direct contact. The arachnid, or 'extrasensory,' powers of touch as an alternative mode of receiving information are in fact highlighted by Tomkis's *Tactus*, where the spider works less as a simile of tactile sensitivity than a condition of knowing. 'For as a subtle Spider closely sitting, / In the center of her web that spreddeth round, / If the least Flie but touch the smallest thred, / She feels it instantly; so doth my self' (Sig. I3). The analogy between nerves and the webbed texture of the spider is expanded out in this play from the domain of the physical body and into the untouchable realms of the cosmos. In one passage, *Tactus* is portrayed as 'scal[ing] the heavens' on the 'cordage fine' spun from a spider's gut:

The maskes are made so strong,
That I my selfe vpon them scal'd the heauens,
And bouldly walkt about the middle region,
Where in the prouince of the Meteors,
I saw the clowdie shops of Haile and Raine,
Garners of Snow, and Christals full of dew,
Riuers of burning Arrowes, Dens of Dragons,
Huge beames of flames, and Speares like fire-brands.
Where I beheld hotte Mars and Mercurie,
With Rackets made of Spheares, and Balls of Starres,
Playing at Tennis for a Tunne of Nectar. (Sig. E2)¹¹

What is articulated here is a vivid form of 'gut' knowledge, or what David Hillman (1997) has called 'visceral knowledge,' at odds with emergent forms of scientific inquiry in the Renaissance. The spiders 'Of their owne gutts to spinne a cordage fine' ('cordage,' invoking the Latin for 'heart') joins the nerves and sinews in an unaccountable way of perceiving the world. This way of sensing is unaccountable, or in other words, suspect, because many of the objects in this ekphrastic whirlwind traditionally belong to *Visus*

(such as the planets, the heavens, the stars, all visible from a distance). This contrasts with Visus's use of Terra in his own performance: for while the earth is visible, it was elementally linked with the properties of touch. Visus only 'shows' Terra, noting 't'were an *indecorum Terra* should speak' (Sig. G1). The implication in this elemental allegory is that the articulation of touch is necessarily indecorous; that is, whereas touch may be fundamental (linked with the 'firmament'), the fact that it may also enable a kind of extrasensory (or suprasensory) mode of knowing is at once asserted and undermined in the passage above: not the least because it is Mendacio who is Tactus's spokesman in this instance.

Maddening Fantasies of Optical Self-knowledge

The inflated and deflated powers of touch are worked into *Lingua's* plot in psychological as well as physical terms as Tactus first feigns madness and then becomes mad in fact. For to be 'touched' in this period involved a psychophysiology of temperament, where one could be physically affected and imbalanced by humoral and environmental forces. This concept was so common that Tactus takes full advantage of it. To deflect attention from the coveted crown and robe he sits upon to hide, Tactus performs his own cultural signification: he pretends that he is 'touched,' melancholy, and so 'out of touch' with his rational faculties that he thinks himself a glass urinal. He says to Olfactus, 'when I had ariu'd and set me downe, / Viewing my selfe, my selfe ay me was changed. / And thou now seest [me] to be a perfect vrinall.' 'I am an vrinall I dare not stirre. / For fear of cracking in the Bottom' (Sig. B3). More telling than this fragile firmament *extraordinaire* are associations that Tactus makes in imagining himself a man of glass: a fantasy with roots in medical and classical lore that is re-imagined in scatological terms. Tactus narrates his apparent transformation to glass by alluding to the Greek god of satire Momus's well-known fantasy that all men should have been made with a glass window, so that one might be able see into the innermost 'core.'

No sooner had I parted out of doores,
 But vp I held my hands before my face:
 To sheild mine eyes from th'lights percing beames,
 When I protest I saw the Sunne as cleer,
 Through these my palms as through a prospectiue.
 No marueil, for when I beheld my fingers:
 I sawe my fingers neere transform'd to glass,
 Opening my breast, my Breast was like a window,
 Through which I plainly did perceiue my heart:
 In whose two Concaues I discernd my thoughts,
 Confus'dly lodged in great multitutes. (Sig. B3)

'[W]hy this is excellent,' responds Olfactus, 'Momus himself can find no fault with thee / Thou'st make a passing liue *Anatomie*. / And decide the Question much disputed: / Betwixt the *Galenists* and *Aristotle*' (Sig. B3). What begins as a vivid account of touch being able to detect his own interior (while still a 'liue Anatomie'), accessing that 'confus'd' realm of thought within the body, ends in a parodic transformation of the self to a urinal, an object that most would not care to see inside. Hillman (1997) convincingly argues that the anatomical fantasy of accessing and seeing one's own and another's insides in the Renaissance always encodes a powerful disavowal of knowledge, a non-recognition of the quintessential otherness of both others and selves. In *Lingua*, that very fantasy is made as fragile as glass: self-recognition here hinges on conspicuous disavowal, since Tactus deploys a largely *visual* model of self-investigation. But the largely academic audience of the play well knows that this is a joke, since Tactus *fabricates* this elaborate disavowal as a way *not* to be seen by others, and to assert his agency.

Given the complexities of touch as a mode of perception in the play, Tomkis' parody of Momus's fantasy at the very least evokes the non-visual correlative of what it might actually mean to know things, in a physiological and affective sense, by heart. Much like Mendacio's dream of touching an untouchable universe, Tactus at least gestures toward the possibility of an alternative way of 'plainely' perceiving one's 'heart': not just seeing it but understanding the confused multitude of 'thoughts' within. Indeed, this Tactus is less dead than the 'liue Anatomies' that people so many Renaissance medical texts, who delicately point to their own grotesque insides without apparent concern, who might dangle their skin over a shoulder like a warm coat on a sunny day, flex their skinless muscles like so many classical bodies, or pose for a guide to the anatomy of the brain with a conspicuously halved cranium.¹² Unlike the living corpses of what Jonathan Sawday has called the Renaissance 'culture of dissection,' where 'the body had become subject to the gaze' (Sawday 1995: 18) Tactus is less a numb body pointing at itself than a 'liue Anatomie' trying to speak from inside out.

As tradition would have it, however, Tactus is ultimately 'found out.' Visus gets the crown, Auditus is next best, and though Tactus is deemed a mere 'necessity,' he gets the robe as a door prize. Common Sense attempts to restore proper numerical and conceptual order:

The number of the *Senses* in this little world, is answerable to the first bodies in the great world: now since there bee but fiue in the Vniuerse, the foure elements and the pure substance of the heauens, therefore there can bee but fiue senses in our *Microcosme*, correspondent to those, as the sight to the heauens, hearing to the aire, touching to the earth, smelling to the fire, and tasting to the water, by which fiue means only the vnderstanding is able to apprehend the knowledge of all Corporeall substances. (Sig. I3)

Even at the end of the play, there is a dramatic dispute over the robe that Tactus has but Lingua wants. Much is made at the beginning of the play that 'there is but one [robe]' (Sig. BI), but Tactus and Lingua (and implicitly Gustus) continue to battle it out for the same sign, recalling the tension implicit in differentiating the senses of taste and touch, and implicitly, all of the senses from each other, in the domain of language and theater. But it also implicates Tactus with the tongue as an instrument of speech, what many in the period considered to be the 'sixth sense' itself: Burton (1931: 137) writes of the five senses, 'you may add Scaliger's sixth sense of *titillation*, if you please; or that of speech, which is the sixth external sense according to Lullius.' In *Lingua*, 'speech' becomes entwined with sensory activity, for it is Lingua who first tempts Tactus into thinking he might rule the pentarchy, working to 'Clad my selfe in Silken Eloquence / To allure the nicer touch of Tactus hand' (Sig. A3). While Lingua ultimately fails 'to make the senses sixe' (Sig. A3), what is on display here is the power of theatrical language not only to 'allure' and 'move' but to activate the mobility and instability of the senses.

Interestingly, it is when Tactus loses his power to infiltrate and complicate the world of knowledge that the single 'object,' the robe, finally comes to signify touch. But more importantly, this single sumptuary habit has a somatic analogue in the play in the reduction of sensory complexity to a localized and vulnerable bodily object. Tactus's ability to disrupt or alter the order of things fully diminishes as he becomes vulnerable to physical (as opposed to cognitive and linguistic) forces stronger than he: his perceptual sensitivity is realized in the body as he is tickled: 'Ha, ha, ha, fie, I pray you leaue, you tickle me so, oh, ah, ha, ha, take away your hands I cannot indure, ah you tickle me, ah, ha, ha, ha, ah' (Sig. M2). 'We see no Man can tickle himselfe,' wrote Bacon (1627: 198) in *Sylva Sylvarum*, 'Tickling is euer Painfull, and not well endured. Indeed, tickles quickly become unbearable and the tactual takes a turn for the worse, as Tactus is touched with a 'pinch,' 'pinne,' and a 'stab' (Sig. M3), wracked with cramps, 'O the crampe, the crampe, the crampe, my legge, my legg' (Sig. M.2), and his powers are diminished to sheer reactivity to the physical force of the world he now inhabits. He is actually disabled from wearing the robe (once again resisting the object) because he is overwhelmed by a kind of burning heat: 'Oh what a wild-fire creepes among my bowells: / Aetna's within my breast, my marrowe fries, / And runnes about my bones, oh my sides: / My sides, my raines, my head, my raines, my head; / My heart, my heart, my liuer, my liuer, oh / I burne, I burne, I burne, oh how I burne' (Sig. K3). In this heartburn *par excellence*, Tactus becomes a kind of grotesque version of the self-demonstrating anatomy, reduced to locating his vulnerabilities in a series of individuated and hurt body parts: 'heart,' 'brains,' 'breast,' 'marrowe,' 'bones,' 'sides,' 'raines.' 'My heart, my heart, my liuer, my liuer.' Such a quick descent from a richly textured realm of plotting, perception, and knowing to a self defined by a series of single

hurt organs, subject to anatomical investigation! What might have been a kind of tremulous public body becomes a spectacle of individually marked symptoms and vulnerabilities of physical touch. In a trajectory that, I argue elsewhere (Mazzio 2003), we can see at work in *Hamlet* and a number of tragic dramas and antitheatrical texts of the Renaissance, the epistemological complexity of touch in *Lingua* is ultimately contained by its materialization in the domain of hurt. The unbearable lightness of touch, the surprise of a tickle, a hint, or an unexpected twist, in rhetoric and logic as on stage, are extremely difficult – in Tactus's words – to 'indure.'

In this Early Modern world, while we see the 'body in pain' emerge as a model that resists 'objectification in language,' the dissolution works, paradoxically, to reify touch *as* pain, substituting the aliveness of touch as an aspect of affect and knowledge with the conspicuous rupture of an otherwise intact body. The physical concretization of sensory-emotional experience that transforms the body itself into its own object foregrounds the profound difficulty of sustaining concepts of touch as complex modes of mediation. If (to re-appropriate McLuhan's phrase) the medium is the message, then when the distance of objects and organs afforded by interanimation of tactile, acoustical, and visual metaphors collapses or, rather, becomes subject to a logic of proximity and material 'immediacy,' touch loses its power to signify. This is all the more reason to take seriously the elusiveness of touch to objects – for what is at stake is less the 'socialization of sentience' in the Marxian sense, than the sensitization of the social in the dramatically literary sense.

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Notes

1. Even for early materialists such as Lucretius, who claim that 'touch and nothing but touch... is the essence of all our bodily sensations,' touch has a peculiar ability to 'upset' sensory organization: 'It is touch... that is felt when the atoms are jarred by a knock so that they are disordered and upset the senses: strike any part of your

own body with your hand, and you will experience this for yourself' (Lucretius 1987: 72–3).

2. Much recent scholarship on the symbolics of the hand in Renaissance literature has emphasized the hand as an instrument of reading (Stallybrass, in progress), writing (Goldberg 1990), gesture (Bevington 1984), memory (Richter Sherman 2001), of labor, political agency, and contractual negotiation (Rowe 1999). But the hand as an instrument often looks quite different when it is represented as a receptor of touch.

3. See further Gozza 2000; Burnett 1991; Elkins 1996; Sawday 1995; and Freedman 1991. On the interanimation (as opposed to the isolation) of vision and hearing in this period, see Eisenstein (1979). For an earlier approach to the senses in Shakespeare, see Spurgeon (1935: 57–78, 82–83) which devotes twenty two pages to vision and hearing, compared to one and a half to touch.

4. Touch and taste, writes Aristotle, are 'are concerned with such pleasures as are shared by animals too (which makes them regarded as low and brutish)' (Aristotle 1976: 137). Touch is worthy of 'reproach... because it attaches to us not as men but as animals. So to enjoy such sensations and find the greatest satisfaction in them is brutish' (Aristotle 1976: 137). For a recapitulation of vision as the 'most precious, and the best... by it we learn and discern all things' and touch as the 'most ignoble' see Burton (1931: 138–39).

5. Much recent work on the body in contemporary literature and thought has integrated 'touch' as a technology of body, mind, and culture: while Anzieu (1989) maps out a kind of thermal and tactual unconscious, other theorists of the body such as Nancy (1994), Grosz (1994), Stewart (2002) and earlier, Irigaray (1980), have turned to 'touch' as a rich and largely neglected technology of perception.

6. This issue is still fully alive when Alexander Ross responds to ancient and contemporary medical writing in the mid-seventeenth century: 'The sense of tact either hath no medium, or else we must make the skin the medium; and the flesh, membranes and nerves the organ' (Ross 1651: 66). The singular use of 'organ' to encapsulate such complex and individuated parts of the body speaks to the extent to which the triad of organ, object and medium, though insufficient, was nonetheless continually invoked to organize the sensory modes.

7. For details on this morality drama, attributed to Jean Gerson and written between 1377 and 1384, see Vinge (1975: 60 n.27).

8. On the structure of the senses in relation to these basic analogical systems, see Vinge (1975: 11). Interestingly, the disequilibrium between the elements of sense (five) and the elements of the natural world (four) is of some concern to Aristotle in *De Sensu*, but as Vinge (1975: 17) notes, he quickly reconciles this by simply conflating taste and touch, which are both aligned with the earth.

9. This infinite divisibility of the senses dramatizes a classical paradox whereby indivisible properties of thinking and judging are inextricably linked with infinitely divisible sensory perceptions. See Aristotle, *De Anima* (esp. 427a–7b).

10. As Aristotle writes:

For if touch is not one sense, but several, there must be several kinds of tangibles. It is difficult to say whether touch is one sense or more than one, and also what the organ is which is perceptive of the object of touch... For every sensation appears to be concerned with one pair of contraries, e.g., vision is of white and black, hearing of high and low pitch, and taste of bitter and sweet; but in the tangible there are many pairs of contraries, hot and cold, wet and dry, hard and soft, and all other like qualities. (Aristotle 1995: 422b, 18–28)

This, the touch that is not one, clearly complicates matters of classification. As such, despite Aristotle's analytical attempts to find the necessary 'solution' for this problematic sense, he finds more and more 'problems' posed by the protean and mysterious tactual realm. Ultimately, the sense of touch for Aristotle is the one sense necessary for all of the others to function.

11. The passage continues: 'And that vast gaping of the Firmament, / Vnder the Southerne pole, is nothing else, / But the great hazzard of their Tennis Court; / The Zodiack is the line; The shooting Starres, / Which in an eye-bright euening seem'd to fall, / Are nothing but the Balls they loose at Bandy' (Sig. E2).

12. On fantasies of optical self-knowledge, and for a series of 'self-figuring' anatomical figures, see Sawday (1995: 1–5, 38–39).

Bibliography

- Anon. (1613), *Pathomachia: or, The Battel of Affections*, London: n.p.
- Anon. ([1613] 1983), *Blame Not Our Author*, ed. Suzanne Gossett, New York: Malone Society.
- Anzieu, D. (1989), *The Skin Ego: A Psychoanalytic Approach to the Self*, trans. C. Turner, New Haven CT: Yale University Press.
- Aristotle (1976), *Nicomachean Ethics*, trans. J.A.K. Thomson, ed. Jonathan Barnes, London: Penguin.
- (1995), *De Anima*, trans. W.S. Hett, Cambridge MA: Harvard University Press.
- Bacon, F. (1627), *Sylva Sylvarum*, London: n.p.
- (1737), 'Against Duelling,' in Peter Shaw (ed.), *The Philosophical Works of Francis Bacon, Baron of Verulam, &c. Methodized and made English from the Originals*, second edition, London: n.p.
- Bevington, D. (1984), *Action is Eloquence: Shakespeare's Language of Gesture*, Cambridge MA: Harvard University Press.
- Boas, F.S. (1914), *University Drama in the Tudor Age*, Oxford: Clarendon.
- Burnett, C. (ed.) (1991), *The Second Sense. Studies in Hearing and Musical Judgement from Antiquity to the Seventeenth Century*. London: The Warburg Institute.
- Burton, R. (1931), *The Anatomy of Melancholy*, ed. F. Dell and P. Jordan-Smith, London: Routledge.
- Carson, A. (1998), *Eros the Bittersweet*, Normal IL: Dalkey Archive Press.
- Crooke, H. (1615), *Mikrokosmographia: A Description of the Body of Man*, London: n.p.
- Davies, J. (1876), 'Nosce Telpsum,' in A.B. Grosart (ed.), *The Complete Poems of Sir John Davies*, London: n.p.
- De Grazia, M., Quilligan, M. and Stallybrass, P. (eds) (1996), *Subject and Object in Renaissance Culture*, Cambridge: Cambridge University Press.
- Elkins, J. (1996), *The Poetics of Perspective*, Ithaca: Cornell University Press.
- Fletcher, P. (1869), 'The Purple Island,' in A.B. Grosart (ed.), *The Poems of Phineas Fletcher*, London: n.p.
- Freedman, B. (1991), *Staging the Gaze: Postmodernism, Psychoanalysis, and Shakespearean Comedy*, Ithaca: Cornell University Press.
- Goldberg, J. (1990), *Writing Matter: From the Hands of the English Renaissance*, Stanford: Stanford University Press.

- Gosson, S. (1579), *The School of Abuse*, London: n.p.
- Gozza, P. (ed.) (2000). *From Number to Sound. The Musical Way to the Scientific Revolution*, Dordrecht: Kluwer Academic Publishers.
- Grossman, M. (1998), *The Story of All Things: Writing the Self in English Renaissance Narrative Poetry*, Durham: Duke University Press.
- Grosz, E. (1994), *Volatile Bodies: Toward a Corporeal Feminism*, Bloomington: Indiana University Press.
- Guarna, A. (1511), *Bellum Grammaticale*, Cremona: n.p.
- Gurr, A. (1996), *Playgoing in Shakespeare's London*, Cambridge: Cambridge University Press.
- Hayward, W. (1576), *Bellum Grammaticale: A Discourse of Gret War and Dissention betweene Two Worthy Princes, the Nounne and the Verbe*, London: n.p.
- Hillman, D. (1997), 'Visceral Knowledge,' in D. Hillman and C. Mazzio (eds), *The Body in Parts: Fantasies of Corporeality in Early Modern Europe*, New York: Routledge, pp. 81–105.
- Howes, D. (1991), 'Sensorial Anthropology,' in D. Howes (ed.), *The Varieties of Sensory Experience: A Sourcebook in the Anthropology of the Senses*, Toronto: University of Toronto Press, pp. 167–91.
- Hutton, L. (1583), *Bellum Grammaticale*, Oxford: n.p.
- Irigaray, L. (1980), 'This Sex Which is not One,' in E. Marks and I. De Courtivron (eds), *New French Feminisms*, Amherst: University of Massachusetts Press, pp. 99–106.
- Langdale, A.B. (1937), *Phineas Fletcher, Man of Letters, Science and Divinity*, New York: Columbia University Press.
- Ling, N. (1598), *Politeuphia. Wlts Common wealth*, London: n.p.
- Lucretius (1987), *On the Nature of the Universe*, trans. R.E. Latham, Middlesex: Penguin.
- Mazzio, C. (1997), 'Sins of the Tongue,' in D. Hillman and C. Mazzio (eds), *The Body in Parts: Fantasies of Corporeality in Early Modern Europe*, New York: Routledge, pp. 52–79.
- (2003), 'Acting with Tact: Touch and Theater in the Renaissance,' in E. Harvey (ed.), *Sensible Flesh: On Touch in Early Modern Culture*, Philadelphia: University of Pennsylvania Press, pp. 159–86.
- McCullough, M. (1996), *Abstracting Craft: The Practiced Digital Hand*, Cambridge MA: MIT Press.
- McLuhan, M. (1962), *The Gutenberg Galaxy*, Toronto: University of Toronto Press.
- Mitchell, W.J.T. (1986), *Iconology: Image, Text, Ideology*, Chicago: University of Chicago Press.
- Nancy, J.-L. (1994), 'Corpus,' in J. Flower MacCannell and L. Zakarin (eds), *Thinking Bodies*, Stanford: Stanford University Press.
- O'Connell, M. (2000), *The Idolatrous Eye: Iconoclasm and Theater in Early Modern England*, New York: Oxford University Press.
- Ong, W.J. (1988), *Orality and Literacy: The Technologizing of the Word*, New York: Methuen.
- O'Rourke Boyle, M. (1998), 'Eve's Palm,' in *Senses of Touch: Human Dignity and Deformity from Michelangelo to Calvin*, Leiden: Brill, pp. 90–171.
- Parker, P. (1989), 'On the Tongue: Cross Gendering, Effeminacy, and the Art of Words,' *Style*, 23: 445–63.

- Richter Sherman, C. (2001), *Writing on Hands: Memory and Knowledge in Early Modern Europe*, exhibition catalogue, Washington DC: Folger Shakespeare Library.
- Ross, A. (1651), *Arcana microcosmi: or, The hid secrets of man's body discovered; in an anatomical duel between Aristotle and Galen*, London: n.p.
- Rowe, K. (1999), *Dead Hands: Fictions of Agency, Renaissance to Modern*, Stanford CA: Stanford University Press.
- Russell, M. (1829), *The Life of Oliver Cromwell*, Edinburgh: Constable.
- Sawday, J. (1995), *The Body Emblazoned*, London: Routledge.
- Scarry, E. (1985), *The Body in Pain: The Making and Unmaking of the World*, Oxford: Oxford University Press.
- Shakespeare, W. (1963), *The Winter's Tale*, ed. J.H.P. Pafford, London: Methuen.
- (1964), *King Lear*, ed. K. Muir, London: Methuen.
- Smith, B. (1999), *The Acoustical World of Early Modern England*, Cambridge: Cambridge University Press.
- Spurgeon, C. (1935), *Shakespeare's Imagery*, Cambridge: Cambridge University Press.
- Stallybrass, P. (in press), How Many Hands Does it Take to Read (or Write) a Book.
- Stewart, S. (2002), *Poetry and the Fate of the Senses*, Chicago: University of Chicago Press.
- Tomkls, T. ([1607] 1913), *Lingua, or the Combat of the Tongue and the Five Senses for Superiority*, ed. J. Farmer, Amersham: Tudor Facsimile Reprints.
- Vinge, L. (1975), *The Five Senses: Studies in a Literary Tradition*, Lund: Berlingska Boktryckeriet.
- Williams, R. (1990), 'From Medium to Social Practice,' in *Marxism and Literature*, Oxford: Oxford University Press.
- Zouch, R. (1610), *Fallacy; or, The Troubles of Great Hermenia*, Oxford: n.p.