versus distraction, continuous versus intermittent, depth versus surface, interest versus disinterest, structural versus culinary, and so on. Yet the music of the late eighteenth-century commercial metropolis might reveal what the attention economy and its ostensibly more virtuous opposites have in common: a conception of all attention as a kind of expenditure, and thus the belief that even the most superior forms of attention involve investing one’s psychic currency wisely, and in the choicest things.

Talking to the Hand: The “Hysterical Epistemology” of the Migrating Sensorium

CARMEL RAZ

Nineteenth-century European medical texts abound in reports of patients allegedly seeing, tasting, smelling, or hearing by means of their internal organs or their extremities. These dislocations traversed corporeal and national boundaries: in Aix, Estelle L’Hardy heard with her wrist, elbow, and stomach, while in Bologna, a woman heard with the palms of her hands, the soles of her feet, and the pit of her stomach. Ann Finn of Dublin could only hear when spoken to on her abdomen, while Johanna Anschütz of Vienna heard with the hollow of her hand. The patients—typically young women—acted as if some or all of their senses had been transferred to another limb or organ, one that alone was capable of perception. Contemporary physicians ascribed these sensory transformations to a trance-like state of catatonic passivity. Alternately termed “hysteria,” “catalepsy,” “ecstasy,” or “somnambulism,” this condition was typically diagnosed as arising either spontaneously from organic causes or as a result of a mesmeric magnetization.

The phenomenon of “transposition des sens” or sensory transposition, as these altered capacities became known, was first described by Jacques-Henri-Désiré Petetin in 1805. Petetin (1744–1808), a Lyon-based physician with an interest in medical electricity, had been summoned to treat a young female somnambulist. At one point, she began to sing compulsively. Unable to attract the woman’s attention in this disordered state, Petetin grasped her, and in doing so slipped and fell across her body, crying out, “It is truly

38. See Despine, Observations de médecine pratique, 62, and Orioli, “Case of Spontaneous Catalepsy,” 664.
40. Animal magnetism, or mesmerism, as it became known, was a vitalist theory proposed by the German physician Franz Mesmer, who claimed that all living beings were pervaded by an invisible magnetic fluid; see Franklin et al., Rapport des commissaires. See also Gauld, History of Hypnotism.
41. Petetin specifies that she performed a “difficult arietta with the best taste imaginable”: Petetin, Electricité animale, 4 (“une arietta d’une exécution difficile, avec tout le gout imagi-

 improbable. Unless otherwise indicated, translations in this essay are mine.
unfortunate that I cannot make this woman stop singing.”

42. Ibid., 7: “Il est bien malheureux que je ne puisse empêcher cette femme de chanter!”

43. For an analysis of the influence of Petetin’s diagnosis on the approach taken by two subsequent physicians, see Goldstein, *Hysteria Complicated by Ecstasy*.


and single-mindedness to pathology. As Natalie Phillips has recently demonstrated, this transformation was evident in the rise of the psychiatric diagnosis of monomania, in which the mind was believed to obsessively return to a single idea. Another manifestation of the newly negative connotations of unswerving focus can be found in accounts of mesmerized subjects compelled to attend to—and obey—the commands of an external agent.

Around the beginning of the nineteenth century, Petetin and others began to explain mesmeric phenomena—such as hysterical sensory transposition—as the result of mechanistic nervous electricity rather than the action of an occult magnetic fluid. In the 1830s, this idea was gradually superseded by the realization that the same experiences could be caused by manipulating the faculty of attention through suggestion. In 1841, Scottish physician James Braid effectively confirmed this theory by demonstrating that hypnosis could be self-induced. The mesmeric trance, he maintained, arose from “absolute repose of body, fixed attention, and suppressed respiration, concomitant with that fixity of attention.” Recasting the condition as essentially consisting of changes to the attention meant that various behaviors previously ascribed to supernatural or electric forces could now be interpreted as indications of morbid single-mindedness.

Given the new importance of attention in accounting for hysterical phenomena, the immersive experience of sound emerged as a particularly appealing illustration of the way in which the senses might wander. For example, British physician Thomas Renwick invoked the case of a deaf man who was able to enjoy listening to music by relying on bone conduction to explain the symptoms of a patient who claimed that her sense of sight had migrated to her hands. Auditory sense transposition, whose only indication was an apparent change to the faculty of attention, as demonstrated by an intentional response to given sound, was at once feasible and uncontroversial: physicians simply noted that transposition had occurred when their charges reacted solely to sounds directed at a certain limb or organ. As the philosopher Alexis Bertrand remarked when discussing Petetin’s patient as late as 1891, the woman “even heard through her big toes, so that it may be said she was all hearing, although not all ears.”

The multidimensional nature of hearing also led Gabriel Andral, professor of internal medicine in Paris, to attempt to demystify the diagnosis of somnambulism in 1833 by comparing it to “a familiar instance of a kind of abstraction noticed every day,” namely the situation in which two persons are “so intently occupied with each other, with their minds so mutually

50. Renwick, *Continuation of the Narrative*, 109–10n.
concentrated, that they are perfectly insensible to all that is passing around them.” In this scenario, he continued, “Questions are put to them in vain. Sometimes they do not hear them at all; or if they do, they do not understand their import.” Here excessive attention caused concrete sensory transformations—a deafness to sounds produced by anyone other than the subject of fascination. A related explanation was proposed in 1866 by Ambroise-Auguste Liébeaul, the founder of the Nancy School of hypnotherapy, who reported that he had successfully transposed his patients’ sense of hearing to their fingers and stomach. He clarified, however, that this was simply a hallucination induced by suggestion. It was sufficient to command hypnotized individuals to ignore all sounds not addressed to their fingertips for them to lose the capacity to voluntarily direct their attention to other sounds.

Another significant factor to consider in the cultural construction of sensory transposition (and the changing understandings of attention it implied) is the impact of a major revolution in nineteenth-century medicine: the development of new technologies that gave physicians access to a patient’s internal organs. The most momentous of these innovations was arguably René Laënnec’s invention of the stethoscope in 1816. A paradigmatically multisensory device, the stethoscope relied on the medium of touch to convey sounds from deep within the patient’s body into the physician’s ear, where they were translated into insights about the state of the internal organs. This process entailed a kind of divination that superficially resembled the marvel related by Petetin’s somnambulist, who found that her “inner sight” allowed her to scrutinize her own innards. The pathologist Michel Peter made precisely this point in 1877 when he suggested that Laënnec’s invention had “transposed our senses by allowing us to see with the ear the visceral lesions through the chest walls, now made transparent.”

If mediate auscultation already entailed a form of sensory transposition, it also transformed the experience of hearing itself, as Jonathan Sterne has observed. In order to focus solely upon specific noises emitted by the inner organs, a listening physician needed to develop meticulous habits of concentration. Interpreting auditory information through the stethoscope thus necessitated a heightened process of filtering that required the utmost attention, paired with a robust capacity for ignoring irrelevant distractions. The immense anxiety—on the part of both physicians and patients—that accompanied the introduction of the stethoscope into medical practice

53. Notably, the only account of sensory transposition that Andral considered credible reported the migration of the auditory sense to the stomach: ibid, 770.
demonstrates how this mode of single-minded auditory attention became linked with pathology in the popular imagination.

So why are shifting discourses of attention so closely intertwined with sensory transposition in the nineteenth century? The answer may lie in the circulation of attention itself within the therapeutic setting and the special role of hearing in this context. The act of hearing and acknowledging another’s speech is to grant that other person a kind of power over oneself. Whether consciously or unconsciously, patients who confined their hearing to moments in which a doctor communicated directly to a chosen limb or organ were essentially setting strict conditions under which they themselves would listen and respond to sounds. In doing so they rejected the demand to distribute their attention while also compelling a particular form of attention from their caretakers. Patients were thus able to determine how they would attend to others, while also exercising control over the way others attended to them.

The inverted power dynamic implicit in such encounters was evident to members of the medical community. As the French physician Alexandre Bertrand observed in the 1820s, “when, then, an ecstatic affirms that she hears only by means of the foot, the knee, the elbow, or any part of the body except the ears, all that we can conclude...is that hearing can function for her only upon the condition that her interlocutor touches her foot, her knee, her elbow, etc.” In contrast to Liébeault’s later success in hypnotizing his patients into hearing with their fingers, the entranced subject generally determined the circumstances of sensory transposition. This involved a renegotiation of authority between the doctor and his patient, something that we might compare with the famously charged dynamics between male physicians and female hysterics. As in the scandalous case of John Elliotson and Elizabeth Okey, female patients were controlling the physicians who believed they were controlling them. Such power exchanges were particularly explicit in cases where sensory transposition was allegedly accompanied by claims of medical clairvoyance comprising the patient’s ability to view her own organs or predict the course of her disease.

57. Quoted in Goldstein, *Hysteria Complicated by Ecstasy*, 151 (my emphasis). Bertrand’s manuscript, “Observations of Nanette Leroux: Hysteria Complicated by Ecstasy,” was composed after 1825 and before 1831 but never published. Music had a powerful effect on Leroux, the subject of this work, and her case history includes an account of the salutatory effects of the piano alongside multiple accounts of sensory transposition. Curiously, when her hearing was transposed, her voice frequently took on a particular falsetto. Ibid., 171, 141–42.

58. Elliotson notoriously took the somnambulist Okey around his wards to predict patient outcomes; Okey subsequently admitted to fraud. See Winter, *Mesmerized*, 79–108.

59. This latter capacity was specifically linked to music in a case reported in 1818 by Joseph Frank, a pathologist at the University of Vilnius. Frank’s patient, Louisa Bärkmann, manifested a transposition of the hearing to the abdomen as well as the ability to predict the course of her disease and to recommend suitable medical treatment. Notably, her symptoms also included
The gendered aspect of these role reversals is striking, especially given the inadvertently comic eroticism of a doctor speaking by pressing his lips or fingers to a patient’s foot or abdomen. For oppressed subjects such as women, invalids, and the insane, exhibiting sensory transposition (whether consciously feigned or experienced in response to a physician’s unwitting prompts) afforded a temporary alleviation of their subordinate position in the social hierarchy. Beyond exerti ng power over their doctors, patients with these symptoms attracted considerable attention and occasionally financial reward, since general audiences as well as men of science flocked to see them exhibit their abilities. In this way, the conventions of diagnosis provided patients with an opportunity partially to determine the circumstances of their illness, whether real or imagined. Rather than the physician setting the terms, the psychic currency of attention allowed the hysterical epistemology to hold sway: an upended reality in which limbs and organs were capable of audition, the patient viewed her organs and prescribed her own treatment, and the entranced subject herself decided the exact conditions under which she would (not) hear.

Thus, for over a century, patients, often female, reported the migration of their senses, a phenomenon indicative of a multilayered medical imaginary involving the renegotiation of sensation, knowledge, and power. These wandering sensory capacities were frequently linked to a heightened sensitivity to music and sound, as well as an occult ability to predict the course of a given illness or hysterical fit. As a perverse parody of medical expertise, sensory transposition enacted a grass-roots opposition to the advent of new regimes of attentive listening analyzed by Sterne and others. Recovering the traces of such unexpectedly inverted epistemologies reveals the centrality of the auditory modality to nineteenth-century medical practice, while at the same time inviting us to consider the means by which the weaponization of attention continues to function as a covert strategy of resistance.

Idle Schubert

FRANCESCA BRITTAN

Works belonging to the highest order of genius depend upon the rare combination of three distinct qualities—(1) Invention, (2) Expression, (3) Concentration. Speaking generally, we may say that Beethoven and Mozart possessed all three... Schubert, the first and second. As fast as [Schubert’s] ideas arose they were poured forth on paper. He was like a gardener bewildered with the luxuriant growth springing up around him... His music is more the work of a

song, and Frank even transcribed some of her spontaneous texts and melodies. See Frank, Praxios medicæ universæ præcepta, 495–516.
60. See Renwick, Continuation of the Narrative, 230–32.