Introduction

On the Materiality of Unseen Things

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First Comments

This book is about the matter—objects, apparatuses, technologies, instruments, and bodies—involved in the experience of the paranormal. "Involved" here may mean a variety of different things: that people experience spirits through mobile phones, for instance, or see them in polaroid photographs, or "hear" aliens through radios; or indeed, that they immerse themselves within the spectral dimensions of meteorology, quantum physics, or biology. But it also has a cosmogonical dimension. Inasmuch as it provides the medium for the manifestation of the unseen, matter enables the existence of the paranormal—it makes it possible and brings it into being, even if simply for the person manipulating the apparatus or object or experiencing a "sense of presence." But this begs an important question, and that is the question of the nature of the medium itself. In a recent book by three media theorists—Galloway, Thacker, and Wark (2014)—the authors question normative understandings of mediation in their bid to contravene the basic tenets of the idea of communication as intrinsic to the concept. Media theorists, they say, tend to understand technological devices, for instance, as "imbued with the irresistible force of their own determinacy" (2014: 7). That means that media have the capacity to intervene in the world, and people can use them as tools for negative or positive influence: "Media are either clear or complicated, either local or remote, either familiar or strange" (2014: 17)—but they always mediate. However, the authors ask, "Does everything that exists, exist to be presented and represented, to be mediated and remediated, to be communicated and translated?" (2014: 10). They answer in the negative. Mediation as a theory is insufficient to account for moments in which there is an impossibility or insufficiency of communication and yet communication still takes place (2014: 16), either because the phenomenon in this communicative relationship is ineffable or because there is a refusal, or a silence (2014: 10), making it essentially *ex-communicative*. Thacker in particular argues in his chapter that media may be "haunted" when they span the gap between different ontological orders or realities, and he uses the concept of "dark media" to signal the absence of communicability, or representation—the media that paradoxically *negate* mediation itself.

The occult has always had a necessary and causal relationship with technological and scientific materiality (cf. Sconce 2000 and Noakes 2019 for useful historical overviews). Indeed, as Bernard Dionysius argues, occultism does not develop separately but emerges from "within the development of rational schemes of science and communication" (2016: 2). Similarly, Christopher White's historical research has explored the occult motivations of mathematicians and physicists in their quest to understand higher dimensional states and objects (2018). Richard Noakes, among others, has even argued that practices such as mesmerism and spiritualism played a pivotal role in the development of science and medicine in the nineteenth century (1999; 2019), during which time, for instance, the "placebo effect" was discovered, as was the unconscious mind, through investigations into these practices and experiences (see Blanes and Espírito Santo 2014). The spectral forces of occultism, as Dionysius says, cannot simply be taken as spectral, that is, ethereal and disconnected from scientific and technological innovation (2016: 9). Rather, they are embedded in the history and imaginary of technological and scientific innovation, which makes spectrality possible in the first place (and perhaps even vice versa). Sconce notes that, in response to Spiritualism's conceptualization of the spirit world—composed of and transmitted through electrical currents (seen, for instance, in the idea of the "spiritual telegraph")-neurologists of the same period legitimated theories of "insanity" based on "an unbalanced telegraphic relationship between the female mind and body" (2000: 13). As Gell argued, "The technology of enchantment is founded on the enchantment of technology. The enchantment of technology is the power that technical processes have of casting a spell over us so that we can see the real world in an enchanted form" (1994: 44). While Gell referred more particularly to forms of art, expertly performed works that capture and entrap us, for the purposes of this book we can understand enchantment in terms of matter more generally. Thus, the issues surrounding mediation take on a much more complex tone in the light of the co-constitutive nature of the paranormal and the technical and

scientific language that historically emerged, and continues to emerge, simultaneously with its experience.

Our point then, to begin with, is that a look at *matter* does not imply that this matter *mediates* between worlds of the here and the beyond. As the authors mentioned above (Gallaway et al.) have argued, there can be an absence of communication in the *matter* of mediation. Indeed, instead of asking *what* matter *communicates* about the paranormal, we could ask not just if "paranormal" matter involves communication but, even if it does, if communication is essentially about meanings or messages, necessarily. Perhaps instead it is about contact. We explore this hypothesis in the conclusion to this book, in relation to the various contributions to this volume. In the conclusion we also explore versions of this relationship. These include the superimposition of discourses (of science and the mystical); the understanding of matter and technologies as "ghostly" or haunted, and feelings of "presence" through things, such as televisions and bodies, or spirit representations; and spirited technologies as somehow extensions of people.

In this introduction we will do two main things. First, we will show that, historically, the connection between paranormality—or the "invisible" more generally—and matter does not reduce to mediation in its simplest form. We propose the need for a spectrum of mediational possibilities, or a lack thereof, in any given historical and ethnographic moment. Second, we will contest the idea that paranormal objects have "agency" and stress the need for different conceptual languages with which to approach the obvious impact of materiality in a consideration of the paranormal or the spiritual. In this volume, we suggest that material organization—in the form of technologies, machines, apparatuses, media, and bodies—participates in the generation of cosmologies of actants, and not just in their affirmation or registry. We propose, following theorists of material semiotics, that people matter the invisible in a variety of different ways. But contrary to Gell, for whom there was a "real" world—to be contrasted with the "enchanted" one—we believe that worlds are performed and enacted through different forms of relationality and thus become real. This includes taking into consideration the power of the very objects in question—a power not just to exert influence on the world but also to relate to other actors in a given setting and create possibilities for the paranormal to manifest, or simply to exist or transpire at any given moment.

Diana Coole and Samantha Frost argue that "there is no definitive break between sentient and nonsentient entities or between material and spiritual phenomena" (2010: 10). This also means that technolo-

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gies and other materials are not divorced, ontologically, from the people that employ them. In this book we start with this symmetry: with the idea that we cannot pre-distinguish, analytically, between material and ethereal dimensions of technologies, sentient and nonsentient, human and material, but must instead do the work of extricating the relations obtaining between the different entities involved in each ethnographic instance in order to understand how this relationality creates vibrancies. In this we are echoing Beliso-De Jesús's ethnography of Cuban American practitioners of Santería (2015) in which she argues that people experience media (whether DVD recordings or the internet) as if it were alive somehow—a platform through which spirits and deities can move (sometimes into people's bodies). Media here does not mediate but rather multiplies and transgresses its condition as mere matter; it extends presences. This requires a flattening of the field of mediation. It also requires a consideration of how materialities act in "concert" (Abrahamsson et al. 2015).

Contested Matter in the History of Spiritualism

The idea of spiritual "presence" is largely connected to materials—or the lack thereof—and the ideologies that underlie them, which are seen to enable or disable such immanence. In Christianity this is very plain. Matthew Engelke (2007) has explored how, in the Masowe Church in Zimbabwe, an apostolic denomination with a "live and direct" manifestation of faith, people are very wary of materiality. Even texts are thought to be dangerous: "They take the spirit out of things" and are, "quite literally, physical obstacles" (2007: 7). However, this repudiation of matter, including the physical structure of the church, does not preclude a painstaking negotiation of what can count as "insignificant" materialities, for instance, honey. Engelke applies Webb Keane's notion of "semiotic ideology" (2003) to his ethnographic study in order to question both how materiality is deployed and how divinity is experienced through different approaches to the morality of things. Of course, Engelke's example is almost the exact opposite of modern Spiritualism and its derivatives, which sought ardently to achieve spirit presence through things—be these bodies, devices, or mysterious substances such as ectoplasm. Indeed, certain mechanical operations and machines in the nineteenth and early twentieth centuries were designed with the explicit purpose of achieving this immanence. This may be surprising, given the long-established division between religious beliefs, meanings, and motivations, all of which are thought to exist in the minds of individuals in particular communities, and technologies proper, which operate independently of such concerns and "do their work "in the real world," producing their effects in accordance with established laws of physics" (Stolow 2013: 2). Indeed, as Stolow says,

Technology refers to an order of things existing outside of and independent from all such dispositions, uses, and frameworks of meaning, and there is not supposed to be anything allegorical about the work technologies perform or the things they can or cannot do. (2013: 3)

Stolow's *Deus In Machina* (2013) is a collective attempt to refute a purely instrumentalist view of technologies and to understand, through case studies, that "reality" does not exist independently of the machines and techniques that bring it into being.

This volume seeks to pursue this agenda not just with technologies but with matter more broadly—as a whole, the authors here question a divide not simply between human and technical agents but between materiality and a nonvisible world of beings and other forces that it sets in motion or participates in. These do not merely pertain to the "religious" domain. We aim to produce, in the words of Eugene Thacker in his preface to Erik Davis's TechGnosis, ethnographic analyses of "religion-without-religion" (Davis 2015: xiii). What Davis suggests, according to Thacker, is that technology is religion by other means, both in a contemporary and historical perspective (2015: xiv). Technologies, and the materials used in evoking forces within other domains, manipulating them, grounding them, or producing contact, have never been completely "material" in their machinations. For instance, in the same book, Davis describes how Michael Faraday, a British experimental scientist, discovered the existence of electromagnetism in the 1830s and suggested that this could consist of force fields, or vibrating patterns, rather than discrete physical particles (2015: 44). With this discovery, "Faraday suggested a new vision of the cosmos: corporeal reality was in essence an immense sea of vibrations and insubstantial forces" (2015: 45). It is from this alchemical vision of pure potential that we believe the first spiritualists took their cue. And it was an alchemy that was to easily confound science with magic: "The fact that Spiritualism's occult fun house sucked in so many prominent scientists simply reflects the larger cultural confusion caused by the explosive growth of science and technology during the industrial revolution" (2015: 61).

The effects of mesmerism, Spiritualism, psychical research, and other occult sciences of the eighteenth and nineteenth centuries occurred on

multiple planes of space and influence, at the same time as they were also clearly inspired by an industrial modernity and its reaches. On the one hand, the appearance of wireless telephony (the telegraph), to state an obvious example, in which the ether was filled with "converted voices waiting to be picked up on a suitably sensitive receiver" (Noakes 2016: 138), was a perfect metaphor for the long-distance "phone calls" mediums made to spirits every time they sat in a séance. The idea of the "spiritual telegraph," a spiritualist technological fantasy of "transmitting" from the beyond, shows, as Sconce says, that "such fantastic visions of electronic telecommunications demonstrate that the cultural conception of a technology is often as important and influential as the technology itself" (2000: 27). Spiritualism produced the first modern fantasies of "discoporative electronic liberation" (2000: 27). On the other hand, Terry Castle describes how the popular spectacle of "phantasmagoria," "illusionistic exhibitions and public entertainments in which 'specters' were produced through the use of a magic lantern" (1988: 27), was inspired by the idea that the mind could be "filled with ghostly shapes and images" (1988: 29). The scientific "demystification" of mesmerism led to the emergence of dynamic psychiatry, techniques of hypnotism, psychoanalysis, and the notion of the unconscious. But people imagined consciousness—and perhaps still do—to be analogous to flows of electricity and information, in some sense justifying imaginaries of disembodiment through apparatuses and technologies, as well as the anthropomorphization of media (Sconce 2000: 8-9). As Castle argues, "Producers of phantasmagoria often claimed, somewhat disingenuously, that the new entertainment would serve the cause of public enlightenment by exposing the frauds of charlatans and supposed ghost-seers" (1988: 30). Of course, they did no such thing. Perhaps this was not because of the public's ignorance or inability to accept evidence. This, we speculate, might have been because the rules at stake were not necessarily rules of the Enlightenment per se; that is, a logic that enacts staunch divisions between animate and inanimate, or between material and immaterial dimensions. In the next few paragraphs we will explain what we mean by this.

While all historians of Spiritualism concur that the events at the Fox sisters' home in Hydesville, New York, where rappings on the walls were interpreted as messages from the spirit world, in codes, impelled the growth of the American spiritualist movement, others—such as Robert C. Cox (2003)—note that there were other, more forceful versions of Spiritualism that emerged simultaneously and even before the Fox events. One of these was Harmonial Spiritualism, founded by

Andrew Jackson Davis—the so-called "Poughkeepsie Seer." Cox describes that as a young man—one who often experienced mesmeric somnabulistic (sleepwalking) states—Davis began to perceive the physiological "interiors" of those around him, diagnosing bodily afflictions, much like a human x-ray. Further, "as his spiritual senses sharpened, he began to see not only the physical structures of individuals but the structures of the universe as well, as if one could be exchanged for the other" (2003: 8). Harmonial Spiritualism posited the integration of all creation: man as a microscope, a miniature universe, and laws that effectively entangled, if not eliminated, the distinction between spirit and matter (2003: 9). This treatise—Harmonial Spiritualism—was inspired by Swedenborgism, among other movements. Emanuel Swedenborg was a Swedish mystic and scientist who had been the recipient of angelic visitations and visions of the otherworld in the 1740s. According to Cox, "he grasped the celestial key, discerning an elaborate set of "correspondences" between the divine and natural worlds" (2003: 12). Mormonism was another powerful influence among early spiritualists, according to Darryl Caterine (2014). Joseph Smith Jr., the founder of the Church of Latter-Day Saints, wrote, "There is no such thing as immaterial matter. All spirit is matter, but it is more fine or pure, and can only be discerned by purer eyes . . . " (1843: 239, in Caterine 2014: 375). Therefore, spiritual development was simultaneously a process of "transmuting one's material" (Caterine 2014: 375). Refining matter was also of concern to Andrew Jackson Davis. Caterine describes how, in Davis's seminal text The Principles of Nature, Her Divine Revelations and a Voice to Mankind, published a full year before the Fox sisters began to communicate systematically with their "ghosts," a particular theological argument is made about progression, matter, and alchemy (2014: 376).

Nature came into being through a spontaneous manifestation of the primordial reality, the Sensorium, into a series of concentric worlds of ever-decreasing material condensation. Creation proceeded, in other words, as a cosmic alchemical process in reverse, with finer matter devolving into a coarser materiality. Through progression, however, Nature continued to unfold as the steady refinement of all things back to their original source, driven by what Davis called its indwelling principle of "motion." (2014: 376)

Davis's messages in this book were also motivated by the increasing weight of industrialization in people's moral frames and by its inevitable obstructions. Indeed, the value of modern technology "was not to be found in its economic applications, but rather in its potential for use as a metaphysical teaching tool" (2014: 378). Electricity in particular intrigued Davis: "It is the elastic substance that exists within and surrounds all things. . . . It is constantly and incessantly engaged in rarifying and purifying all things; and it is a medium to transmit power and matter in particles" (1847: 144, in 2014: 378). Thus, in Davis's own cosmology, so Caterine argues, technology was simply an extension of the natural world. In death, man becomes exceedingly more "fine" as a material body made of particles (2014: 379).

But Davis's alchemical transformation is further illustrated in the work of John Murray Spear, a Universalist minister who converted to Spiritualism in the 1850s. Caterine recounts how in 1852 Spear began to receive messages from a set of spirits calling themselves the Association of Electricizers, led by American Founding Father Benjamin Franklin (2014: 380). They transmitted instructions for the building of a device called the New Motor, whose purpose was to transform coarse matter to finer matter, echoing A. J. Davis's ideas. Franklin explained through his medium—Spear—that the machine would harmonize with the minds of people it came into contact with in order to facilitate the flow of benevolent spirits into society (2014: 381). Spear's machine, as Sconce notes, which he built in a piecemeal fashion with instructions from the other world, was to be a "convergence of electromagnetisms, both physical and spiritual," a "source of infinite, self-generating energy"; "nothing less than a "living" machine" (2000: 39). Wires were seen as sacred; zinc and copper as symbolic of the human organism (2009: 40).

As we can see, in relation to American Spiritualist history, the notion that "technology can observe nature innocently while the human body becomes increasingly uncontrollable or unreliable in the course of the nineteenth-century" (Kassung 2015: 5-6) is absolutely untenable. Matter—technologies, devices, objects, and bodies—was enmeshed in a web of knowledge and effect in which it absolutely transcended its place in the dualistic universe. Christian Kassung, in an article on "self-writing machines," argues that, in order to obtain a symmetrical perspective, "one has to go a step further and assume that society and nature, or, in our case, man and machine, require the same level of explanation" (2015: 9). This means fundamentally setting aside any understanding of what matter, materiality, and objects are and do in favor of how they emerge from and function in systems greater than themselves. There is an obvious critique of mediation theory in the anthropology of religion, which we can posit. When the medium literally becomes the message, the notion of mediation collapses. Birgit

Meyer says that media *shapes* and *forms* the transmission or messages, participating directly in the cosmologies it mediates (2011). But communication can be varyingly absent from these processes, or it can take alternative shapes where it is no longer glossed as communication; messages are far from universal qualifiers of the relationship between matter and the paranormal.

Toward Material Semiotics

Our stance here is not that objects have "agency," nor that they are more or less "material," and even less that the paranormal or invisible somehow "communicates" through them. Social archaeologist Lambros Malafouris has traced a kind of genealogy of the "agency" of things in anthropology, observing that "on closer inspection the much-celebrated post-processual passage from the passive to the active artifact was essentially a reevaluation of the human rather than the material agent" (2016: 121). However an object may construct a social reality, Malafouris argues, it tends to ultimately turn upon *human* intentionality (2016: 121). For instance, Gell has an influential definition of "agency" in his book *Art and Agency* (1998: 20), cited in part by Malafouris:

"Things" with their thing-y causal properties are as essential to the exercise of agency as states of mind. In fact, it is only because the *causal milieu* in the vicinity of an agent assumes a certain configuration, from which an intention may be abducted, that we recognize the presence of another agent. . . . Because the attribution of agency rests on the detection of the effects of agency in the causal milieu, rather than an unmediated intuition, it is not paradoxical to understand agency as a factor of the ambience as a whole, rather than an attribute of the human psyche, exclusively.

So far, so good—agency belongs to a *system*, an *ambiance*, rather than to a person or even a single object. But then he makes a distinction between "primary agents," "who initiate happenings through acts of will" (1998: 21) and intentionality and who are "categorically distinguished from 'mere' things or artefacts" (1998: 20), and "secondary agents" through which the primary ones distribute their own agency (1998: 20). These can be cars, dolls, religious items, artwork. The definition in the citation above in which Gell suggests agency to be a property of a kind of atmosphere contradicts significantly his proposition of "kinds" of agency—clearly, some are more important than others. Malafouris

in particular takes issue with what he sees to be a counterproductive distinction: "On the one hand, it seems to imply that Gell accepts that intentionality is a criterion of agency attribution; on the other, it violates the above-mentioned symmetry between persons and things" (2016: 136). According to Malafouris, what Gell is doing by saying some agents are more "primary" than others is to place the *human* mind and its intentions over and beyond material engagement, as if objects were somehow deficient in this regard (2016: 136). In their seminal volume *Thinking through Things*, Henare, Holbraad, and Wastell also criticize Gell's tendency to see objects *only* in the light of their social relationships: "His art objects stop short of *revising* our common sense notions of 'person' or 'thing.' For agency, here, remains irreducibly human in origin, and its investment into things necessarily derivative" (2007: 17).

We are sympathetic to their notion that people "think through things"—as well as with the idea that "no theory can encompass" the diversity of ways people do this, because "disparate activities may well generate equally disparate ontologies" (2007: 17). Thus, there is no one theory, but a method for generating a multiplicity of concepts or theories. For instance, in Morten Pedersen's chapter, Darhad Mongol shamans don specific robes that enable them to access transcendent kinds of perspective. In this particular case, "shamanic knowledge is embedded in different religious artefacts, such as the shamanic costume, whose intricate design triggers people's momentary conceptualization of social relationships which otherwise remain unseen, and for the same reason, to a large extent unknown" (2007: 141). In Martin Holbraad's now much-cited chapter, he argues that the sacred powder on which the prestigious Cuban babalawos exercise their divination craft, is also a power, of sorts. Thus, object and idea, thing and concept, can be collapsed in this particular ethnography. The key to this collapse, according to Holbraad, is the notion of motility: the movement of both the object (a powder)—marks made by the diviner while he is calling the deity—and the concept (the deity, power) that is moved into existence (immanence) by an initiated diviner with a powerful powder.

If the motility of powder dissolves the problem of transcendence versus immanence for *babalawos*, then motility also dissolves the problem of concept versus thing for us. And this because the latter problem is just an instance of the former. After all, the notion of transcendence is just a way of expressing the very idea of ontological separation. (2007: 218)

We do not need to reanimate a world that is already flowing with forces and movements of all kinds, says Ingold (2010). What Henare et al.

(2007) and Ingold have in common is a basic attention to the affordances of things—in the former's case, the *conceptual* affordances that lead, in effect, to the existence of many "worlds" or ontologies; in the latter's, the *phenomenological* ones, which question the division of humanity and nature. And indeed, the critique Ingold has of the methodologies of the "ontological turn," which Holbraad's work (2012; Holbraad and Pedersen 2017) has been considered to be a fundamental part of, is that it is far too conceptual. We have no space here for an in-depth consideration and critique of this influential "turn" in recent anthropology, or for even a brief consideration of Ingold's sophisticated ecological anthropology. But we will say that in relation to the themes of this book in particular, we feel that, paradoxically, while we agree with both, neither one of these perspectives does full justice to what we have called "paranormal matter." However, there is much that we can take from each.

For instance, in Ingold's "dwelling perspective," matter, objects, landscapes, even navigational instruments and maps are temporal markers that are engaged with perceptually: as an example, "places exist not in space but as nodes in a matrix of movement" (2000: 219). In terms of cartography, in another example, Ingold says,

The more it aims to furnish a precise and comprehensive representation of reality, the less true to life this representation appears." In contrast, "wayfinding depends on the attunement of the traveller's movements in response to . . . his or her surroundings. . . . Ways of life are not therefore determined in advance, as routes to be followed, but have continually to be worked out anew. And these ways, far from being inscribed upon the surface of an inanimate world, are the very threads from which the living world is woven. (2000: 242)

Ingold is thus diametrically opposite to Gell in his understanding of the inherent "animacy" of the world. "The animacy of the lifeworld, in short, is not the result of an infusion of spirit into substance, or of agency into materiality, but is rather ontologically prior to their differentiation" (2006: 10). One does not "infuse" an object with life, Ingold argues. Animacy is not "a way of believing *about* the world but a condition of being *in* it" (2006: 10). This has to do, on the one hand, with the relational constitution of being, with the idea that the separation between organism and environment is false (2006: 12–13), and on the other, with the primacy of movement, with the idea that we are all immersed in movement, caught up in the movement of things, even the weather and the earth, all the time (2006: 15–16). All enti-

ties issue paths, leave traces, move. There is no "inanimate" world to contrast with an "animate" one, just as there is no "agent" to contrast with a "non-agent." Inhabitation is prior to occupation, according to Ingold, and indeed, he argues that we are all "closet animists" (2006: 11). But Ingold has little to say about the properties of the metaphysical imagination as such, and the capacities of things-objects, and technologies—to enter into dialogue, or formations, which dissolve the boundaries of their "objecthood," so to speak. For that, we need an approach that, according to what Holbraad and Pedersen (2017: 215) have argued, should speak to "the ethnography of things, as opposed to the things themselves." In these authors' revision of the introduction to Thinking through Things (TTT), they take up the Ingoldian challenge of looking at the materials themselves and their properties (2017: 216). But rather than understanding these materials' enmeshment in forms of life, which would be Ingold's stance, Holbraad and Pedersen propose to raise the question of the conceptual affordances of matter (2017: 218), and understand these "materials' transformation into forms of analytical thought" (2017: 219). Holbraad's own objection to his own chapter in TTT was that ontology was thought of only through the lens of the diviners themselves—the human end. A "pragmatology" (Holbraad and Pedersen 2016: 238), by contrast, involves a far more "thing-driven" component (2016: 239). Pragmatology "designates the activity of extracting concepts from things (pragmata) as a distinctive analytic technique" (2016: 239).

The problem with a consideration of materials, matter, or objects, or even technologies, from the point of view of their "paranormal" use and the cosmologies implied in and through this interaction, is that neither concepts nor matter should figure as prior to the anthropological analysis itself. Our interest is neither in animate worlds (even if all materials are animate) nor in an anthropology that collapses concepts with, or extracts them from, things. When we analyze "invisible" things or entities, it makes it even more imperative to understand how they can come about in *systems* of things, people, and ideas, the relations of which create certain possibilities for becoming. And importantly, how this "coming about" or "becoming" can be variably experienced, noncommunicable, and even nonconceptual.

We could follow Karen Barad's statement that "the primary units of analysis are no longer objects with inherent boundaries but rather phenomena that are entangled and intra-acting" (2007: 429). For Barad, matter is a *doing*; it refers to the "materialization of phenomena—it does not refer to an inherent fixed property of abstract, a priori and

independent Newtonian objects" (2003: 822). In this sense, different categories of phenomena need to be *performed* in the world in order to gain existence. We should probably start our exploration of different languages of paranormal matter here. Instead of exploring the entire field of material semiotics, from Bruno Latour to Karen Barad, we can take three keywords and unravel their relevant dimensions to the project of this book. One of them, as suggested by Barad, is *performance*. Another might be *relationality*, the idea that matter comes into being through its relations with others in the same network or assemblage, with greater or lesser stability. And yet another, *heterogeneity*, a term and concept used by Annemarie Mol and John Law to describe the idea that materiality is multiple, subject to constant reorganization and assembly. These three concepts are employed to varying degrees in actor-theory-network, new materialism, and relational materiality.

What do we mean by *performance*, or *enactment*? This question goes to the heart of the discussion above on agency, and on whom or what is thought to be acting. Simon Choat (2018: 1030) argues that "Western philosophical tradition has tended to treat matter as something that is brute and inert: a passive substance to be mastered and manipulated by active human subjects." We have thoroughly internalized these distinctions all too well. In contrast, the notion of performance or enactment requires an "actant" (Latour 2005) who is not necessarily a human being, or even sentient as such, but is a source of action with no particular motivation or intentionality. An actor, or operator, according to Jane Bennett (2010), makes things happen. In the light of the new materialism approach (vital materialism), which she defends, this makes perfect sense, for even a "human is a heterogeneous compound of wonderfully vibrant, dangerously vibrant matter" (2010: 12-13). But it is assemblages that Bennett focuses on most intently, which owe their agentic qualities to the "vitality of the materials that constitute" them (2010: 34). Agency here is "confederate," fully "distributed" (2010: 38); it is the "assemblage" that has the power of enactment, since "elements by themselves probably never cause anything" (2010: 33). Inherent performance, we could say, is the vibrancy of which Bennett writes. But it is not determinate, nor is it efficient necessarily, but emergent: "The vital materialist must admit that different materialities, composed of different sets of proto-bodies, will express different powers" (2010: 31). Assemblages are living, vibrant confederations with the power to enact certain realities. Diana Coole and Samantha Frost add to this description by saying that matter "becomes" rather than simply "is" (2010: 10): "It is in these choreographies of becoming that we find cosmic forces

assembling and disintegrating to forge more or less enduring patterns that may provisionally exhibit internally coherent, efficacious organization" (2010: 10). Matter, for them, is always more than "mere" matter—there is an excess that forces us to think of causation in more complex ways (2010: 9). But the enactment of boundaries in these assemblages of matter, through material-discursive practices, as Barad says, is also a performance of sorts (2003: 803). This she calls "agential intra-action" (2003: 817), in which she says the primary units are not "things" but phenomena, on their way to becoming "matter":

Agential intra-actions are specific causal material enactments that may or may not involve "humans." Indeed, it is through such practices that the differential boundaries between "humans" and "nonhumans," "culture" and "nature," the "social" and the "scientific" are constituted. Phenomena are constitutive of reality. Reality is not composed of things-in-themselves or things-behind-phenomena but "things"-in-phenomena. (2003: 817)

Through an analysis of apparatuses in Niels Bohr's physics experiments, Barad argues that apparatuses are "constituted through particular practices that are perpetually open to rearrangements, rearticulations, and other reworkings" (2003: 817). This is part of science, she says. Agential intra-actions are particular material enactments that may not involve people (2003: 817) but that transform phenomena into matter. Reality is not "composed of things-in-themselves" but of things-in-phenomena, and the "world *is* intra-activity in its differential mattering" (2003: 817). Boundaries are in constant reappraisal and constitution through material-discursive practices. This might be what Law and Mol refer to when they say that "materials are interactively constituted; outside their interactions they have no existence, no reality" (1995: 277). So, by performance, or enactivity, we actually mean *interactivity*, or indeed, *intra-activity*, the processes whereby matter (persons, things, entities of all kinds) comes into being.

Law and Mol's relational materialism argues this well. They argue that materiality and sociality are part and parcel of the same thing: "When we look at the social, we are also looking at the production of materiality. And when we look at materials, we are witnessing the production of the social" (1995: 274). Materials themselves are "relational effects" (1995: 274), they only achieve significance inasmuch as they find themselves in relation to others. Law and Mol give Latour's example of Pasteur being "the successful scientist." They say that this statement is an "ordered network, a relational effect" (1995: 277). It is not just scientific objects and phenomena that are effects of the products of interactions,

but all things—spirits, people even. "Bacteria, cultures, microscopes, laboratories, laboratory assistants, farms and farmers, cows, diseases, vaccines—all of these and many more were assembled together" (1995: 277) to produce "Pasteur, the scientist," not Pasteur the failed politician, family member, French citizen. This is why semiotic relational materialism is nonhumanist, they say. This does not mean that there are no strategies—by humans or not—to achieve variations of scale or durability (1995: 282). And indeed, strategy is inconceivable without representation or at least imagination (1995: 281). They give us an example of an early jet engine, built in the 1950s by Bristol Engines. The first designers used pencils and paper; these initial drawings were then converted to a set of engineering drawings. It was asked whether the right materials were available. Engineers and materials scientists then set to work to produce a design for the "real" engine, which included specifications to machinists on how to cut metal. Then, the drawn engine was made into a wooden engine, in three dimensions. Only after this step was the wooden engine translated into a metal engine (1995: 281-82). "In sum: strategy both organizes and produces material distinction" (emphasis in original, 1995: 182). In this light, matter also needs to be seen in context. Abrahamsson et al. (2015) argue this for the fatty acid omega-3. We need to understand food, they argue, not simply in relation to the people consuming it but to greater webs of causation and effects, which include globalization and politics. Matter never acts alone (2015: 15), but in concert and relation with others in a given web, necessarily: "Omega-3 is not matter itself all by itself" (2015: 5).

This means, for us, that there may or may not be a stable project of "paranormal mattering" in any given local arrangement. Both socially and phenomenologically, for the people involved, and ethnographically, for us as observing and participating scholars, we may not have a continual production of something we call the "spiritual," or "paranormal," or "godly," or "divine." It may only be there intermittently, variably, conditionally, in a "patchwork" or through "local" and "partial connections," as Law and Mol suggest (1995: 287). Perhaps there is no whole, or totality, when we speak of experiencing the paranormal through matter or media, or technology. For Ian Hacking, models "enable us to intervene in processes and to create new and hitherto unimagined phenomena" (1983: 37). Some of these models, or strategies, we could say, we have described above in the sections on Spiritualism, psychical research, and parapsychology. These include models of ectoplasm, the spiritual telegraph, psychic currents, vitalism, psi, the voices of the dead or aliens, the apparatuses to ascertain and measure

them, and many others that have borrowed from and contributed to the languages of science and materiality of their époque. But models are finite and inconsistent because the phenomena they produce are deeply *heterogeneous*, and no single model is fully satisfactory.

Indeed, what material semiotics gives us primarily is the idea that ontologies are not stable but immanently unstable: assemblages can form, disassemble, and reassemble as something else altogether. In a scientific laboratory, according to Law, one finds instruments, rulers, animals, cell-lines, detectors, microscopes, notes, books, experimental results, and rumors—all assembled together in a "messy mundanity" (2008: 4). As Law, and also Mol, shows in relation to lower limb atherosclerosis (2002), there are many ways in which a scientific "fact" can be materialized. This is not to discount scientific and medical bodies of knowledge; rather, it is only to say that matter is constantly done, what Law calls mattering. In relation to atherosclerosis, for example, the "illness" can be mattered in myriad forms; from an angiogram, which reveals the position and size of the blood vessels after the patient has been injected with a dye, to an ultrasound, which shows the speed of the passing blood, to the operating table, where the disease appears in the vessel under intervention as a thick white paste (Law 2008: 10). There is not one disease but many. Thus, the body is multiple. This is another way of saying there is no single ontological monopoly over "reality."

Plan of the Book

We have divided this book into three sections, to showcase the heterogeneous potential of working with the concept of "mattering." The first section, called "Bodily Semantics, Metaphor, and Mediation," is an exploration of the metaphorical and somatic aspect of what we have called invisibilities. It recognizes that there are different "designs," be they human or not, that affect people's relationships with matter and with the paranormal. In only some of these is there a clear "transcendent" to mediate to; others forge routes that confound or even invert the two (transcendence and immanence), or deny their distance in the first place. The body here is imperative to how these cosmologies are framed, experienced, and enacted. For instance, Jack Hunter's chapter draws on his ethnographic experience with mediums in Bristol to explore how spiritualists, psychical researchers, and parapsychologists of the nineteenth and twentieth centuries drew and continue to draw

from biological and organismic models (as a sort of countercurrent to those employing reductionist and mechanist models) to make sense of paranormal phenomena, especially those experienced in the context of spiritualist séances. It is suggested that organismic and ecological frameworks might provide fruitful avenues for investigating the processes by which invisible entities are mattered. Next, Miguel Algranti's chapter deals with affect, and pain, through an essentially topological approach. In his ethnography of a well-known spiritist center in Argentina—and in particular, through a specific incident in which a medium was possessed by the spirit of an ex-guerrilla fighter who had been tortured with an electric prod—Algranti argues that the body of the medium is an "expressive surface for spirits and apparatus alike," collectively developing the "entanglement between the sentient and the non-sentient as a topological space." This gives rise, through conceptual and perceptual ambiguities, to a shared semantics of suffering. In this case, spiritual beings and technologies are not opposing categories. Gertrud Hüwelmeier's chapter is a testament exactly to the dynamic of mediation itself. In her ethnography of Vietnamese forms of spirit mediumship and veneration, she argues that "people, things, technologies, and spirits are related in particular ways," and thus one could say that it is precisely this "relatedness that brings them into action," into being. By contrast, in Anastasios Panagiotopoulos's chapter, notions of mediation that have distance between divinity and humanity as their premise are problematized. Rather, for the practitioners of Afro-Cuban religion that he works with, it is disruption of mediation that is achieved through oracular consultations and initiations. Oracular pronouncements come as "tools" to "fix" problems of articulacy, of living one's path as the gods have planned. "Words" here are both literal and metaphorical.

In the second section, which we have titled, "Orders of Sound, Sight, and Measurement," we argue that there tends to be an imperative to record the invisible, to make it evident, through visual and other means. But this of course runs into many paradoxes and has a strong ambiguous element to it. What exactly is being registered, and by whom, and how can we trust it? "Mattering" as a frame can help unwind how this construction, as well as deconstruction, of the invisible as an order of measurement can take shape. This is explored by Diana Espírito Santo in her chapter on UFOs and amateur radios in Chile, where she shows how both the conversations of the amateur radioaficionados and the overwhelming event of the appearance of a UFO over Santiago in 1985 were constructed and performed by the multiple actors. She uses

Barad's notion of "diffraction"—as a dynamics of inter-activity—to show how Chile's ufologists enact particular versions of reality at particular moments. In Ehler Voss's chapter on American ghost hunters, he looks at the charisma of his main interlocutor and the processes involved in the production of "evidence." While hearing is a skill one learns, there is also something particular to the medium that allows them to evoke results from the apparatus, something connecting the person to the machine at the core. Indeed, he adds that "the common clear distinction between animated human mediums and inanimate technical media is thus the result of a work of purification, because the two are inseparably connected with each other." There is a profound ontological ambiguity here, which does not depend on the burden of proof. Andrea Lathrop Ligueros presents a similarly thought-provoking case study on the role of Polaroid photography in re-enchanting the West, through media's capacity to shape perception. Lathrop makes a distinction between "disembodied" media such as the telegraph and the "material and embodied capacity of photography to empirically make things visible," especially analog machines such as Polaroid. In particular, she analyzes the so-called thoughtographs of the American psychic Ted Serios, a process whereby thoughts are "materialized" onto the photographic medium.

In the third section, "Mattering Invisible Powers," we go to the core of the conceptual and material processes involved in sensing or perceiving something, a language by which this "other" comes into being within a particular frame of reference. Science is one of these frames; but often such frames are interchangeable, pliable, and porous. Renzo Taddei's chapter, for instance, deals with the boundary-crossing potential of science and spirits. Meteorology, the study of the climate, is immanently intangible. Learning to navigate the world of climate sciences, he says, required a "thorough deconstruction of some of the most basic phenomenological intuitions about reality, and a reconstruction of them over new grounds," grounds that he calls "phantasmagorical." Boundaries between weather predictions and the "interventions" in the weather system by the main chief (medium, shaman) of the Coral Snake Foundation become matters of interpretation. Science is a discourse that fluctuates between these. In her ethnography of particle physicists at CERN, a nuclear research laboratory between France and Switzerland, Anne Dippel enacts, through her analytical writing, what is essentially a productive conversation between an "enchanted" indigenous cosmology and Western scientific cosmology. Particles are understood as "tricksters"; and people's worlds are seen as "animated by

invisible fields." Indeed, she says, "Western science is superseding the dialectics of object and subject." Finally, Ruy Blanes's chapter explores the materialization and objectification of Angolan witchcraft, *ndoki*, through the notion of "parallax." Parallax is a shift in positionality and perspective that allows one to trace the effects and consequences of invisible realms. *Ndoki* has certain languages and signs of what he calls "presentification," not just in human bodies—it is not self-contained—but distributed through multiple and polyhedral means, manifesting its "phantom power" even in aspects of the city Luanda itself. Blanes employs a parallactic technique for describing his ethnography, and in this way also reminds us that the anthropologist herself is a component of the mattering dynamic.

Diana Espírito Santo, PhD UCL, 2009, has worked variously on spirit possession and mediation in Cuba, with Afro-Cuban *espiritismo*, in Brazil, with African-inspired Umbanda, and more recently in Chile, where she is currently examining ontologies of evidence and technologies in parapsychology movements, paranormal investigation, and ufology. She has published many articles, is writing her third monograph, and has coedited four volumes, including *The Social Life of Spirits* (University of Chicago Press) with Ruy Blanes. She currently works as associate professor at Pontificia Universidad Católica de Chile.

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