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# The Phenomenology of Supernatural Belief

The Ravenous Spirit (*phii pob*) Belief Tradition in Contemporary Northeast Thailand

Classic anthropological studies construe magic as a body of propositions and practices concerning natural laws that, though approximating science in several respects, is founded on a false assessment of reality. Per this outlook, magic is a set of fallacious premises and practices in contradistinction to wellgrounded and empirically verified science. Examining the ravenous spirit (*phii pob*) belief tradition practiced by several rural communities in contemporary northeast Thailand, this paper revisits the status of magical beliefs vis-à-vis science. An inquiry into experiences convincing believers of the reality of ravenous spirits reveals that the ravenous spirit tradition, like science, is I) a body of propositions and practices anchored to a rational assessment of empirical evidence, and 2) a speculation on the possible causes of a phenomenon, inferred from its manifested effect, which is inevitably partial.

KEYWORDS: supernatural beliefs—ravenous spirit belief tradition—northeast Thailand—folk beliefs—Thai folklore

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Rolent, amorphous spirits related to a distinct category of misfortunes. An unusually high frequency of sudden death among humans and animals that befalls a community in a specific period of time, or an outbreak of pathological symptoms that elude biomedicine, is construed by several northeastern Thai communities as ravenous spirit havoc. Voracious and formless, the wicked ravenous spirits as conceived by believers penetrate into living creatures, devour them from within, and cause sudden deaths among healthy humans and animals that display no sign of critical illness prior to their passing. Inscrutable misfortunes that induce ravenous spirit beliefs reveal a rational relation between magical beliefs and empirical experiences, which challenges a classical anthropological view that magical beliefs and practices are founded on a false assessment of reality. In this paper, I present incidents that undergird ravenous spirit beliefs to posit that this "magical" belief tradition is not appreciably different from science, given its basis in properly perceived and rationally interpreted empirical experience.

# MAGIC, SCIENCE, AND EMPIRICAL EXPERIENCE

Classic anthropological studies construe magic as a mode of thought distinct from yet compatible with empirical science (Sharot 1989, 262–63; Styers 2004, 123). Despite their argument for the experiential basis of magic, these seminal works ascribe magic to the false association of ideas or the subjective, even irrational, interpretation of empirical experiences. This strand of anthropological thought implies a hierarchical distinction between science and magic. The former is regarded as "objective, neutral, and value-free" in juxtaposition with the latter, which is supposedly "private, self-serving, and anti-social" (Coudert 2011, 28).

James G. Frazer notes that magic resembles science in many respects. Magic is a principle of causality discerned by the savage mind. It is also a system of practical techniques employed by primitives to produce desirable effects. As a system of ideas and practices concerning causal relations between entities, magic approximates science (Frazer 1999). However, magic is "a spurious system of natural law" (ibid., 117), since it involves a belief that magical causality—precisely, the causal principle formulated via random ideas and subjective assessments of concrete phenomena—unfailingly reflects what transpires in the external world. For Frazer, contagious magic and homeopathic magic are "two great principles turned out to be merely two different misapplications of the association of ideas" (ibid., 117).

Marcel Mauss (2005) argues against this pejorative view of magic. Rather than false science, he sees magic as a rudimentary form of scientific ideas and practices. Magic, Mauss posits, is characterized by an impulse to "determine the use and the specific generic or universal powers of beings, things, even ideas" (2005, 94). This preoccupation with the innate properties of things and the manipulation of these properties to master the external world motivates magicians, who observe tangible phenomena in search of an overarching causal principle. Given their common interest in the formation of the universally applicable laws, Mauss equates magicians to scientists. He bolsters this remark by contending that a great deal of technical knowledge with immense practical value in primitive societies was first formulated and experimented on by magicians (Mauss 2005, 94).

Unlike Frazer, who describes adherents of magic as "ignorant and dull-witted people" (Frazer 1999, 118), Mauss regards magicians as predecessors in the discipline of causal knowledge (Mauss 2005, 95). This favorable view of magic and its practitioners is incoherent with Mauss's stance on the relationship between magical belief and empirical experience, expounded in the same monologue. Magical beliefs and scientific notions are grounded in experiences, yet their relations with experiences are of a different nature. Scientific notions are "a posteriori beliefs, constantly submitted to the scrutiny of individuals and dependent solely on rational evidence" (Mauss 2005, 113; emphasis in original). On the contrary, magic "is a priori a belief" based on selected experiences that reaffirm the preconceived faith in its efficacy (ibid., 114; emphasis in original). This view is apparent in Mauss's statement that "magic has such authority that a contrary experience does not, on the whole, destroy a person's belief. In fact, it escapes all control. Even the most unfavorable facts can be turned to magic's advantage" (ibid., 114). For Mauss, it seems that science is a rational assessment of empirical input constantly revised and attuned to new evidence, while magic is an obstinate belief that preempts falsification.

In a similar fashion, Bronislaw Malinowski discusses the experiential basis of magic only to emphasize its irrational foundation. Malinowski (1948) delineates how overwhelming emotion engenders magical beliefs. Man, agitated by an unattainable desire, performs a substitute activity that has no empirical connection to the desired end, yet is believed by its actor to work in his favor. An anxiety induced by man's impotence to fulfill his desire is, as Malinowski describes, "a strong emotional experience, which spends itself in a purely subjective flow of images, words, and acts of behaviors". An action caused by an emotional outburst "leaves a very deep conviction of its reality, as if of some practical and positive achievement, as if something done by a power revealed to man" (61). Adherents of magic are convinced that the idiosyncratic acts they perform out of an overflowing emotion or obsessive desire have a transformative impact on external reality. In Malinowski's view, this failure to discern irrelevant actions from consequential endeavors underpins magical acts.

Despite their different conceptions of magic, Frazer, Mauss, and Malinowski agree regarding the erroneous perception and interpretation of external reality

that underpin magical beliefs. For Frazer, magic is a body of ill-founded principles that misconstrue the causal connection of things and entities. For Mauss, magic is a mode of thought that misreads dissenting empirical input. For Malinowski, magic arises from a psycho-physiological mechanism that muddles man's judgment about actions that produce empirical consequences.

Bruno Latour ascribes this anthropological conception of fallacious magic versus rational science to the Great Divide—an epistemological paradigm that positions Nature in contradistinction to Society (Latour 1993, 94–95). The modern episteme differentiates natural science from ethnoscience, placing them at different points within the Nature–Society spectrum. The natural science of "us, the West" stays closest to the Nature pole, as it was believed to be the objective and reliable method of discerning natural laws detached from and thus uncorrupted by cultural preconceptions, social categories, and political interests. The ethnoscience of "them, the rest" is closer to the Society pole, since their knowledge of the natural world is merely "an image or a symbolic representation of Nature" (ibid., 97), precisely the flawed understanding of nature entrenched in social or cultural premises.

This belief in the intrinsic and irreducible differences between objective, disinterested, and transparent "true science" and mediated, partial, and context-dependent "pseudo-science" produces, as Latour contends, asymmetry in anthropological inquiry. Indigenous science and folk knowledge were scrutinized by Victorian ethnologists who attempted to discern socially and culturally mediated views that account for such subjective conceptions of external reality (Tambiah 1990, 85). The science of the West, nonetheless, was never subjected to anthropological scrutiny, since it was generally accepted as the self-evident truth that remained "unstudied, unstudiable, miraculously conflated with Nature itself" (Latour 1993, 97). This privileged status modernity accords to science is dubious, Latour further argues, because it neglects the fact that experimental science cannot be totally detached from social processes that authorize and certify the "matters of fact" it produces (ibid., 24).

Anthropological and folklore scholarship on magical beliefs vis-à-vis scientific knowledge at the end of the twentieth century evinces a paradigm shift, precisely the view that magic and science are, in Gillian Bennett's cogent words, "cultural options, competing discourses; and that neither is 'better' or less 'superstitious' than the other" (1999, 38; emphasis in original). This outlook has been expressed via two distinct lines of inquiry: one examines arbitrary and irrational components of modern science, and the other investigates the empirical bases and valid interpretations of external experiences that underlie magical beliefs. Latour and Woolgar (1979) and Latour (1993) are monumental examples of anthropological research that adopts the first line of inquiry. The former delineates social settings and activities in which the production of scientific knowledge is embedded, while the latter remarks on "scientific" givens that have been generally accepted as self-evident despite their equivocality. The belief that experiments conducted in the artificial and controlled setting of a laboratory unfailingly replicate what transpires in the vast and uncontrollable natural environment is one such questionable given (Latour 1993, 22). One can infer from Latour's comment that science, like other belief systems, entails a leap of faith (Walker 1995, 2).

Studies that delineate empirical bases and rational components of magical beliefs include, among others, David J. Hufford (1982), Gillian Bennett (1999), and Shelly R. Adler (1995). Scholars conducting these studies concur that some supernatural beliefs are grounded in baffling empirical experiences that are properly perceived and rationally interpreted. Hufford, studying a distinct type of somatic experience known in Newfoundland, Canada, as Old Hag, concludes that supernatural traditions surrounding this sensory experience correctly remark on its empirical features, which, prior to the inception of sleep pathology, were dismissed as illusory. Bennett delineates that the acute sense of presence (i.e., the impression that the deceased person still lingers about) reported by her informants forms the basis for their beliefs in the ghost of the dead. Adler examines SUNDS (Sudden Unexpected Nocturnal Death Syndrome), whose cause remains a mystery to modern science, among Hmong immigrants in the United States and how its baffling aspects bolster a Hmong belief in *dab tsog* (Adler 1995, 181)—a nocturnal evil spirit. In my view, the implications of these studies are two-fold. In one respect, they acknowledge the reality of inexplicable phenomena that question the explanatory power of modern science. In another respect, they imply that magic and science are heuristic tools adopted by people to make sense of different facets of reality. They are distinct bodies of notions and premises apposite to different sorts of empirical inputs rather than the rational or the fallacious modes of thought.

This paper explores the empirical basis of the ravenous spirit belief tradition, practiced by several rural communities in contemporary northeast Thailand, to elucidate two salient points. First, in a number of cases, the correctly perceived and rationally interpreted experiences undergird ravenous spirit beliefs. Individuals whose stories are presented in this study experienced mental or physical symptoms that elude biomedicine, yet become accountable and solvable when redressed by ravenous spirit rituals. Baffling aspects of these troublesome experiences and the failure of modern science to decipher them warrant believers' decisions to resort to the ravenous spirit belief tradition. Second, at least in the cases mentioned in this paper, supernatural beliefs are adopted to fill the void caused by the failure of the scientific-rationalist paradigm to cast light on certain extraordinary experiences. Supernatural beliefs, when viewed in this light, do not reflect their holders' false reasoning but their logical attempts to make sense of enigmatic facets of reality.

The empirical basis and rationality of ravenous spirit beliefs as expounded in this paper, I believe, nuance a long and complex anthropological conversation concerning magic vis-à-vis science. Based on the ethnographic cases presented here, I contend that some supernatural beliefs are, like science, anchored to a valid assessment of and apposite reaction to empirical experiences.

### DEFINITION OF TERMS AND ETHNOGRAPHIC CONTEXT

Some equivocal and value-laden terms used in this paper may seem to contradict the rationality of supernatural beliefs for which I argue. The term "supernatural," for instance, presupposes the veracity of a positivistic conception of reality that dismisses occurrences, ideas, or convictions that contradict it as anomalous and thus false or unreal. I, nevertheless, adopt a different reading of the term propounded by Barbara Walker, that its existence in language: "is a linguistic and cultural acknowledgement that inexplicable things happen which we identify as being somehow beyond the natural or the ordinary, and that many of us hold beliefs which connect us to spheres that exist beyond what we might typically see, hear, taste, touch, or smell" (1995, 2). In referring to ravenous spirit tenets as "supernatural," I emphasize the inexplicable experiences from which they derive rather than make a judgment about their truth or falsity.

Like "supernatural," the term "believe" in this paper conveys a particular meaning distinct from the general sense of the term in common usage. Rather than an act of granting the veracity of a truth claim, "believing" in the context of this paper means accepting that a proposition *may be* and *can be* true. In light of this conception, ravenous spirit believers are not individuals who readily grant that these voracious and malevolent spirits *really* exist, but persons who seriously consider the possibility that ravenous spirits are the agents behind the confounding incidents they have experienced.

Several scholars studying supernatural beliefs in Thailand note the prevailing "not belief, not disrespect" (mai chua ya loplu) attitude toward the supernatural among the Thais (Golomb 1993, 32-33; Aiewsriwong 1998; Cornwel-Smith 2005, 178; Engel and Engel 2010, 157–58). The sentiment reveals an obscure boundary between belief and disbelief that characterizes Thai supernaturalism, suggesting that regardless of one's skepticism, it is wise not to totally dismiss the idea. This attitude is apparent in my informants' choices to adopt both scientific and supernatural strategies to redress the mysterious afflictions they have experienced. Despite the institutionalization and propagation of Western medicine by the Thai state in the 1930s, followed by several reformations of Thai public health policies and practices that account for the legitimacy of biomedicine in Thai health culture (Puaksom 2007), local healing traditions, many of which involve a supernatural approach to illness, have never been outmoded (Heinze 1977, 85; Pylypa 2011, 133). The three-tiered healthcare network, consisting of 1) regional and provincial hospitals, 2) district hospitals, and 3) community health centers, established and administered by Thailand's Ministry of Public Health in the past two decades, enhances the accessibility and quality of the healthcare service in remote areas (Pylypa 2007, 351). My field research on ravenous spirit beliefs conducted in northeast Thailand from 2013 to 2014, however, reveals that biomedicine and traditional healing rituals complement rather than refute one another in vernacular Thai health practice. An exorcist in Ubon Ratchathani differentiates natural symptoms from supernatural afflictions by means of profound meditation. In cases wherein he does not detect evil power in the divinatory trance, the exorcist suggests to his clients that they have a medical check up (personal interview, II July 2013). Similarly, a young widow from the Ban Nameun community in the city of Ubon Ratchathani suggests that biomedicine and supernatural healing traditions are equally apt because an illness can be caused either by a natural or a supernatural agent. While she was convinced that her husband died from a ravenous spirit affliction, she praised a spiritual healer who successfully persuaded her parents to hand her over to a physician when they misconstrued her postnatal symptoms as a supernatural affliction (personal interview, 25 May 2013).

Given this context of contemporary northeast Thailand in which a mechanistic worldview and supernatural beliefs are generally accepted as different approaches pertinent to different situations and problems, a person who totally dismisses supernatural beliefs is as peculiar as an individual who tenaciously adheres to supernatural traditions without enlisting the service of modern science. As is apparent in the ethnographic cases presented in the following section, informants' acceptance that ravenous spirit havoc is the most likely explanation for the baffling incident results from the trial of multiple approaches. In these scenarios, informants consider diverse explanatory schemes before adopting the theory that most coheres with the empirical input.

The term phenomenology may evoke a train of philosophical postulates on the intricate interplay between consciousness and the perceived objects or phenomena.<sup>1</sup> Phenomenology in this paper, however, simply means the study of empirical experiences as described by witnesses and the roles of these experiences in inducing or sustaining supernatural beliefs.

Ethnographic data on the ravenous spirit belief tradition and informants' accounts presented in this paper were collected via field research I conducted in northeast Thailand during the summer of 2013 and 2014. For ethical reasons, pseudonyms have been used in places of informants' real names. While I refer to involved communities by their real names, I do not reveal their specific locations.

## The phenomenology of ravenous spirit beliefs

#### The inscrutable misfortunes

From late January to the middle of March 2011, ten cases of death befell four hamlets of Ban Nongkung village in northeast Thailand. This unusually high frequency of death induced a widespread suspicion among the villagers that their community was plagued by ravenous spirits. The vice abbot of the village temple was the first to collapse. On the day of his passing, the venerable observed his usual routine. He made an alms round early in the morning before having his meal and then retiring for an afternoon nap. A few hours later, he was found dead in his cell. The vice abbot did not display or complain of any pathological symptoms. He simply passed away in his sleep. A senior monk, however, relayed an eerie dream the deceased person said he had the night before the incident. The venerable saw a big black dog in his dream. The bloodthirsty beast ferociously chased after village dogs. Once this piece of information spread, some villagers speculated that the vice abbot was possessed and then devoured by ravenous spirits. The black dog that appeared in the monk's dream, according to the belief tradition, was a corporeal form of ravenous spirits.

Two days after the vice abbot's passing, two villagers collapsed due to complications associated with their respective chronic illnesses and passed away. In no time, another case of inscrutable death followed. A woman in her sixties suffered from a mild case of diarrhea in the middle of the night. She was sent to the hospital the following morning, and she passed away during the afternoon of the same day. Blood poisoning was registered as the cause of death on her death certificate. Many villagers, however, were skeptical of this simplistic conclusion. For them, it was absurd that a healthy woman who had never suffered from any major illnesses developed blood poisoning over the course of a night and died less than twenty-four hours after the manifestation of a mild ailment. The community was astir when two more individuals died perplexing sudden deaths. A woman in her early fifties had a swoon on her way back from a visit to her mother who lived in the same neighborhood. She died shortly after arriving at the hospital. The physician attributed her sudden passing to kidney failure. Another victim was a man in his early forties. Like the vice abbot, this man passed away in his sleep without any prior signs of pathological symptoms. His passing reaffirmed the theory, which heretofore remained an evanescent speculation among Ban Nongkung villagers, that suggested ravenous spirits had plagued the community.<sup>2</sup> Considering the peculiar situation that induced ravenous spirit beliefs in the Ban Nongkung community, suffice it to say that the pejorative label that reads "empirically groundless" cannot be used to describe this belief tradition. Ravenous spirits are malevolent spirits believed to emerge from the unethical use of magic. Underlying this tenet is the conception of magic as a discipline of knowledge,<sup>3</sup> which holds that mystical power is a natural resource accessible to the adepts well versed in occult science (Tambiah 1975, 49; Burchett 2008, 818–19). Even though practicing magic is not an intrinsically evil act given this particular outlook on magic and mystical power, fear and suspicion against a certain magic adept may arise when there are doubts about the moral quality of his or her practice (Golomb 1988, 437). A ritual master tends to experience both covert and overt forms of social sanction when the community learns about his overcharged service.

These tenets on the accessibility of mystical power and the threat to common well-being posed by the morally corrupted magic practitioners serve to underpin ravenous spirit beliefs. The tradition has it that all sorts of instrumental magic are regulated by rules and taboos that guard against the illicit use of mystical power. The violation of these ethical codes results in the birth of ravenous spirits which permanently reside within the transgressor, yet constantly venture outside their host, possess humans and animals, then silently devour them from within (Suwanlert 1976, 69). Several northeastern Thai communities adopt these tenets about the origin of ravenous spirits to explain deaths and illnesses that transpire in the following manners: I) an epidemic of sudden death among healthy individuals who, prior to their passing, displayed no signs of critical illness; 2) an outbreak of physical or mental symptoms that are irresponsive to biomedicine; 3) a high frequency of unnatural deaths, such as those caused by accidents, that all of a sudden befalls a community; and 4) a massive death among cattle and farm animals, the cause of which is unidentified.

Unlike E. E. Evans-Pritchard's notion of witchcraft that explains unfortunate events (1937, chapter 2), incidents that elicit ravenous spirit beliefs cannot be dis-

missed as mere reactions to everyday misfortunes. Discerning logic behind Zande witchcraft beliefs, Evans-Pritchard posits that they constitute a heuristic scheme that the Azande deploy to rationalize both major threatening incidents and everyday misfortunes, such as a minor foot injury caused by an accident or the failure of a simple task that usually yields an anticipated outcome (1937, 63–64). Tackling everyday unfortunate occurrences, Zande witchcraft beliefs are adopted alongside rationalist explanations. Each accounts for different dimensions of the same mis-fortune. The collapse of a dilapidated granary may be ascribed to its termite-ridden foundation, yet witchcraft can be blamed for the fact that a number of people sat under the granary at the moment it collapsed and were injured (Evans-Pritchard 1937, 70). Arguably, phenomena that elicit Zande witchcraft beliefs do not baffle modern science or attract supernatural theories. They are unfavorable mundane occurrences rendered sensible by both supernatural and rationalist idioms.

Incidents that elicit ravenous spirit beliefs, however, feature inscrutable aspects that defy scientific explanations. Even individuals who hold a mechanistic worldview and dismiss supernatural beliefs would not fail to note these baffling aspects. Successive cases of sudden death among healthy people feature two irreducible and baffling components that cannot be easily dispelled by the scientific-rationalist theories such as the malfunction or the failure of internal organs; these include I) the health condition of the deceased persons who displayed no signs of critical illness prior to their passing, and 2) the number of people who collapse, one after another, in this sudden, haphazard fashion. Likewise, an abrupt outbreak of physical and mental symptoms within a community leaves too many unintelligible details when attributed to an epidemic of infectious disease or a mass hysteria.<sup>4</sup> A natural epidemic, as understood by most of the lay northeastern Thais whom I interviewed, should be responsive to or at least detected by biomedicine. Mass hysteria is an equally obscure explanation, since it does not elucidate how erratic behaviors develop a contagious quality and spread from one person to others. These baffling aspects, suffice it to say, are not entirely contingent upon a cultural lens. They obtrusively demand explanations. People who adopt diverse stances on the reality of the supernatural world would concur that the incidents believers attribute to ravenous spirits are out of the ordinary, and that they stand out from mundane incidents in the domain of everyday reality.

Within this particular circumstance in which a coherent and empirically verified explanation is absent, several northeastern Thai communities ravaged by the inscrutable misfortunes mentioned earlier resorted to ravenous spirit beliefs. Tenets concerning the origin of these spirits and their evil activities render all riddles that elude modern medicine and psychology intelligible. Ravenous spirits' voracious appetites, including their ability to penetrate into and lie hidden beneath the corporeal forms of other creatures, explain the abrupt nature of the death epidemic and the absence of pathological symptoms among the victims. They did not die from illness; therefore, they displayed no signs of critical disorder prior to their deaths. Their doom is immediate because the voracious spirits rapidly and thoroughly devour their internal organs, leaving only empty shells. Likewise, a sudden outbreak of convulsion, nonsensical babbling, and a laughing or crying fit that haphazardly afflicts people within a community falls into place when explained in the idioms of ravenous spirit afflictions. Afflicted individuals were not mentally ill or deranged; rather, they collectively displayed similar erratic behaviors because ravenous spirits temporarily possessed them. Given that these extraordinary experiences are made accountable and sensible to their witnesses by ravenous spirit beliefs, I contend that the tradition is a heuristic tool, not a superstition. Northeastern Thai communities have employed this tool to devise a coherent explanation of and a sensible reaction to a distinct class of baffling phenomena, whose cause and nature have not yet been clarified by modern science.

I do not intend to argue that the inscrutable misfortunes ascribed to ravenous spirits vouch for the objective reality of supernatural agents. It is feasible, none-theless, to advance two salient arguments about the source of supernatural beliefs on the basis of the ethnographic data presented in this sub-section. First, ravenous spirit beliefs emerge not from the superstitious propensity of some northeastern Thai peasants, but from their logical attempt to devise rational explanations for and sensible reactions to baffling incidents that defy the scientific-rationalist notions of reality. Second, phenomena that constitute the empirical basis of ravenous spirit beliefs are accurately perceived and rationally interpreted. Case after case of unnatural, sudden death that elude modern science are too concrete to be dismissed as individuals' delusions. Nor can they be refuted as illusions in the sense that ravenous spirit believers falsely attribute a natural phenomenon to a supernatural cause because speculations about possible natural causes are apparently inadequate.

These arguments are elaborated in the following sub-section, which highlights personal experience narratives about the incidents that warrant informants' beliefs in the reality of ravenous spirits. These cases evince that science and supernatural beliefs are two distinct approaches to reality, each of which is considered by a rational human being in search of an explanatory framework to grapple with an inscrutable phenomenon. Supernatural beliefs are adopted as the troubled individual realizes that the puzzling incident becomes most coherent and intelligible in supernatural idioms.

# The fantastic reality

Tzveton Todorov (1975, 25) uses the term *fantastic* to denote the moment of hesitation readers experience when the narrative does not define the agent behind mysterious incidents occurring to baffled characters. A fantastic narrative features phenomena that deviate from the course of everyday reality. The uncertainty expressed by characters as they hesitate between the natural and the supernatural cause of the emerging incident primarily constitutes the fantastic quality of the story, which takes complete effect when the narrative induces a similar reaction from readers. Once the story reveals the agent behind the intriguing phenomenon, the hesitation is dispelled and the narrative loses its fantastic effect.

Phenomena that constitute the empirical and rational basis of ravenous spirit beliefs, I argue, are fantastic in Todorov's sense. However, unlike those fabricated mysteries invented for aesthetic effects, ravenous spirit havoc poses actual threats to the mechanistic view of reality espoused by scientific rationality. On the one hand, these real-life mysteries call to mind Thomas Hobbes's argument that we can only speculate on causal principles that govern phenomena not of human construction (Hobbes 1845, 183–84). There is no single analytical scheme, not even the established paradigm of knowledge like experimental science, which can guarantee the actual cause of the perceived effect. This uncertainty is intrinsic to the act of making inference, by which we can only infer possible causes of the transpiring phenomenon from its manifested consequences discernible by physical senses and experimental protocols (Hobbes 1998, 42). For Hobbes, human-made rationality satisfies our natural desire for meaning and intelligibility. However, it does not guarantee that our knowledge of non human-made phenomena unfailingly mirrors ways in which they emerge and transpire in reality (Shapin and Schaffer 1985, 151).

On the other hand, the mysteries believers attribute to ravenous spirits raise a significant question about the sources of supernatural beliefs and the ability of their holders to perform rational thinking. Given the absence of a conclusive, empirically verified explanation of the incidents believers construe as ravenous spirit havoc, their choosing to resort to the ravenous spirit tradition does not evince their false logic or superstitious disposition. Rather, it spells out Hobbes's view that human minds naturally require meaning and intelligibility. Occurrences cannot be dismissed simply as unexplained absurdities; rather, they need to be ascribed to some plausible causes. Ravenous spirit beliefs result from this rational requirement of the human mind. They are believers' reactions to and interpretations of the threatening, baffling phenomena for which we have not yet formed conclusive and empirically proven explanations. Mrs. Somjai's and Mr. Namchai's personal experiences cast light on this scenario of believing, in which fantastic experiences form a basis for supernatural beliefs. Their narratives also underscore logical components of ravenous spirit beliefs, apparent in the sound reasoning and the valid thought process that warrant informants' decisions to resort to ravenous spirit rituals.

I interviewed Mrs. Somjai in June of 2013 about a mysterious headache that attacked her in 2009. Mrs. Somjai is a native of a rural village in Udornthani province, yet she is not worlds away from modern lifestyle, nor does she remain uninfluenced by modern sentiments and values. Mrs. Somjai frequents the principal city of Udornthani for both business and relaxation. She occasionally travels to neighboring countries with her husband on holidays. She consults physicians about her health issues and is a big fan of television dramas. Despite the fact that she resides in a rural community where traditional values and practices are still prevalent among its people, Mrs. Somjai cannot be positioned within a reductive category of the credulous folk whose embeddedness in rural locality is, for some "scientific-minded" debunkers, accountable for their outmoded beliefs (Mullen 2000, 127; Brady 2001, 10). Mrs. Somjai became convinced that the headache she experienced in 2009 was a ravenous spirit affliction. She narrated the following incident to explain the basis for her belief.

I had this symptom when I was returning home after grocery shopping. I felt the sudden attack of pain in my neck and shoulder. I sometimes have this kind of pain before and after my period. But this time the pain got worse at night. It was so severe that my head throbbed. I felt like my head was going to shatter into pieces and my eyes were about to leap from their sockets. I could not open my eyes. The pain started from my neck and shoulder and it went up to my head. I took some painkillers, but the pain did not subside so my husband brought me to the hospital. The doctor gave me an injection but the pain was still severe. The medication was just totally useless. Then my husband called for a healer. She visited me at the hospital and performed a brief healing rite. She tied sacred white thread round my wrists then gave me a small bottle of water to drink. A short while later I felt sick to my stomach. It was strange because there was not much water in the bottle, and it tasted just like normal water. Then I went to the restroom and vomited. And you would not believe it, but the pain totally disappeared. (Personal interview, 23 June 2013)

Mrs. Somjai's headache, resisting medical treatment but responding favorably to the healer's holy water, attracts a supernatural interpretation. The healer diagnosed Mrs. Somjai's headache as a ravenous spirit affliction. She claimed that a ravenous spirit, unable to possess Mrs. Somjai, perched on her shoulder instead. The supernatural cause of the incident, as propounded by the healer, sounds convincing to Mrs. Somjai not because Mrs. Somjai is gullible, but because she infers the cause of her headache from its perceived effect. Thomas Hobbes discusses two reasoning methods devised by human intellect to discern a causal relationship between entities or phenomena: the synthetical and analytical methods (Shapin and Schaffer 1985, 148). The synthetical method denotes an inference made from cause to effect, which is employed in mathematics and geometry. From a set of established theorems or fundamental principles, a mathematician defines the outcome that necessarily follows (such as one plus one always equals two). Prescribed rules and theorems are fixed causes that produce invariable outcomes, which remain unchanged as long as the ground rules are observed and the calculating method is executed as prescribed. The analytical method, on the contrary, features an inference made from the perceived effect to its possible cause. Experimental science, discerning the cause of the observed phenomenon from its manifested traits, employs the analytical method in the production of causal knowledge. Hobbes further argues that when it comes to natural phenomena not of human construction, we cannot secure the same degree of certainty about the causes that produce these phenomena as in mathematics or geometry, which are primarily about invented causes (figures, lines, angles) and the results that necessarily follow from the prescribed relationship (calculating formulae or theorem) (Shapin and Schaffer 1985, 150; Shapiro 2009, 190-91).

Mrs. Somjai, inferring a supernatural cause of her headache from the efficacy of a supernatural approach, adopted the analytical method. Each healing approach she resorted to espoused a distinct theory of her illness. Therefore, its failure or success implies falsity or veracity of the theory it espouses. For Mrs. Somjai the inefficacy of painkillers rules out the possibility that her headache was a menstrual-related symptom. The medication the informant received in the hospital also failed. The repeated failure of biomedicine accounts for the informant's adoption of an alternative healing approach, which suggests a supernatural cause of the symptom. The immediate efficacy of the ritual and the holy water, experienced by the informant in stark contrast to the failure of biomedicine, persuades Mrs. Somjai to seriously consider the supernatural theory of her headache. The informant's reasoning contains no false logic. She infers a possible cause of her illness from empirical evidence, or precisely, the ways in which the symptom responds to different healing approaches.

Skeptics may argue that the informant's headache was possibly dispelled by the belated effect of biomedicine, which happened to take effect right after Mrs. Somjai consumed holy water, or that the water may have contained certain medicinal substances. The real cause of Mrs. Somjai's headache, nonetheless, is not the issue of concern for me. I have attempted to delineate the thought process that underpins Mrs. Somjai's acceptance of the supernatural theory of her illness, and to argue that it is based on a rational interpretation of an empirical incident.

Mr. Namchai, like Mrs. Somjai, experienced a baffling phenomenon that convinces him of the reality of ravenous spirits. Mr. Namchai has lived in the city of Sakon Nakhon since birth. By the time I interviewed him in May of 2013, the informant was in his early sixties. He ran a clothing shop in one of the city markets. Mr. Namchai constantly expressed his reluctance to assert a supernatural interpretation of a bizarre incident occurring to his male friend. Nonetheless, he also admitted that its perplexing aspects cannot be accounted for via scientific-rationalist idioms.

You can listen to my story and see how to make sense of it. But I am sure you will find it strange, very strange. One of my friends, Mr. Liam, was possessed by a ravenous spirit. He is also my distant relative. The incident took place when we were in our late twenties. Liam was thin and lean. He was not like me. I was bulky and sturdy. I was a sporty man. You will not believe, when Liam was possessed he writhed and kicked so hard that I and other friends—all of us were bigger than him-could not hold him still. Four or five sturdy men joined forces to hold Liam down. Then we sent him to the hospital. The physician said we need to calm Liam down first. So he gave him three shots of sedative. Normally a person will pass out just from one shot, but after the third shot Liam was still kicking and screaming. Don't you agree that this is very strange? Then he said he was hungry, and he asked for whisky and a whole chicken. Liam was not a drinker. He did not drink alcohol. But when he was possessed he poured one after another bottle of whiskey down his throat. Even the most relentless drinker cannot do things like that. And the way he ate chicken, he chewed its bone like it was just a gum. I was bewildered by the whole incident, but there were more baffling things. Liam did not get better, so we took him out of the hospital and called for a famous exorcist. By this time, the whole neighborhood was astir because of Liam's mysterious symptoms. A lot of people, around twenty or thirty, I think, came to his house to observe the exorcising rite. When Liam was brought into the room, he leaped to the exorcist who stood among the crowd, and started to shout insulting words at him. How could he know that man was the exorcist? Nothing marked him out. He dressed like other people and he was just quietly observing Liam when he entered the room. This exorcist failed to expel the spirit, so he recommended to us another one who lived in Ban Koh village. We brought him there. An exorcising rite was performed for him for two full days, then he was back to himself again. This struck me as most peculiar.

Modern medicine failed to explain his symptoms, let alone cure him, but he recovered after an exorcising rite! How will you explain this incident? Can you describe it in terms of science? I have tried to explain it in a more rational way, but many details remain perplexing. I know this incident is too bizarre to be true, but it did happen. (Personal interview, 26 May 2013)

Mr. Namchai did not hastily leap to the supernatural cause of the experience. His reluctance evinces the flagrant incongruity between the incident he witnessed and the view of reality he espouses. Ravenous spirit possession, the informant admitted, is an explanation too fantastic to be received without doubts or skepticism. However, intriguing aspects of the incident stubbornly resist the dominant mechanistic worldview that attributes all phenomena to certain natural agents. The informant's expressed hesitation seems to result from his awareness of the epistemic authority held by science, which, in several cases, engenders scientism characterized by a steadfast belief in "scientific" explanations even when they are apparently at odds with the phenomenon under investigation (Hufford 1985, 181; Holton 1993, 147). Influenced by the predominant conception of authoritative science vis-à-vis fallacious supernatural beliefs, the informant considered various possible scenarios within the rationalist frame of reference to make sense of his bizarre experience in conventional terms, only to discover that the troublesome experience was most intelligible in supernatural idioms.

Mr. Namchai's choice to adopt a supernatural interpretation of the incident rather than leaving it unexplained or explaining it away by certain rationalist theories, which are conspicuously inadequate, evokes Hobbes's observation on the nature of truth, reason, and the limited capacity of human intellect. If the causal knowledge of the non human-made phenomena is inevitably speculative and uncertain, then it is sufficient to adopt the cause that satisfies the individual's rational faculty (Shapin and Schaffer 1985, 151). For Hobbes, what matters is not the certain and exact knowledge of the vera causa—the real and definite cause of the observed phenomenon, which is inevitably mediated since it does not transparently appear on the manifested effect but has to be inferred from available empirical evidence. More crucial is the plausible cause that renders the perceived effect accountable and intelligible (James 1949, 13). In light of this outlook on the uncertainty inherent in the inferred causal knowledge, sensible conjecture of what could be the cause of the perceived phenomenon is more feasible than the knowledge of the real cause, whose definite mechanism and operation we cannot completely know given the partial and mediated nature of making inference. Viewed in light of this proposition, Mr. Namchai's deployment of ravenous spirit beliefs to make sense of the intriguing experience reflects his logical attempt to create meaning from chaos. The informant adopted ravenous spirit tenets because they suggest a plausible cause most coherent with the enigmatic incident he experienced.

Mrs. Somjai's and Mr. Namchai's personal experiences elucidate a scenario in which a properly perceived and rationally interpreted empirical experience forms the basis for supernatural beliefs. In their cases, supernatural beliefs, rather than the self-evident proof of their holders' false logic and gullibility, evince the discrepancy between the scope of reality and the scope of human rationality. Some people adopt supernatural idioms because the orthodox paradigm of reality fails to decipher certain phenomena (Walker 1995, 5). These occurrences are fantastic in Todorov's sense, as they challenge an illusion that we have come to possess an omnipotent heuristic device, namely scientific rationality, which illuminates all facets of the phenomenal world and subjects them to human knowledge and control. When fantastic incidents, like those experienced by the two informants, wreak havoc on this assumption, supernatural traditions serve as alternative frames of reference that render bizarre experiences intelligible and meaningful. Mrs. Somjai's and Mr. Namchai's stories are less about primitive mentality and illogical thought processes than they are about the necessity to have a coherent story that renders sense and order to chaotic, baffling experiences (Needham 1937, 282; Geertz 1973, 100). Mr. Kom, a peasant residing in a rural northeastern Thai village in Ubon Ratchathani, cogently expressed this view in his comment on the obscure aspects of reality and the impossibility of having a single, all-efficient heuristic device that has a lucid, final answer for everything. When it comes to these mysteries, supernatural beliefs and scientific rationality occupy the same ground. They are mere speculations of, to use Mr. Kom's words, "what is likely to have happened."

For people in general, ravenous spirit beliefs may appear superstitious. But can you give me a mode of thought or a mental scheme that can explain everything out there in the world? Even science does not have explanations for everything. If it does, then we would have known by now what happened to that missing Malaysian plane.<sup>5</sup> Everything should be clear and there should not be mysteries in the world. The thing is, reality can be much, much more complicated than we can imagine. And what we have is different versions of what is likely to have happened. (Personal interview, 30 May 2014)

#### CONCLUSION: THE EMPIRICAL CONTEXT OF BELIEF

In this paper, I have made two salient arguments. First, ravenous spirit beliefs practiced by several rural villages in northeast Thailand, in a number of cases, are grounded in properly perceived and rationally interpreted experiences. Second, these cases problematize a general assumption that supernatural beliefs are a combination of misconstrued experiences and false logic. Mrs. Somjai's and Mr. Namchai's stories present the opposite scenario. In their cases, experiences they witnessed defy scientific rationality but fall into place when viewed in light of supernatural beliefs.

In this concluding section, I discuss the ramifications of this study. Informants' experiences as presented in this paper elucidate the formation of supernatural beliefs, which is not appreciably different from that of scientific notions. Through Mrs. Somjai's and Mr. Namchai's cases, we learn that supernatural beliefs are induced by empirical experiences and the rationally thought-out activities that informants conducted to redress a baffling and threatening situation. In light of these cases, supernatural beliefs are not fallacious cognitive tenets; rather, they are the outcome of an intricate process that consists of empirical experiences, rational observation of reality, and logical reactions to the fantastic but real incidents. Ultimately, I argue that the ravenous spirit tradition, like science, is 1) a body of propositions and practices anchored to a rational assessment of empirical evidence, and 2) a speculation on possible causes of a phenomenon, inferred from its manifested effect, which is inevitably partial.

Believing is not simply an act of holding an unverified or unverifiable tenet. Believing also implies a preceding circumstance that warrants the believer's choice to accept and retain certain tenets (Motz 1998, 349), and this circumstance does not invariably feature false logic and misperceived or misinterpreted phenomena. The rational components of ravenous spirit beliefs as delineated in this paper suggest that it is no longer adequate to conceptualize belief as a conviction that influences the believing individual's action and interpretation of his surroundings, because the opposite is equally true (Luhrmann 1991, 310; Glass-Coffin 2001, 190; Keane 2008, S116–17). Certain incidents attract and bolster unconventional beliefs, because they contain perplexing aspects unresolved by the dominant worldview (Hufford 1995, 14; McClenon 1995, 119). Considering these cases, experiences induce convictions rather than vice versa.

#### Notes

I. For the history of phenomenology as an analytical method, see Thomas Ryba (2006, 92–97).

2. The series of phenomena that triggered the ravenous spirit panic in Ban Nongkung village are elaborately described in a television documentary titled "A Probe into Ravenous Spirit Rituals" (*Jo phithikam prap pob*) (JSL Global Media 2011). The program features interviews with villagers and community leaders, thus presenting the empirical context of ravenous spirit beliefs from emic perspectives.

3. The conception of sorcery as a discipline of knowledge is apparent in the etymological composition of the term *saiyasart*, which denotes sorcery in the Thai language. The term consists of the prefix *saiya-* and the root *-sart*. In the 1999 edition of the Thai–Thai dictionary complied by the Thai Royal Institute, *saiya-* is defined as "the occult of magical formulae and spells derived from Brahmanic tradition" (1999, n.p.). The suffix *-sart* is a Thai transliteration of the Sanskrit word *shastra*, which means "a discipline of knowledge." The etymological composition of the term *saiyasart* evinces that sorcery is conceptualized as a field of specialization within the Thai worldview. In comparison with the English term *sorcery*, *saiyasart* is relatively devoid of value judgment because it construes occult power as ethically neutral, that is, not intrinsically good or evil (Wattanagun 2016, 42).

4. Several psychological studies of ravenous spirit beliefs in Thai academia explain the collective display of erratic behaviors, construed by belief communities as ravenous spirit afflictions, in terms of mass hysteria. However, in many cases (Pradubsamut 1999; Huttapanom et al. 2006) psychological interpretations are advanced without sufficient empirical evidence, such as the afflicted individuals' medical histories or a comprehensive study of mental symptoms they had displayed. Without solid evidence, researchers attribute mass hysteria to everyday discontent experienced by afflicted individuals. The making of ill-founded psychological interpretations reifies Hufford's observation that psychological theories, when adopted without adequate evidence, merely uphold a "scientific" façade of the analysis rather than illuminate the supernatural tradition being studied (Hufford 1983, 23).

5. The informant referred to Malaysia Airlines Flight 370, which disappeared while flying over the Andaman Sea on 8 March 2014.

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