

Name of authors of the target article: Robert Jagiello, Cecilia Heyes, and Harvey Whitehouse

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Commentary title: The ritual stance does not apply to magic in general

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Abstract:

Contrary to the author's proposed classification scheme, I argue that most magical practices are better viewed as "instrumental" rather than "ritualistic". Much ethnographic and historical evidence shows that magicians and ritual experts often have elaborate causal theories regarding how magic actions lead to the putative outcome, and the "physical/mechanical" vs. "supernatural" distinction in causal mechanisms needs serious reconsideration.

Main text:

While the overall classificatory system of cultural action proposed by Jagiello et. al (2022) is laudable, I am concerned about the portrayal of magic as "quasi-instrumental" and its grouping as ritualistic. Under their description, despite magic's explicit, overall goal, the causal mechanisms via which this goal is obtained by magical actions are "irresolvably" opaque in principle. That is, from the perspective of the observer, how magical actions achieve some worldly outcome has no knowable physical-causal pathway. This account of magic suffers from a major issue: ample historical and ethnographic evidence shows that many magic practices are genuine instrumental efforts (Hong & Henrich, 2021) and the practitioners often believe that they possess the causal knowledge regarding how the putative outcomes are produced by their actions (Edmonds III, 2019; Hong, 2022a). My study on Chinese rainmaking, for example, shows that ancient scholars have explicitly theorized the mechanisms of how specific "ritual" actions causes rain, and many rainmaking methods were the direct results of cosmological theories in a way not very different from modern engineers designing practical solutions to pressing problem based on their understanding of the causal nature of the problem (Hong et al., forthcoming). There is also a great deal of "experimentation" where people would try out different methods in an effort to induce rain, a key feature of the "instrumental stance" in Jagiello et. al (2022)'s proposed bifocal stance theory.

A crucial aspect of individual's understanding of magic (or any technological practice) is that the knowledge of the exact causal mechanism via which action achieves outcome is often possessed by a few experts in the community, and lay people typically are aware of the existence of such

experts to whom they turn when specialized help is needed (Kominsky et al., 2018). Jagiello et al. (2022) alluded to this sparingly in the target article, but I suggest this such knowledge distribution plays a much more important role in human societies. In a discussion of religious beliefs, Dennett (2006, p. 218) refers to this phenomenon as the “division of doxastic labor”, where lay people do the believing, and defer the complicated understanding of the underlying religious dogmas to the experts. The same dynamics readily applies to magic: lay people need only believe that a town should close its southern gates and open those on the north in order to induce rain (Snyder-Reinke, 2020), and leave the *yin-yang* theory that serves as its theoretical foundation to scholars and specialists. Importantly, the (often implicit) deference of causal understanding to experts may occur even when such expert knowledge is practically inaccessible, as in the case of ancient/lost knowledge (Hong, 2022b).

It is worth noting that such division of causal understanding is not restricted to religious cognition but rather a general feature of human cognitive life. In modern societies, few people understand the exact causal mechanism of how pressing a button on a remote control turns on the TV, yet most of us would agree that it is a purely instrumental action. This leads to my other concern which has to do with Jagiello et al. (2022)’s classification of causal mechanisms into the resolvable physical/mechanistic and the irresolvable supernatural. Although Jagiello et al. (2022) do not explicitly define “supernatural” in the target article, it is largely used to refer to actions that involve interaction with spirit beings. In section 2.4.2, they suggest that in order for the instrumental stance to be triggered, the action-outcome causal pathway needs to be *physical*, with the implication that people view physical (transparent, resolvable) and supernatural (opaque, irresolvable) causations as qualitatively different kinds of processes. While it is true that many magic practices do involve personalized spirits, there are two problems with this dichotomization. First, whether individuals themselves make this emic distinction is highly debatable (Lohmann, 2003; Weiskopf, 2020), with some authors suggesting that religious practices in small scale societies are simply practical know-how, along with various hunting and gathering techniques (Dennett, 2006, p. 161). Second, even if we grant that this emic distinction exists, it is unclear why causal opacity of some mechanism depends on the presumed involvement of spirits. In fact, the logic behind petitioning to a deity is very straightforward and closely resembles that of asking for favors from a capable human individual (Horton, 1960). One may not only supplicate, but also bribe and/or coerce the deities to achieve specific outcomes (Cohen, 1978). As such, the negotiation with these human-like entities can be a very creative process where action details are not blindly observed and reproduced; rather, they are understood as instrumental components to achieve the outcome and may be modified if circumstances demand (Hong et al., forthcoming). For example, in ceremonies that involve meat offerings to some deity, the animals to be sacrificed may change as a result of pragmatic constraints (McCauley & Lawson, 2002).

As Jagiello et al. (2022) rightly point out, the instrumentality or conventionality of an action lies in the eyes of the beholder, and the same cultural action may be interpreted either way based on the background knowledge of the observer as well as the contextual cues that happen to be present in the learning episode. Therefore, my arguments above are really to make the qualitative point that *most magic practices are better viewed as instrumental actions for most individuals in their communities most of the time*. Indeed, if we consider magical actions that do not explicitly

involve spirits (e.g., classic Frazerian sympathetic magic), then its boundary with pseudo-science can be extremely fuzzy, as in the case of alchemy (Clements, 2017) and astrology (Thagard, 1978). I worry that stripping off the instrumentality from magic may lead researchers to misinterpret the genuine effort that people made in trying to explain, predict, and control worldly events (Horton, 1967).

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## References

- Clements, J. (2017). *The intellectual and social declines of alchemy and astrology, circa 1650-1720*. University of York.
- Cohen, A. P. (1978). Coercing the Rain Deities in Ancient China. *History of Religions*.  
<https://doi.org/10.1086/462793>
- Dennett, D. C. (2006). *Breaking the spell: Religion as a natural phenomenon* (Vol. 14). Penguin.
- Edmonds III, R. G. (2019). *Drawing Down the Moon: Magic in the Ancient Greco-Roman World*. Princeton University Press.
- Hong, Z. (2022a). A cognitive account of manipulative sympathetic magic. *Religion, Brain & Behavior*, 0(0), 1–17. <https://doi.org/10.1080/2153599X.2021.2006294>
- Hong, Z. (2022b). Dream Interpretation from a Cognitive and Cultural Evolutionary Perspective: The Case of Oneiromancy in Traditional China. *Cognitive Science*, 46(1), e13088.  
<https://doi.org/https://doi.org/10.1111/cogs.13088>
- Hong, Z., Slingerland, E., & Henrich, J. Magic and Empiricism in Early Chinese Rainmaking -- A Cultural Evolutionary Analysis. *Current Anthropology*, forthcoming.
- Hong, Z., & Henrich, J. (2021). The Cultural Evolution of Epistemic Practices. *Human Nature*, 1–30.
- Horton, R. (1960). A Definition of Religion, and its Uses. *The Journal of the Royal Anthropological Institute of Great Britain and Ireland*. <https://doi.org/10.2307/2844344>
- Horton, R. (1967). African Traditional Thought and Western Science. *Africa*.  
<https://doi.org/10.2307/1158253>
- Kominsky, J. F., Zamm, A. P., & Keil, F. C. (2018). Knowing When Help Is Needed: A Developing Sense of Causal Complexity. *Cognitive Science*.  
<https://doi.org/10.1111/cogs.12509>
- Lohmann, R. (2003). Special Issue: Perspectives on the Category ‘Supernatural.’ *Anthropological Forum*, 13(2), 115–219.
- McCauley, R. N., & Lawson, E. T. (2002). *Bringing ritual to mind: Psychological foundations of*

*cultural forms*. Cambridge University Press.

Snyder-Reinke, J. (2020). *Dry spells: State rainmaking and local governance in late imperial China*. Brill.

Thagard, P. R. (1978). Why Astrology is a Pseudoscience. *PSA: Proceedings of the Biennial Meeting of the Philosophy of Science Association*.  
<https://doi.org/10.1086/psaprocbienmeetp.1978.1.192639>

Weiskopf, D. A. (2020). Representing and coordinating ethnobiological knowledge. *Studies in History and Philosophy of Science Part C :Studies in History and Philosophy of Biological and Biomedical Sciences*, 84. <https://doi.org/10.1016/j.shpsc.2020.101328>