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Ritual

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Rituals are patterns of behavior, ranging from handshakes that seal a business deal to singing anthems before sporting events and the hand-clasp greetings of chimpanzees. They include initiation rites, such as baptisms and bar mitzvahs, and they often demarcate major life events, such as weddings and funerals. They are performed routinely (e.g., daily prayer), but also in singular moments of illness (e.g., healing rituals), trauma (e.g., memorial ceremonies), and celebration (e.g., birthday parties). Despite their diversity, rituals exhibit common patterns and cognitive underpinnings. Notably, ritual is a form of communication—common across species and fundamental to all human cultures—that creates frameworks of expectancy and predictability.

History

Ritual has been studied in various fields, but two general research trends can be delineated in its historical development. The first emphasizes the functional aspects of ritual. For instance, the uncertainty principle posits that rituals emerge under conditions of unpredictability ([Malinowski, 1948](#)). Rituals can lower anxiety and provide a sense of control in such environments (e.g., among baseball players; [Gmelch, 1992](#)). Other research has emphasized how certain rituals—rites of passage—serve to demarcate transitions in social roles and status ([Turner, 1969/2017](#)). For example, weddings mark the transition from bachelor to husband, graduations mark the transition from student to graduate, and baptisms mark the transition from unsaved to saved. Still other research focuses on the direct consequences of ritual performance, whether it is ritual's ability to heal the infirm, as in shamanistic ritual performances ([Singh, 2018](#)) or provide individual and community needs through ritual magic, such as ensuring a bountiful harvest, birth of a child, or death of an enemy ([Sørensen, 2007](#)). Drawing inspiration from [Durkheim \(1912/1995\)](#), researchers also examine how ritual impacts social solidarity and group cohesiveness ([Watson-Jones & Legare, 2016](#)). More broadly, all these research strands clarify how ritual communication facilitates social life by naturalizing normative behavior [see [Normativity](#)] and reinforcing collective values and beliefs. Ritual is thus “the basic social act” ([Rappaport, 1979](#), p. 174).

The second general trend focuses on ritual's capacity to elicit symbolic meanings that are difficult to articulate ([Turner, 1967](#)). For example, the singing of “The Star-Spangled Banner” before NFL games symbolically represents American ideals of freedom, liberty, and equality. Typically, symbolic meanings are not salient or even considered at each ritual performance, but they can become salient through ritual protests, such as taking a knee during the recitation of national anthems, expressing sentiments that a society is failing to live up to its values. Because rituals carry symbolic meanings, scholars approach them as cultural texts that require interpretation ([Geertz, 1973](#)). Structuralists, for instance, argue that rituals are governed by symbolic binary oppositions that can be decoded to reveal the underlying logic of cultural practices and beliefs ([Lévi-Strauss, 2016](#)). Symbolic interactionists, on the other hand, emphasize the subjective meanings individuals attribute to rituals and their role in shaping identities ([Goffman, 1967](#)). Others, relatedly, have explored how symbolic metaphors rooted in embodied ritual experiences link concrete actions to abstract concepts such as identity, power, status, and transcendence ([Lakoff & Johnson, 2008](#)).

Core concepts

Ritual is defined as “the performance of more or less invariant sequences of formal acts and utterances not entirely encoded by the performers” ([Rappaport, 1999](#), p. 24). This definition highlights ritual’s key features. First, rituals are action-patterns not originated by those who perform them. None of us created the handshake, nor is the hand-clasp greeting the invention of any living chimpanzee. Second, ritual acts are formal, thus demarcated and easily distinguished from other actions, facilitating their role in social communication [see [Signaling](#)]. Extending one’s hand for a handshake is generally not mistaken for an involuntary arm spasm. Third, rituals are consistent, making them predictable as action-patterns but individually flexible enough to permit the communication of performers’ internal states. In the American context, a firm handshake suggests more enthusiasm about an encounter than a limp grasp. Fourth, rituals involve vocal expressions. Handshakes, for example, are usually accompanied by greeting expressions such as “Hi!” or “How are you?” Fifth, rituals are physical actions; that is, performance is intrinsic to ritual. None of these features are unique to ritual, but their coalescence is unique and has functional implications that are critical for human (and nonhuman) sociality and cognition.

The given definition of ritual suggests two components—*self-referential* and *canonical*—of ritual form. The *self-referential* component signifies the performer’s current mental or physiological state. Bird mating dances, ape greetings, and dog submission postures indicate the intentions of the performer—respectively, a readiness to mate, willingness to socially engage, and a demarcation of play activity. Nonhuman rituals are generally limited to such signals. However, the union of embodied action and recursive grammatical communication—language—infuses human rituals with the ability to concretize abstract values and ideals. This *canonical* component of ritual implicitly or explicitly contains the moral codes and social obligations of a community ([Rappaport, 1979](#)).

Consider the prayers, for example, of a Sunday churchgoer. The self-referential component of prayer refers to how a person recites prayers. Prayers recited with enthusiasm suggest commitment to the church community and its values, whereas mumbling prayers through a scowl likely intimates that sitting in the pews is a consequence of social pressures, rather than personal dedication to the church. Prayer, however, is not limited to self-referential signals. In addition to physical movements and expressions, prayer is an articulation of specific words. These words, the canonical component of prayer, contain the values and moral codes of the church community, which of course were not written by anyone offering them. The meaning of the words themselves, consequently, cannot provide a window into the current state of the worshipper; the same words are recited week after week, regardless of subjective mood. Rather, the antiquity of the prayers points to a deep tradition, and their contents suggest enduring values.

Ritual is also characterized by *stereotypy* and *repetitiveness* (consistent repetition), *redundancy* (multiple actions lead to the same goal), *sharedness* (collectively practiced by a community), *rhythmicity* (regular recurrences that unfold in a specific order), and *causal opacity* (observers cannot intuit how ritual

performances cause their outcomes; [Legare & Nielsen, 2020](#)). For example, the up-and-down motion of a handshake is repetitive, redundant, and rhythmic; handshakes are a socially accepted and shared greeting in Western cultures; and it is causally unclear how the rhythmic pumping of clasped hands serves as a social lubricant when people meet, even though it evidently does.

Rituals are also temporally distinguished ([Rappaport, 1999](#)). *Calendrical rituals* such as Easter and Halloween celebrations occur annually on specific dates. Noncalendrical rituals, known as *ecological rituals*, are elicited in response to social and environmental situations, such as a rain dance performed to end a drought.

Questions, controversies, and new developments

Distinguishing the self-referential from the canonical components of ritual raises a number of key questions and points to new areas of research. For example, the boundaries of ritual's self-referential component are unclear. Specifically, it is unclear at which point the efficacy of a ritual is voided by individual deviations. Returning to prayer for instance, at what point are mumblings or expressions of exuberance perceived as falling outside the ritual community? Relatedly, research is needed on how new rituals are created and become accepted by individuals and their communities. And more empirical work is needed to explain why some rituals succeed, whereas others fail. One intriguing possibility is that humans have cognitive expectations about the structure and form of rituals; rituals that align with those expectations are more likely to be adopted and accepted by a community [see [Cultural Attractors](#)] ([McCauley & Lawson, 2002](#)).

Cognitive anthropologists, however, debate how rituals are culturally transmitted from one generation to the next. Some theorists emphasize emotional salience; rituals that evoke fear, awe, joy, tranquility, or other emotions are most likely to endure ([Alcorta & Sosis, 2005](#)). Others suggest that cultural transmission is a problem of memory, resulting in a bimodal pattern in which rituals are either frequently performed, or infrequently performed but highly elaborate, and thus memorable ([Whitehouse, 2021](#)). Other researchers argue that rituals must be considered within the cultural systems in which they are embedded, and thus, the transmission of rituals is a matter of how well rituals are linked to aspects of their cultural system, such as the myths and beliefs of a society ([Sosis, 2020](#)).

Broader connections

Research on ritual intersects with the cognitive sciences at many levels, including social dynamics (e.g., group cohesion), identity (e.g., community membership) [see [Social Identity](#)], development (e.g., childhood rituals, changes in ritual activity across the life course) [see [Social Learning](#)], and how populations differ in these matters throughout the world [see [Cultural Evolution](#)]. Moreover, ritual intersects with the cognitive sciences in the study of language, memory, spatial relations [see [Spatial Cognition](#)], perceptions of order [see [Perceptual Learning](#)], emotions, embodiment, moral intuitions [see [Normativity](#)], complex systems [see [Complex Dynamical Systems](#)], and cognitive neuroscience [see [Social Cognitive Neuroscience](#)] (see [Purzycki & Sosis, 2022](#)).

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Further reading

- Bell, C. (1992). *Ritual theory, ritual practice*. Oxford University Press.
- McCauley, R. N., & Lawson, E. T. (2002). *Bringing ritual to mind*. Cambridge University Press.
<https://doi.org/10.1017/CBO9780511606410>
- Rappaport, R. A. (1999). *Ritual and religion in the making of humanity*. Cambridge University Press.
<https://doi.org/10.1017/CBO9780511814686>
- Whitehouse, H. (2021). *The ritual animal: Imitation and cohesion in the evolution of social complexity*. Oxford University Press. <https://doi.org/10.1093/oso/9780199646364.001.0001>

References

- Alcorta, C. S., & Sosis, R. (2005). Ritual, emotion, and sacred symbols: The evolution of religion as an adaptive complex. *Human Nature*, 16(4), 323–359. <https://doi.org/10.1007/s12110-005-1014-3>
- Durkheim, E. (1995). *The elementary forms of religious life*. Free Press. (Original work published 1912)
- Geertz, C. (1973). *The interpretation of cultures*. Basic Books.
- Gmelch, G. (1992). Superstition and ritual in American baseball. *Elysian Fields Quarterly*, 11(3), 25–36.
- Goffman, E. (1967). *Interaction ritual: Essays on face-to-face behavior*. Anchor.
- Lakoff, G., & Johnson, M. (2008). *Metaphors we live by*. University of Chicago Press.
- Legare, C. H., & Nielsen, M. (2020). Ritual explained: Interdisciplinary answers to Tinbergen’s four questions. *Philosophical Transactions of the Royal Society B*, 375(1805), 20190419.
<https://doi.org/10.1098/rstb.2019.0419>
-

↑

- Malinowski, B. (1948). *Magic, Science, and Religion*. Doubleday Anchor.

↑

- McCauley, R. N., & Lawson, E. T. (2002). *Bringing ritual to mind*. Cambridge University Press.
<https://doi.org/10.1017/CBO9780511606410>

↑

- Purzycki, B. G., & Sosis, R. (2022). *Religion evolving: Cultural, cognitive, and ecological dynamics*. Equinox. <https://doi.org/10.1558/isbn.9781800500532>

↑

- Rappaport, R. A. (1979). The obvious aspects of ritual. In *Ecology, meaning & religion* (pp. 173–222). Atlantic Books.

↑

- Rappaport, R. A. (1999). *Ritual and religion in the making of humanity*. Cambridge University Press.
<https://doi.org/10.1017/CBO9780511814686>

↑

- Singh, M. (2018). The cultural evolution of shamanism. *Behavioral and Brain Sciences*, 41, e66.
<https://doi.org/10.1017/S0140525X17001893>

↑

- Sørensen, J. (2007). *A cognitive theory of magic*. Rowman Altamira.

↑

- Sosis, R. (2020). The last Talmudic demon? The role of ritual in cultural transmission. *Philosophical Transactions of the Royal Society B*, 375(1805), 20190425. <https://doi.org/10.1098/rstb.2019.0425>

↑

- Turner, V. (1967). *The forest of symbols: Aspects of Ndembu ritual*. Cornell University Press.

↑

- Turner, V. (2017). *The ritual process: Structure and anti-structure*. Routledge. (Original work published 1969) <https://doi.org/10.4324/9781315134666>

↑

- Watson-Jones, R. E., & Legare, C. H. (2016). The social functions of group rituals. *Current Directions in Psychological Science*, 25(1), 42–46. <https://doi.org/10.1177/0963721415618486>



- Whitehouse, H. (2021). *The ritual animal*. Oxford University Press.
<https://doi.org/10.1093/oso/9780199646364.001.0001>

