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COGNITIVE DIFFERENCES IN INTERPRETING THE CONCEPT OF DISASTER IN HINDU THEOLOGY, BALINESE-INDONESIAN RELIGIOUS PRACTICE, AND CHRISTIAN RELIGION

Abstract

The word 'disaster' seems to travel across languages and cultures with ease – until you look closely at what each tradition actually means when it invokes catastrophe, collapse, or cosmic rupture. This paper examines how three distinct religious frameworks – Hindu theology, Balinese-Indonesian syncretic religious practice, and Christian theology – construct the concept of DISASTER at the level of cognition and meaning-making. Drawing on conceptosphere analysis and cognitive-semantic methodology, the study argues that disaster is not a culturally neutral category but a conceptual space shaped by deeply embedded beliefs about cosmic order, human agency, moral causality, and the possibility of restoration. The three traditions examined here differ not in their acknowledgement of catastrophic experience but in the cognitive architecture through which such experience is named, explained, and endured. The analysis has implications for cross-cultural communication, translation studies, humanitarian discourse, and the design of AI tools that operate across culturally diverse disaster communication contexts.

Keywords: DISASTER concept; conceptosphere; cognitive semantics; Hindu theology; Balinese religion; Christian theology; cross-cultural conceptology; moral causality; cosmic order; translation studies

Introduction. There is a particular moment in cross-cultural disaster communication that reveals something important about language and cognition. It is the moment when a direct translation of a disaster warning, an emergency appeal, or a humanitarian message lands in a receiving community and simply does not resonate – not because the words are wrong but because the conceptual framing is foreign. The ideas about who or what caused the catastrophe, whether it carries moral meaning, and what a meaningful response looks like are all encoded in the original and absent – or differently encoded – in the target. The translation is technically accurate. The communication fails.

This paper starts from that moment. It asks why disaster concepts resist smooth translation across cultures, and it answers that question by examining the cognitive architecture of disaster in three religious and theological traditions that have shaped some of the world's most elaborate responses to catastrophic experience: Hindu theology, Balinese-Indonesian syncretic religious practice, and Christian theology. These three traditions are not chosen arbitrarily. Each represents a distinctive way of organising experience around the relationship between cosmic order, human agency, and the meaning of suffering – and each, for that reason, produces a distinctive conceptual structure for DISASTER.

The methodological framework is cognitive-semantic conceptosphere analysis (Koliasa, 2025), which treats conceptual structures not as abstract philosophical positions but as lived cognitive realities expressed in theological language, ritual practice, metaphorical

systems, and everyday discourse. The goal is not a survey of religious doctrine but an account of how these traditions think, at the levels of language and cognition, about catastrophe.

The purpose of this paper is to demonstrate that the DISASTER concept is not merely culturally inflected but cognitively differentiated – that the three traditions examined here do not simply attach different values to the same underlying concept but construct fundamentally different conceptual objects when they invoke catastrophe, divine punishment, cosmic imbalance, or the collapse of moral order.

A secondary purpose is methodological. The DISASTER concept has been extensively studied in Western, Christian-influenced contexts (Perry&Quarantelli, 2005; Oliver-Smith, and Hoffman, 2002), and the dominant frameworks of disaster studies carry those conceptual assumptions in ways that are rarely made explicit. By bringing Hindu and Balinese-Indonesian frameworks into the same analytical frame, this paper aims to show what conceptosphere analysis can reveal that standard disaster studies approaches cannot – namely, the cognitive depth at which cultural differences in disaster interpretation operate.

A third purpose is practical. As AI tools are increasingly deployed in disaster communication contexts – including emergency translation, humanitarian messaging, and crisis documentation – understanding the conceptual gap between traditions becomes directly relevant to the design of tools that are culturally adequate, not merely linguistically accurate. The DISASTER conceptosphere work developed in this paper contributes to that broader research agenda.

The problem begins with a deceptively simple question: what is a disaster? In most Western, Christian-influenced discourse, the answer seems obvious – a disaster is a severe, harmful event that disrupts human life, usually associated with natural forces, human error, or some combination of the two. This framing tends to foreground physical destruction, human vulnerability, and the need for practical response. It is broadly secular in its causal logic, even when religious language is used in the immediate aftermath of traumatic events.

But when you follow the concept into Hindu theological discourse, something shifts. The Sanskrit lexical field around catastrophe – *pralaya* (cosmic dissolution), *āpad* (calamity as consequence), *kali* (the age of moral degeneration) – is not organised around physical severity or random occurrence but around the relationship between dharmic order and cosmic consequence. A disaster, in this cognitive architecture, is not primarily something that happens to people. It is something the disruption of moral and cosmic order makes inevitable. The agency is distributed differently, the temporality is vastly expanded, and the possibility of restoration is built into the structure of the universe rather than dependent on human effort alone (Doniger, 2009; Flood, 1996).

The Balinese-Indonesian tradition complicates the picture further. Bali presents one of the world's most elaborated examples of a syncretic religious system, in which Hindu cosmological structures have been integrated with Austronesian animist traditions, ancestor veneration, and, in the coastal lowlands, Islamic influence (Geertz, 1973; Hobart, Ramseyer, and Leemann, 1996). The concept of disaster here is not a single idea but a layered cognitive space in which cosmic imbalance (sekala-niskala, the visible-invisible world), ritual failure, ancestral displeasure, and environmental disruption are all simultaneously active as explanatory frames. The 2002 Bali bombings, the 2004 Indian Ocean tsunami, and the recurring eruptions of Mount Agung are events that Balinese communities have interpreted through this multi-layered cognitive architecture, producing responses that combine ritual action, community

solidarity, ecological restoration, and political negotiation in ways that have no direct parallel in Western disaster management frameworks.

Christianity presents a third configuration. The Christian theological tradition is not monolithic – Protestant, Catholic, and Orthodox traditions differ significantly in their accounts of divine providence, natural evil, and human suffering – but certain cognitive structures are widely shared. Disaster is often framed within a tension between divine sovereignty and human freedom: catastrophes may be permitted by God, caused by human sin, or sent as trials that call for repentance and renewed faith. The moral causality is personal and relational rather than cosmic and impersonal. Restoration is eschatologically oriented toward an ultimate redemption that may not come in historical time, as well as practical, expressed through charitable response and community reconstruction (Tillich, 1952; Brueggemann, 1997).

The problem, then, is not that these three traditions differ only in their disaster vocabulary. It is that they are different at the level of cognitive architecture – in their assumptions about causality, agency, temporality, and the possibility of meaning. These differences are not incidental; they determine what counts as an adequate response to disaster, what forms of assistance are intelligible and acceptable, and what kinds of communication can cross the conceptual divide.

Analysis and Discussion. The Hindu conceptual field for disaster is anchored in the doctrine of *yuga* – the cosmic cycles of creation, maintenance, and dissolution that structure time on a scale that makes individual human catastrophes almost imperceptible. Within this framework, *pralaya* (total dissolution) represents the ultimate catastrophe, but it is a necessary catastrophe, built into the logic of cosmic renewal rather than representing a failure of divine order. More immediately relevant to human experience is the concept of *āpad* – calamity or adversity – which is understood in classical texts as a consequence of *adharma*, the violation of moral and cosmic order. The cognitive structure here assigns disaster a moral address: it is not random but meaningful, not external to human agency but connected to it, and not permanent but part of a larger arc of restoration.

This does not mean that Hindu theology is naively optimistic about catastrophe. The Mahābhārata and the Purāṇas contain some of literature's most unflinching accounts of mass death, ecological collapse, and the suffering of the innocent. But the conceptual framing through which these events are processed includes a temporal dimension – *the idea of karma* extending across lifetimes – and a cosmological dimension – the idea that even the most horrifying dissolution is a moment in a larger pattern – that creates a different relationship to catastrophic experience than the frameworks available in secular Western disaster discourse. The cognitive consequence is significant: the question 'why did this happen?' is answerable, at least in principle, in ways that Western secular frameworks cannot match, but the answer operates at a level of abstraction that can make immediate practical response feel less urgent than it does in traditions with a stronger emphasis on historical, this-worldly restoration.

The Balinese concept of *sekala-niskala* – literally, the seen and the unseen – organises experience into a dual ontology in which visible events always have invisible correlates and causes. A volcanic eruption, a flood, or a violent incident is never purely a physical event; it is simultaneously a sign of disruption in the niskala realm – the world of spirits, ancestors, and cosmic forces – that must be addressed through ritual action as well as practical response. This cognitive architecture does not make Balinese communities passive in the face of disaster. On the contrary, the obligation to restore ritual balance is itself a form of active agency. But it means

that the practical and the ritual are not separable: distributing food relief without also performing the appropriate purification ceremonies is not an adequate response to disaster in this cognitive framework. It is half a response, and the missing half is the one that actually matters for the community's sense of meaning and restoration.

What makes the Balinese case particularly instructive for conceptosphere analysis is the way in which Hindu cosmological structures have been adapted and inflected by Austronesian understandings of the relationship between landscape, community, and the sacred. The active volcanic landscape of Bali – Mount Agung as the axis of cosmic order, the orientation of the built environment toward the mountain – means that the physical and the cosmic are spatially co-present in everyday life in a way that intensifies the cognitive integration of disaster and meaning. The eruptions of 1963 and 2017 were experienced not as geological events with spiritual dimensions but as spiritual events with geological expression. The conceptual order of causality runs in the opposite direction from the one assumed in most Western disaster communication frameworks.

Christian theology has spent two millennia wrestling with the problem of natural evil – the question of why an omnipotent and benevolent God permits or causes catastrophic suffering. The range of answers produced by that sustained engagement – from Augustinian theodicy through Reformation providence to contemporary process theology – reflects the cognitive pressure that the DISASTER concept exerts on a theological system in which divine goodness and omnipotence are both foundational commitments. The cognitive architecture of Christian disaster discourse is shaped by this tension in distinctive ways.

In many Protestant and evangelical traditions, disaster is interpreted through a framework of divine judgment and call to repentance: the event is addressed to the community’s moral condition and requires not only practical response but spiritual stock-taking. In Catholic and Orthodox traditions, the emphasis on redemptive suffering – disaster as participation in the suffering of Christ – produces a different but equally distinctive cognitive structure in which the experience of catastrophe is a potential site of spiritual transformation rather than purely a problem to be solved. In more liberal theological traditions, the question shifts toward human solidarity and the prophetic critique of the social conditions – poverty, inequality, ecological exploitation – that convert natural events into human catastrophes.

What these variants share, and what distinguishes them collectively from the Hindu and Balinese frameworks, is a cognitive structure in which the primary relationship is personal and relational: between God and the human community, and between human beings in their shared vulnerability. Restoration is not primarily cosmic in the Hindu sense or ritual in the Balinese sense but practical, historical, and communal – a matter of rebuilding what was lost, caring for those who suffer, and addressing the conditions that made the catastrophe worse than it needed to be.

What this comparative analysis reveals is that ‘disaster’ is not a concept that travels transparently across cultures. It is a conceptual space – densely packed with assumptions about causality, agency, temporality, and meaning – that is constructed differently in Hindu, Balinese-Indonesian, and Christian theological traditions. These are not surface differences of vocabulary or emphasis. They are structural differences in cognitive architecture: in what counts as an explanation of why disaster happens, in what constitutes an adequate response, and in what restoration looks like when it comes.

The implications are significant in several directions. For translation studies, the analysis reinforces the point that disaster-related translation requires more than linguistic competence – it requires the conceptual knowledge to recognise when a target community's cognitive framework for disaster differs structurally from the source, and to make translation decisions that are adequate to that difference. For AI-assisted disaster communication, it raises urgent questions about the conceptual assumptions encoded in English-dominant training data and reproduced in AI-generated translations for communities whose cognitive frameworks run in different directions. And for disaster studies more broadly, it suggests that the field's still predominantly Western conceptual vocabulary may be limiting its capacity to understand and communicate with communities for whom disaster means something genuinely different.

The DISASTER concept, examined across these three traditions, is not a single thing differently named. It is three different cognitive architectures for making sense of the most extreme forms of human experience. Understanding those differences – at the level of language, cognition, and meaning – is not an academic luxury. It is a practical necessity for any communication that aspires to reach across the full breadth of human cultural life.

REFERENCES

1. Brueggemann, W. (1997). Theology of the Old Testament: Testimony, dispute, advocacy. Fortress Press.
2. Doniger, W. (2009). The Hindus: An alternative history. Penguin Press.
3. Flood, G. (1996). An introduction to Hinduism. Cambridge University Press.
4. Geertz, C. (1973). The interpretation of cultures. Basic Books.
5. Hobart, A., Ramseyer, U., & Leemann, A. (1996). The peoples of Bali. Blackwell.
6. Koliasa, O. (2024). The DISASTER concept in the Ukrainian conceptosphere: A
7. Oliver-Smith, A., & Hoffman, S. M. (Eds.). (2002). Catastrophe and culture: The anthropology of disaster. School of American Research Press.
8. Perry, R. W., & Quarantelli, E. L. (Eds.). (2005). What is a disaster? New answers to old questions. Xlibris.
9. Tillich, P. (1952). The courage to be. Yale University Press.
10. Zurbuchen, M. S. (Ed.). (2005). Beginning to remember: The past in the Indonesian present. Singapore University Press.