



NARRATING RESILIENCE: SPATIAL IMAGINARIES IN FLOOD MYTHS AND THEIR CULTURAL LEGACY

by Pelin Yalçın

Tutor John Hanna

TU Delft

Abstract

Flood myths shape cultural memory, resilience strategies and spatial practices, reflecting how societies understand and respond to environmental disasters. These narratives do more than record past catastrophes; they convey lessons on survival, transformation and renewal. This study examines flood myths from various traditions, including Noah's Ark, Atrahasis, Deucalion and Pyrrha, Matsya Purana, the Drowned Land of Saeftinghe, and the Namazu myth. Through spatial analysis, the research explores how these stories construct meaning through landscapes and disaster narratives.

The study identifies five spatial themes. Firstly, elevation as a refuge highlights how mountains serve as sanctuaries and sites of renewal. Secondly, floating vessels as salvation examines arks and boats as protective spaces that preserve life and knowledge. Then, the vessel as a self-contained world considers how these spaces function as ordered microcosms during chaos. Fourthly, submerged landscapes as memory explores lost cities, and drowned lands as symbols of catastrophe, and cultural continuity. Finally, markers of disaster memory such as Japan's tsunami stones show how communities embed disaster lessons into landscapes to guide future generations.

By combining perspectives from archaeology, mythology, and urban studies, this thesis reveals how flood myths continue to shape perceptions of risk, adaptation, and resilience. These narratives do more than preserve cultural memory; they offer lasting frameworks for understanding human responses to disasters, and the relationship between storytelling, space, and survival.

Keywords

Natural disasters, flood, resilience, myth, story telling, spatiality

Introduction

Myths and legends have long shaped how societies understand and respond to natural disasters. Beyond narrating destruction, these stories provide cultural frameworks that influence collective memory, guide responses to crises and shape perceptions of environmental risk. As Bas van Bavel et al. argue, examining past disasters offers insight into the social, economic and political structures of societies, revealing patterns of vulnerability and resilience.¹ Flood myths, in particular, reveal how historical events take root in cultural memory, offering symbolic frameworks that resonate with spatial practices and regional identities.

The concept of resilience, originally derived from the Latin *resilire*, meaning “to jump back,” was first used to describe the ability of materials to absorb shocks and return to their original form. Over time, its meaning expanded across ecological and social sciences to describe how systems, whether environmental, social or economic adapt to disturbances while maintaining continuity.² One of the foundational definitions of resilience in ecological studies was introduced by ecologist C.S. Holling, who described it as the measure of the persistence of systems and of the ability to absorb change and disturbance and still maintain the same relationships between state variables.³

This explanation emphasized that resilience is not about returning to a previous state but about maintaining essential structures and functions through transformation and adaptation. This idea of resilience was later applied to social and psychological areas, where it is seen as a process shaped by personal strengths and community support. As Paton and Johnston explain, resilience involves personal characteristics, a capacity to create meaning from adverse experiences and the presence of social practices such as support networks that reduce harm and enhance recovery.⁴ In this sense, resilience becomes a socially embedded and culturally shaped process, reflecting how communities and individuals interpret disruption, maintain coherence and encourage recovery.

¹ Bas van Bavel et al., *Disasters and History: The Vulnerability and Resilience of Past Societies* (Cambridge-University Press, 2020).

² Bavel et al.

³ Crawford Stanley Holling, ‘Resilience and Stability of Ecological Systems’, *Annual Review of Ecology and Systematics* 4 (1973): 17, <https://doi.org/10.1146/annurev.es.04.110173.000245>.

⁴ David Paton and David Johnston, ‘Disasters and Communities: Vulnerability, Resilience and Preparedness’, *Disaster Prevention and Management* 10, no. 4 (2001): 273, <https://doi.org/10.1108/EUM0000000005930>.

This thesis examines a selection of flood myths, including the Biblical narratives,⁵ Deucalion and Pyrrha,⁶ Matsya Purana,⁷ Atrahasis,⁸ the Drowned Land of Saeftinghe⁹ and Namazu.¹⁰ These stories demonstrate how different societies interpret and respond to catastrophic floods within their cultural frameworks. In addition to portraying destruction, they reflect symbolic spatial structures such as the movement to elevated ground, the formation of sacred rivers or the survival of solitary landmarks. These elements influence how communities perceive safety, risk and renewal.

The methodology combines close readings of the myths with historical, literary and architectural analysis. Primary sources include translated mythological texts, supplemented by secondary scholarship in the fields of disaster history, cultural geography and architectural theory. The study also considers how these narratives are reflected in physical environments, from landmarks and ruins to spatial practices shaped by memory or ritual. Through this interdisciplinary approach, the thesis investigates how myths influence perceptions of space, vulnerability and adaptation in regions shaped by flood risk.

By highlighting the lasting influence of myths on spatial memory and resilience, this study contributes to a broader understanding of how storytelling shows collective responses to environmental challenges. It aims to demonstrate that flood narratives are not just reflections of past events but active cultural forces that continue to shape the ways in which societies conceptualize disaster, adaptation and survival.

⁵ King James Bible, *The Holy Bible: King James Version* (Oxford University Press, 2008).

⁶ Ovid and Mary M. Innes, *Metamorphoses* (Harmondsworth, Middlesex: Penguin Books, 1955).

⁷ William Joseph Wilkins, *Hindu Mythology: Vedic and Purānic* (Calcutta: Thacker, Spink & Co., 1882), <https://archive.org/details/hindumythologyve00wilk>.

⁸ Stephanie Dalley, *Myths from Mesopotamia: Creation, the Flood, Gilgamesh and Others, Illustrated, New Edition, Revised*, Oxford World's Classics (Oxford: Oxford University Press, 2000).

⁹ Nick Vossen, 'Het Verdrongen Land van Saeftinghe', *De Nachtvinders* (blog), 6 February 2022, <https://de-nachtvinders.nl/kort-verhaal-verdrongen-land-saeftinghe>.

¹⁰ Christoph Kühn, 'Japanese Stone Monuments and Disaster Memory – Perspectives for DRR', *Disaster Prevention and Management: An International Journal* 31, no. 6 (2022): 1–12, <https://doi.org/10.1108/DPM-03-2021-0089>.

The Origins and Power of Myths in Shaping Cultures

Myths and stories play an essential role in human culture, passing down knowledge, values and shared experiences from one generation to the next. Myths, in particular, are traditional narratives that often involve supernatural elements and seek to explain natural phenomena, historical events, or cultural practices. According to Joseph Campbell, myths are the secret opening through which the inexhaustible energies of the cosmos pour into human cultural manifestation.¹¹ They offer societies a means of understanding the world around them, providing both explanations and guidance for navigating the complexities of life.

The French anthropologist and ethnologist Claude Lévi-Strauss emphasizes that mythological worlds have been built up only to be shattered again and that new worlds were built from the fragments.¹² This observation emphasizes how myths are dynamic demonstrating their capacity to modify and recreate cultural realities particularly in the wake of calamities and social upheavals. As a result, myths are dynamic narratives rather than static stories that aid societies in navigating the unpredictable nature of their surroundings.

Myths and stories naturally develop in communities frequently in reaction to important occasions or environmental problems. French philosopher and literary theorist Roland Barthes makes the case that myths turn history into nature giving the appearance of naturality and timelessness to cultural constructs.¹³ In addition to being historical documents they also function as frameworks that influence how societies view their surroundings and their role in them. Myths impact spatial practices and strengthen social cohesion by enshrining cultural values in narrative forms.

Stories and myths frequently surface in the context of natural disasters as a means of explaining the erratic nature of the natural forces. Because they capture the dual nature of water as a life-giving and destructive force flood myths for instance, are common in many cultures. By instilling in cultural memory lessons about adaptation survival and respect for natural forces these stories help a society become more resilient. Flood myths offer an important framework for comprehending how communities react to and interpret their surroundings because of their enduring impact on views of landscapes and regional identities.

¹¹ Joseph Campbell, *The Hero with a Thousand Faces*, 3rd edition (United States: Pantheon Books, 2008).

¹² Claude Lévi-Strauss, 'The Structural Study of Myth', *The Journal of American Folklore* 68, no. 270 (1955): 428–44, <https://doi.org/10.2307/536768>.

¹³ Roland Barthes, *Mythologies*, trans. Annette Lavers (New York: Hill and Wang, 1972). Originally published in 1957.

Spatiality in Mythological Narratives

In mythological and literary narratives, spatiality often serves as a fundamental framework for shaping societal reactions to environmental dangers, preserving collective memory and expressing cultural relationships with the natural world. Space is not just a passive backdrop, but an active element shaped by human actions, stories, myths and beliefs. As Henri Lefebvre explains, the spatial practice of a society secretes that space; it propounds and presupposes it, in a dialectical interaction; it produces it slowly and surely as it masters and appropriates it. From the analytic standpoint, the spatial practice of a society is revealed through the deciphering of its space.¹⁴ These understanding positions space not as a neutral container, but as an active participant in cultural life, one that influences and is influenced by social actions, interpretations and narratives.

Spatiality is used as a fundamental framework in mythological and literary narratives to shape society reactions to environmental dangers, preserve collective memories and represent how society interacts with the natural world. Roland Barthes argues that myths transform cultural and historical events into naturalized truths, thereby embedding symbolic and spatial meanings into everyday practices and landscapes.¹⁵ Flood themed myths and stories effectively represent this process by using spatial metaphors and structures such as mountains, vessels, submerged cities and boundaries to communicate deep cultural values, fears and resilience strategies.

This research identifies several recurring spatial themes commonly found in flood and catastrophe narratives. While not exhaustive, these patterns highlight how myths use spatial language and imagery to construct meaning. As Marc Augé observes, “The term ‘space’ is more abstract in itself than the term ‘place’, whose usage at least refers to an event (which has taken place), a myth (said to have taken place) or a history (high places).¹⁶ In mythological narratives, space becomes place through symbolic action and storytelling, gaining significance as it becomes associated with memory, ritual and belief. Words and expressions related to height, depth, enclosure and boundary-setting frequently appear in these myths to convey layered symbolic meanings. Sanctuaries or places of safety are often situated in elevated locations such as mountains or hills, emphasizing their associations with protection, transcendence and divine favor. Likewise, enclosed constructions like ships, arks, or vessels evoke containment, resilience and continuity in the face of chaos. These spatial motifs form the narrative architecture of myth, revealing how space is not simply described but actively shaped through cultural imagination.

¹⁴ Henri Lefebvre, *The Production of Space*, English Edition (Oxford, UK: Blackwell, 1992).

¹⁵ Barthes, *Mythologies*.

¹⁶ Marc Augé, *Non-Places: Introduction to an Anthropology of Supermodernity*, Second English edition (London: Verso, 2008).

Spatial Themes in Flood Myths and Legends



^ Fig. 2 Crispijn de Passe the Elder, The Flood, 1612, engraving, 8.6 x 13.3 cm, The Metropolitan Museum of Art, New York.

1. Ascending to Sanctuary: The Symbolism of Elevation

Elevation, within mythological narratives, symbolizes not only refuge from environmental dangers but also embodies significant cultural and spiritual meanings. High grounds such as mountains and hills frequently represent sanctuaries providing both physical safety and symbolic proximity to divine or moral clarity. This dual symbolism is best illustrated in the biblical story of Noah's Ark where the ark finally rests on the mountains of Ararat. This represents both literal survival from floodwaters and spiritual purification establishing elevation as a mediator between chaos below and divine protection above.

1 And God remembered Noah and every living thing and all the cattle that was with him in the ark: and God made a wind to pass over the earth and the waters assuaged;

2 The fountains also of the deep and the windows of heaven were stopped and the rain from heaven was restrained;

3 And the waters returned from off the earth continually: and after the end of the hundred and fifty days the waters were abated.

4 And the ark rested in the seventh month, on the seventeenth day of the month, upon the mountains of Ararat.

5 And the waters decreased continually until the tenth month: in the tenth month, on the first day of the month, were the tops of the mountains seen.

6 And it came to pass at the end of forty days, that Noah opened the window of the ark which he had made...¹⁷

¹⁷ The Holy Bible: King James Version.

Here the elevation serves as a haven from the turbulent waters and a symbolic moment when humanity re-establishes its moral and spiritual connection to the divine. Similar to this Mount Parnassus is portrayed in the Greek myth of Deucalion and Pyrrha as a safe haven from devastating flooding emphasizing elevations function as a symbol of moral rebirth and renewal.

*...When Zeus looked down from Mount Olympus and saw that only Deucalion and Pyrrha remained, floating in their chest upon the swollen seas for nine days and nights, he commanded Poseidon to calm the wild waves. Poseidon directed Triton, a sea god, to blow upon his loud-sounding shell and order all the floods to retreat. When Deucalion and Pyrrha saw Mount Parnassus reaching above the clouds, they guided their chest in that direction and floated by the side of the mountain until the receding waters left their craft on solid land...*¹⁸

This recurring spatial motif of elevation aligns closely with historical settlement patterns. Archaeologist V. Gordon Childe emphasized the use of elevated platforms in early urban settlements, particularly in Mesopotamian cities, where temples and central institutions were often constructed on raised mounds. While Childe focuses on the religious and administrative symbolism of these elevations, their positioning may have also served practical functions such as defense or protection from environmental threats.¹⁹ Complementing this perspective, historian James C. Scott notes that early states often chose elevated terrain for their defensive advantages, including greater visibility and the ability to monitor and control surrounding areas.²⁰ Therefore, spatial choices evident in myths reflect real historical practices, illustrating the deep connection between symbolic and pragmatic spatial planning.

Elevation in flood myths also embodies spiritual ideals beyond just practicality. Mountains often appear as spaces of divine encounters and revelations across various cultural traditions. The Hindu flood narratives further emphasize the protective role of mountains. The Matsya Purana reflects similar themes of refuge, recounting how Manu, under the guidance of Vishnu, ties his vessel to a mountain peak in order to withstand the catastrophic flood.²¹ Like the other narratives, the Vishnu Purana highlights the symbolic significance of elevation, especially in the Churning of the Ocean myth, where Vishnu commands the gods and demons to use Mount Mandara as a churning staff to extract the nectar of immortality. The mountain, tethered and stabilized by the serpent Vasuki, becomes the axis of cosmic transformation, much like the mountains in flood myths serve as points of renewal and divine intervention:

¹⁸ Ovid and Innes, *Metamorphoses*.

¹⁹ V. Gordon Childe, 'The Urban Revolution', *The Town Planning Review* 21, no. 1 (1950): 3–17.

²⁰ James C. Scott, *Against the Grain: A Deep History of the Earliest States* (New Haven: Yale University Press, 2017), <https://yalebooks.yale.edu/book/9780300182910/against-the-grain>.

²¹ William Joseph Wilkins, *Hindu Mythology, Vedic and Purāṇic* (Calcutta, Thacker, Spink & co.; London, W. Thacker & co., 1882), <https://archive.org/details/hindumythologyve00wilk/page/n7/mode/2up>.

*...With these, your foes; collect all plants and herbs
Of diverse kinds from every quarter; cast them
Into the sea of milk. Take Mandara,
The mountain, for a churning stick and Vasuki,
The serpent, for a rope. Together churn
The ocean to produce the beverage
Source of all strength and immortality...*²²

Mountains in these narratives not only offer physical refuge but also serve as metaphysical pillars of creation and sustenance, reinforcing their spatial and symbolic role in mythological storytelling. These structures, whether Mount Ararat, Mount Parnassus or Mount Mandara, function as cosmic stabilizers, sites where divine forces intervene to restore order after catastrophe. Through these complex spatial narratives, myths shape cultural understandings of vulnerability and the human pursuit of safety, control and spiritual transcendence.

Elevation is a powerful cultural symbol that continues to influence how societies perceive environmental adaptation and resilience in addition to being a helpful response to natural disasters. This cultural tendency to seek elevated ground for both safety and a sense of security extends beyond mythological storytelling. Historical settlement patterns in the low-lying regions of the Netherlands reflect a similar understanding of elevation as refuge. Around the eighth and ninth centuries, towns such as Middelburg, Oostburg, Breda and Leiden were built around *burchts*²³ which are artificial mounds rising above the flood-prone landscape. These rounded hills, often fortified with wooden palisades or brick walls, provided secure spaces where communities could seek shelter from both invading forces and floods. The surviving *burcht* in Leiden stands as a testament to how elevation became central to early urban planning. As Gerald L. Burke describes, these structures served as fundamental points for growing settlements, which gradually evolved into trade centers and administrative hubs.²⁴ These early towns became the foundation for more structured civic life, just like the symbolic mountain peaks in flood myths that support survival and renewal. The *burcht*, like Mount Ararat or Mount Parnassus, shaped the collective identity of its people and offered a physical manifestation of resilience against external threats such as floods.

2. Floating Spaces as Vessels of Salvation

The image of a vessel floating on floodwaters appears in many flood myths, symbolizing both survival and transformation. Unlike elevation, which represents a fixed refuge, the ark, boat, or floating enclosure signifies move-

²² Wilkins.

²³ Van Dale, 'burcht', in *Burcht* is a Dutch term referring to a fortified mound or stronghold, typically constructed on elevated ground. See: Van Dale, *Groot woordenboek van de Nederlandse taal*, s.v. "burcht." (Utrecht: Van Dale Lexicografie, 2025).

²⁴ Gerald L. Burke, *The Making of Dutch Towns: A Study in Urban Development from the Tenth to the Seventeenth Centuries* (London: Cleaver-Hume Press, 1956).

ment, transition and adaptation in response to disaster. These vessels are not just practical means of survival; they hold deeper cultural, spiritual and symbolic meanings. The floating space becomes a liminal zone, a bridge between destruction and renewal, between the chaos of the flood and the restoration of order. In this sense, such vessels can be seen as spaces that suspend the normal order of the world and carry within them the seeds of regeneration. They resemble what Michel Foucault describes as heterotopias “places that are outside of all places,” layered with meaning and function. He names the ship as “the heterotopia par excellence,” a floating piece of space that is both isolated and open to the vastness beyond.²⁵ It functions not only as a container of life but as a symbolic environment where people carry their hopes, beliefs and memories. In these spaces, they imagine new beginnings and hold on to the values that help them make sense of catastrophe.

One of the clearest expressions of this idea is found in the Biblical flood narrative, where Noah’s Ark is described as a carefully constructed space of salvation, designed to endure the chaos outside while preserving life and order within:

*...Make thee an ark of gopher wood; rooms shalt thou make in the ark and shalt pitch it within and without with pitch. And this is the fashion which thou shalt make it of: The length of the ark shall be three hundred cubits, the breadth of it fifty cubits and the height of it thirty cubits...*²⁶

This narrative highlights the ark as an intentional architectural space, designed to withstand chaos and preserve order. The pitch waterproofing conveys a concern for structural integrity and strengthens the notion that the ship is more than just a boat it is a meticulously constructed world that maintains continuity in the face of surrounding devastation. This architectural logic finds resonance in Marc-Antoine Laugier’s concept of the primitive hut, which he presents as the purest form of architecture based on nature and necessity.²⁷ Both the ark and the hut respond to a fundamental human need: the need for shelter that is not decorative, but essential. The ark, like the hut, prioritizes structure, material clarity and enclosure over complexity. While the primitive hut is located in the stability of the earth, the ark adapts this principle to a condition of instability and movement. The hut represents the beginning of architecture in Laugier’s theory, and the ark symbolizes the beginning of a renewed world after a flood. In both, architecture becomes a central element for continuity, enabling survival not only through physical protection with symbolic meanings. A similar spatial intention can be seen in the Mesopotamian myth of Atrahasis. In this epic, the gods command Atrahasis to build a boat with specific instructions:

²⁵ Michel Foucault, ‘Of Other Spaces: Utopias and Heterotopias’, *Architecture /Mouvement/ Continuité*, October 1984, <https://web.mit.edu/allanmc/www/foucault1.pdf>.

²⁶ The Holy Bible: King James Version.

²⁷ Marc-Antoine Laugier, *An Essay on Architecture*, Dover edition (Los Angeles: Dover Publications, 1977).

*...Dismantle the house, build a boat, Reject possessions and save living things. The boat that you build... Roof it like the Apsu so that the Sun cannot see inside it! Make upper decks and lower decks. The tackle must be very strong, The bitumen strong, to give strength...*²⁸

The ark in Atrahasis is described as a multilevel structure, strengthen its function as a contained world designed for survival. The reference to roofing it like the *Apsu* (the watery deep beneath the earth in Mesopotamian cosmology)²⁹ suggests an intentional spatial separation between the human and divine realms, indicating that the ark is not just a protective space but also a sacred domain, a temporary world that maintains order during the chaos of the flood.

It is possible to read the instructions for Atrahasis ark as describing a cubic shape that differs from Noahs Arks shape. The biblical ark is made for movement and navigation but a cubic structure would put stability and resistance to choppy waters first stressing durability over directionality. This contrast reflects different perspectives on how survival is perceived, whether as an act of opposition the flood in a compact, fortified space to navigate towards renewal.

A hierarchical structure within the ship is also suggested by the emphasis on the upper and lower decks which reflects the symbolic division of various life forms within as well as the practical requirement for spatial distribution. Furthermore the ark was sealed with bitumen demonstrating a technological concern and highlighting the significance of materiality in protecting these floating areas from environmental degradation. The moment of sealing the ark is also significant in Atrahasis, marking the transition from preparation to survival:

*...The face of the weather changed. Adad bellowed from the clouds. When he heard his noise, Bitumen was brought and he sealed his door. While he was closing up his door, Adad kept bellowing from the clouds. The winds were raging even as he went up And cut through the rope, he released the boat...*³⁰

The act of sealing the door of the ark is a decisive spatial moment, separating Atrahasis from the outside chaos. The reference to the storm god Adad shouting during the storm highlights the contrast between the arks safety and the strong natural forces outside. The ark is now detached and must traverse the unknown after the rope is cut signifying the arks surrender to fate. God shuts the door of the ark at this point in Noahs story illustrating that once the transformation begins there is no turning back.

²⁸ Stephanie Dalley, 'Atrahasis', in *Myths from Mesopotamia: Creation, the Flood, Gilgamesh and Others*, Revised Edition, Oxford World's Classics (Oxford, 2000), 30.

²⁹ 'Apsu', in *Encyclopaedia Britannica* (Encyclopaedia Britannica), accessed 17 March 2025, <https://www.britannica.com/topic/Apsu>.

³⁰ Dalley, 'Atrahasis'.

The Greek myth of Deucalion and Pyrrha presents a similar idea but in a less defined way. Unlike Noah's Ark, their vessel is unnamed and undescribed, focusing instead on the act of floating as salvation rather than the structure itself. The lack of details about the boat move attention from architectural preservation to the role of resilience and divine favor in human survival.

In Hindu mythology, Manu's ship in the Matsya Purana presents a similar function but introduces divine intervention. As Manu ties his vessel to Vishnu's horned fish incarnation, the story shows the idea that survival is not just dependent on human effort but also on the guidance of a higher power:

...Then near him swam the fish and to its horn, Manu made fast the cable of his vessel. Thus drawn along the waters, Manu passed beyond the northern mountain...³¹

Here, unlike in Noah's carefully crafted ark or the drift of Deucalion's vessel, survival depends on a spiritual partnership. It illustrates an intimate dialogue between the mortal and the divine. As Manu ties his vessel to the horn of Vishnu's fish incarnation, the narrative introduces a spatial logic depends on faith and trust. Resilience, in this context, is not just about endurance or resistance; it becomes a reflection of one's alignment with a divine order. The ship, therefore, functions as a vehicle of transformation, where survival is made possible through participation in sacred harmony.

3. The Vessel as a Self-contained World

In many flood stories, the floating vessel acts as a self-contained world, carrying life and knowledge to start over after disaster. In Noah's Ark, this is clear as animals and people are brought inside to make sure life continues. In the Hindu flood story Matsya Purana, Manu's vessel also saves sacred wisdom, showing that survival is not just about living but also about keeping culture alive.

This idea connects to how society considers enclosed spaces in architecture and history. Roland Barthes, in his analysis of Jules Verne's Nautilus, describes ships as places that create a sense of control over the environment. He explains that an attraction to ships comes from the joy of being perfectly enclosed, having everything within reach and existing within a clearly defined space.³² This is relevant to stories about floods where the vessel serves as a controlled organized environment that maintains order amid chaos in addition to being a means of survival. While there are no obvious boundaries or limits to the flood outside the ship is a secure and independent space.

This is relevant to stories about floods where the vessel serves as a controlled organized environment that maintains order amid chaos in addition to being a means of survival. While there are no obvious boundaries or limits to the flood outside the ship is a secure and independent space.

³¹ Wilkins, Hindu Mythology, Vedic and Purāṇic.

³² Barthes, Mythologies.



^ Fig. 3 By Unknown author - http://zoeken.felixarchief.be/zHome/Home.aspx?id_isad=16689 Felix Archief, CC0, <https://commons.wikimedia.org/w/index.php?curid=116242192>

4. Submerged Landscapes and Spatial Memory of Flooded Regions

Cultural perceptions of disaster and resiliency are shaped by flood myths which frequently depict submerged landscapes as sites of loss and memory where the remnants of former civilizations lie beneath the water. Whether historical, mythical or symbolic, these drowned worlds serve as reminders of divine anger, human vulnerability and the cyclical nature of destruction and rebirth. A close connection between memory and resilience is established by the underwater remnants of formerly vibrant areas which demonstrate how societies use myth and collective storytelling to preserve and reinterpret lost locations. The idea of a drowned city or lost land appears in many mythological traditions such as Atlantis, Avalon or Shangri-La, showing that landscapes do not simply vanish when submerged but instead become hidden archives of the past. These underwater remnants, whether literal, physical or metaphorical, retain the memory of the societies that once inhabited them. Rather than being erased, they are recontextualized through narrative and belief, gaining new perspectives and meanings in the process. One such example where a submerged landscape continues to shape inhabitant's memory is the legend of the Drowned Land of Saeftinghe in the Netherlands. According to local legend, the fertile region was destroyed as a consequence of human greed and disrespect for nature, turning its ruins into a symbol of cautionary memory.

*Namen will go down and only the tower will remain.*³³

According to legend, the people of Saeftinghe became wealthy and arrogant, rejecting those in need. One day, fishermen captured a mermaid in the Scheldt estuary. Her merman husband begged for her freedom but they turned him down. He cursed the land in rage saying that only its towers would survive. Soon after catastrophe resulted from the dikes neglect.

³³ Nick Vossen, 'Het Verdrongen Land van Saeftinghe', Denachtvlinders (blog), 6 February 2022, <https://denachtvlinders.nl/lokaal-spoekverhaal-verdrongen-land-van-saeftinghe/>.

The entire region was submerged when a huge tidal wave swept up the Scheldt during the All Saints Flood in 1570. The charming city vanished under the water and mud leaving only ruins in its wake.

Here the only remaining building the church tower preserves the community's memory of the tragedy while also acting as a landmark and cultural icon. Similar tales are found in other cultures where submerged landmarks serve as a reminder of abandoned communities and a cautionary tale for future generations about the dangers of making the same mistakes twice.

5. Markers of Memory and Warning



^ Fig. 4 Kohlstedt, Kurt. "Tsunami Stones: Ancient Japanese Markers Warn Builders of High Water - 99% Invisible." 99% Invisible, December 2, 2020. <https://99percentinvisible.org/article/tsunami-stones-ancient-japanese-markers-warn-builders-high-water/>

In Japan, tsunami stones act as both warning signs for future generations and mementos of past tragedies. With their warnings against construction in susceptible areas some of these more than 600-year-old stones preserve historical knowledge. These markers show how societies embed disaster memory into the landscape, turning natural features into cultural symbols.³⁴ They function as both historical records and boundaries, influencing settlement patterns based on shared experience.

*"Do not build your homes below this point. Remember the calamities of the great tsunami"*³⁵

These warnings originate from Japan's strong cultural ties to oceanic and seismic forces especially the legend of Namazu a gigantic catfish thought to be the source of earthquakes and tsunamis.³⁶ Namazu is

³⁴ Florence Lahournat and Emmanuel Garnier, 'Japanese Stone Monuments and Disaster Memory – Perspectives for DRR', Disaster Prevention and Management: An International Journal 31, no. 6 (2022): 1–12.

³⁵ Kurt Kohlstedt, 'Tsunami Stones: Ancient Japanese Markers Warn Builders of High Water', 99% Invisible (blog), 2 December 2020, <https://99percentinvisible.org/article/tsunami-stones-ancient-japanese-markers-warn-builders-high-water/>.

³⁶ Jan Kozák and Vladimír Čermák, The Illustrated History of Natural Disasters (Dordrecht: Springer, 2010).

supposedly restrained by the god Takemikazuchi beneath the earth but when the catfish moves there are violent tremors and floods. The placement of tsunami stones which act as both useful guides and symbolic reminders of nature's power reflects Japan's long-standing understanding of natural disasters and this myth. Similar to mythical submerged cities tsunami stones serve as tangible reminders of past tragedies. Reminding future generations of the dangers associated with nature and influencing how people interact with their surroundings they make sure that the memory of disasters is visible.

Conclusion

Flood myths reveal more than ancient fears or religious beliefs. They offer insight into how societies have long interpreted space, risk and survival in the face of environmental threats. Through shared themes such as elevation, enclosure and submersion, these narratives express symbolic and practical strategies for dealing with disaster. Mountains serve as places of refuge and spiritual renewal, while boats and arks become mobile sanctuaries carrying life, memory and meaning through chaos. Submerged landscapes like Saeftinghe preserve cultural memory by turning loss into cautionary narratives and vessels like those in the stories of Noah, Atrahasis and Manu reflect ideas of protection, order and transformation.

These spatial ideas continue to shape modern practices. In Japan, tsunami stones remind communities of past tragedies and guide settlement choices, preserving the logic of elevation and warning embedded in myth. In the Netherlands, the historical use of *burchts* and the ongoing development of dikes demonstrate how flood-conscious planning remains rooted in cultural memory. Myths and their spatial expressions have not faded; they continue to inform how people prepare for, remember and respond to disasters. They remind us that storytelling is not separate from space, but closely tied to how communities survive, adapt and imagine the future.

References

“Apsu.” *Encyclopaedia Britannica*. Accessed March 17, 2025. <https://www.britannica.com/topic/Apsu>.

Augé, Marc. *Non-Places: Introduction to an Anthropology of Supermodernity*. 2nd English ed. London: Verso, 2008.

Barthes, Roland. *Mythologies*. Translated by Annette Lavers. New York: Hill and Wang, 1972. Originally published in 1957.

Bavel, Bas van, Daniel R. Curtis, Jessica Dijkman, Matthew Hannaford, Maïka de Keyzer, Eline van Onacker, and Tim Soens. *Disasters and History: The Vulnerability and Resilience of Past Societies*. Cambridge: Cambridge University Press, 2020.

Burke, Gerald L. *The Making of Dutch Towns: A Study in Urban Development from the Tenth to the Seventeenth Centuries*. 1st ed. London: Cleaver-Hume Press, 1956.

Campbell, Joseph. *The Hero with a Thousand Faces*. 3rd ed. New York: Pantheon Books, 2008.

Childe, V. Gordon. “The Urban Revolution.” *The Town Planning Review* 21, no. 1 (1950): 3–17.

Dalley, Stephanie. “Atrahasis.” In *Myths from Mesopotamia: Creation, the Flood, Gilgamesh and Others*, 30. Revised ed. Oxford World’s Classics. Oxford: Oxford University Press, 2000.

Foucault, Michel. “Of Other Spaces: Utopias and Heterotopias.” *Architecture /Mouvement/ Continuité*, October 1984. <https://web.mit.edu/allanmc/www/foucault1.pdf>.

Holling, C. S. “Resilience and Stability of Ecological Systems.” *Annual Review of Ecology and Systematics* 4 (1973): 1–23. <https://doi.org/10.1146/annurev.es.04.110173.000245>.

King James Bible. *The Holy Bible: King James Version*. Oxford University Press, 2008.

Kohlstedt, Kurt. ‘Tsunami Stones: Ancient Japanese Markers Warn Builders of High Water’. 99% Invisible, 2 December 2020. <https://99percentinvisible.org/article/tsunami-stones-ancient-japanese-markers-warn-builders-high-water/>.

Kozák, Jan, and Vladimír Čermák. *The Illustrated History of Natural Disasters*. Dordrecht: Springer, 2010.

Kühn, Christoph. “Japanese Stone Monuments and Disaster Memory – Perspectives for DRR.” *Disaster Prevention and Management: An International Journal* 31, no. 6 (2022): 1–12. <https://doi.org/10.1108/DPM-03-2021-0089>.

Lahournat, Florence, and Emmanuel Garnier. “Japanese Stone Monuments and Disaster Memory – Perspectives for DRR.” *Disaster Prevention and Management: An International Journal* 31, no. 6 (2022): 1–12. <https://doi.org/10.1108/DPM-03-2021-0089>.

Laugier, Marc-Antoine. *An Essay on Architecture*. Dover ed. Los Angeles: Dover Publications, 1977.

Lefebvre, Henri. *The Production of Space*. Translated by Donald Nicholson-Smith. Oxford: Blackwell, 1992.

Lévi-Strauss, Claude. "The Structural Study of Myth." *The Journal of American Folklore* 68, no. 270 (1955): 428–44. <https://doi.org/10.2307/536768>.

Ovid. *Metamorphoses*. Translated by Mary M. Innes. Harmondsworth, Middlesex: Penguin Books, 1955.

Paton, David, and David Johnston. "Disasters and Communities: Vulnerability, Resilience and Preparedness." *Disaster Prevention and Management* 10, no. 4 (2001): 270–77. <https://doi.org/10.1108/EUM0000000005930>.

Scott, James C. *Against the Grain: A Deep History of the Earliest States*. New Haven: Yale University Press, 2017. <https://yalebooks.yale.edu/book/9780300182910/against-the-grain>.

Van Dale. 'burcht'. In *a Dutch term referring to a fortified mound or stronghold, typically constructed on elevated ground*. See: Van Dale, Groot woordenboek van de Nederlandse taal, s.v. "burcht." Utrecht: Van Dale Lexicografie, 2025.

Vossen, Nick. 'Het Verdrongen Land van Saeftinghe'. De Nachtvinders, 6 February 2022. <https://denachtvinders.nl/kort-verhaal-verdrongen-land-saeftinghe>.

Wilkins, William Joseph. *Hindu Mythology, Vedic and Purânic*. Calcutta: Thacker, Spink & Co.; London: W. Thacker & Co., 1882. <https://archive.org/details/hindumythologyve-00wilk/page/n7/mode/2up>.