

University of Wales Trinity Saint David

Walking Narratives

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Abstract

Before we had evolved into homo sapiens, we were walking from one place to another, connecting place and time in much the same way that narrative does. We continue to make these connections today by reading about places or going to them but often pay more attention to the specific sites than to the connections. Slow travel, primarily walking, as a form of narrative and how theories of narratology may or may not be applicable is a key consideration of this thesis. There has been research on how we navigate routes and on various types of narrative but fewer considerations of how these may be aspects of the same processes. The application of walking to ancient sites as a form of narrative and what that may tell us has been somewhat neglected. Both are ways of joining points of memory and anticipation. There are inherent rhythms. Both are dynamic through time and distance. Three very disparate sites in which people did, and do, intentionally travel to in ways that very much involve embodied perceptions are compared. The three sites, the Outer Hebrides, Chaco Canyon, and contemporary Taiwan exemplify how people negotiate narratives and navigation. Narratives about these places and the travel that they involve continue to be constructed, the narratives themselves travel and form new connections. In looking at important sites, especially those that appear to have been used occasionally rather than on a permanent basis, we may overlook the process involved in getting to them and therefore unnecessarily limit understanding.

Declaration

I declare that I am the sole author of this thesis and that no sources other than those listed were used in this writing. I have acknowledged and provided a complete and detailed listing of the sources that I have referred to in this writing. Furthermore, I declare that this has not been written to fulfill requirements for any other assignment, exam, or degree.

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August 3, 2026

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Introduction

Throughout the world, there are ancient sites that are subject to numerous interpretations with regard to purpose and use. Often overlooked are the spatial and temporal linkages between the places and people of the past and the present. The spaces surrounding sites could be seen as analogous to negative space in works of art or the spaces between particles of quantum physics and be of equal importance. Space defines rhythm and is an innate quality of communication from music to typography.¹ Sebastian Conrad writes of the 'the relations of constellations in space to other locations' becoming important to considerations of history on a global scale.² The relationships of places on earth happens in the spaces between. Getting to the site itself might have been or sometimes continue to be a ritual process; meaning might be found in the movement from one place to another which is the substance of pilgrimage.³ Knowing how to find the way to important sites would have been essential and so considering ways or reasons why routes were known might provide another way of looking at things. Several writers have compared long walks to narrative.⁴

Both narrative and navigation are ways of moving between points in a sequential, although not necessarily linear order. We hear people speak of being 'transported' or 'moved' by a narrative. The purpose of this thesis is to explore narrative and slow

¹ Albert Kapr. *Schriftkunst: Geschichte, Anatomie und Schönheit der lateinischen Buchstaben*. (Munich, De Gruyter Saur, 1900).

² Sebastian Conrad. *What is Global History*. Princeton and Oxford, (Princeton, NJ: Princeton University Press 2016).66

³ Peter Stanford. *Pilgrimage: Journeys of Meaning*. (London: Thames and Hudson, 2021).

⁴ Christopher Tilley and Kate Cameron - Daum. *An Anthropology of Landscape*. (London: UCL Press, 2017),17; Ian J. Reader *Making Pilgrimages: Meaning and Practice in Shikoku*. (Honolulu, HI: University of Hawaii Press, 2005)41; Robert Macfarlane and Robin Sachs. *The Old Ways: A Journey on Foot*. (Ashland, OR: Blackstone Publishing, 2013).

forms of long-distance travel in a variety of ways that exemplify means in which people are, and were, transported from one place to another in space and time. It is useful to consider the forms of agency inherent in the networks of *approaches* to sites such as is found in the computer modelling of Stephanie Blankshein theorizes about the routes and in so doing connects to them across time.⁵ All forms of storytelling, including walking, may be practices of exploration and cultural (de/re)coding.

‘Media’ is a channel of communication and can take many forms. Sometimes words fail and alternative forms of narrative may convey a fuller sense of meaning.

Multiple narratives may give a more comprehensive understanding. Reading about a place, writing about a place, making a drawing in a place, filming, recording, and walking in a place are all ways of exploring different aspects of that place. If I make a drawing, the light is very important. If I walk, the ground is. When I am reading, I can quickly look up things that are referenced. In combination, they can enrich my understanding of a place. A documenting narrative such as in text or film attempts to permanently fix a particular version whereas narratives in alternative, more fluid media, such as live music, theater, dance, or alternate forms of happenings may be more open to translation biases and subjective interpretations.⁶ I will be exploring places through a textual narrative that may complement an embodied narrative in order to have a fuller idea of places as dynamic entities moving through time. If a walk is a narrative, then the converse should also be true, that a narrative may be a walk, at least metaphorically. Various forms of documentation may serve as reminders or traces of thoughts and expand the spacio-temporal reach of cognition. It is difficult to own a narrative which is not fixed.

⁵ S.L. Blankshein. (2019) *Transient Trajectories: Modelling Movement and Connectivity in the Neolithic of the Outer Hebrides*, Dissertation.

⁶ Nina Tecklenburg, trans. William Locke Wheeler. *Performing Stories; Narrative as Performance*. (London, New York, Calcutta: Seagull Books, 2021). 258.

Pathways themselves are materials that cannot be disentangled although they may be obscured. They still may provide insight into aspects of ancient lives that are often overlooked. This thesis will consider places where storytelling and slow travels intersect as a way of experimenting with properties that are common to both. Neurons, walking paths, trees, blood systems, and river systems all utilize branching patterns of circulatory systems that maximize connectivity, and this paper will, in some sense, emulate that.

Slow forms of travel such as walking, sailing, horseback, camel, or dogsled involve a constant awareness of where one is relative to the surrounding environment and representations of it; they require us to pay attention. Media such as textual narrative or television may allow for 'losing oneself' with little awareness of surroundings in ways that may be dangerous in that the connections are not perceived by a combination of senses. Traveling by train or plane does not require the embodied awareness, the cognisance derived from multiple senses working together, of the slower types of travel. Passengers have neither the degree of agency nor the responsibility that the driver has. Three aspects of this type of travel will be considered.

1. Narration

We tend to think of a narrative as a story. English is full of referential metaphors concerning the ubiquity of acquiring information in this way- 'every picture tells a story', 'a telling look,', or 'time will tell'. We do not assume that the telling or reading in these examples require either text or a person to act in the role of narrator, nor do we question what is meant. We also 'read' objects that fit many of the parameters of a narrative although not in a linguistic or grammatical sense. People may claim to read maps, rocks,

palms, rooms, tea leaves, and minds among other things. Narratology is a relatively new field and there is a great deal of controversy as to what constitutes a narrative and what the parameters are. The Russian literary theorist, Mikhail Bakhtin, in emphasizing dialogism and the unfinalizability of a narrative diverged from the Russian formalists who had first articulated the study of narratology and in this was a precursor to the structuralism,⁷ with its emphasis on relationships, of Claude Lévi-Strauss and Roland Barthes both of whom contended that narrative is not dependent on medium but is, rather, transmedial. Relationships may be seen in the pathways that connect. All three were considering the spreading nature of narrative. Fritz Breithaupt has taken this further in experiments with retellings (i.e. the telephone game) to see which parts of a narrative change and what is carried through in multiple retellings⁸. Meaning is not strictly dependent upon medium; it may depend on delivery and varieties of embodiment. A recording of Peter Sellers performing *A Hard Day's Night* is nothing like a Beatles recording of the same material.⁹ The medium may be the message. Or not. The interpretation of narrative can change over not only medium but also culture, or time; it is a grouping of symbols that may be translated in a variety of ways. Material symbols and linguistic symbols cannot be assumed to always be 'read' in the same way. Constance Classen described the ways that various cultures at diverse times have interpreted sensual perceptions such as temperature and smell very differently than people from the ways in which contemporary

⁷ Ken Hirschkop. *The Cambridge Introduction to Mikhail Bakhtin*. (Cambridge UK, Cambridge University Press, 2021) 146-150.

⁸ Fritz Breithaupt. *The Narrative Brain: The stories our neurons tell*. (New Haven, USA, Yale University Press, 2025).

⁹ <https://www.youtube.com/watch?v=zLEMncv140s> (accessed August 1, 2026).

Western cultures might.¹⁰ We do not all hear, smell, see, touch, taste, or anything else in the exactly the same way as people within our own networks. Putting an experience into a singular form of abstraction such as '21st century American English' may be a fairly insubstantial means of description that then becomes a symbolic representation rather than phenomenological experience as Plato discussed in *Phaedrus*.¹¹ We take this distance as a known and common phenomena with the term 'armchair traveler' which assumes travel by narrative. This sort of travel can be done in a comfortable chair with a cup of tea and a cat purring on your lap. It is an experience of reading and imagining travel rather than of actual moving- a different thing entirely. The narrative moves away from the materiality of travel but may assume another form. Going the other way, we might narrate by traveling the lines that connect places.

Death is often spoken of as a journey. Miller and Parrot note the equal roles of narrative and materiality in the bereavement processes of many cultures and that bereavement is enacted over time.¹² They emphasize that it is the *relationship* that both the materials and narratives speak to and that it is the relationship that changes. A relationship is a pathway. Bartlett experimented with memory which is a component of both narration and navigation and found it to be very changeable.¹³ The classical idea of narrative refers to text, often the novel, but that is an oversimplification.¹⁴ Establishing parameters of what narrative is and does in reference to long journeys will allow for a

¹⁰ Constance Classen. *Worlds of sense: Exploring the Senses in History and Across Cultures*. (Abingdon UK: Routledge, 2025).

¹¹ Plato. *Lysis. Symposium. Phaedrus*. Edited and translated by Christopher Emlyn-Jones, William Preddy. Loeb Classical Library 166. (Cambridge, MA, Harvard University Press, 2022). 346-349.

¹² Miller, Daniel, and Fiona Parrott. "Loss and Material Culture in South London." *Journal of the Royal Anthropological Institute* 15, no. 3 (August 11, 2009). 502-19.

¹³ Frederic Bartlett, *Remembering*, (London and New York, Macmillan, 1932). 213.

¹⁴ Manfred Jahn. "Cognitive Narratology." *Routledge Encyclopedia of Narrative Theory*. (Abingdon, UK, Routledge, 2008). 67-71.

common place from which to consider multiplicity of views of pathways utilizing a broader, postclassical reading of narratology. Time, space, focality, framing, symbols, and polyphony may all be parts of a narrative. There is an irony in the fact that while 'controlling the narrative' is a common phrase, defining the narrative is often less than straight forward. There are recursive discussions in which attempts are made to control the narrative about narrative which might correspond to the habit of walking in circles that people often exhibit when lost. There may be multiple levels of narrativity that overlap and diverge as we see in criminal trials or novels told through the eyes of different characters. How the narratives that pertain to the roads of Chaco Canyon form and reform will be considered in this section as an example of the ways that pathways move through time.

2. Navigation

Walking, like other forms of slow travel is very much an embodied experience and requires some navigation. This section will consider how navigation and narrative are inherently linked. The point of view of the traveler is a continually shifting sequence of experiences along the route through time and space. An event can be a narrative both while it is happening and may be narrated afterwards, in Arthur Danto's terms 'inside' and 'outside'.¹⁵ Stories can travel over vast times and distances. They are easy to carry. We see spatial and temporal positioning reflected in language. We find ourselves 'looking forward', 'thinking back', or occasionally discover that 'things went sideways'. Spatial and temporal indicators demonstrate our not always conscious cognitive positioning within narrative. Cognitive mapping processes and narratology both may be understood as navigating routes that

¹⁵ Danto, Arthur C., *Narration and Knowledge*. (New York, Columbia University Press, 1985).353.

connect humans to both internal and external worlds. A consideration of the influences of slow, embodied forms of travel in terms of cognition is the second objective of this dissertation.

The Hebridean Way and speculations of how people might have traveled to the megaliths in the Outer Hebrides will be the subject to which ideas pertaining to navigation are applied. The rhythm of walking and the temporal patterning that are an inherent part of the motion affect us physically- EMDR and kinetic learning are common processes in which the connections between mind and body are utilized. We might wonder how we came to distinguish mind, body, environment and spirituality as being separate from rather than an integral part of the larger world. It seems overly simplistic to attribute such a seemingly enormous shift to Descartes, Plato, or the Enlightenment.¹⁶ It is the 'how' of the thinking that allows us to make a way in the world that I would like to delve into.

3. Negotiation

Societal narratives which define both individual and cultural identity are also aspects of long walks or travels.¹⁷ This section will look at the negotiations within groups in the spaces 'between' and the relationships that may result. Some walks are pilgrimages which can infer religiosity or be a form of penance; all speak to identity and to one's place in the world. There may be many overlapping and evolving motivations. Community is an important part of many long walks; shared meals promote inclusion and often people will find themselves walking at the same speed as others on the

¹⁶ Iain McGilchrist. *The Matter with Things*, Vol. 1. (London Perspectiva Press, 2021).

¹⁷ Victor Turner and Edith Turner. *Image and Pilgrimage in Christian Culture, Anthropological Perspectives*. (New York: Columbia University Press, 1978).

same track and sleeping near the same locations whether those are lodgings or camping spots. People sharing meals and walking together often tell stories. Familial and living arrangements can change, there may be long term repercussions. Long distance walking is an activity that may be more available to some individuals due to constraints imposed by age or sex. Many people who participate in long walks are either childless or have grown children. Ritual and performance are aspects that will be incorporated into the third section pertaining to social aspects of narrative and long-distance walking. The annual Dajia Mazu pilgrimage in Taiwan will be the subject of this section as it affords an opportunity to look at a contemporary pilgrimage in which there are a multitude of stakeholders.

This review of the literature on narrative and on the effects of long-distance travel will be applied to various aspects of different journeys in order to compare those themes that are common and those that are disparate. Both narrative and travel are forms of connection that bridge people, time, and places. Both may be used to promote a particular ethos but may be hard, if not impossible, to control.

New and long-distance walking and biking routes are being established in many places and there is currently an upsurge in the numbers of people who participate in these. Refugees often travel very long distances out of desperation. Analyzing the ways in which travels might function as narratives and the implications of the webs of connections could indicate directions that are more satisfying for all participants and lead to variant paths in the narratives that we construct.

Narrative

Chaco Canyon

The word 'narrative' implies an account of a progressive nature. A narrative is a way of viewing something, a vision afforded by linkage. Arthur Danto equates historical narrative with explanation and distinguishes it from 'chronicle' which he defines as a listing of facts.¹⁸ I would suggest that a historical narrative must always be a locative narrative.¹⁹ A numerical accounting is a chronicle in Danto's terms. This definition of narrative does not seek to provide catharsis but explanation.

Explanation requires a setting which may be temporal, exterior, or interior. Locative narrative relies on a relative experience of place which may have fluid borders. Like memory, narrative is episodic. Like a textual narrative, a long walk is a collection of elements, words or steps that continue until the episodic ending is reached.

In 1969, following the lead of Vladimir Propp and his work analyzing structures of Russian folk tales, Tzvetan Todorov coined the term 'narratology'.²⁰ There are many facets of narratology that can be applied to a variety of forms of slow travel. Attributes of narrative may be found in the waggle and round dances that are understood to be the means by which bees communicate locations of pollen to their fellow bees. The dances communicate an individual bee's account of what was found

¹⁸ Arthur Danto, *Narration and knowledge: including the integral text of Analytical Philosophy of History* (Columbia University Press, 1985). 201.

¹⁹ Emma Whitaker, 'The Wave Crest' in *Narrative Complexity Cognition, Embodiment Evolution* eds. Maina Grishakova, Maria Poulaki (Lincoln, University of Nebraska Press, 2019), 75-76. Locative narrative 'is complex on the grounds that (1) the authorial intention is to situate and integrate the story world within an existent location; (2) the structure of the narrative is linked with the mode of interaction; (3) the reader-audience becomes a participant whose actions take place within the fictional world and the existent environment; (4) the spatial-temporal complexity of partaking is inherent; (5) ontological ambiguity may result when perceptual clues are not readily attributable to the existent place ...; and (6) the prompting of experiential and epistemological questions arise...'

²⁰ David Herman, Manfred Jahn, Marie-Laure Ryan. *Routledge Encyclopedia of Narrative Theory*. (Abingdon, Routledge, 2005). ix.

and an explanation of where to find it. Different groups of bees use different dialects for their dances.²¹ Marc Slors describes how sequences of perceptions utilized in narrating the story of our movements are continually produced. "If we go from *a* to *b*, we will pass through all intermediate places separating *a* and *b* according to the route we take, thus producing a sequence of perceptions narrating the story of this route".²² This human narrating of routes is analogous to what the bees do, but rather than using words, they perform the narrative.

When there are gaps in a sequence, we tend to imagine what might bridge the gaps; we want narratives that make sense. The term 'make sense' implies a desire for an embodied perception, what we try to understand through our senses. While studying material properties is a science that is done in a lab, interpretation and ways we might try to understand findings may be more accurately construed as an art. Trends in art, as with narrative interpretations, are constantly fluctuating and subject to a variety of influences and fashions.

Episodes of both narrative and travel are somewhat subjective in that what are designated as the beginning or ending are arbitrary points and tangents from those points may be extended in multiple directions. A line which may be construed as a shape if it is wide enough. A road looks like a line from an airplane but not to an ant on the ground. The space taken up depends upon perspective. It may be the common point of convergence of many paths that marks the beginning of a specific walk or a point designated on a map but that is not necessarily the beginning of *my* walk or *your* walk which are individual strands of narrative that feed into the path. Slow travel is an exercise in phenomenology wherein the body is the point of dialectic between consciousness and the material world as defined in Western

²¹ Karl von Frisch, "Dialects in the Language of the Bees," *Scientific American*, Vol. 207 No. 2 (1962) 78-89.

²² Marc Slors, "Two Conceptions of Psychological Continuity," *Philosophical Explorations*, 1:1, (1998) 73.

cultural thought.²³ When events are textually narrated there is a discourse that is at a remove in a way that a physically experienced environment is not, the events have been contained in calligraphic symbols. A mountain, barring geologic events, maintains the same in outline for eons whereas concurrent descriptions of it may vary greatly. A walking path is a line of inquiry as is a line of text. There are assumptions that humans are capable of determining where consciousness may be found but those assumptions may simply be demonstrations of cultural habits and may be neither true nor universally acknowledged. We make assumptions because labeling simplifies data but may not be essentially of the greatest veracity. If we return to a previously visited location, it is another place in our bodily experience of upon the return. The forms may appear to be the same but bodies are continually regenerating cells and the features of the earth are not locked in place although they operate on a much greater time scale. It is a different encounter. What part of us is it that returns to a place after a period of time?

David Herman writes that 'events in a story... unfold as plan-based actions performed by participants who are attempting to bring about some desired state or event...'.²⁴ Traveling itself can be a 'desired state' that does not necessitate a defined outcome, it may be the phenomenological experience that is sought after and therefore might not concur with Herman's definition of narrative which emphasizes results rather than process. The enacted movement may be the 'desired state' as might be the lack of a plan. Slow travel is more in keeping with Mikael Bahktin's views which go beyond Herman's in his view that fictional characters may assume lives of their own despite the best plan-based intentions of the author. Bahktin's

²³ Edward Casey "How to get from space to place in a fairly short stretch of time: Phenomenological Prolegomena." *Senses of Place* 27(1996). 14-51; Martin Heidegger, *Being and Time* (Harvard University Press 1962) §12

²⁴ David Herman. *Story Logic Problems and Possibilities of Narrative* (Lincoln NE, University of Nebraska Press 2002). 289

theories were, not surprisingly, inspired by his studies of Dostoyevsky. Things happen.

Storyworlds are a concept of narratology that can be a useful paradigm with every journey, stage, or unexpected event presenting a new storyworld option. Marie-Laure Ryan's considerations of 'emergence' in storyworlds as may be found in online video games is particularly applicable in that like walking paths, the games unfold in real time and there are choices to be made.²⁵ They are both bottom up narratives that unfold in a not necessarily linear fashion as they are performed. Like jazz, they are often polyphonic narratives. Packing up a tent or leaving an albergue presents new possibilities as might a steep cliff when it begins to hail. A wrong step that breaks an ankle puts everything on a different trajectory. Walking may be viewed as embodied worldmaking in which walkers are immersed in a storyworld the structure of which is a variety of performed narrative that does not require an audience. The travel becomes embodied *storyworldmaking*.

There is much in the study of narratology that pertains to grammatical structures and linguistic theory and is therefore medium specific. Much of the field of narratology revolves primarily around English and other Indo-European languages and the associated grammatical structures thus making it narrower than the present considerations and not particularly relevant to the scope of this thesis. Language is one way in which the parameters of the experience are contained but as researchers of perceptual and emotional history have written, we do not necessarily experience or react in the same way to phenomena that people may have in other cultures and temporalities and assuming that we do is somewhat imperialistic.²⁶

²⁵ Marie-Laure Ryan. Narrative as / and Complex Systems in *Narrative Complexity Cognition, Embodiment Evolution*. Maina Grishakova, Maria Poulaki eds.(Lincoln, University of Nebraska Press, 2019). 29-55

²⁶ Rob Boddice, *The History of Emotions*(Manchester, UK, Manchester University Press,2019); Constance Classen *Worlds of sense: Exploring the senses in history and across cultures*.(Oxon and NewYork: Routledge, 2025); Jan Plamper *Sounds of February, Smells of October: The Russian*

How history is narrated is a process that, like any other pathway, is somewhat fluid in the travels, the rememberings, and the tellings which become further removed from embodiment with each iteration. The experience becomes multiple retellings of a story from person to person, it was found that although the words changed, the emotional emphasis was preserved. The symbols are altered but not the feeling. The authors write that 'we posit that emotion appraisals can operate as anchors for remembering and retelling stories.'²⁷ These 'anchors for remembering' correspond to the landmarks that we use in giving directions and, as with some landscape features, some emotions have a higher priority.

A long walk is necessarily homodiegetic, a narrative in the first person, while being comprised of a series of framing structures within a larger frame; different landscapes or characters contribute other, heterodiegetic stories that the primary narrator does not necessarily participate in but may go on to incorporate into still other narratives exemplifying Bakhtin's theory of *unfinalizability* as an outcome of polyphony.²⁸ The emphasis of a story may be adapted to the audience. This framing leads directly to the dichotomy between story and discourse,²⁹ between what is told and how, with each coloring aspects of the other. A long walk may function in multiple genres depending upon what is framed. Herman proposes that there needs to be at least two shifts of deictic center in any retrospective narrative. and that these may be environmental or mental.³⁰ Slow travelling, by foot, boat, horseback, camel,

Revolution as Sensory Experience, *The American Historical Review*, Volume 126, Issue 1, March 2021, 140–165.

²⁷ Fritz Breithaupt, Binyan Li, and John K. Kruschke. "Serial Reproduction of Narratives Preserves Emotional Appraisals." *Cognition and Emotion* 36, no. 4 (February 15, 2022). 581–601.

²⁸ Mikhail Bakhtin, *Problems of Dostoevsky's Poetics*. Ed. Caryl Emerson. (Minneapolis, Minnesota: University of Minnesota Press, 1984).

²⁹ From Latin *discursus* "a running about," in Late Latin "conversation," in Medieval Latin "reasoning," noun use of past participle of *discurrere* "to run about, run to and fro, hasten," <https://www.etymonline.com/word/discourse> (accessed, August 1, 2026)

³⁰ David Herman, *Story Logic: Problems and Possibilities of Narrative*, 2002. (Lincoln and London. University of Nebraska Press) 224.

etc. always incorporates both; you sit down, you anchor, you dismount. Both action and focality shift as you move through time and space. The setting does not have an optional or minor role in either travels or stories and when traveling the surroundings are continually shifting as a person is moving and sky, water, ground surface, and weather change. Often landscape is considered a background to events but that is a possibly myopic convention. Spacio-temporal movement along a path through environments, states of mind, time periods, and cultures results in diegetic shift. There is often a retrospective aspect in that there are environmental reminders such as wheel ruts and cairns juxtaposed with the more immediate knowledge that your tent is still wet from the rain the night before. The retrospective considerations may be offset by the anticipation of impending arrival at someplace ahead so that the traveler, participating in a narrative that is retrospective while also forward looking, is very much situated in the immediate present which is constantly changing as each falling motion of the body is broken by the placement of a foot. Walking and narrative are both ways to expand understanding. Stories help to translate what has been experienced. Walks may do the same. The encoded symbolic representations inherent in the stories like the tracks that we walk on may signal to receivers of the narrative, in this case subsequent travelers, that a prior route or way has been established. The interpreter of the symbols will neither necessarily agree with nor understand earlier meanings, be the signs words or constructions. At the end of the documentary, *The Mystery of Chaco Canyon*, Edmund J. Ladd, from the Zuni Pueblo says of the constructions at Chaco 'They served a purpose when they were needed. And now that purpose or that need is no longer there, it's no longer necessary to repeat that portion of that story.'³¹

³¹ *The Mystery of Chaco Canyon*. Bullfrog Films, 1999 54:09.940.

At Chaco Canyon in northern New Mexico, are found monuments which required much effort to build but give little indication of meaning. They function as symbols which invite storytelling, sometimes euphemistically termed 'interpretation'. There are competing narratives. In places where we do not recognize the meanings or the syntax of the symbols, we may try out different stories based on frames that are familiar just as we may try different routes when traveling in an unfamiliar city.

While it is not always easy to interpret the meaning of what someone speaking directly to us in real time says, we project feelings and emotions onto ancient peoples attempting to translate their worlds into terms we understand. We blithely assume that other peoples' experiences can be contained within our own cultural parameters. Surely, we think, anyone standing outside in the middle of a July day at Chaco would have felt miserably hot. Gary Gossen studied the Tzotzil living in the Chiapas highlands of Mexico and their belief that the degree of heat determines the basic parameters of the universe, ordering both space and time. It appears as an intrinsic part of their language.³² This is a very different view of the world from that of most western Europeans although, as Mayans, the Tzotzil may reasonably be suspected of having a closer connection to the people who inhabited Chaco Canyon than do most people formulating interpretive narratives. Things are tried 'out' or 'on' as an attempt is made to position them in a story, looking for plausible explanations but in our own terms. The less clear something is to us, the more we engage in storytelling or *historytelling*. The identity of the original narrator, especially if one departs from an anthropocentric, might not be singular. I lived for many years in a canyon that has had two catastrophic floods during my lifetime.³³ The canyon

³² Gary H. Gossen, *Chamulas in the World of the Sun: Time and Space in a Maya Oral Tradition*, (Prospect Heights, Ill: Waveland Press, 1984). 31.

³³ The Big Thompson Canyon in Colorado, U.S.A. After the first, in 1976, we were told it was a 'once in 500 years event.' The second, in 2013, was, purportedly, a 'once in 1000 years' event.

walls, the river, and the rain were the main actors devising the narrative, telling it with relentless sounds of water and huge, crashing boulders; people were incidental.

History is itself a narrative with multiple options for deviation, there are as many possible detours as can be imagined. There is an accepted path from past to present, usually represented in Western cultures as unidirectional which may speak more to lack of imagination than it does to reality. Visiting the ruined sites of ancient, once powerful civilizations and comparing the contemporary circumstances in the same places should be enough to convince us that civilizations are not uniformly on a linear, positive, one-way projection. Maybe flowing and eddying water would be a better metaphor for time.

There are over 200 miles of ancient roadway in Chaco Canyon. The Chacoan peoples flourished in the Four Corners region of the American Southwest from 850 to 1250 CE and their descendants remain in the local area with many living within fifteen local pueblos. Apache and Navajo people subsequently arrived in the area and now many of the larger ancestral pueblo ruins are on Navajo Nation land. It is arid scrubland with neither reliable water nor mineral resources although there is oil shale nearby. Summer afternoons are often over 100F. It is shocking how blue a sky can be during the day and how bright the stars are at night. Rattlesnakes are not uncommon. The remnants of the Chacoan world are to be seen in the adobe great houses, a rich material culture, and straight, often 9-meter-wide roads some of which seem to radiate from great houses. After 1300, the great houses and the entire northern section of the Chaco world was abandoned. The longest of the Chaco roads are mapped at around 75 meters in length.

In 1934, in her book, *Patterns of Culture*, Ruth Benedict portrayed the ancient Anasazi or Puebloan culture of this area as egalitarian, peaceful, and permanent.

Seventy years later, Steve Lekson disagrees with most of Benedict's characterizations. He depicts the ancient Puebloan people as extremely mobile and often at war with each other. Lekson proposes that the Great North Road, the most established of the roads, followed what he calls the 'Chaco Meridian'. He expands upon this, declaring that the builders of pueblos with distinctive T-shaped doors may be traced through a successive series of moves. There is, in his view, evidence of this type of architecture first at Chaco and then moving north to Aztec, and eventually as far south as Casa Grandes or perhaps Culiacan in Mexico.³⁴ Lekson's narrative has been called into question by a number of people including David A. Phillips Jr. who notes that among other discrepancies, only 16 of 80 km of Lekson's Chaco Meridian actually coincide with the Great North Road. The Great North Road itself does not veer by more than 2 degrees from true north so this deviation cannot be attributed to navigational error.³⁵ This is an example of a wandering historical narrative has gone through several turnings just within the past 100 years and is further complicated by being a product of people outside of the culture. The narrative is completely different depending on focality; a telling of what 'we' did is not the same as what 'they' did.

It may be that in English the word 'track' is a more appropriate term for these lines. A 'road' is what is travelled on to go from one place to another and although that is what these initially appear to be, it is not necessarily true. Etymonline defines 'track' as a "footprint, mark left by anything". The website also notes the relationship between 'track' and 'trace'.³⁶ There are traces and tracks but not necessarily roads.

³⁴ Stephen H. Lekson, "Europe, the New World, and Buildings Without History." Essay. In Canyon Gardens: The Ancient Pueblo Landscapes of the American Southwest (University of New Mexico Press, 2008).1-16.

³⁵ David A. Phillips, The Chaco Meridian: A Skeptical Analysis, January 1, 2009.
<https://www.unm.edu/~dap/meridian/meridian.html>. (accessed May 10, 2026)

³⁶ <https://www.etymonline.com> (accessed June 30, 2026)

Arthur Danto posited that narrative is a cognitive necessity for explaining a particular event within general world-knowledge.³⁷ General world knowledge changes with time, culture, and location. One distinction that Danto makes between 'narrative' and 'chronicle' is that 'chronicles cannot be narratives; their authors cannot know 'how things came out.'³⁸ And yet, we invent narratives despite not knowing. How do we decide when the narrative is done? Chaco has a history but also a present, as do many ancient sites which become entities of episodic existence. Jerome Bruner wrote that 'Narrative "truth" is judged by its verisimilitude rather than its verifiability. There indeed seems to be some sense in which narrative, rather than refer to "reality" may in fact create or constitute it...'.³⁹

There are numerous explanations as to what caused the abandonment of Chaco. Just as a person walking and a route will both change over time, so will a storyteller and an audience.⁴⁰ A reader with a book will change, and the book may be more worn and although the letters remain, the same is not necessarily true of their meanings.

The ancestral Puebloans differed from other nearby indigenous groups in that they began cultivating corn, most likely from Mexico, between 4000 and 1800 years ago. The Basketmaker III period (A.D. 500-700) saw a shift from hunting and foraging with sporadic farming to subsistence farming, particularly of corn and beans. With farming came pottery production for storage, the growth of villages with *protokivas*, the raising of turkeys, and use of turquoise in jewellery making. Prior to that, the indications are that locations were occupied periodically.⁴² When

³⁷ Danto, *Narration and Knowledge*. 238

³⁸ *Ibid* 356

³⁹ Jerome Bruner. "The Narrative Construction of Reality." *Critical Inquiry* 18, no. 1 (October 1991).13.

⁴⁰ We act 'over' and 'through' , 'out of' or 'in' time but rarely 'under', or 'around' of it although something may be 'timeless'.

⁴² Linda Cordell. *Ancient Pueblo Peoples*. (Montreal, St. Remy Press ; Smithsonian Books, 1994)

people stay in place they accumulate things. Some people may accumulate more. Narratives can be used to try to justify inequalities.

The great houses that were built, such as Pueblo Bonito were sometimes 4-5 stories high with as many as 700 rooms and numerous kivas. Pueblo Bonito is just one of twelve massive great houses constructed between AD 860 and 1130.⁴³ They seem to be places that people travelled to but did not live in. At least six major routes from that time lead into Chaco Canyon.⁴⁴ There is no indication that the great houses ever had a domestic use, the rooms have no windows. Midden evidence indicates periodic intensive consumption of food at the large public structures. Burials are scarce except for a few that are apparently 'high status'.⁴⁵ There are solar or lunar alignments of several of the larger buildings, roads, and numerous petroglyphs found but with the number of ruins within the area, easily hundreds, it may be that it is possible to find what is looked for; the dots can be connected in multiple ways.⁴⁶ James Gibson wrote that "a perceptual system hunts for a state of what we call 'clarity'".⁴⁷ The narratives about Chaco Canyon have arbitrary endings as the numerous pueblos in the area for whom this is ancestral land have songs and stories of their histories that continue to be told.

⁴³ Lekson, S. H., Windes, T. C., & McKenna, P. J., *The Archaeology of Chaco Canyon: An eleventh century pueblo regional center* (pp. 67–116). Santa Fe: School of American Research Press, 2006.

⁴⁴ R. Gwinn Vivian, "Chacoan Roads: Function." *KIVA* 63, no. 1 (January 1997): 35–67; Thomas Windes. (2023). 1987 Investigations of the Pueblo Alto Complex, Chaco Canyon, New Mexico 1975-1979, Vol II Part 1.

⁴⁵ Judge, W. James, John D. Schelberg, Robert P. Powers, Stephen H. Lekson, Thomas C. Windes, Ann M. Palkovich, and Henry Wolcott Toll. *Recent Research on Chaco Prehistory*. Albuquerque, N.M: Division of Cultural Research, U.S. Dept. of the Interior, National Park Service, 1984.

⁴⁶ As Patrick O'Neill writes 'Narrative structure necessarily revolves around the discursive arrangeability of real or invented storyworld facts and events. Any story, real or invented, can be told in an indefinitely large number of ways, incorporating an indefinitely large number of discursive modifications and qualifiers. The more flaunted such discursive manipulations are...the more they serve to remind us that all narratives, literary or otherwise, are in principle, if to varying degrees, 'fictions of discourse.' (Herman et al 2005:370).

⁴⁷ James Gibson. *Senses Considered as Perceptual Systems*(Boston, USA; Houghton Mifflin Company, 1966)320.

Physical space is often a form of social organization, and the tracks emphasize space both by their width, by the space between them in those instances when they are parallel,⁴⁸ and by the affordances of mountain peaks that they sometimes indicate. The width of the roads is notable as the Anasazi,⁴⁹ did not use wheeled vehicles. There are neither resources nor communities known to have been along the Great North Road. In addition to Great North Road, the Ah-Shi-Sle-Pah Road arrives from the northwest, there are two south roads, in addition to the Chacra Face Road and the East Road from Pueblo Pintado descending into Chaco Canyon by a set of steps.

Anna Sofaer, who favors a cosmological reading, writes of the Great North Road 'The road's great width and parallel routes, its ephemeral practical use, and apparent terminus at an isolated badlands canyon fail to justify, in functional terms, the effort entailed in its construction. The road apparently goes 'nowhere' ... In many important respects, the road appears to be its own reason for development - an end in itself.'⁵⁰

Some of the roads have sections where are found dense ceramic scatters of a somewhat uniform size, approximately 2 cm across. The structure of the roads is notable for both the abruptness of turnings and for the way they go straight over rather than around obstacles such as cliff faces.⁵¹ Robert Weiner suggests that the roads may be the oldest constructions in the southwest.⁵² Most aspects of present-day Puebloan rituals and religious activities are not open to people outside of the communities so continuity of practices is primarily theoretical. There are five

⁴⁸ In a few places there are as many as four parallel roads.

⁴⁹ 'Anasazi' is the common name for the people who built the ancient pueblos. It is from the Navajo for 'enemy'.

⁵⁰ Anna Sofaer. "The Great North Road: A Cosmographic Expression of the Chaco Culture of New Mexico ." (Cambridge and New York , Cambridge University Press. *World Archaeoastronomy*, 1986) 365–76.

⁵¹ Pattison recorded 149 sets of stairs or steps (1985:63)

⁵² *Great Houses for Whom?: God Houses, Temples, and Chacoan Monumental Architecture*". Aztlander Zoom, May 27, 2025.

language groups amongst the contemporary pueblos in this language area leading Paul Reed to posit that the people who built Chaco Canyon dwellings may not have been a unified group.⁵³ There is a lack of both linguistic and cultural information but 'Because Zuni and Keresan are language isolates,⁵⁴ they are presumed to have developed in their current location, rather than migrating from elsewhere, and to have therefore participated in the Anasazi tradition'.⁵⁵

Like Sofaer,⁵⁶ James Snead views the road sections as primarily symbols without a utilitarian purpose in part because often there doesn't seem to be anything that they connect.⁵⁶ In narratological terms, the roads today demonstrate a postmodern narrative structure. Roland Barthes distinguished between the realist texts of the nineteenth century and the 'writerly' texts of the postmodern period. In his view, realism sets everything out for the reader as opposed to the 'writerly' which requires that the reader participate in the making of meaning.

The wood that was used in the buildings at Chaco, over 200,000 large wooden beams, came from at least 50 miles away. There was a use for roads but it is not clear which roads. Some appear to be aligned to the path of the sun during the winter solstice. Framing devices? Parade routes? Like language, the roads may be semiotic depending on the perspective. Water may be found near the beginning or end points of the tracks which is important in a drought prone area. Chaco Canyon is also the site of spectacular lightning and flash flooding on a seasonal basis. Ritual Puebloan dances often center on rainmaking.⁵⁷

⁵³ Catherine Christine Berezna. "The Pueblo Region as a Linguistic Area: Diffusion among the Indigenous Languages of the Southwest United States." *The Pueblo Region as a Linguistic Area: Diffusion among the Indigenous Languages of the Southwest United States*, 1995: 198

⁵⁴ Keresan is the language group spoken by several of the contemporary Puebloan groups.

⁵⁵ Berezna, 191

⁵⁶ James E. Snead, "Obliterated Itineraries: Pueblo Trails, Chaco Roads, and Archaeological Knowledge." Essay. In *Highways, Byways, and Road Systems in the Pre-Modern World*, 106–27, 2012

⁵⁷ Edward P. Dozier, *The Pueblo Indians of North America*. Prospect Heights, Ill: Waveland Press, 1983, 141. Edward P. Dozier (1916-1971) was a member of Santa Clara Pueblo and the first Native American to earn a PhD in anthropology. Most of his anthropological work was done in the Philippines.

Starry nights are when Chaco is alive. Hopi and Zuni pueblos, and possibly Acoma, consider there to be six directions. In addition to the four cardinal directions of Western navigation, 'up' and 'down' are recognized as primary directions. Does that change the shape of the narratives of this place? Walking here during the day, one becomes very aware of the *scapes*- land, sky, body, sound and temperature are entangled in this environment. The changing frames might have been more those of the skyscape rather than landscape. As with any narrative, the experience differs depending upon focality. The experience of the walker cannot be disentangled from the environment, bodies react to heat and dust. It is often below freezing in the winter, it snows. It is a very quiet place. The size of the ruins alludes to the idea that there would also have been a social/cultural context that these roads were a part of that is different from the social/cultural contexts within which we might walk on them today. Ancient trade routes, marked by shrines and petroglyphs extended from as far away as Los Angeles and Guasave, Mexico to the Pueblos.⁵⁸ The archaeological record confirms that trade was ubiquitous in prehistoric times, including the importation of obsidian, saltwater shells, cotton textiles, pottery, turquoise, copper, and macaws into the region.⁵⁹

We experiment with different narratives accepting, rejecting and adapting the stories. The past is as fluid as the future in the textual narrative. The interpretations of the meanings of the roads, and even whether they are actually 'roads' is constantly being debated and revised. Most of the published narratives are written by people who are outside of the indigenous culture and become a form of narrative interventionism. Whether that matters or why can be a parallel pathway or a

⁵⁸ Robert Ford, *Handbook of North American Indians: Vol. 10, Southwest*. (Washington, DC: Smithsonian Institution, 1983). 717-18

⁵⁹ A. Helene Warren. "Tonque: One Pueblo's Glaze Pottery Industry Dominated: Middle Rio Grande Commerce. ." *El Palacio* 76, no. 2 (1969): 36-42.

deviation. If we are looking for some truth about the history, we may get closer to that in investigating how the roads were built which would be a shift that does not include owning the narrative but instead is concerned primarily with the data, more a chronicle than a story although we often collect data for the purpose of building a story. Walking on the road sections at different times may tell us as much as we can know and at the same time be constantly changing- the roads are becoming less obvious over time as the earth reabsorbs them and the area is increasingly encroached on by sand dunes. This walking on ancient roads is a form of narrative that utilizes Herman's concept of contextual anchoring, the basing of a storyworld on the cues established by another narrative. What we learn from the embodied experience might not easily be contained by the singular dimension that is text.

When a long walk is compared to a narrative, both the walker and the path may be the narrator or the narrated. It is a discourse, a conversation that neither party has control of. Either may mark the other and both usually do in some way. The narratives of the Chacoan roads are fragmented storyworlds; terminal points are unclear. Memory serves the future and narrative, in forms that include story and path, encapsulates it at a point in time but also changes with time so that we only have traces. There are patterns in the overlapping rhythms of steps, breath, pulse and oscillating brain waves.

The philosopher of science, Karl Popper, stressed that science was dependent upon being able to prove or disprove hypothesis whereas Ian Hodder promoted the prerogative of the researcher to explain and interpret findings, a somewhat 'writerly' position. The stories, or 'interpretations' told at a great distance from their origins, take their own changing, branching, interconnecting paths.

Navigation

The Outer Hebrides

‘You are out of your mind.’ ‘I have something in mind.’ ‘He has lost his mind.’ ‘Her mind is in the gutter.’ These common statements imply that ‘mind’ has specified boundaries that one can be on the inside or outside of and that it can be put someplace or misplaced. Someone may not be in their ‘right mind’. I might be of two minds. It is a term that we may position but cannot quite locate. The word ‘mind’ itself, according to the Online Etymological Dictionary, is "that which feels, wills, and thinks; the intellect," late 12c., *mynd*, from Old English *gemynd* "memory, remembrance; state of being remembered; thought, purpose; conscious *mind*, intellect, intention,"⁶⁰ What are the borders of a mind that we can be inside or outside of? Does it extend beyond bodies and include environment? Is it porous like a membrane? You might have something in your mind’s eye or have the superpower of mindreading. Minds can be changed.

Lambros Malafouris uses the term ‘hylonoetic field’ to encompass ‘...a mindscape quite literally extending into the extra-organismic environment and material culture’.⁶¹ His Material Engagement Theory is concerned with the ‘enactive constitutive intertwining between brain and culture’⁶² but seemingly emphasizes the materiality of manmade artifacts rather than the materiality of the earth itself which is the primary constituent of both artifacts and bodies. He writes of the mindscape that extends but does not allow that other varieties of scapes may themselves be extending, creeping, obscuring and meshing.

⁶⁰ <https://www.etymonline.com/search?q=mind> (accessed June 18, 2026)

⁶¹ Lambros Malafouris. *How Things Shape the Mind: A theory of material engagement*. (The MIT Press, 2016). 227.

⁶² Ibid 46

Paths and people taking them are mutual extensions of each other and while the footsteps are the usually the primary point of physical contact,⁶³ both the surrounding landscape and ambient environment of the path in addition to the socio/cultural context of the walker connect at that point. Gibson, writing on human extremities, pointed out that ‘the equipment for feeling is anatomically the same as for doing’.⁶⁴ Research on embodied cognition has provided an understanding that cognitive processes can be bolstered by whole body engagement and environmental immersion.⁶⁵ This has implications for both considerations of how people in the past constructed their worlds and of how we live now. Limb and Braun, in their fMRI studies of brains of musicians found that those of jazz musicians showed dorsolateral prefrontal and lateral orbital regions associated with top down learning were ‘extensively deactivated’ whereas the neocortical sensorimotor areas when a musician was operating from a ‘bottom up’ reactive, participatory place were highly activated.⁶⁶ The brains of the jazz musicians brought together embodied perceptions, reactions, and memory to employ a bottom-up creativity in musical narratives. This is analogous to the feature of emergence that Ryan observed and to choices made during slow travel. Buzsáki, in a discussion of neuroplasticity and free recall studies of animals writes that ‘on a linear track, environmental cues constantly supervise and affect the direction of activity sequences by updating the content of each theta cycle, similar to cue-guided story-telling of episodes.’⁶⁷ I assume that includes musical episodes. People engaged in choosing routes use their brains in a way

⁶³ Pilgrimages are done in a variety of ways other than walking. These include knees, hands and knees, wheelchairs, bicycles, coaches, automobiles, boats, motorcycles, scooters, and unicycles.

⁶⁴ James J. Gibson *The Senses Considered as Perceptual Systems* (Boston: Houghton Mifflin, 1966)98

⁶⁵ A. M. Glenberg, “Mental Models, Space, and Embodied Cognition.” Essay. In *Creative Thought: An Investigation of Conceptual Structures and Processes*, 495–522. American Psychological Association, 1997. Francisco J. Varela, Evan Thompson, Eleanor Rosch *The Embodied Mind Cognitive Science and Human Experience*. London, Cambridge MA. MIT Press, 2016.

⁶⁶ Charles J. Limb, Allen R. Braun “Neural Substrates of Spontaneous Musical Performance: An fMRI Study of Jazz Improvisation.” In *Plos One*3 (2). 2008

⁶⁷ György Buzsáki. *Rhythms of the Brain*. (Oxford: Oxford University Press, 2011). 329

different to someone who relies on an app for navigation. How we navigate is how we experience the world. Choose your own adventure.

Kim Shaw-Williams hypothesizes that humans are the only terrestrial animal that utilize tracks in order to find what is unseen or unheard. Footprints of birds on a beach or new snow tell us where the birds have been and appear as asemic text. Shaw-Williams also points out that a person may follow their own tracks backward if they are lost.⁶⁸ This property of reversibility is also noted by Poincaré and Piaget both of whom considered it the root of spatial awareness.⁶⁹ Buzsáki suggests that shifting to a predictable oscillating state rapidly when in unpredictable environmental conditions provides a capacity to realize linear variables, 'a fundamental physiological requirement for psychological constructs described by the terms "anticipation," "expectation," and "prediction."' ⁷⁰ The neuroplasticity of the oscillation networks enables the incorporation of inputs from both adjacent and noncontiguous cell assemblies.

Shaw-Williams's position is that the following of tracks led to the development of episodic or 'autonoetic' memory.⁷¹ A series of episodes, or tracks, joined together constitute a narrative. He agrees with Suddendorf and Corballis that this type of memory allows 'mental time travel' so that we both remember and anticipate based on those memories.⁷² The joining or juxtaposition of episodes leads us to make perceptive jumps that we may not be conscious of. This emphasis on 'reading' tracks would partially agree with McLuhan who attributed the shift from an emphasis on

⁶⁸ Kim Shaw-Williams. "The Social Trackways Theory of the Evolution of Human Cognition." *Biological Theory* 9, no. 1 (November 21, 2013). 16–26.

⁶⁹ Henri Poincaré. *The Foundations of Science*. Washington, D.C: University Press of America, 1913, 1982. Jean Piaget. "The Attainment of Invariants and Reversible Operations in the Development of Thinking." *Social Research* 30, no. 3 (1963). 283–99.

⁷⁰ *Ibid*, 131

⁷¹ J. Metcalfe & H. S. Terrace (Eds.), *Episodic Memory and Autonoesis: Uniquely Human? Missing Link in Cognition*. (Oxford: Oxford University Press, 2005).

⁷² Thomas Suddendorf and Michael C. Corballis. "The Evolution of Foresight: What Is Mental Time Travel, and Is It Unique to Humans?" *Behavioral and Brain Sciences* 30, no. 3 (June 2007) 299–313.

hearing to sight to the invention of the alphabet.⁷³ One can't help but wonder what he would see resulting from the online world. It is not difficult to see tracks as signs prefiguring lettering, both carry meaning in repeatable figures. Tracking is done by paying attention to multiple stimuli simultaneously, 'reading' the signs. Alphabets may not have been the first things that we read but the written words have taken some of our attention away from complimentary ways of knowing the world. Instead we use symbolic representations of phenomena which may expand our awareness of ideas while at the same time limiting our perceptual understanding.

The firing patterns in the brains of rats in a maze show that a two-dimensional, hexagonal grid pattern is produced when the rats are learning a route. If a site is approached repeatedly from a variety of directions it goes from being a temporary reference point such as might be used for dead reckoning to becoming a spindle shaped neuron in map-based semantic memory.⁷⁴ Our frames of memory are both egocentric and allocentric.⁷⁵ In addition to the grid patterning, brains react to changes in head direction and maintain an awareness of edges.⁷⁶ There is no singular part of the brain that is credited with spatial memory or navigation.

Ancient places are part of our narrative repertoire and their stories, or the stories that we make about them, may hold places in our cognitive maps. Binyan Li of the Experimental Humanities Lab, theorizes that it is not just the physical world but the fictive, narrative world that is mapped by the hippocamel neurons. He writes

'From research on cognitive maps, we know that hippocampal neurons form maps of physical space and time... we propose that the same neural processes underlie engagement with fictional stories: during story processing we create cognitive maps of various domains—spatial, social, moral, etc.—that we can later use for real-world

⁷³ Marshall MacLuhan. *The Gutenberg Galaxy*. (Toronto:University of Toronto Press, 1962).

⁷⁴ György Buzsáki. *Rhythms of the Brain*. (Oxford:Oxford University Press, 2011) 33.

⁷⁵ Neil Burgess. "Spatial Memory: How Egocentric and Allocentric Combine." *Trends in Cognitive Sciences* 10, no. 12 (December 2006) 551–57.

⁷⁶ Edvard I. Moser, Emilio Kropff, and May-Britt Moser. "Place Cells, Grid Cells, and the Brain's Spatial Representation System." *Annual Review of Neuroscience* 31, no. 1 (July 1, 2008) 69–89.

navigation... we see stories as affording paths that guide our navigation through multiple dimensions of life'⁷⁷

This idea is seemingly acknowledged when we refer to a *moral compass*. The finding of direction can refer to multiple dimensions.

While landmarks are physical entities, *junctions, crossroads, turning points* and *turning a corner* often refer to temporal, interior markers. Narrative which is embodied and perceived through the senses may be mapped in the brain in the same way as are other sensual perceptions. A particular smell may transport us to a specific time and place just as some songs can.

A story, like a map, is an interpretation of how to fill in the space between two points requiring limited sensory participation and is therefore always removed from the physical experience. The psychologist William James defined thoughts and feelings as having motor consequences resulting in some bodily change and determined that bodily perception was dependent upon action.⁷⁹ Neuroscience tells us that movement is necessary for brains to develop a notion of space. The same being true for weight and time; all three are subjective, based on experience. Moving bodies change over time so the brain depends upon neuroplasticity. The size of the hippocampus is affected in part by the degree to which we construct mental maps by actively engaging with our environment.⁸⁰ The commonality of language capacity indicates that some form of language was most likely existent before the dispersals from Africa. As with bees, communication may have facilitated travel and the narratives of how to get from one place to another were happening long before there was text. Suddendorf theorizes that during an earlier period of dramatic climate change, 'human language may have evolved primarily for the communication of

⁷⁷ Li, Binyan. "Navigating by Narratives: Cognitive Maps Encode Engagement with Physical and Fictional Worlds." *CogSci*, 2021.

⁷⁹ William James (1878)1920. 'Remarks on Spencer's Definition of Mind as Correspondence' in *Collected Essays and Reviews*, 43-68.

⁸⁰ Iain McGilchrist. *The Matter with Things*, Vol. 1 (London: Perspectiva Press, 2021).

episodes, whether from the past or the imagined future, or indeed in the form of fiction.⁸¹ The need to navigate climate change, to anticipate difficulties and plan contingency relocations due to changing conditions is not novel.

The Outer Hebrides of Scotland is a place where people have been traveling since at least Neolithic times. Norse sagas tell of accidental discoveries of Greenland, Iceland, and North America and it is easy to imagine that not everyone who arrived in the Outer Hebrides intended to. The islands themselves are constantly changing due to wind, tides, climate change, and glacial loading. The gneiss rock of which they are formed is some of the oldest in the world. The current landscape is one of hills and lochs with the ground constantly shifting between machair, dunes, bogs, and small woods. The evidence of habitation on the islands shows that domestic sites, with the exceptions of Eilean Dhomhnaill and the Udal on North Uist and Northton on Harris to have been mostly put to periodic or occasional use rather than as permanent habitations although many of the known sites were discovered accidentally. A thorough survey seems unlikely. It is probable that some sites are no longer accessible due to the changing coastline. Crannogs, the man-made islands that are reached by causeways in lochs such as those of Lanabhat, Arnish, and Bhorghastail, appear to have been some of the earliest sites of periodic use and occasional feasting. Movement of land, sea, and people appear to have always been a fact of these islands which were probably an archipelago or differently connected at other times. Terrestrial wayfinding depends upon estimating distances, finding position based on environmental features, and a degree of spatial orientation. Mariners need these plus additional awareness of weather, tides, and currents thereby being a three dimensional type of navigation rather than two. The Outer Hebrides, like other small islands, necessitate a flexible combination of terrestrial

⁸¹ Thomas Suddendorf, Donna Rose Addis, and Michael C. Corballis. Essay. In *'Mental Time Travel and the Shaping of the Human Mind'*. (Oxford: Oxford University Press, 2011).

and marine wayfinding. The changes in day length due to the high latitude is also a factor.

The constant changes mean that navigation in the Outer Hebrides does not fit neatly into the differences that John O’Keefe and Lynn Nadel distinguish between routes and maps and probably never has: ‘Routes are rather rigid; they are rendered useless by any damage, or by the loss of a guidance or direction’.⁸² They write and compare this to maps which allow for greater flexibility amidst changes in environment. They also point out that ‘routes imply goals which imply motivations.’⁸³ In this scheme, routes would exemplify top down thinking whereas maps would be bottom up. Looking at old maps, one realizes that they are not, in Danto’s terms, chronicles. The making of a map itself implies goals or motivations and although they may not be as obvious a narrative they do illustrate Foucault’s changing discursive fields. Maps that warn of dragons or monsters are telling a story about both the time, place, and the cartographers. A series of routes, possibly in combination with some type of maps, utilizing a variety of transport, might be the most practicable for some journeys. This is a complex way of traveling requiring an awareness of multiple factors. Arriving by boat would not provide tracks that could be followed in reverse and the view is very different when moving in the opposite direction if an effort has not been made to look back on occasion.

Maps can come in many forms.⁸⁴ Today we use maps that are imagined as birds eye views but it is a perspective that is culturally and temporally specific. When the earliest people were traveling in the Outer Hebrides there would not have been marine charts or tide schedules as we know them. There is often fog, and in the

⁸² John O’Keefe, and Lynn Nadel. “The Hippocampus as a Cognitive Map.” UCL Discovery - UCL Discovery, January 1, 1978:89.

⁸³ Ibid 83.

⁸⁴ Maps from the Marshall Islands that are used for marine navigation are made of sticks tied together in patterns.

summer when the chances of clear skies would have been best, the period of starlight would have been shortest. Most travel to Lewis today involves multiple short hops. To walk the Hebridean Way, I flew to London and got on a sleeper train at midnight.⁸⁵ The sleeper train was then cancelled at 2 a.m. having never left Euston station. The cancellation necessitated walking to a different train station to catch an early train to Glasgow, then by bus to Oban. From Oban a ferry went to three different islands, until it arrived at Castle Bay on Barra. From Castle Bay a ride to Vatersay to begin walking. Vatersay is an arbitrary starting point, anything prior could be designated as the beginning of my journey. Getting to London from my home in Southern Italy was part of my trip. The various stages that I intended upon leaving my house had a pre-determined order. I had a general idea of where I was going to go and how I would get there. We can't know what ancient people travelling to the Outer Hebrides intended although the megaliths on Lewis do seem likely to have been a destination and so imply both route and motivation. There were several ferries and bridges between islands during my walk. There were only five other people who were walking the same route at that time. One of them ended his walk early while another seemingly disappeared after the third day thus demonstrating another way in which slow travel is a fluid process.

A shared neurocognitive experience leads to similar activity in the brains of people who are engaged. Walking with, eating with, and sleeping near people over several days or weeks may be a cohesive experience. People tell stories. People walking to Santiago speak of their 'camino families'. The neuroscientist, Shane O'Mara, writes that 'The power of a live oral telling is no accident: shared attention and emotional arousal are potent drivers of memory encoding and social bonding'.⁸⁶

⁸⁵ The Hebridean Way was opened in 2017 and while not an ancient route it continually passes through Neolithic landscapes.

⁸⁶ <https://www.brainpizza.com/p/from-campfire-to-cortex-storytelling> (accessed April 16,2026)

With its very dynamic routes, it might be that getting to Calanais has always involved multiple sequential stages which increase the numbers of people interacting and telling stories thus comprising more and more points of connection. There may be common reasons for choosing a particular destination.

The ritual complex at Calanais is not associated with any known settlements. It is worth noting that Orkney was also considered to be a primarily ritual landscape at one time but that has changed as more archaeological work has been done. It is possible that the same could prove true for Lewis or the other islands of the Outer Hebrides. There are at least 15 stone circles in the immediate area, several within sight of others. Comparing the affordances of the various monuments in the Outer Hebrides or beyond, particularly in light of the anomalies found by Bates et al. could be enlightening.⁸⁷

As in the American Southwest, this is an area of magnetic anomalies that present in the archeological record.⁸⁸ At Calannis these have been attributed to lightning strikes.⁸⁹ Cosmic energy made visible. This is also a place from which the Aurora Borealis may be seen. The verticality of the monuments changes the horizon; they touch and shape the sky. It is a common observation that the upright stones are all smaller towards the tops making them appear like figures gathering. Was there a thought of attracting or commemorating lightning with the megaliths? Did lightning attract people or did people do something to attract lightning?

⁸⁷ C. Richard Bates, Martin Bates, Chris Gaffney, Vincent Gaffney, and Timothy D. Raub. "Geophysical Investigation of the Neolithic Calannis Landscape." *Remote Sensing* 11, no. 24 (December 11, 2019): 2975

⁸⁸ Ulrich Schmucker. "Anomalies of geomagnetic variations in the Southwestern United States." 1970.

⁸⁹ *Ibid* 'The spatial size and intensity of this 'fossil' lightning magnetic signature also suggests that it may represent multiple, repeated strikes (whether in a single storm or accumulated over time), and also for it to have a relatively high current density. In the Western Isles, significant peat accumulation began from approximately 5900 BP and, therefore, for the lightning strike signature to have been preserved, it most likely predates this, and therefore provides a terminus ante quem for the strike...a fossilized, buried, pre-peat significant lightning strike at Calannis XI would seem even less likely in the absence of an unrecognized attractor within the stone circle. The multiple strike inference, given the scale and magnitude of the central dipole anomaly, would increase this non-uniform strike attractor inference many fold. It is not possible to determine if the strikes occurred before or after the stone circle had been constructed.'

Travel by boat along the west coast of the islands of the Outer Hebrides would have been and still can be, treacherous. Stephanie Blankshein has done extensive computer modelling regarding the possibility of boats having been used, both along the coast and through various lochs, to travel within the Outer Hebrides between the numerous sites of cairns and monuments.⁹⁰ In the Outer Hebrides the boggy ground, especially on the hillsides of Harris, can be particularly difficult to walk on. The wettest sections are often the paths where people have walked the most and left depressions. To avoid walking in muck that goes above my knees, I walked on higher ground nearby. Considering that there are often multiple parallel paths as a result of many people doing the same, it appears that the fragile ground is being permanently marked by the people walking through. Maybe the parallel tracks in Chaco are due to equally pedestrian causes. There is some quicksand. It is hard to imagine walking in these islands with children or anything that could not be easily carried unless there was a well known and trodden route such as the coffin roads that lead to the western sides of the islands. Maybe it was easier walking before the peat began to accumulate.

The neolithic tombs on Lewis are of the Clyde and Hebridean types which may indicate that different groups of people were here. An arrowhead found on the west coast of Lewis dates from 4000 years ago and is made of the bloodstone found on Rùm.⁹¹ Similar bloodstone arrowheads have been found on Skye and Canna. Porcellanite stone axes from County Antrim have been found throughout the Irish, Scottish, and British Isles indicating the use of boats. And yet, while Blakenshein's work on the use of boats is very convincing, boats and boat making equipment have

⁹⁰ Stephanie L. Blankshein *Transient Trajectories: Modelling Movement and Connectivity in the Neolithic of the Outer Hebrides*. University of Southampton, Doctoral Thesis, 2019.

⁹¹ <https://www.trove.scot/place/4283> (accessed January 23, 2026)

not been found in the Outer Hebrides although trees and other organic materials have been found preserved deep in the peat.

The construction of the monuments on Lewis would have required a tremendous number of man hours and some means of transport. Blakenshein posits that something similar to skin covered coracles may have been used.⁹² The Outer Hebrides, both coastally and within lochs are subject to the North Atlantic Current, large swells, and quickly changing weather. It is not a convenient place to get to but that might have been the point. Going to a place that was challenging to get to has sometimes led to attributions of esoteric or ritual knowledge for those that have made the journey. Portable goods crafted of unfamiliar materials might serve to demonstrate how far a person had travelled and seen, a familiarity with unknown powers. Goods, especially if from the earth or sea, may be seen to have an intrinsic power of their own.⁹³ Mary Helms proposes that goods acquired at a long distance from a traditional homeland may carry cosmological implications of sanctity and mystical powers associated with the supernatural.⁹⁴ It would seem that an engaged hippocampus would have been one result of the haptic experience of moving through such an environment. Mace heads made of the local gneiss have been found in both Orkney and at Stonehenge. The movement of material items is evidence of the interchange that typifies the western Atlantic coast of Europe. Antonia Thomas, writing on the hidden carvings found in Orkney and at Newgrange in the walls surmises that is might have been the process rather than the product that was the point and that the carving imbues the stones with a secret life.⁹⁵ Computer modelling

⁹² J.M. Synge's description of travelling by coracle off the coast of Aran emphasizes the degree to which that would have been very much an immersive experience.
<https://www.gutenberg.org/ebooks/4381>

⁹³ Mary W. Helms *Ulysses' Sail: An Ethnographic Odyssey of Power, Knowledge, and Geographical Distance* (Princeton, NJ, Princeton University Press, 2017). 114.

⁹⁴ *Ibid* 118

⁹⁵ Antonia Thomas. *Art and Architecture in Neolithic Orkney: Process, temporality and context.* (Archaeopress, 2016)26

such as Blakenshein's allows insight into factors that might otherwise have been obscured but does not allow for nuance or for rituals of process.

Travelling to the Outer Hebrides is a bit of an endeavor and most likely always has been.⁹⁶ Barry Cunliffe writes that by 4000 B.C. there was a distinct North Atlantic identity that the Hebrides would have been part of, distinguished by the building of cairns, passage graves, and megaliths.⁹⁷ Cunliffe's 'North Atlantic' is viewed from a rather Eurocentric position. He makes no mention of the path of nearly 100 inuksuit which extends for more than six kilometers on Baffin Island, a few days sail from Greenland. Sylvie Leblanc has found that some of the inuksuit are over 4500 years old.⁹⁸

Emotions and context are not easy to include in computer models but may well be driving forces of events if there is any truth to either our literary narratives or the news of current affairs. Humans are demonstratively, predictably, irrational while wanting to believe the contrary. There are few practical reasons to explain why we might walk or bicycle on the current Hebridean Way or other long-distance routes but hundreds of thousands of people do so every year. Assuming that the builders of monuments or travelers to sites were acting in the least cost, most efficient ways, is predicated on the assumption that we might attribute qualities that are not noticeably common in contemporary humans to the people who established the traces that we find. It might be a heuristic exercise. Harbours and camping areas are places where people meet, tell stories, make music, share meals. They are points of confluence, divergence, and dispersal, the locations of which might be distinguished by rational computing but there are other factors that are not so predictable or easy

⁹⁶ Derek Cooper's 'Road to the Isles Travels in the Hebrides 1770-1914' is a catalogue of difficulties and unexpected adventures.

⁹⁷ Barry Cunliffe. *Facing the Ocean: The Atlantic and its Peoples, 8000 BC-AD 1500*. (Oxford University Press, 2004)155

⁹⁸ <https://www.cbc.ca/news/canada/north/baffinland-s-proposed-railway-near-inuksuk-chain-1.1162614> (accessed February 27, 2026)

to articulate. Daniel Kahneman studied the irrationality of humans. His results showed that our brains consistently use heuristics leading to errors that we make repeatedly.⁹⁹ Religion, politics, and other power structures are sometimes distorting factors and group endeavors such as the megalithic monuments found on Lewis show a degree of planning that connotes some sort of organization if not a hierarchy. It is hard to envision that the monuments on Lewis could have been built without some people doing planning and some engaged in various aspects of the construction work. If ancient people were habitually engaging parts of their brains that we do not, they may have had different decision making processes.

Rites of passage often involve travel through the liminal spaces between sacred sites and the travel itself may be part of a ritual.¹⁰⁰ One of the distinctions that human brains make is of edges. An edge may be a coastline or a border. It could be the end of a chapter. Do we mark social or moral edges? People might think that there are 'lines we don't cross' but these are often cultural and some, such as cannibalism, may be flexible depending on circumstances. Much of the Outer Hebrides consists of edges which may also change but on a different time scale. We may cross edges, turn around upon reaching them, or move along them either in a moral/legal sense or physically.

Iain McGilchrist, working with his theories of cerebral lateralization, writes that walking shifts the brain to a right hemisphere mode and that

'Although both hemispheres are involved in all experience, the characteristics of right hemisphere phenomenology, in particular its greater capacity to sustain ambiguity, understand meaning that lies beyond language, and perceive systemic wholes, means that it is more likely to be able to accommodate religious thought and experience.'¹⁰¹

⁹⁹Daniel Kahneman. *Thinking, Fast and Slow*. London: Penguin, 2012

¹⁰⁰ Victor W. Turner, and Edith L. B. Turner. *Image and Pilgrimage in Christian Culture*. Columbia University Press, 2011.

¹⁰¹ Iain McGilchrist. "Cerebral Lateralization and Religion: A Phenomenological Approach." *Religion, Brain & Behavior* 9, no. 4 (June 26, 2019). 319–39.

The religiosity of pilgrimage might be partially explained by the ways in which brains process embodied motion. Many people spend weeks or months walking a path, spend a day or two at the end location, and then return to their homes because the end was not the objective. Some simply turn around and continue walking. The embodied process is what signifies.¹⁰² Indications are that getting to ancient sites when they were active would have involved much more walking than it does now. If McGilchrist is correct, it would seem that people traveling to sites in earlier times might have been in a neurologically different frame of mind than people who drive to sites today and look for a place to park.

We contrive narratives about places that were obviously important at one time but we may live lives that remove us from processes and often experience things in a primarily visual manner such as reading or on a screen. It is a limited way of learning about places and in that reduces the world as we know it.

¹⁰² Lakoff and Johnson emphasize that everything we know, we know through embodiment and that knowledge cannot be abstracted without distortion. Lakoff, George, and Mark Johnson. *Philosophy in the Flesh: The Cognitive Unconscious and the Embodied Mind: How the Embodied Mind Creates Philosophy*. Basic Books, 1999.

Negotiation

The Dajia Mazu Pilgrimage in Taiwan

Getting from one place to another, whether that is done by narration or navigation, is a forming of relationship, an establishment of connection. The beginning and ending are related by a process which incorporates an interweaving of multiple strands. This may be true of characters in a book or in the paths of a library of books if we were to map their travels. We can visualize the interconnected relationships as a net or a web that helps to anchor multiple facets of changing reality. While the two previous chapters included considerations of travel done in the past, it may be useful to look at a modern-day pilgrimage. The indications pertaining to Chaco and to Calanais are that they were sites of periodic happenings. The Dajia Mazu in Taiwan is a present-day pilgrimage that happens for just over a week each year.

The relationships that the people of Taiwan navigate are both geopolitical and geologic. Over the past ten years, there have been an average of 267 earthquakes per year with a magnitude over 4.0.¹⁰³ Between 1911 and 2024, 378 typhoons either hit Taiwan directly or caused major damage.¹⁰⁴ And yet, when Taiwan is referred to as a dangerous place, the geologic and climatic aspects are background to the geopolitical relationships that are also continually shifting.

In July, 1987 the Democratic Progressive Party (DPP) was elected to replace the Kuomintang (KMT) as the main political party, a position they presently maintain. With this change of political party, martial law and the restrictions placed on

¹⁰³ <https://earthquakelist.org/taiwan/> (accessed March 6, 2026)

¹⁰⁴ https://www.cwa.gov.tw/V8/E/K/Encyclopedia/typhoon/typhoon_list02.html#typhoon-14 (accessed March 6, 2026)

religious practices were lifted. Today, the Dajia Mazu pilgrimage, which began to take place in Taiwan in 1730, is one of the largest moving religious events in the world.¹⁰⁵ An estimated 600,000 people participated in the pilgrimage in 2025.¹⁰⁶ In 2008, the pilgrimage was named a 'significant intangible national cultural asset' by the UN. The pilgrimage takes nine days and is about 300 km long. It begins at the Dajia Jenn Lann Temple in Taichung, proceeds through Taichung, Changhua, Yunlin, Chiayi and returns, stopping at nearly 100 temples en route. Temples may be anything from grand, multi-story edifices to small, local arrangements along the street. Temples are sponsored and supported by neighbourhoods, businesses, private individuals, and governmental organizations meaning that temples must also navigate relationships. Pairs of the moon blocks used for fortune telling are thrown during the Lantern Festival in order to establish the starting date and time of the pilgrimage.¹⁰⁷ ¹⁰⁸ The pilgrimage itself has something of a parade atmosphere complete with numerous Electric Flower Cars that function as mobile stages. There is an established order of where the palanquin with the statue of Mazu is taken for a variety of rituals and of the eighteen brigades that make up the official structure that lead the pilgrimage.

Membership in the brigades is considered an honor. Those who are carrying the palanquin holding the statue of Mazu being particularly esteemed. The first of the brigades is a jester / town crier figure, the *baòmǎzǎi* followed by fifteen other groups including drum, flag, horn, and parasol brigades leading Mazu's palanquin which is then followed by the bicycle brigade.¹⁰⁹ People along the route often kneel

¹⁰⁵ It originally included carrying Mazu to China for spiritual recharging.

¹⁰⁶ <https://ocacnews.net/article/395202> (accessed January 23, 2026).

¹⁰⁷ Throwing wooden moon blocks is called Po divination. It is perfectly acceptable to throw them multiple times until you get your desired answer.

¹⁰⁸ The Lantern Festival happens during the full moon on the fifteenth day of the first month of the Chinese calendar.

and light incense. It is considered a blessing if the palanquin is carried over a person who is lying on the ground. An official schedule sets out the distance to be covered each day, times of each of the ceremonies, and the place where the procession stops and rests each night. As Shih Fang-long writes

‘Religious rituals and festivals are understood by the DPP as events likely to attract national and international tourists as well as potential vehicles for local and national identification. These can be understood in terms of what has been called the ‘invention’ of tradition, authenticity, and distinctive culture. The re-invention of native/local religious rituals and festivals through state-sponsored tourism is further understood by the DPP as a critical element in a strategy whose objective is the creation of a national identity for Taiwan...’¹¹⁰

Mazu is the Goddess of the sea and protects sailors, voyagers, and fishermen. Her influence is credited with driving the Dutch out of Taiwan. Tradition says that she lived 960-987 CE on Meizhou Island in Fujian Province which is also the ancestral home of many of the immigrants to Taiwan and other parts of southeast Asia. Her name during her life was Lin Moniang, she never married. After her death, visions of Mazu often appeared to guide ships in distress and various cult practices, particularly in coastal regions, developed.¹¹¹ Zhang explains that Imperial recognition of Mazu when the pilgrimage still involved taking Mazu to Fujian province was an unsuccessful attempt by the Chinese state to control the narrative.¹¹²

The smaller Taiwanese islands almost invariably have large temples dedicated to Mazu. Although she originated in Chinese folk religion, the temples predominately display a combination of Daoist and Buddhist iconography. Mazu is often conflated

¹¹⁰Shih Fang-long. “From Regulation and Rationalisation, to Production: Government Policy on Religion in Taiwan.” In Dafydd Fell, Bi-yu Chang, and Henning Klöter (eds.) *What Has Changed?: Taiwan before and after the Change in Ruling Parties*, 265–83. (Wiesbaden: Harrassowitz, 2006). 277.

¹¹¹ Klaas Ruitenbeek. “Mazu, the Patroness of Sailors, in Chinese Pictorial Art.” *Artibus Asiae* 58, no. 3/4 (1999): 281–329.

¹¹² J.J. Zhang, “Paying Homage to the ‘Heavenly Mother’: Cultural-Geopolitics of the Mazu Pilgrimage and Its Implications on Rapprochement between China and Taiwan.” *Geoforum* 84 (August 2017): 32–41.

with the Buddhist Guanyin. Her sometimes title 'queen of heaven' and flowing blue and white robes are not unfamiliar motifs to Christians. As many of her devotees have been mariners, knowledge of her was spread, particularly throughout southeast Asia where she is often worshipped in local ways. In Japan Mazu is considered to be a Funadama, a shinto deity who protects people at sea. She has a somewhat Catholic aspect in the Philippines. Taiwan's Ministry of Public Affairs lists over 1000 temples in Taiwan alone dedicated to Mazu.¹¹³ Until recently, statues from temples in Taiwan were taken on occasional pilgrimages to Meizhou Island for a spiritual recharging but that is no longer considered practical. The narrative of Mazu has evolved significantly within Taiwan as an inclusive expression of national identity within a shared cultural framework.¹¹⁴ This demonstrates an application of the famous quote on historical materialism by Karl Marx "It is not the consciousness of men that determines their existence, but their social existence that determines their consciousness."¹¹⁵ Like the starting point of a narrative or a journey, social change and human action are facets of processes which we know neither the beginning nor end of.

In many ways, the metaphor of riding waves is very appropriate for the people of Taiwan. In addition to the aboriginal languages, people may speak Taiwanese, Mandarin, and Hakka with many older people also speaking Japanese. Most younger people learn English in school. Like Mazu herself, the language referred to as 'Taiwanese' originated in the Fujian province; there is not a standard written version. Not only do Taiwanese often speak multiple languages, but they also aggregate a variety of religions into their worship practices and temple architecture.

¹¹³ <https://nspp.mofa.gov.tw> (accessed June 12, 2026)

¹¹⁴ Hsun C.,(2012). Between religion and State: the Dajia pilgrimage in Taiwan. *Social Compass*, 59(3), 298-310

¹¹⁵ *Preface to A Contribution to the Critique of Political Economy* 1859:4

Daoism, Buddhism, Christianity and Chinese folk traditions may all be incorporated with occasional elements of Shinto and native religions.

In recent years there has been DNA analysis aimed at finding evidence of aboriginal blood as a means of establishing that Taiwanese are genetically different from Chinese. This, in turn, is further complicated by the competing narratives regarding the origins of the numerous Taiwanese aboriginal peoples who do not necessarily share origins.¹¹⁶ Many facets of Taiwanese culture have been borrowed and incorporated. It is not unusual to have people who claim to be Christian devotees advising on what is necessary to avoid in order to stay safe during Ghost month¹¹⁷ or to see women dressed as drum majorettes and cheerleaders participating in Daoist funerals. Religion in Taiwan is very inclusive. Strippers are often part of religious processions, as are fireworks and brass horns. Many of Taiwan's aboriginal people combine Catholicism with their native practices so that Amis paintings and statues of the Virgin Mary show her with the blue facial tattoos that denote women of high status. The confluence in the pilgrimage of a wide array of ritual symbolism reinforces the uniquely Taiwanese aspects of the presentation. It is also considered to be good insurance. Worshiping in a wide-ranging manner has a history of defusing longstanding ethnic antagonisms in Taiwan.¹¹⁸

Unlike many western religions where quiet and a subdued atmosphere is encouraged, Taiwanese worship includes the concept of *renao* which infuses an exuberant, noisy, crowded party feeling into religion. It is also prevalent at night markets. *Renao* is reflected in the traditional glove puppets, *budaixi*, that may be seen in performances at religious gatherings and temples. Mazu, a drunken monk, Confucious, Guan Yu, Liu Bei, Zhang Fei and the monkey king are stock characters.

¹¹⁶ Ku, Kun-hui. "Rights to Recognition: Minority/Indigenous Politics in the Emerging Taiwanese Nationalism." *Social Analysis* 49, no. 2 (January 1, 2005): 99–121.

¹¹⁷ No whistling, no clothes hanging on a line at night, no swimming, avoid wearing red or black, etc.

¹¹⁸ Shih, "From Regulation and Rationalisation, to Production," 278–79

The puppets are easily portable and are a way for heritage narratives to be carried forward. The puppet shows utilize multiple musical instruments and fireworks to tell stories from folklore and religion in constantly evolving narratives. Like Mazu, this tradition traveled from Fujian province and has come into its own in Taiwan which has a television channel dedicated to puppetry.

Negotiating Taiwan's place in the world is a continual process of navigating relationships, both with the physical and political landscapes. Since the 1600s, the Netherlands, Spain, Ming China, Qing China, and the Japanese have claimed and marked Taiwan. Both maps and narratives have been created to demonstrate the supposed veracity of those claims. Threats, either natural or political are the background against which people lead their lives. The Dajia Mazu pilgrimage is a performance of Taiwanese national identity and seems to be growing as the threats from the CCP do. It is a political, cultural, and religious statement. John Eade opined that pilgrimage should not be construed 'merely as a field of social relations but also as a *realm of competing discourse*'¹¹⁹ something that is very much on display with this pilgrimage.

The city of Tainan in the south of Taiwan was the capital until 1887. It is in the southern part of the country which includes the pilgrimage route and is considered to be the cultural and religious heart of Taiwan. As the politics of Taiwan have emphasized democratic ideals since the DPP came into political power, there has been more of an emphasis on the aspects that differentiate Taiwan from China. There is an embracing of indigenous cultures on the political stage. Former president Tsai Ingwen claimed Paiwan heritage and her inauguration opened with an Amis man blessing the proceedings. Many government sponsored festivals include native

¹¹⁹ John Eade 1991 as cited in Albera, Dionigi, and John Eade. *New Pathways in Pilgrimage Studies: Global Perspectives*. (Abingdon, UK: Routledge, 2019). 6.

foods. The government seemingly prioritizes the promotion of a narrative of inclusivity and uses religion as one means to define heritage and identity.

The overwhelming majority of academic papers written about the Mazu pilgrimage emphasize the economic benefits of cultural tourism. In the 1950s and 60s, the KMT viewed expenditures of time or money on religious activities to be a waste of resources and people were encouraged to economize on those activities.¹²⁰ That has changed and now politicians of all types want to be seen participating in the religious and cultural aspects of the Mazu pilgrimage. The temples become locations of power brokering that is clothed in ostensibly inclusive expressions of religion.

As with the puppet shows, the Dajia Mazu pilgrimage is a narrative that is performed and as such is open and participatory.¹²¹ One result of this is that the narrative is hard to control and the result is not so much a competing discourse as it is one that is plied of numerous strands. Some strands are flashier, some are stronger. This is a performance of a narrative which has gone through multiple iterations within the lifetimes of many of the residents of Taiwan. Memory and imagination are processed in the same parts of the brain and it may be difficult to distinguish between the two. The narrative of the Mazu pilgrimage is becoming more about Taiwanese nationalism and less about Mazu needing to visit her homeland. Many actors have a vested interest in the narrative. De Certeau wrote that a story 'does not limit itself to telling about a movement. It makes it. One understands it, then, if one enters into this movement...'.¹²² The embodied

¹²⁰ Shih, Fang-long. "From Regulation and Rationalisation, to Production: Government Policy on Religion in Taiwan." In *What Has Changed?: Taiwan before and after the Change in Ruling Parties*, edited by Dafydd Fell, Bi-yu Chang, and Henning Klöter, 4:265–83. *Studia Formosiana*. Wiesbaden: Harrassowitz, 2006

¹²¹ Nina Tecklenburg. *Performing Stories: Narrative as Performance*. Translated by William Wheeler. London, New York, Calcutta : Seagull Books, 2021.

¹²² Michel de Certeau. *The Practice of Everyday Life*; translated by Steven F. Rendall. (University of California Press, Berkely, Los Angeles, London, 1984). 81.

movement in space and place narrates the story which is both a reactivation of and reaction to the past. As a performance of a negotiated translations, the Dajia Mazu pilgrimage is a narration/navigation that is recreated every year as a constitutive practice. Like the space and time between the beginning and the end of the pilgrimage, the space between the occurrences of the walk from one year to the next is where things unfold that will influence the discourse. Covid kept many people from live social interaction- the years following have had increasingly greater participation in the pilgrimage. The Dajia Mazu pilgrimage is a social contract with a shared understanding that includes a negotiating of the versions of historical narrative to justify futures. The politicians are negotiating the future, the history-to-come, so that the flow of time is going in multiple directions while people simultaneously adapt and adapt to the shapes of narrative.

The concept of *guanxi*, (关系), permeates Taiwanese society and exemplifies the what Foucault referred to in writing that 'Power is employed and exercised through a netlike organization'.¹²³ *Guanxi* is the term applied to the reciprocating relationships that connect society in pathways of almost mycorrhizal extension. Power and obligation move along these connections. The first character, 关, refers to a gate or barrier while the second, 系, is a connection or pathway.

Walking either a long distance in Chaco Canyon or the Outer Hebrides in our time may confer different mental health benefits than those of the Dajia Mazu pilgrimage. Walking in nature, as Chaco Canyon and the Outer Hebrides are now, can be beneficial and it has been found that there is a decrease in the amount of activity in the amygdala, the area of the brain that processes stress, as a result. The

¹²³ Ibid 98

amygdala also has a role in spatial navigation.¹²⁴ While the studies prioritize the benefits of walking in nature, it may be that there are other psychological benefits derived from feelings of inclusion that could be a result of participating in something one feels is bigger than oneself. Political marches capitalize on this. In the February 1, 2026 edition of the Taipei Times, Chiu Chih-jou and Jake Chung report that

‘... the top related news events of last year showed that loneliness has become a major issue in Taiwan... Isolation is a larger cross-generational issue affecting not only the elderly but also the young..., adding that proper mental health was not just about making one better, but about re-establishing the connection between people.’¹²⁵

Durkheim believed that the process of synchronization and intensifying emotions, which he termed ‘Collective Effervescence’ felt by individuals when participating in shared rituals, was a central component of collective behavior and a way in which society empowers individuals to cope with challenges. In his view, with reference to gatherings ‘their first effect is to bring individuals together, to multiply the relations between them, and to make them more intimate with one another. By this very fact, the contents of their consciousnesses are changed.’¹²⁶ A pilgrimage, or a march involving thousands of people, becomes an entity in itself. It consumes things, leaves things behind, has moods.

In a country where feelings of isolation are a growing problem, a ritual gathering such as the Dajia Mazu pilgrimage may be an important way for people to feel as though they are part of a larger community with shared values. When the local natural environment is primarily jungle it is very different to walking through the types of European landscape that most studies about walking in nature are

¹²⁴ Sonja Sudimac, Simone Kühn, *Can a nature walk change your brain? Investigating hippocampal brain plasticity after one hour in a forest*, Environmental Research 262(2024) 119813. 10.1016/j.envres.2024.119813.

¹²⁵ <https://www.taipetimes.com/News/taiwan/archives/2026/02/01/2003851582> (accessed date).

¹²⁶ Emile Durkheim. *The Elementary Forms of Religious life: A study in religious sociology*. Translated by J.D. Swan (London: G. Allen & Unwin, 1912). 348.

considering. Feelings of connection, whether to nature or to large numbers of other people, may both be beneficial. This can be related to Mihaly Csikszentmihalyi's concept of 'flow', 'the loss of a sense of self separate from the world around it is sometimes accompanied by a feeling of union with the environment'.¹²⁷ The environment may be a large crowd of people. Studies that indicate the benefits of walking in nature as compared to urban environments do not include urban walking with a large group and tend to center on the benefits to Western, American/European people which is, again, making assumptions about how other cultures make sense of the world. Studies of this type begin with the premise of a division between people and where they walk rather than considering people to be a part of where they are. Connections can be grounding and the more ways that we perceive them, the more connected we are.

¹²⁷ Mihaly Csikszentmihalyi. *Flow: The Psychology of Optimal Experience*. (London, Sydney, Auckland, Johannesburg: HarperCollins, 2016). 63.

Conclusion

Three different walks have been considered as lenses through which to look at aspects of what occurs when spanning the space, or time, between two points. I chose these three because I have walked in these places and so have a better feeling of them. Any of the three walks could have been used to look at issues of storytelling, wayfinding, and community. All forms of slow travel include these aspects in some form, they form webs of connection. With the emphasis on the materiality of ancient sites rather than the experiences of moving to, between, and through them, we might be missing important considerations. The paths between ancient sites could be viewed as a circulatory system. The relationships between the places and the beings that are part of the larger assemblage form connections across space and time. The more ways that we try to perceive things, the fuller our experience of them is.

The three disparate localities and their associated pathways have some commonalities. All three appear to be sites of periodic events with evidence of long distance connectivity. In the three locations, the environmental phenomena are dynamic; the weather has a strong presence in the forms of storms, lightning, and typhoons. Parallel paths are a recurring feature. All three appear to have implications of a hierarchy. There are apparently important burials in the two older sites with religion seemingly playing a part in all three. Chaco and Calanais evince orientations based on the sky, Mazu as a sea goddess is intrinsically connected to weather and the sky. We see the pilgrimage in Taiwan gaining in popularity and importance as the Taiwanese government tries to emphasize a cohesive cultural

fabric from different population groups. The different language families of the Puebloan people may also indicate a coming together of disparate groups with goods brought from a long distance. The mobility of people going to and from the Outer Hebrides can be seen in the dispersements of stone tools.

There may be a variety of motivations for narrative pathways. There is a changing narrative that is performed annually in Taiwan. The historical narratives regarding the people who built monuments at Chaco or in the Outer Hebrides are also dynamic and continue to change in the present day. It is a negotiation of both past and future by people who perform the narratives. The changing narratives demonstrate Bakhtin's 'unfinalizability' with new characters continually joining into or stepping out of the pathways of the stories.

A useful way of contemplating whether a long walk might function as a narrative is to consider the five Barthesian codes of narrative.¹²⁸ These five, the hermeneutic questions of what will happen, the proairetic action that connects the elements, the semantic, the symbolic, and the cultural are all facets of slow forms of travel as much as they are of narrative. They are also features of negotiation which attempts to bridge different points of view. Walking bodies on the earth are part of a multitude of overlapping, interwoven rhythms.

Constance Classen rightly points out that the written word 'creates a state of alienation by separating the writer from the written and the reader from the writer. What is written has a disembodied existence; knowledge is no longer contained within human bodies but exists separately from them. In a literate society therefore, knowledge- and by extension, the cosmos- is de-vitalized, de-personalized and reified. The literate world is a silent, still world, one in which the

¹²⁸Roland Barthes. *S/Z an Essay*. Translated by Richard Miller. (New York: Hill & Wang, 1974).

primary means of gaining knowledge is by looking and reflecting, not by actively engaging...¹²⁹

The paths on which we practice slow journeys become lines of connection that we are ‘actively engaging’ with. To me, this seems to be true whether the path is one that is walked on or one that is researched and written about. The connections are not static; they are constantly undergoing processes that change the shapes and strengths of the strands and of their connections. When we visit ancient places without regard to the process of getting there, or simply read about them, we are viewing a symbol.

Walking may be an exercise in attentiveness like making a drawing. Malafouris, referring to throwing pottery on a wheel writes that ‘The creative process becomes, then, a binding of materials—a dynamic flow of the organic into the inorganic that can be understood as a new or “surprising” blend of ingredients that can act or be acted upon.’¹³⁰ A tattoo, on the other hand, is an example of the flow going in the opposite direction, the inorganic into the organic that may have meaning and will also physically change over time. Might the same not be said of a walking path? Malafouris distinguishes between ‘agency’ and ‘human agency’ based on consciousness but that may be a particularly Western cultural construction. People who live near water or high mountains may attribute a consciousness to those seemingly temperamental features of the landscape that sometimes seem to wield much power.

Does a ceramic cup become ‘material’ once the mud is shaped or when it is fired? The clay was a type of earth previously and if the cup is broken and ground into

¹²⁹Constance Classen. *Worlds of sense: Exploring the Senses in History and Across Culture* (Abingdon, UK: Routledge, 2025). 110.

¹³⁰ Lambros Malafouris. *How Things Shape the Mind: A theory of material engagement*. (Cambridge, MA: The MIT Press, 2016). 213.

dirt, becomes so again. Bodies are also compendiums of minerals that come from the earth. A discussion of materiality is a bracketing of when a substance is in a particular state, much like designating termini of a path or story. It is *process* that makes materials or locations become fixed points in our narratives and navigations which are themselves dynamic processes. The relationship between materials and narrative does not only change when we are grieving as Miller and Parrot found, it changes throughout our lives.

The classical idea of narrative was put forth in *Phaedrus*, when Plato and Socrates discuss text and memory as they go for a walk.¹³¹ Walking along with Socrates and discussing is an embodied event. Remembering the occasion is at one remove, and writing about it is yet another step away. Reading about it, possibly in translation, is still further removed. Do we consciously choose this distance? The ubiquitous use of GPS distances us from interacting with situational awareness to our surroundings in much the same way that text may undercut discussion and adaptation. When ancient sites were built, it would seem that people would have been engaged with their environments in ways that we might seem to be withdrawing from. They would have been using parts of their brains that we may be neglecting. Maybe we compensate and optimize other parts but we cannot assume that we experience the world in the same way.

Navigating through physical or social worlds is, like narrative, a way to move from one place to another. Both may utilize the same parts of our brains. Breithaupt points out that narrative often incorporates a multiversionality that involves choices and that options are part of the appeal.¹³² That is equally true of walking paths.

¹³¹ Plato. *Lysis. Symposium. Phaedrus*. Edited and translated by Christopher Emlyn-Jones, William Preddy. Loeb Classical Library 166. (Cambridge, MA: Harvard University Press, 2022). 346-349.

¹³² Fritz Breithaupt. *The Narrative Brain: The Stories our Neurons Tell*. (New Haven, USA: Yale University Press, 2025).

In fiction or in the present day news on screens we find that the logical course is often not to be the one taken and yet we try to impose what we see as logical reasoning on ancient people. We want historical populations to make sense despite that not being much other than an aspirational trait of our own. Over time stories branch and intertwine so a severe pruning of the story is easier for people to define but it is also self imposed and maybe detrimental limitation of our understanding.

Frederic Bartlett's experiments on memory which is an important aspect of both narrative and navigation found that

'Remembering is not the re-excitation of innumerable fixed, lifeless, and fragmentary traces. It is an imaginative reconstruction, or construction, built out of the relation of our attitude towards a whole active mass of organized past reactions or experience, and to a little outstanding detail which commonly appears in image or in language form. It is thus hardly ever really exact, even in the most rudimentary cases of rote recapitulation, and it is not at all important that it should be so.'¹³³

Intentionality requires a narrative. People moving through a landscape once might not be significant but if they repeat the journey there is a temporal aspect requiring anticipation and memory. It is the repeatability that indicates a narrative aspect of cognition. I recently went for a multiday walk. There were four other people who started on the same day from the same place that I did. We all ended on the same day and saw each other again. Although we had all supposedly taken the same route and had GPX, we did not actually follow the same paths. There were overlaps, parallel routes, and deviations. A bridge was out, trees were down, there was hail. One reason why performances are compelling is that unpredictable things may happen during the performance. We are conflicted in wanting both predictability and the unexpected. Long distance walks with ample opportunities for deviation offer richer experiences in part because they are accessible to a greater

¹³³Frederic Bartlett, *Remembering*, (New York, USA: Macmillan, 1932). 213.

variety of people both on and off the trail, people join in, drop off, spend time in nearby places. They are multiversional.

The pathways become lines of embodied spatiotemporal connection. Those connections are not stagnant; they are constantly undergoing processes that change the shapes and connections. Some connections are cut off and may reform, some are lost in negotiation.

With the Mazu pilgrimage we see the living process of bringing together multiple narratives about making a way in the world. Religious, political, emotional, social, historical and personal all come together. There is not a single motivation that encompasses everyone.

The same could also be said about history and maybe, as Bartlett said of memory, it is not important that it be exact. History, like memory, changes and does not necessarily move in one direction. Any interpretation that is not actually a fact is conjecture and maybe we should celebrate that exercise of imagination. What things, if any, would be consistent in different renderings of histories? If we travel to places and experience being in those places, then they still have agency.

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