

Collective Social Memory as Manifest in Skyscape Narratives

Roslyn M. Frank

University of Iowa
roz-frank@uiowa.edu

Nearly every culture perceives the stars to be in groupings of constellations due to the uneven distribution of stars across the celestial sphere. Throughout time people have imposed order on the stars, as they perceive the heavens in terms of their own value systems. (Griffin-Pierce 1986, 62)

In the Navajo version of creation, cited in Newcomb (1967, 83), First Woman says:

I will use these [the stars] to write the laws that are to govern mankind for all time. These laws cannot be written on the water as that is always changing its form, nor can they be written in the sand as the wind would soon erase them, but if they are written in the stars they can be read and remembered forever.

Over the past 20 years, the field of Cultural Astronomy has become increasingly less compartmentalised in terms of its disciplinary grounding and much more multi-disciplinary, even transdisciplinary, in its methodology and approaches. At the same time, the period in question has seen the rise of two other areas of academic concern and a proliferation of publications, journals and books elucidating them which, at first glance, might not appear to have much to do with cultural astronomy. The first area is that of human–animal studies, which has seen tremendous growth in recent years as the human–animal divide, along with the culture–nature dualism, of Western thought has come under increased scrutiny, driven in part by an increased awareness of the environmental crisis facing the planet (Ingold 1995). Central to these human–animal studies is the conflicted relationship between humans and other-than-human animals and hence, our relationship with what we call “nature” itself. One must recognise that the concept associated with the word “nature”, along with its many connotations, is not universal, but rather a social construct particularly prevalent in Western thought, in the same way that separating human animals from nonhuman animals is far from a universal cognitive category (Frank 2003).

The second area that I have in mind is called “memory studies”, which, along with work taking place in cultural linguistics (Sharifian 2014; Frank 2015), examines the way that cultural conceptualisations are affected by the acts of individuals at the micro-level and of social collectives at the macro-level. These forms of distributed cognition, taken collectively, play a role in the way that communities of practice view their world and memorialise it. While studies concerning the role played by memory in laying down cultural conceptualisations that persist across time is still very much in the exploratory phase (Sutton 2008a; 2008b; Harris *et al.* 2010), the skyscape projected by different cultures might be viewed as one way of storing the memory of a community. In this sense, the narratives attached to sky resources can be understood to function as “collective memory banks” (wa Thiong’o 1986).

Keeping in mind that the skyscape projected by a given culture or group of cultures is an example of how acts of collective memory operate over extended periods of time, the skyscape can be conceptualised as a memory bank in which certain patterns of understanding become fixed elements even though the precise nature of the individual socioculturally instantiated acts that led to these cultural conceptualisations and not others to be established and transmitted across time are no longer directly accessible. In this sense, the resulting skyscape reflects back past acts of meaning-giving as well as understandings of cultural identity and values. In short, just as language itself can be conceptualised as a “memory bank” (Frank 2005), so, too, can the skylore of different peoples. Moreover, given that the skyscape is produced by multiple past acts of cognition and, therefore, multiple attempts to project skyward the norms and values of the group, the result is an exteriorisation of a worldview shared by the community in question. And concomitantly, this opens up vistas on past acts of meaning making.

In what follows, I will attempt to show how human–animal studies along with memory studies can be integrated into the toolkit of cultural astronomy. Given that in recent years work in the field of cultural astronomy has been to a large extent oriented, toward alignment studies and continues to be so, questions related to the sociocultural situatedness of explanatory narratives attached to the skylore of different cultures have tended to receive less attention. Rather, when the stories told to explain a given constellation are examined, it is the constellation or asterism in question that becomes the focus: for example, its role in calendar keeping or wayfaring, but not specifically the relationship that those stories might have or have had in terms of reflecting – exteriorising – the cultural norms of the population in question. Similarly, little attention is paid to the fact that the narratives themselves might be overlays on even older narratives that were lost or misplaced at some stage in the past, processes that suggest that there were factors that led the original narrative to undergo modification or to be replaced by an entirely new version. As a result, the sociocultural grounding of the narrative often goes unnoticed.

Viewed from this perspective, narratives that end up being transmitted from one generation to the next, whether orally or in written form, do not represent some kind of static template, but rather one that is reinterpreted by each successive generation through the lens of the dominant values implicit in that culture itself. Naturally, in the

case of the stories told about “Western” constellations, where their transmission has been facilitated by access to written sources, the sociocultural embeddedness originally informing the individual narratives becomes fossilised. Nonetheless, the values inherent in them can be reactivated and come into focus when subsequent generations of readers attempt to interpret their meanings.

Narratives associated with the classic “Western” constellations and asterisms represent a syncretic blend, a compilation of hybrid narratives composed of fragments drawn from different geographical zones and based on Mesopotamian and Mediterranean traditions transmitted across time and space with the aid of written texts and cultural contacts (Allen 1963 [1899]; Ridpath 1989; Rogers 1998a; 1998b). The result is an amalgam that stitches together different chronological layers including, in some instances, elements emanating from an older animistic belief system rooted, for example, in the hunter-gatherer veneration of and respect for bears as ancestors of humans, upon which the Greek and Roman pantheon of sexually promiscuous male gods and jealous wives is superimposed (Frank 2014).

For example, in Greek and Roman mythology, the sexual misconduct of primarily anthropomorphically conceived male gods is regularly highlighted, along with the jealousy aroused in irate wives by their husbands’ sexual escapades, which includes even violent assaults on defenceless young virgins. Perhaps the paradigmatic example of such chronological overlays is represented by the well-known story of Callisto, as told by Ovid (*Metamorphosis* 2.401–507). The narrative recounts how Jupiter (Zeus) comes upon the young woman Callisto and is sexually aroused by her. In the words of Ovid, Jupiter, upon seeing her lying weary and unprotected, says to himself: “Here, surely, my wife will not see my cunning, or if she does find out it is, oh it is, worth a quarrel!” (2.423–424 = Ovid 2000, 56). So he disguises himself as Diana (Artemis) to approach the unprotected virgin, whom he grabs and kisses. Callisto then realises who is forcibly kissing her and begins to fight back. In the end, though, she is raped by the all-powerful father of the gods and becomes pregnant.

Later, to add insult to injury, Callisto is ejected from the group of virgins led by Diana, when the chief huntress discovers Callisto’s pregnancy. Abandoned by her female companions and filled with shame over what has happened to her, Callisto is then further punished by Jupiter’s jealous wife Juno (Hera), who finds Callisto to be the guilty party rather than her predatory husband. Callisto’s punishment consists of being changed into a bear, an act that has a clear subtext: animals are less than human, so that being turned into a furry clawed creature is a loss of status. In other words, only if humans were viewed as innately superior to animals would this be understood, automatically, as a form of punishment. But Callisto isn’t reduced to this bestial status until after she has given birth to her son, Arcas. Eventually, Arcas goes out hunting, encounters his mother, who he sees as a bear and is about to kill when, for some inexplicable reason, Jupiter intervenes, turns Arcas into a bear also and sends them both up to heaven, hence explaining the origin of the two circumpolar bear constellations (Krupp 1991, 232–234).

Other works have variations of the story. In the Greek *Katasterismoi* of Pseudo-Eratosthenes, dating to the first and second centuries AD, it is again Zeus who lifts his

former victim out of harm's way, keeping her son Arcas from killing her, allegedly in deference to their earlier relationship (somewhat bizarre since the "relationship" was a forced rape); whereas in the *Poeticon Astronomia* of the first-century BC Latin author Hyginus, it is Diana who punishes the young woman violated by the high god for the crime of which Callisto was victim (for both, see Condos 1997). Without going into great detail, it is clear that the value system implicit in the interpretive frame attached to these tales was one that stigmatised the victim and left the victimiser unpunished. At the same time, there is a second element inextricably embedded in the tales: that being turned into an animal stands for a kind of punishment.

The Greek and Roman narratives recounting the origins of Ursa Major and Ursa Minor that have survived become even more interesting once the stories about human females turning into bears and *vice versa*, which are commonplace among circumboreal peoples, are taken into account. Such narrative confrontations often portray a shape-shifted human female, seen as a bear, who is about to be killed by one of her bear-human offspring. They hold special meanings when interpreted from within a hunter-gatherer mentality, where bears were conceptualised as ancestors or relatives. The human-animal divide was much less marked and, along with it, the asymmetric dichotomy of culture-nature so deeply ingrained in Western language and thought.

Indeed, recent publications in cultural astronomy have thrown into stark relief the way in which radically different worldviews have been projected skyward, often in a more holistic fashion in the sense that the result is more cohesive and reflects more closely the contemporary norms and values of the social collectives in question. While space does not allow for a full exposition of these points, the remarkable work carried out by Cardoso (2016) among indigenous communities in the northwestern Amazonian zone and by Lee (2016) among the North American native peoples of Minnesota are examples of how insights coming from outside the conceptual boundaries of Western thought can shed new light on how sky and earth resources can meld together and end up being projected skyward.

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