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How Mana Left the Pacific and Became a Video Game Mechanic

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One of the key insights of this book is that 'mana' is not, despite what anthropologists might think, a concept that is uniquely tied to their discipline. True, the term has been important at foundational moments of anthropology, but it is not currently a topic that is the subject of much attention in anthropological theory. Indeed, it appears that mana has the most import amongst non-anthropologists, such as Pacific Islanders pursuing cultural revival (Tengan, this volume) or in Pacific Christian theology (Oroi, this volume). But as we will demonstrate in this chapter, even these uses of the term 'mana' are hardly the most common. In fact, the most widespread use of the term 'mana' today comes from game players. In video games, trading card games, and tabletop role-playing games, 'mana' is a unit of energy used to cast spells. It is this usage, employed by tens of millions of people who participate in the global culture of fantasy game play, that is most common today.

How did an Austronesian concept become a game mechanic? In this chapter we present a Boasian culture history (Sapir 1916) of the diffusion of mana from the Pacific into the western academy and American popular culture. Tracing the diffusion of mana is difficult because there are multiple lines of influence, and teasing them apart would require a close analysis of the biographies of dozens of people.

Here we will tell this story in broad outlines only, choosing as our end point how mana ended up in the massively multiplayer online game *World of Warcraft* (or *WoW*). We describe how mana left Island Melanesia and entered the Victorian world of letters in the nineteenth century. As this diffuse world of intellectual production hardened into discrete disciplines, knowledge of mana was incorporated into the disciplines of anthropology and the history of religion. After World War II, this work was read by the creators of early role-playing games. Game designers then grafted the idea of mana onto a pre-existing mechanic of 'spell point'. Once the idea of mana as a unit of magic energy was established, it transferred easily to early computer games.[1]

In addition to this historical account, we aim to make a theoretical contribution to debates on diffusion (or, as it is now known, 'globalisation') and the politics of culture in the Pacific. Today the ethics of cultural appropriation are central to anthropology both in the Pacific and beyond. We conclude by arguing that anthropologists seeking to study mana must come to terms not only with Pacific Islanders, but with majority populations in their own countries, who often pursue their own 'quasi-anthropological' interests in ways that are as detailed or more detailed than anthropological work, and equally worthy of commemoration and documentation.

Mana as a unit of spell power

Let us begin by describing the most common use of the term 'mana' today, which is mana as a resource possessed by characters in video games who use it to cast spells. This is mana as part of a 'game mechanics', the set of rules and definitions that structures video games and shapes the action that occurs in them.

A good example of mana as a unit of spell power is its use in the video game *WoW*. *WoW* is set in a 'high-fantasy world' in which players pay a monthly fee to create characters of different 'races' (orcs, dwarves) and 'classes' (mage, warrior) and then play them with thousands of

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1   At a late date in the production of this chapter, we learned of Nicholas Meylan's earlier work tying together the history of mana in video games and the history of religions (Meylan 2013). We thank him for sharing his work with us.

other people who are logged on concurrently. Players kill monsters and complete quests in order to gain experience and 'gear', or armour and weapons (Nardi 2010).

WoW is the most popular online virtual world in the United States of America. At its peak, the game was played by 2.5 million people in the USA and 11 million players worldwide. It has been translated into seven languages and is played in North America, Europe, Australia, New Zealand, South Korea, mainland China, Taiwan, Singapore, Hong Kong and Macau (Blizzard Entertainment 2008). This is more people than the combined population of Tonga, Fiji, Vanuatu, Samoa, New Zealand (including pakeha), and all the Pacific Islanders in the US.[2] If there is a hegemonic definition of mana today, it is that used in *WoW*.

In *WoW*, mana is a magical energy possessed by druids, mages, paladins, shamans, priests and warlocks. All characters possess a certain amount of mana, which is measured in points. Different spells cost a certain per cent of a character's total mana pool. Thus, for instance, the shaman spell 'Riptide' (which heals fellow players) costs 16 per cent of a character's mana (*WoW* experts will observe that we are glossing over the difference between base and total mana). When a character has used up all of its mana, it is said to be 'oom' or 'out of mana'. Much of the game mechanics revolves around managing and using mana wisely: casting spells often enough to achieve your goal, but not so often that you go oom.

Mana is featured heavily throughout *WoW*'s fantasy world. Characters can replenish their mana by drinking mana potions or eating mana-filled foods (created by mages) such as mana strudels and biscuits. Mana oil can be applied to weapons to increase the rate that their bearers regenerate mana. Mana looms are required to weave enchanted cloth. Magical beasts such as mana leeches and mana serpents roam the land. Clearly, mana as a magical energy is central not only to the mechanics of this game, but to the fantasy world in which it is set.

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2   We estimate that 7,149,515 million people live in these areas. Census figures come from Central Intelligence Agency of the United States (2016), with the exception of Pacific Islanders in the United States, which comes from Hixson, Hepler and Kim (2012).

Mana outside of anthropology: Eliade and Jung

Mana began its journey towards *WoW* in the late nineteenth century. As Matt Tomlinson and Ty Tengan point out in their introduction, the works of Robert Henry Codrington, especially his 1891 book *The Melanesians*, were a key pathway by which mana entered the late Victorian world of letters. But it would be wrong to assume that this meant that the study of mana would be exclusively carried out by anthropology. Today, anthropologists look back at this period as the period when anthropology was institutionalised as a discipline (Kuklick 1991; Stocking 1987). But Codrington's audience did not know, as we do, that our present was their future, and they were not anthropologists in our sense of the term. Many of the lines of transmission of mana from anthropology to the game-playing community come through what we will call 'quasi-anthropology', the disciplines and semi-disciplined intellectual fields which inherited the same world of letters as anthropology and studied similar things in similar ways to anthropology, and yet which were clearly not anthropology. These include disciplines such as German *völkerpsychologie* ('folk psychology') and *völkerkunde* (which later become something like 'ethnology'), which were arranged in disciplinary configurations quite different from those that currently exist today.

A key 'quasi-anthropological' discipline in this story is the 'history of religions' (sometimes called 'comparative religion' or 'religious science'). History of religions had its origin in the eighteenth century's focus on enlightenment and rationalism. It began as a Dutch Protestant endeavour that sought to undertake a modern, critical study of the textual sources of Christianity in order to free Jesus' true teachings from the oppressive and inaccurate corpus of texts and traditions that had been grafted on to it by the Catholics (de Vries 1977: 19–20).

By the time Codrington published his works on mana, history of religions became a sort of proto-area studies discipline, providing an institutional home for those studying Europe's Others in ways that could not be accommodated by the traditional mediaeval disciplinary arrangement that still organised the western academy (Fournier 2006: 38–40). Philology (Turner 2014) and archaeology had revealed

thousands of years of history in the ancient near east that predated the world described in the Torah. Missionary and ethnological work provided accounts of 'religious' beliefs (for so were they labelled) of colonial subjects. And translations of Buddhist, Hindu and Confucian texts—as these traditions came to be labelled in the West—revealed entire worlds of thought. It was at this time that the concept of 'world religions' as a phenomenon to be studied was first formulated (Masuzawa 2005; Nongbri 2012). Max Müller, who first published Codrington's findings on mana (see Tomlinson and Tengan, this volume), was a key figure in this area.

One of the main thinkers who helped transmit mana to the gaming community was the Swiss medical doctor Carl Gustav Jung. Jung combined a modern, rational training in medicine and science with a Protestant, spiritualist background that was deeply influenced by romanticism and he took seriously occult and paranormal phenomena (Douglas 1997). Although briefly in Sigmund Freud's orbit, Freud and Jung parted ways and Jung constructed his own system of 'analytical psychoanalysis'. But to call Jung's work merely a version of psychoanalysis is to miss the audacity of his vision. Jung was a synthetic thinker whose voluminous work combined *völkerpsychologie*, history of religion, philosophy, literature and various mystic and hermetic streams of thought into a single overarching picture of the human condition. Indeed, Jung bears comparison to authors such as Ernst Cassirer (Skidelsky 2008) and Eric Voegelin (Webb 1981) in that he attempted to present a comprehensive explanation of mind, culture and religion in an age when such synthetic accounts were being replaced by specialised and modern scientific disciplines.

Jung was conversant with the ethnographic reportage of his day, and drew connections to it that strike us as unfamiliar given the current disciplining of our field. Jung read E.B. Tylor and James Frazer, and participated in at least one seminar in the United States with Franz Boas (Shamdasani 2003: 274–78). He read *L'Année Sociologique* and shared with Émile Durkheim the intellectual influence of Wilhelm Wundt. He cited Marcel Mauss and Henri Hubert's discussion of mana eight times in his work (Jung 1960: 293–94), and was a correspondent and friend of Lucien Lévy-Bruhl (Shamdasani 2003: 323–28). His interest in cross-cultural psychological universals led him to travel to Africa on something like an ethnographic expedition (Burleson 2005), as well as

the American Southwest (a hotbed of Boasian anthropology at the time (Stocking 1982), where he was chaperoned by the semi-Boasian Jaime de Angulo, who eventually became his patient (Bair 2003: 332–40).

What role did mana play in Jung's work? Unlike Freud, Jung believed that the contents of the unconscious derived not just from individual experience, but from a species-wide and millennia-deep collective unconscious that Jung's writing brought increasingly into reflexive, articulated consciousness. Thus, for instance, he claimed that 'the concept of energy … is … an immediate a priori intuitive idea' (Jung 1960: 28). He continued:

> The idea of energy and its conservation must be a primordial image that was dormant in the collective unconscious … the most primitive religions in the most widely separated parts of the earth are founded upon this image. These are the so-called dynamistic religions whose sole and determining thought is that there exists a universal magical power [a footnote here reads: 'generally called mana'] about which everything revolves. Tylor … and Frazer … misunderstood this idea as animism. In reality primitives do not mean, by their power-concept, souls or spirits at all, but something which the American investigator Lovejoy has appropriately termed 'primitive energetics.' This concept is the equivalent to the idea of soul, spirit, God, health, bodily strength, fertility, magic, influence, power, prestige, medicine, as well as certain states of feeling which are characterized by the release of affects (ibid.: 68).

In his discussion of 'the primitive concept of libido' ('*Über die Energetik der Seele*' perhaps more properly translated as on the energetics of the soul), Jung moved quickly through about a dozen ethnographic accounts, mostly from North America, Africa and Australia, discussing 'how intimately the beginnings of religious symbol-formation are bound up with a concept of energy' (Jung 1960: 61). This, his most sustained engagement with ethnography, cites Codrington ('so rich in valuable observations' (ibid.)) as well as other authors who have summarised the literature on mana, such as Friedrich Lehmann (1922), J. Röhr (1919), Arthur Lovejoy (1906), and Nathan Söderblom and Rudolf Stübe (1916). After around four pages of discussion he concludes that 'we cannot escape the impression that the primitive view of mana is a forerunner of our concept of psychic energy and, most probably, of energy in general' (Jung 1960: 65). Jung's longest discussion of mana comes in a section of his long

essay 'The Relation Between the Ego and the Unconscious' entitled 'The mana-personality', but here as elsewhere in his work, it is really the authors cited above (Lovejoy, Mauss and Hubert, Lehmann, and so forth) who are his main sources on mana.

Jung's work strikes the contemporary anthropologist as paradoxical— massively researched and yet reliant on secondary sources, incredibly erudite and yet fundamentally stuck in the nineteenth century in the way that it juxtaposes decontextualised ethnographic reportage. Edward Sapir described Jung's *Psychological Types* as 'almost defiantly bare of case-material' (Sapir 1999: 715).

Another major quasi-anthropological thinker who drew on the concept of mana was Mircea Eliade, who was present for the collision of anthropology, mana and the history of religions at the École Pratique des Hautes Études (EPHE) in Paris. In 1886—five years before Codrington's *The Melanesians*—the École expanded to include a fifth 'section' in 'sciences religieuses'—section here meaning something like 'centre' or 'department' in an Anglophone academic organisation. Founded during France's Third Republic, the fifth section was designed by the secularist, bourgeois and progressive government of the day to increase France's eminence abroad through rational improvement of the country within. The institution was highly controversial in Catholic France, where challenges to priestly authority could still meet with stiff resistance.

The fifth section of the EPHE became important in the history of anthropology because it was home to several key figures in the discipline: Marcel Mauss was there from 1901 to the early 1920s, and Claude Lévi-Strauss worked there in the early 1950s. Both dealt extensively with the concept of mana (see Tomlinson and Tengan, this volume). In 1947, a sixth section of the EPHE was created to study social sciences (*sciences sociales*) and in 1975 this section became its own organisation: the École des Hautes Études en Sciences Sociales, which is now where many French anthropologists find a home. The original section of religious sciences continues to exist at the EPHE, although this work is not often read by anglophone anthropologists. This history demonstrates the complexity of academic disciplinarity and its relationship to the concrete institutional structures of academic life.

Teaching alongside Lévi-Strauss was Georges Dumézil, a scholar who worked on the comparative mythology of Indo-European societies. Dumézil has had a direct impact on anthropology, influencing Lévi-Strauss and Marshall Sahlins. As a key patron of Michel Foucault, his influence on anthropology was often indirect as well. Central to our story here, however, is Dumézil's patronage of another scholar: Mircea Eliade, whom Dumézil invited to the fifth section of the EPHE in 1945.

Eliade is a complex figure with a colourful biography (see Wedemeyer and Doniger 2010). Briefly, he was a Romanian intellectual who originally specialised in Yogic techniques in South Asia. By 1945 he had expanded his scope to a broader synthetic account of the history of religions. At the École, he produced two books which summarised his thought—*Traité d'Histoire des Religions* (translated as *Patterns of Comparative Religion*) and *Le Mythe de l'Éternel Retour* (translated as *Myth of the Eternal Return*) were both published in 1949. Drawing originally on Gerardus van der Leeuw (1938) and later Rudolf Otto (1923), Eliade argued that all humans shared a species-wide experience of divine power. Because such power was ineffable, our experience is shaped by culture and history. Eliade thus proposed a global comparative study of the culturally distinct shaping of hierophany, or this universal experience of the sacred. This study, a 'new humanism' (Eliade 1961) was pluralistic and inclusive of cultural difference even as it organised its study under a single, all-embracing academic discipline.

Eliade's longest discussion of mana takes place in the *Traité* and in *Myths, Dreams and Mysteries* (Eliade 1967 [originally 1957]). The latter reiterates almost exactly Eliade's discussion in his *Traité*. In this work, Eliade argues that the experience of mana is 'kratophonic'—an experience of the sacred in which the element of power or efficacy is primary. Eliade was especially concerned to make two points. First, he argued against R.R. Marett that mana 'is not a universal idea, and therefore can hardly be taken to represent the first phase of all religions' and, second, that 'it is not quite correct to see mana as an impersonal force' (1958: 20). For Eliade, mana is an elementary form of kratophany not because it is historically earlier or ontogenetically simpler, but simply because it is 'a simple and undisguised modality of the sacred made manifest' (1958: 20). Such a force could not be 'impersonal' because such a concept 'would have no meaning within

the mental limits of the primitive' (ibid.: 23)—anything that had mana, he argued, must exist and therefore have some sort of identity. As a result, an 'impersonal force' could not exist.

Eliade was especially wary of attempts to conceive of mana as a universal concept of power or efficacy, which was how it was portrayed in the sources that Jung read and used. 'The idea of mana is not found everywhere', he argues—indeed, he points out that 'mana is not a concept of all Melanesians' (Eliade 1958: 20–21). In his description of similar terms from North America and Africa, Eliade is quick to point out that 'all these words [*wakan*, *orenda*, *zemi*, *oki*, *megebe* and so forth] mean the same sort of thing as mana' but that 'even among the varying formulae … there are, if not glaring differences, certainly nuances not sufficiently observed in the early studies' (ibid.: 21–22).

In this work Eliade drew largely from Codrington (1891) and Jørgen Prytz-Johansen (1954), the two authors he excerpts in his massive sourcebook *From Primitives to Zen* (Eliade 1967). But he was also a regular reader of the journal *Oceania* and cites H. Ian Hogbin (1936) and Arthur Capell (1938), whose work is recognisably modern when compared to Codrington's. On the one hand, Eliade continued to reuse this material a quarter century after it was written without consulting more up-to-date sources, which was hardly ideal. On the other hand, his work is more nuanced than that of thinkers who saw in mana a universal or primitive conception of spirituality.

Mana, California counterculture and fantasy gaming

How did mana move from these high-academic, largely European, and quasi-anthropological schools of thought into role-playing games? The key moment for this movement was post-war America—and particularly California—where a growing higher education system helped create the American counterculture and its hobbies.

After World War II, higher education began a massive expansion that continued until the mid-1970s (Menand 2010). Veterans, members of what is called the 'silent generation', used the GI Bill and America's new affluence to pursue college degrees. Soon their children, the baby boomers, followed their parents to college. Between 1965 and 1972

there was a new community college opening once a week in the US (ibid.: 65). As many humanities and social science dissertations were written in the US between 1956 and 1965 as were written from 1890 to 1956 (Abbott 2014: 32). The 1950s also saw the rise of paperback book publishing, which made specialised academic work easy to access (Abbott 2011: 75). This included series such as Harper Torchbooks, 'the first series of a trade publisher specifically designed for the religious interdenominational market' (Schick 1958: 240) and which published Eliade's work. As early as 1950, publishers began marketing these paperbacks to the college market (ibid.: 83). Like the rest of the country, California witnessed rapid expansion in public education in the postwar era, particularly after 1960, when the Donohoe Higher Education Act was made law, creating a massive expansion of the University of California system (Starr 2009: 217). Both Jung and Eliade benefited from this massive growth in higher education.

Jung spent most of his career outside higher education, benefiting instead from the Bollingen Foundation, a nonprofit organisation funded by the Mellon family (McGuire 1982) and dedicated to creating an entire scholarly infrastructure of publication and conference organisation to support Jung and his fellow scholars. Joseph Campbell was one of the best-known members of the Bollingen circle, but it should be noted that the Boasian Paul Radin received financial support from Bollingen (McGuire 1982: 168–69), particularly during the years he was hounded by the FBI (Price 2004: 199–206). Importantly, Bollingen helped support the publication of many early popular anthologies of Jung's work. The first major anthology of Jung's work, *Psyche and Symbol*, was published in 1958. *The Basic Writings of C.G. Jung* came out the following year, while *The Portable Jung* appeared in 1971, edited by Joseph Campbell.

Eliade also used the higher education boom in the US to his advantage. He moved to the US in 1956 where he took up a position at the University of Chicago. There, Eliade used his position at the Divinity School to become a hegemonic force in the history of religions. In addition to training students, Eliade founded the journal the *History of Religions* (see Eliade 1961), wrote an ambitious three-volume synthesis of the history of religious ideas, edited a major encyclopedic reference work (completed in 1986), and published an anthology of readings for classroom use (Eliade 1967) which, due to its size, was reissued

in three shorter books. He frequently produced books of essays, many of which repeated his earlier writings. These then were in turn reanthologised and edited by Eliade's students and followers.

Jung's analytical psychoanalysis and Eliade's new humanism respected cultural difference while exploring its most exotic details—a role that anthropologists often assume is uniquely their own. As a result it struck a chord with baby boomers seeking an escape from the dullness of their everyday lives. 'Strange worlds, man', remarked game designer Steve Perrin in an interview with Alex Golub, 'that's where we were going' (Skype interview between Hawai'i and California, 6 June 2013). Psychedelica and humanistic psychology, popular incitements to self-exploration at the time, thus combined with an interest in exotic cultures, which were seen as reservoirs of usable difference. Disentangling all of these threads is beyond the scope of this paper. But at least in the case of California, we can say that South Asia, East Asia and the European past (particularly the medieval period) were key reference points. Outposts of South Asian and East Asian mystic traditions, as well as Medievalist antiquarianism, had been established in Marin, Big Sur and the Southern California desert in the early decades of the twentieth century (Starr 2009: 314–51). These prepared the ground for the reception of Jung and Eliade, who focused largely on these same ethnographic areas.

The Pacific, however, was not a 'strange new world' for baby boomers. Rather, it was a source of exotic liberation for their predecessors, the silent generation. World War II ended almost exactly a century after the publication of Herman Melville's *Typee: A Peep at Polynesian Life*, which was arguably the moment when America's romance with Oceania truly got underway. The late nineteenth and early twentieth centuries saw the appeal of the Pacific wax and wane under the influence of authors such as Robert Louis Stevenson and Margaret Mead, as well as the fad for 'Hawaiian' music in the 1920s (Imada 2012). But, especially after World War II, the Pacific truly became the object of American pop primitivism (Kirsten 2003). James Michener's *Tales of the South Pacific* was published in 1947 and turned into the musical *South Pacific* in 1949 (Lovensheimer 2013). Thor Heyerdahl's *Kon-Tiki* appeared in the US in 1950. 'Tiki' bars and entertaining date back to the 1930s, but Tiki culture really came into its own in the 1950s and matured in the 1960s. As Sven Kirsten notes:

> Just as Tiki fever reached its peak, the big generational divide of the 60s put an end to it. The children of the Tiki revelers decided to create their own Nirvana where Free Love and other-worldly happiness became an immediate reality. Alcohol was no longer the drug of choices as marihuana [sic] and psychedelics became recreational avocations and the sexual revolution seemingly did away with all Puritan notions of monogamy. Together with the tropical cocktails, the greasy sweet faux-Chinese cuisine termed 'Polynesian' clashed with the growing health food consciousness. The 'British Invasion' shifted the young generations' attention toward another strange Foreign cult, the Beatles. The Kinks lamented a plastic Polynesia in 'Holiday in Waikiki' whining 'even all the grass skirts were PVC'. (2003: 47, 50)

In an earlier piece (Golub 2014) we emphasised the importance of Eliade to this moment, but with further research we feel that Jung may ultimately have been more effective at transmitting the concept of mana. Early Jungians settled in California as early as the late 1930s, and by the time the C.G. Jung Institute was established in 1964, there had been over a decade of interest in Jung in the Bay Area (Kirsch 2000: 74–91).

Moreover, it is difficult to over-estimate the role of Joseph Campbell in popularising Jung's thought. Although a scholar in his own right, Campbell drew heavily on Jung in the books and television shows that made him a household name. With the exception of the hero figure of Maui, Campbell wrote little about the Pacific, but that did not stop him from invoking a Jungian theory of mana in *Hero with a Thousand Faces*, one of the main influences on Star Wars:

> Mythological figures ... are ... controlled and intended statements of certain spiritual principles, which have remained as constant throughout the course of human history as the form and nervous structure of the human physique itself ... The universal doctrine teaches that all the visible structures of the world ... are the effects of a ubiquitous power out of which they rise, which supports and fills them during the period of their manifestation, and back into which they must ultimately dissolve. This is the power known to science as energy, to the Melanesians as mana, to the Sioux Indians as wakonda, the Hindus as Śakti, and the Christians as the power of God. Its manifestation in the psyche is termed, by the psychoanalysts, libido. And its manifestation in the cosmos is the structure and flux of the universe itself. (Campbell 1972: 221)

The authors of early role-playing games, then, read accounts of mana radically divorced from the Pacific. Books like Campbell's were secondary sources based on secondary sources. Even Eliade's material was decades out of date in the 1960s. The image was of mana being a 'Melanesian' primitive idea from the lowest rung of the evolutionary ladder, rather than a 'Polynesian' idea from a 'complex chiefdom'.

The anthropology of the 1960s also downplayed the importance of the Pacific. At this point, Margaret Mead was a conservative columnist for *Red Book*. Marvin Harris's popular work would not truly take hold until the mid-1970s, with *Cows, Pigs, Wars, and Witches* (1974). The key figures during this period were the 'interpretive anthropologists' Clifford Geertz and Victor Turner, whose work was much more accessible to undergraduates than the Lévi-Straussian structuralism that made such waves among intellectual elites. Geertz' Indonesia was the closest to the Pacific that widely read work of this period got. Nor did anthropologists connect with history of religion. Leach's dismissive 1966 review of Eliade in the *New York Review of Books* is typical of the anthropological take on Eliade (Leach 1966).

Mana moves into science fiction and fantasy

The exception was the literature on millennial movements, which was widely read by people interested in radical change, or in radically changing themselves. Norman Cantor's *Pursuit of the Millennium* appeared in 1957, the same year as Peter Worsley's *The Trumpet Shall Sound*. Peter Lawrence's *Road Belong Cargo* appeared in 1964, and John Loftland's *Doomsday Cult* in 1966. It was this literature that ended up prompting one of the key promoters of mana in the 1960s, the science fiction author Larry Niven. During his years as an undergraduate at Washburn University, Niven read *The Trumpet Shall Sound* (Worsley 1968) and in an interview with Golub said that he learned of the concept of mana from that book (Skype interview with Niven, 5 June 2013).

Niven went on to become one of the best-known science fiction writers of his generation. It was his early work that involved mana. He wrote a Nebula Award-winning story entitled 'Not Long before

the End' (Niven 1969), which was later expanded (1972). Niven then wrote a novella set in the same imagined universe (1978). In Niven's degradationist vision, mana is a nonrenewable magic energy that permeates the world but is slowly exhausted over time as people use it. In the distant past, powerful Wizards live out the end of their days as their magical potency slowly diminishes thanks to overuse. This idea of a time of ancestral prosperity and power really is similar to what you might find on the North Coast of New Guinea. Niven explains its nature and operation for the benefit of an unfamiliar audience:

> *Mana* can be used for good or evil; it can be drained, or transferred from one object to another, or from one man to another. Some men seem to carry *mana* with them. You can find concentrations in oddly shaped stones, or in objects of reverence or in meteoroids. (Niven 1972: 29)

Niven was not the first author to import mana into a fantasy setting. Niven began writing about magic as mana at a time when the medieval fantasy genre had reached an unprecedented level of popularity. Following the monumental sales of inexpensive paperback editions of J.R.R. Tolkien's *Lord of the Rings* in the mid-1960s, publishers heavily promoted the works of classic fantasy authors like Robert E. Howard (of 'Conan' fame), L. Sprague de Camp, Jack Vance, Fritz Leiber, Poul Anderson, Roger Zelazny and Michael Moorcock. All of these authors featured magic and spellcasting in their stories, though there was no single vision for how magic works.

Fantasy authors often mined scholarly literature for inspiration, or just for concepts they could pepper their stories with to lend them verisimilitude. The year before Niven's 'What Good is a Glass Dagger?' Anderson wrote in his novel *Operation Chaos*: 'Although centuries have passed since anyone served those gods, the mana has not wholly vanished from their emblems' (1971: 204), and this was only one of several works of Anderson's that refer to mana between 1969 and 1973. Vance had dropped mana into his fiction as early as 'The Moon Moth' (1961), referring to 'prestige, face, mana, repute, glory'; Zelazny's *Dream Master* (1966) has a character explain, 'We seek after new objects of value in which to invest this—mana, if you like' (Zelazny 1966: 49). Even in an epic science fiction work like Frank Herbert's *Dune Messiah* (1969), we can find Paul Atreides insisting, 'Religious mana was thrust upon me … I did not seek it' (Herbert 1969: 89). While Niven's use in 1969 was thus not the first time that fantasy

fiction met mana, the earlier precedents were just name-dropping. Niven, on the other hand, produced a detailed account of mana, one that was specific enough that it could be incorporated into a game.

From fantasy fiction to role-playing games

Fans of fantasy fiction connected with another subculture of the late 1960s: wargamers, players of games that simulate conflict. The most visible facet of this hobby at the time were the board wargames published by the Avalon Hill company, and later Simulation Publications Inc., which let players refight historical battles like *Gettysburg* (1958). There was also a smaller and more artisanal community that staged wargames with military miniatures, following the influential *Little Wars* (1913) by H.G. Wells. Though there had been many prior experiments with fantasy wargaming (Peterson 2012), the first published system of wargame rules for the fantasy setting was Gary Gygax and Jeff Perren's *Chainmail* (1971).

Chainmail offered wargamers a set of rules that allowed them to 'refight the epic struggles related by J.R.R. Tolkien, Robert E. Howard, and other fantasy writers' (*Chainmail* 1971: 33). For example, a September 1973 article by Gygax explains how the *Chainmail* rules could be used to refight the famous Battle of the Five Armies at the conclusion of *The Hobbit* (Gygax 1973). Given the prominence of wizards in Tolkien, especially Gandalf, the *Chainmail* rules have a specific set of provisions for them. Wizards may cast various sorts of spells, including throwing 'fire balls' or 'lightning bolts' in combat, and performing utility functions like creating magical darkness or summoning elementals to fight on their behalf. While the original system was not especially clear on how frequently these abilities could be used, a clarification published within a year divided wizards into 'four classes of persons with magical ability', in descending order of power the Wizard, Sorcerer, Warlock and Magician (Gygax 1972). The fledgling Magician could cast only three spells per game, while the powerful Wizard could cast six. This system simulates fantasy fictions where some spellcasters are more powerful than others, but it more importantly introduces the notion that spellcasters have some reservoir of magical efficacy which is depleted by casting spells, and that more powerful spellcasters have quantifiably larger reservoirs.

Famously, *Chainmail* served as the basis for the game experiments and variations that resulted in *Dungeons & Dragons* (*D&D*) (1974), published by Tactical Studies Rules (TSR). In it, Gygax, with his co-author Dave Arneson, radically expanded the role of wizards—now called 'Magic-users'—drawing heavily on the vision of magic popularised in Vance's *Dying Earth* anthology and its sequels. *D&D* lets Magic-users choose a set of spells 'that can be used (remembered during any single adventure)'. Players must therefore anticipate which spells might be useful in an adventure beforehand, rather than allowing Magic-users to choose on the fly the spells they might cast (*D&D* 1974, vol. 1: 19). This notion that spells must be memorised in advance can be found in for example Vance's *Dying Earth* story 'Turjan of Miir', in which the titular protagonist possesses 'librams setting forth the syllables of a hundred powerful spells, so cogent that Turjan's brain could know but four at a time' (Vance 1950: 24). Vance's account of memorised magic was influential on several other fantasy authors: Moorcock, for example, has his anti-hero Elric 'memorise a spell' in the story the 'Black Sword's Brothers' (1963: 23). As *D&D* Magic-users become more powerful, they can memorise more spells at once, and moreover have access to more powerful spells than starting wizards could hope to memorise.

D&D was however unclear on how frequently memorised spells could be cast. Some early players argued that Magic-users should be able to cast memorised spells as frequently as they wanted, which would make Magic-users disproportionately powerful in the game. In Vance's account, memorised spells could be cast only once, as in his *Dying Earth* story 'Mazirian the Magician' the protagonist finds after casting that 'the mesmeric spell had been expended, and he had none other in his brain' (Vance 1950: 6–7). This was apparently the intention of Gygax and Arneson, but the first printing of *D&D* had numerous errors, omissions and ambiguities, and by the time they clarified their meaning, players had already begun experimenting with alternative ways of restraining magic.

In the spring of 1975, early adopters of *D&D* in the Los Angeles Science Fiction Society advocated for replacing memorisation with a system that would model the energy required to cast spells in order to prevent wizards from incessantly blasting out magics. Ted Johnstone sketched a model in a local fanzine for 'goetic energy' that would be expended by casting but replenished by inactivity:

'Suppose a Magic-User with 14 points of goetic energy used 5 in a major encounter—say he could restore one point in each full turn of rest or two turns of movement (no spell-casting)' (Johnstone 1975). The term 'goetic energy', however, got little traction; in the following issue, the term 'spell points' appears in a response to Johnstone, and this would prove among the most enduring of names for this concept. One of the first variants of *D&D*, the 1975 game *Warlock* (which developed in Los Angeles), dispenses with the idea of memorisation entirely, and instead uses such 'spell points'. Up to 1977, many such early fan systems or competing games had a concept of 'spell points', 'energy points' or 'fatigue'.

Once systems based on spell points as an expendable resource became widely discussed, it might have been inevitable that they would connect with the idea of mana, roughly as Niven describes it in his fantasy fiction. Niven's work was widely read and discussed in the role-playing game (RPG) community, and Niven himself was involved with the Los Angeles Science Fiction Society, as were several other prominent writers. The process by which mana became integrated into role-playing games cannot be reduced to some arboreal first cause, however; it was an inherently rhizomatic process, with many independent points of transmission and sources of influence.

The earliest reference to mana in role-playing game literature comes from Greg Costikyan, a designer based in New York City. His initial write-up is in his fanzine *Fire the Arquebusiers #1*, from November 1975, produced at the height of confusion about the implementation of magic in *Dungeons & Dragons*. Costikyan recalls earlier Niven stories where mana was a finite resource extracted from the land and used to power magical spells, though Costikyan misremembers the name as 'manna' rather than 'mana'. We will find this misspelling is common in the era. Costikyan muses about a role-playing game setting where mana resides in the land, not in characters, and provides a *D&D* system for a 'Warlock's Wheel', an item familiar from Niven's stories, which exists to sap all of the mana from an area in order to prevent magical practice there.

Curiously, although Costikyan played *D&D* with magic based on a spell point system at this time, he did not yet connect this to the idea of mana: he still used the term 'spell points'. This highlights the distinctions between the mana described by Niven and the early

proposals for spell points circulating in 1975. Spell points were, for example, renewable with rest, quite unlike Niven's depleting mana. Although Niven occasionally talks about mana accumulating in people, or deriving from certain actions ('there is mana in murder'), Niven's mana is primarily derived from lands, and where lands lack mana, magic simply doesn't work. The fact that mana is localised in the earth in this fashion, and is an irreplaceable commodity that wizards are depleting, surely had metaphorical relevance to the energy crises in the United States throughout the 1970s.

This almost ecological vision of mana obviously is not coextensive with the idea of spell points as described by early *D&D* players. However, by the end of 1978, several systems would adopt the term 'mana' as the basis for these spell point systems. Broadly, there seem to be three schools of thought about mana that evolved relatively independently, all of which yielded spell point systems named for mana in the 1976–78 timeframe: Berkeley mana, New York mana and Rockville mana.

In Berkeley, we see the first significant connection of mana with the concept of spell points in the *D&D* variant rules circulated in February 1976 as the 'Perrin Conventions'. Steve Perrin was part of a role-playing group in Berkeley, California, that had significant overlap with local fantasy fans and participants in the Society for Creative Anachronism (SCA): Perrin had himself been a Seneschal in the SCA. He distributed his house rules, or his 'Conventions', at the first instance of a Bay Area gaming convention called DunDraCon. In Perrin's system, for each Magic-user, one adds their strength, intelligence, and constitution statistics, divides the result by three, and then multiples that total by level to yield a number of 'spell points'. The term 'spell point' is used throughout the six pages of the original 'Perrin Conventions', though one brief aside on the fifth page notes that the spell point system is 'also known as the "manna point system"'. This variation in terminology suggests that Perrin reflects diverse local practices— though he seems to have been the first to write down a system describing mana. Following DunDraCon, Perrin's rules were widely disseminated and discussed in the growing *D&D* community.

By the middle of the year, two further catalysts had stimulated a sudden uptake of interest in mana as spell points. The first was the publication of Niven's story 'The Magic Goes Away' in *Odyssey* magazine in the summer of 1976. With the real world now deep in the throes of the

energy crisis, Niven brings the ecological parable of depleting mana to the fore in this story, which won the prestigious Nebula Award that year—it was widely read by fantasy fans, and surely gamers as well. The second was the endorsement by the creators of *D&D* of spell point systems. In 1976, Gygax made a spell point system part of canonical *D&D* by introducing in *Eldritch Wizardry* the concept of 'psionics', a form of magic where spell-like effects cost an amount of 'psionic strength points' to cast or maintain (*Eldritch Wizardry*, n.p.). While *Eldritch Wizardry* makes no mention of mana, the psionics system kindled even more interest in some kind of quantified energy to cast spells; psi points are renewable by refraining from psychic activity, most effectively by sleeping.

At the second incarnation of DunDraCon, the year after the 'Perrin Conventions' were released, David Hargrave first distributed his *Arduin Grimoire* (1977), an extensive book of variant rules for *D&D*. The *Arduin Grimoire* has a detailed theoretical discussion of the nature of magic, which refers to several possible ways to limit magic in a game, including a variant of klutz systems (where spells have a percentage chance of failure) and a system where spells expend 'manna points'—in the text, the spellings 'manna' and 'mana' both appear in different locations. Hargrave was connected with Perrin's Berkeley group, which had clearly been experimenting with systems along these lines for some time, as he refers to how 'some controversy has also revolved around "manna" or "spell" points and their application towards limiting magic use' (*Arduin Grimoire* 1977: 29).

Hargrave treats mana as a quantity of magical energy possessed by Magic-users, which varies with certain core game statistics: intelligence and level. A starting Magic-user of average intelligence might have only three or four mana points to start with, whereas a mid-level Magic-user of high intelligence would have 50 or more. Throughout Hargrave's descriptions of spells, he lists a 'Mana Cost' for each one: simple spells cost only a single mana point to cast, and few cost more than 10, though he imagines as well some epic works of magic that might cost 35, or even 100 mana points. A Magic-user's mana is renewable with 12 hours of rest. *Arduin* was widely read by role-playing game fans at the time; it received considerable attention in important fanzines like *Alarums & Excursions* (Gold). Hargrave's usage of mana surely inspired many of the systems that would appear the following year.

Early in 1978, another Berkeley resident, Isaac Bonewits, published *Authentic Thaumaturgy*, a booklet that attempted to show how 'real' magic might be incorporated into a role-playing game. Bonewits was a scholar of magical traditions who moved in the same circles as Hargrave and was very active in the SCA. *Authentic Thaumaturgy* notes that Hargrave worked closely with Bonewits in the development of the book; Bonewits first gave a seminar on how to use 'real' magic with *D&D* at DunDraCon II, just as the *Arduin Grimoire* came out. Bonewits provides a detailed, effectively canonical description of mana as it was conceived in Berkeley at the time. *Authentic Thaumaturgy* does make oblique (though scornful) reference to Niven's mana, but as a scholar of magical traditions Bonewits was directly familiar with Eliade and other authors who wrote about mana.

Bonewits approaches mana by attempting to explain 'the methods of raising mana used by real world magicians' (*Authentic Thaumaturgy* 1978: 14). First, he castigates those who conflate 'mana' with 'manna', properly identifying the latter as 'an edible substance', whereas he identifies the former as 'a Polynesian word for magical and spiritual energy' (ibid.). Sanctioned methods for generating mana include singing or chanting, dancing or meditating, though all of these methods take considerable time to accrue mana. Bonewits is careful to relate these practices to existing game descriptions from the *Arduin Grimoire* and a recent game called *Chivalry & Sorcery* (1977), a competitor to *D&D*. He also notes that 'certain beverages and herbal potions can produce enormous amounts of mana and/or open up the mage to large inflows of power' (ibid.: 15) surely the first reference in game literature to the idea of a 'mana potion'. Bonewits counsels us, however, that raising mana so quickly is very dangerous, and can lead to insanity and even demonic possession. *Authentic Thaumaturgy* provides a separate table on 'tapping' mana from various sources, ranging from 'the ether' to a 'magical familiar' or 'magical device', and then 'willing' or 'forced' persons, and finally deities (ibid.: 94). Careful formulas allow gamers to calculate the exact results of tapping mana in this fashion.

Authentic Thaumaturgy was produced by a company called the Chaosium as a generic supplement applicable to any role-playing game. By 1978, several companies had produced fantasy role-playing games to compete with *D&D*, and the Chaosium itself joined the market that year with its game *Runequest*, by 'Steve Perrin & Friends' as the original cover says. While *Runequest* uses a spell point system

based on a statistic called 'Power' or 'POW' for short, the rulebook does allude to mana: for example, the chapter on 'Rune Magic' begins with a description of how 'Mana is to the Spirit plane what matter is to the physical world. Power is the capacity to collect mana. Spells then shape the mana to attain a particular effect' (*Runequest* 1978: 56). Although *Runequest* makes no further mention of mana, its conceptual place in the game shows how pervasive the use of mana had become in the Berkeley circles where Perrin and his 'Conventions' circulated. When Bonewits published a description of how his mana system could be applied to dungeon adventuring in the first issue of the Chaosium's house organ *Different Worlds*, these ideas reached a still wider audience.

Outside of Berkeley, numerous other communities incorporated mana into game products in 1978. For example, Simulation Publications Inc., a board wargaming company, published their title *Swords & Sorcery* in May 1978 as a hybrid of a role-playing game and a wargame. Its designer was Greg Costikyan, mentioned above for his 1975 proposal to incorporate Niven's vision of land-based mana into role-playing games. *Swords & Sorcery* unsurprisingly does include mana (given again as 'manna'), this time as a spell point system for characters; clearly this follows from Costikyan's 1975 usage. Whether or not Costikyan's New York version of mana was influenced by the newfound interest in Berkeley is unclear.

Additionally, a company called Little Soldiers in Rockville, Maryland, published Ed Lipsett's rulebook called *The Book of Shamans* (1978). This was one among several generic accessories for role-playing games that Little Soldiers had published since 1976. Apparently without knowledge of either the Berkeley or New York mana systems, this booklet proposes a shaman character class which has expendable mana points for spell casting. The term 'shaman' does appear in the original *D&D* system, but without any real connection to shamanic traditions; *The Book of Shamans* references 'North American Indian lore' as well as 'Aboriginal Australia' and the 'Siberian tradition'. *The Book of Shamans* stipulates that 'the shaman's brand of magic is based entirely on natural things', and that thus 'all of the listed values for mana point costs assume that the shaman is outdoors'. Significant penalties are incurred if a shaman tries to use magic in an urban setting. Shamans may derive mana from many sources. For example, if a shaman defeats 'a large, dangerous mammal', he may take its

claw as a reserve of five mana points. Mana may also be drawn from locations in the world, 'usually places of great beauty and loneliness'. Shamans may sacrifice limbs for mana (an eye yields 20 points). A final resort for a shaman to gain power is 'to sleep with a woman without her or anyone else knowing about it' (Lipsett 1978: 56–57). From its included bibliography, Rockville mana purportedly draws directly on Eliade's 'Shamanism' and other sources (Budge, Campbell and Frazer, among others) for its account. Although this system was not immediately influential, it shows how paths of influence potentially independent of Niven may have further popularised the idea of mana in role-playing games.

The idea of mana quickly spread beyond these early adaptations, inaugurating a tradition of mana usage in games. At the very end of 1978, Jeffrey C. Dillon published a new role-playing system called *High Fantasy*. The system for Wizards in *High Fantasy* shows the further spread of the concept of mana in the game industry of the day. In it, 'a wizard casting a spell acts as a conduit for aether energy. The amount of aether a wizard can conduct is a direct function of the wizard's skill and is expressed as manna' (*High Fantasy* 1978: 9). A 'first plane' spell costs only a single 'manna' to cast, where a 'second plane' spell costs two. Wizards automatically regain one 'manna' every 24 hours, regardless of whether they cast or rest in that period. Starting wizards have a maximum capacity of three 'manna' points; while the most powerful command 25. Ultimately, this system likely follows the *Arduin Grimoire*, and derives its misspelling of 'manna' from that book's internal inconsistency.

While all of these systems show mana as synonymous with the pre-existing concept of spell points, there were short-lived experiments that tried to fit mana into role-playing games in other ways. For example, in 1977, Steve Marsh began publishing a variant system through the magazine *Alarums & Excursions* which proposed the concept of 'mana levels'. It was not, however, a spell point system: even normal melee fighters have a 'mana level' that determines their relative efficacy compared to others, and various circumstances made this mana level rise or fall.

By the end of the 1970s, however, numerous role-playing games embraced the concept of mana as a system of spell points. Later editions of *Runequest*, for example, award a larger role to mana. Mana figured

as well into many later systems like the *Generic Universal Role-Playing System* (GURPS) published by Steve Jackson. It is difficult to trace direct lines of influence after 1978 because the concept of mana had become so diffuse and pervasive.

From tabletop to computer

Role-playing games made the jump to computers very quickly, thanks to the substantial overlap in the community of computer enthusiasts with fans of games, science fiction and fantasy. Before the personal microcomputer revolution began in the late 1970s, computer games were largely a diversion of college students who had access to university systems and, in some cases, early networks. Those college students were also the core constituency that played role-playing games. The first role-playing games to appear on computers were thus hobbyist products, non-commercial, and often viewed by university authorities as an abuse of computing resources.

The first recorded example of a computer role-playing game was implemented on the PLATO (Programmed Logic for Automated Teaching Operations) network system based at the University of Illinois at Urbana-Champaign, although the surviving account of this game comes from another university on the PLATO network, Cornell. A description by Cornell student Philip Cohen from August 1975 announces that 'D&D can now be played by computer' (Cohen 1975: 4). This early implementation of role-playing via computer did not have any concept of a character class: every character could wield weapons and cast spells. The spell system was extremely simple. Starting characters could only cast one magic spell per trip, but as they advanced in level, they could gain the ability to cast more spells. Already, computer games had embraced the notion that wizards held a reserve of magic power that was expended by casting spells. Only 16 spells were available in the game, and Cohen notes that due to the amateur hobbyist implementation, six of the spells were 'not yet operational' (ibid.).

When the personal microcomputer revolution began in late 1977 with the release of the inexpensive Commodore PET, Tandy TRS-80, and the Apple II, these naturally became a new vector for commercial games to reach the public, along with the Atari Video Computer

System (VCS) console released the same year (Barton 2008). Hobbyists became very interested in the potential for bringing role-playing games to these platforms. This was abetted by the fact that so many of the early adopters and designers of computers were based in the San Francisco Bay Area, which also harboured a vibrant role-playing game community. We can see for example in the November 1978 issue of *People's Computers*, an early microcomputer hobbyist magazine, an article by Steve Perrin about *Runequest*, which promises that 'in this and future issues … we will publish excerpts from *Runequest* and begin building computer programs to (1) assist a gamemaster conducting a game of *Runequest* or (2) implement a simple form of *Runequest* as a computer game' (Perrin 1978: 13). Similarly, Chaosium's *Different Worlds* ran notices in *People's Computers* (and its successor, *Recreational Computing)*, as the overlap in the interested communities was substantial.

By 1979, Gary Gygax hinted in an interview with *White Dwarf* magazine that 'computerized forms' (Livingstone 1979: 24) of *D&D* would be forthcoming as computer products. The earliest commercial microcomputer role-playing games, like the *Temple of Apshai!* (1979) had extremely rudimentary systems, which might not implement character classes or spellcasting in any form. Richard Garriott's *Akalabeth* (1980) allows a choice of playing a mage or a fighter; the uses of the game's crucial 'magic amulet' are however not limited by any constraints in the spellcasting ability of characters.

The early 1980s brought with them a crop of more sophisticated games, such as Garriott's follow-up *Ultima* (1980) and Sir-Tech's *Wizardry* (1981). *Wizardry* followed the precedent of *D&D* in requiring spell memorisation. The *Ultima* series trialed various means of implementing magic, but the most influential was the spell point system of *Ultima III* (1983), especially as the game's Japanese translation was widely imitated in Japanese console role-playing games, including *Dragon Warrior* (1986) and *Final Fantasy* (1987). *Ultima III* referred to its spell points as 'Magic Point' levels, often abbreviated as 'MP', and most Japanese imitators retained the Roman characters 'MP' for their user interface rather than choosing some more localised term.

Much as was the case with role-playing games in the 1970s, this concept of 'magic points', like 'spell points', lingered for some time before it became connected with the idea of mana. Classic titles like

Bard's Tale (1985) and the first *Might & Magic* both utilised 'spell points'; *Phantasie* (1985) had 'magic points' and the first *Legend of Zelda* (1986) simply had 'magic'. The prevalence of the abbreviation 'MP', however, potentially made it easy for 'mana points' to become an alternative to 'magic points' in documentation.

In 1987, the first major personal computer title to incorporate spell point systems as mana appeared: the influential game *Dungeon Master*, by FTL Games, originally for the Atari ST system (although it was quickly ported to the Amiga, Super Nintendo, PC, Apple and numerous other platforms). The *Dungeon Master* user interface shows three bar graphs, coloured differently for each character (or 'champion'): health, stamina and Mana. As the manual states, 'The Mana graph will drop as the champion uses up magical energy to cast spells'. Because 'beginning magic users can hold only limited quantities of Mana', it will not be possible for these starting characters to cast spells that require more 'syllables' to cast (*Dungeon Master* 1987: 8). As characters increase in level, their maximum mana increases as well, as we saw in earlier pen-and-paper systems like the 'Perrin Conventions', *Arduin Grimoire* or *High Fantasy*. Mana, along with health and stamina, can be restored rapidly by sleeping. *Dungeon Master* helpfully provides a lengthy description of the theoretical underpinnings of 'Magick', and how Mana relates to them. It is perhaps especially noteworthy that this description explicitly states that mana is restored 'by drawing new Mana from the world around you', which perhaps deliberately echoes the land-based mana described by Niven's fantasy fiction (see also Morgain's chapter on New Age mana, this volume).

Mana on the table

Although many new wargames and role-playing games appeared on computer platforms in the 1980s, innovation on the tabletop did not grind to a halt. In the early 1990s, an important new genre of games emerged: the collectable trading-card game. The first and most influential of these titles was *Magic: The Gathering* (1993), designed by Richard Garfield and published by Wizards of the Coast.

Magic in its classic incarnation is a battle game, played with cards, that simulates a magical conflict between two wizards. Wizards may summon creatures to attack one another, cast a variety of damaging

spells, heal themselves of damage sustained, or leverage various artefacts, enchantments and counterspells to assist them in battle. All of these actions are powered by mana. As the original rulebook states, 'The upper right hand corner of each spell card shows the cost of casting the spell. This cost is in mana.' Following Niven's vision of land-based mana exactly, mana is something 'which you get from your lands, and occasionally from other sources' (*Magic* 1993: 10). In the course of the game, players have the opportunity each turn to lay down a single land card, and that card can then be 'tapped' for mana. Mana comes in coloured varieties; for example, plains yield white mana while swamps bestow black mana. Creatures and spells usually require a particular flavour of mana to cast; healing spells, for example, often require white mana.

During the course of a casting a spell, a player may 'tap' multiple lands in this fashion. The mana tapped from lands is not however depleted forever; lands become untapped at the beginning of a player's turn, and may be reused in this fashion each turn for casting new spells. But the debt that this owes to Niven's vision of mana is confirmed by the presence in the earliest edition of *Magic* of a card called 'Nevinyrral's Disk' ('Larry Niven' spelled backwards), an artefact which, like Niven's 'Warlock's Wheel', will deprive magical artefacts, creatures and enchantments of power, and thus destroy them. That said, in a 2013 interview with Jon Peterson, Garfield confirmed that when he designed Magic he was well versed in the mana systems developed for role-playing games, including the *Arduin Grimoire*, so influence no doubt came from several sources (30 October 2013, Seattle).

From its humble origins in 1993, *Magic: The Gathering* quickly became immensely popular and influential. Within a year, virtually any new tabletop or computer game that embraced the concept of mana did so in full awareness of the precedent set by *Magic*.

Warcraft and mana

Magic proved immensely popular, and video game designers played it alongside everyone else. That included the people at Blizzard Games (Craddock 2015), originally located in Irvine, California, who played *Magic* to take a break from designing video games, as did the folks at their sister company, Blizzard North, which was based in the Bay Area.

It was a world tightly knit with the tabletop gaming community; one of Blizzard North's artists, Michio Okamura, had even previously illustrated volumes of the *Arduin Grimoire*.

Blizzard made history in 1994 with the release of the computer game *Warcraft: Orcs & Humans*. This first *Warcraft*—*Warcraft I* as it is now known—was innovative because it was a ground-breaking 'real time strategy' or 'RTS' game. Most older computer strategy games were turn-based, like chess: you moved all of your units, pressed the 'end turn' button, then the computer moved all of its units, then you moved your units, and so on. *Warcraft* took advantage of the computing power of the new PCs and ran in 'real time'—you gave your armies orders and they carried them out right before your eyes, simultaneous with the actions your opponent, which might be a computer or a human. The game had a different rhythm than the jittery, gun-heavy slaughterfests played today; a slow and mounting sense that things were building up. The sense of build-up was increased by the fact that you were literally building up: in *Warcraft* you commanded an economy as well as an army. You started with just a few peons and then slowly built farms, barracks, lumber mills and castles. You had to keep the resources flowing to keep your soldiers pushing the front forward.

The first *Warcraft* included various types of spellcasters, including the Conjurer. In the *Warcraft* user interface, the Conjuror has a bar for 'Magic' and a bar for 'HP' (short for 'hit points', a synonym for health derived from *Dungeons & Dragons*). The green Magic bar models a spell point system, as the Conjurer may cast various spells, each of which costs a quantity of these Magic points. What kind of magical energy was it? This was not initially fleshed out; a single employee had responsibility for creating the fantasy setting of *Warcraft*, and apparently there was little need to detail the workings of magic at first.

Warcraft II: Tides of Darkness, released in 1995, deepened the level of fantastic simulation. *Warcraft II* includes a similar user interface showing the health and magic for units, though this time the 'Magic' bar is blue, rather than green like the health bar. We can for the first time find in the manual for *Warcraft II* hints that this Magic bar should be understood as a quantity of mana. For example, the description of the *Warcraft II* mage spell 'Lightning' reads in part: 'Being the simplest of nature's forces to command, Lightning requires

but a fraction of the caster's mana to employ' (*Warcraft II* 1995). The designers of this game must have chosen the term 'mana' because they thought it would be familiar to players—thanks to *Magic* and earlier fantasy systems, it was already in the air.

In 1996, Blizzard North produced the first version of its isomorphic dungeon crawler, *Diablo*. At this point, Blizzard made mana an explicit component of the user interface. The player has two orbs on their display: an 'Orb of Health' and an 'Orb of Mana'. Each is rendered like a globe containing a liquid: red liquid for health and blue liquid for mana. Mana is expended by casting spells, and slowly regenerates over time, although the *Diablo* manual also notes that 'Special mana potions are able to restore the hero's spellcasting abilities by refreshing the body and clearing the mind of the imbiber' (p. 29). Mana was now part of Blizzard's lexicon.

After *Diablo*, Blizzard produced several other games that continued this characterisation of mana, most notably the third installment of the *Warcraft* fantasy wargame series, and then its monumentally successful *WoW* massively multiplayer online role-playing game. *WoW* has brought the concept of mana to more than 10 million players, and is almost certainly the dominant context in which mana is encountered in world culture today.

Conclusion

As we have seen, mana had a long road to *WoW*: beginning from its origins in the Pacific, it travelled to the European world of letters and its quasi-anthropological disciplines, and then spread to the United States in the years after World War II. In this conclusion, we would like to step back from the particulars of this historical narrative and compare anthropologists, quasi-anthropologists and gamers. In discussing the culture of the Pacific Islands, anthropologists often see themselves engaged in dialogue with Pacific Islanders. But as our history reveals, other communities are just as important—and often even more influential—in the dissemination of Pacific Islands' culture to global audiences. Anthropologists interested in the Pacific, then, should recognise and attend to this more complicated dialogue of voices. Anthropologists must also recognise their own placement in a globalised world of cultural production, one in which 'their' concepts

have circulated widely. Just as anthropologists seek to contextualise and historicise Pacific Islander experiences, they must also contextualise and historicise their own subject positions, not merely as agents working in the wake of colonialism, but as participants in this wider global conversation. Otherwise we risk producing a dialogue which is ultimately very parochial and inward looking.

The gamers of the late twentieth century inherited a number of religious concepts from academics, novelists, and filmmakers. The history of mana serves as a case study of the ways in which games transformed these ideas. For mana, that process begins with field reporters, who study cultures like that of the Pacific Islanders to capture the utterances and practices of believers. Academics then grapple with the meaning of these activities and ideas, draw cross-cultural comparisons, and provide accounts for their peers and the general public. These may in turn be commandeered by purveyors of popular fiction, who alter and extend these accounts to serve their own narratives; even theories that have become unfashionable in academic circles may prove inspirational to these authors.

Games added a new and most demanding phase to the process. Once gamers embrace a concept like mana, they must eliminate ambiguities and reduce the idea to a formal construct which can be quantified and systemised. The requirements of gamers differ in this fundamental way from that of novelists or anthropologists, who can embrace ambiguity and uncertainty about the nature of mana. Games must be fair, predictable and capable of simulation, which necessitates the concretisation of a concept like mana into something suitable for the ecosystem of a fantastic game world. The resulting game system has nothing of the subtlety and uncertainty of field reports, and a tenuous relationship with its source at best. It would be interesting to compare how the demands of simulation quantify and regiment theories of mana to the ways in which bureaucracies quantify and regiment local and multivalent patterns of kinship and ethnicity in order to govern (Scott 1998; Mullaney 2011). Theoretically speaking, the topic most directly comparable to the history of mana may be the history of ethnogenesis.

It does however render mana a consensual and measurable property of the world gamers' experience when they play in environments like the *WoW*. Mana potions of various strengths sell for stable prices in that

world, and as its virtual currency exchanges with real world money, the mana of *WoW* trades as do 'real' commodities. While it is tempting for anthropologists to approach this group of gamers who now speak of 'mana' like it is an ostensibly real substance (within the magic circle of gaming (Huizinga 1971)) in a manner reminiscent of Pacific Islanders, this historical account cautions academics to understand their own role in this transubstantiation of mana, and not to approach contemporary adherents to mana without considering the historical circumstances that redefined it. As games have plundered history and fiction for gods and monsters, scriptures and folklore, academics in many disciplines should be similarly mindful of their part in this process of assimilation.

A second conclusion to be drawn from this chapter is that the study of popular culture requires the same sort of care, erudition and attention to detail that anthropologists may more commonly associate with old-fashioned, museum-based studies of diffusion. As historians and sociologists have long pointed out, a cultural studies approach to this material (which is often stimulating but not particularly rigorous) is not the only, or best, way to examine these phenomena. Indeed, just as anthropologists have learned that Pacific Islanders are experts about themselves, we have seen that fan communities, intellectuals, and independent scholars produce accounts of popular culture that are more rigorous, detailed and elaborated than those produced by university academics.

Third, we emphasise the importance of creating these histories of popular culture. Simply because some of the information used to produce these histories is available online does not mean that synthetic histories will be written—nor does it mean that the information will always remain online. And finally, scattered Internet sources must be supplemented with archival and oral historical research. The need for the latter form of research is particularly pressing now, since many of the original generation of game designers and writers are growing old.

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