Introduction

In his 1917 lecture on "Science as a Vocation," German sociologist Max Weber popularized the term "the disenchantment of the world" when describing the rise of scientific rationality and the declining belief in religion and magic. To Weber, not only did the industrialized West undergo—per the literal translation—a process of explicit "de-magification," but life in Western Europe and North America became increasingly fragmented and bureaucratised. As the twin projects of intellectualisation and industrialisation further placed humanity in a cold, distant position of perceived mastery over nature, the cosmos no longer thrummed with indiscernible, purposeful vitality but was instead inherently dead, alien, and mechanical in all its operations. For Weber, the loss of social intimacy and religiosity that had accompanied these developments was a centuries-long process, all inevitably leading to the dissolution of all meaning. For Weber, disenchantment was the defining feature of modernity.

A little more than one hundred years later and the narrative of disenchantment is still going strong. As life in the twenty-first century becomes increasingly surveilled, commodified, and algorithmically predicted, it also becomes commensurately more difficult to dismiss Weber's claims. To quote Jane Bennett, "In the cultural narrative of disenchantment, the prospects for loving life—or saying 'yes' to the world—are not good" (2001: 4). But perhaps unsurprisingly, counter-assertions of the persistence of enchantment and recurring processes of re-enchantment have proliferated in the century following Weber's declaration of the death of magic. Midcentury scholarship from Horkheimer and Adorno—among the most vocal proponents of the disenchantment narrative—indicted modernity as *itself* too-enchanted by its own rationality (1947). Charles Taylor further complicated disenchantment by arguing that we have retained our capacity to wonder at a vast and intricately mechanistic cosmos, even in the absence of a

universal, metaphysical "great chain of being" (2007). More recent work from Jason Ā. Josephson-Storm brought critical attention to the fundamental inconsistencies of "the myth of disenchantment," documenting the multiple esoteric currents that flourished among the pioneers of scientific rationalism at the time of Weber's scrutiny (2017). And Michael Saler, on whose scholarship this article goes into further detail below, has shown that the increased rationalism of the *fin de siècle* produced new imaginative modes that allowed rational minds to still experience wonder (2009, 2012). New entertainments, steeped in the fantastic yet shaped by the rational, would surge in popularity from the Victorian era into the present. But since disenchantment is an ever-ongoing process, as Weber defined it, each new enchantment always runs the risk of losing its magic, and what was once novel and miraculous quickly turns quotidian and banal.

On August 15, 2016, game designer Monte Cook launched a Kickstarter campaign for his latest venture, *Invisible Sun*, a tabletop roleplaying game (RPG) that—in his own words—he believed would make "magic magical again." A tabletop roleplaying game is a collaborative storytelling game where the players adopt the role of fictional characters and describe their actions through conversation, often with the addition of formal rules, elements of chance (dice rolls, card draws, etc.), and one player acting as a hybrid storyteller/referee (this role is often called the "game master") (Peterson 2020). In this sense, *Invisible Sun* was formally no different than its predecessors, but the Kickstarter campaign hinted at adventurous and ambitious design goals. The game's iconography resembled the magic circles and sacred alphabets of medieval grimoires, yet its art and layout drew clear inspiration from the Roaring Twenties and Art Nouveau. Colorful illustrations highlighted *Invisible Sun*'s imaginative, surreal vision of fantasy, and clean, austere photography captured the game's many physical components: round and rectangular cards of varying sizes, secret-bearing envelopes, square-shaped books, and a sculpted

resin hand with unusual glyphs carved into its flesh—all contained in an ominous, matte black cube.

But the very notion that *Invisible Sun* would make "magic magical again" suggested that the magic of fantasy tabletop RPGs was no longer magical. Though magic in *Invisible Sun* was assured to be "weird, wonderful, unpredictable, and dangerous" (Kickstarter 2016), the game's solution to the broader state of disenchantment within the tabletop RPG hobby was not to render magic as a rare and indiscernible force. Wonder was not something so delicate that it needed to be kept in reserve to sustain it. On the contrary, the since-published *Invisible Sun* presents a panoply of detailed magic systems to its players, each maintaining its own distinct mechanical and thematic identity within the larger cosmology of the gameworld. While the coexistence of multiple magical traditions within a single fantasy RPG setting is a common trope, some of the most influential tabletop roleplaying games to significantly feature magic—*Dungeons & Dragons* and *Mage: The Ascension*—have relied heavily upon diegetic (i.e., "in-world" or "in-fiction") lore to delineate between discrete magical practices, privileging description coupled with high-level abstraction over unique procedures and asymmetrical player activity. Description is the dominant mode of representation for how tabletop RPGS depict and differentiate between distinct forms of magic.

This article argues that *Invisible Sun*'s emphasis on making each of its magical traditions mechanically distinct from one another provides multiple powerful examples of what I call *procedural enchantment*: the capacity of rules and procedures to produce a sense of awe, charm, and wonder. The article begins with a brief overview of the origins of tabletop RPGs, illustrating how their systems are ultimately rooted in two interleaved developments at the turn of the nineteenth century: the surging popularity of hobbyist wargaming and the emergence of a literary

genre called the New Romance. It then continues with a short history of magic in *Dungeons & Dragons*—the first and still most-popular tabletop RPG—and highlights key magic systems that followed in subsequent games, paying critical attention to the ways that each system has continued to uphold the hegemony of diegesis over procedurality. To clarify, I use the term "diegesis" to refer to circumstances and events that transpire within the fiction of the game as experienced by the characters of the gameworld. By "procedurality," I refer to the ways that rules and processes create and govern the dynamics of one's experience with an interactive system, such as a tabletop or digital game. This article then analyzes *Invisible Sun* through close reading of its various magic systems, positioning the procedural, non-diegetic differences between these systems as a critical site of meaning-making central to the game's project of ludic (i.e., games-based) re-enchantment. The findings suggest that to better understand the relationship between magic and games in popular culture, future scholarship must attend not only to the ways that procedural representations of magic operate but must also consider how the history (and prehistory) of tabletop RPGs continues to shape which modes of representation are privileged over others.

Tabletop Wargames and the New Romance

All tabletop RPGs, including *Invisible Sun*, can trace their development back to the 1974 release of the first published roleplaying game, *Dungeons & Dragons* (D&D). But D&D traces its own direct ancestry to wargames, which possess a much older and no less significant history. Indeed, while wargames had seen centuries of use in the military, they only reached hobbyist communities in the 1800s (Peterson 2016). In 1870, after the Prussian victory in the Franco-

Prussian War, the military sciences of the much smaller country—who many initially believed would not win the conflict—became the "subject of international scrutiny" (Peterson 2016: 10). The other nations of Europe and the hobbyists that lived in those countries took an intense interest in the wargame *kriegsspiel,* which the Prussian army had used to train its officers. New wargames appeared for both military and civilian use as an outgrowth of this new widespread interest. *Treasure Island* novelist Robert Louis Stevenson experimented with crafting his own rules for wargames using cheap, ubiquitous toy soldiers—rules that his stepson later compiled for publication in 1898. Not long after in 1913, science-fiction author H.G. Wells published *Little Wars*, his own ruleset for playing wargames with miniature figurines. The realistic outcomes of simulated battles, made possible through the soft mathematical modeling of the otherwise indiscernible chaos of war, comprised no small portion of wargames' appeal. And that Stevenson, by way of his son, and Wells, by way of his own pen, were advocates for the wargaming hobby aligned neatly with their literary outputs at the turn of the century. The appeal of wargames closely resembled that of another form of Victorian and Edwardian entertainment, of which Stevenson and Wells both stood at the forefront.

The "New Romance" was a *fin-de-sciècle* literary genre that appealed to the increasingly secular and disenchanted readership of the late nineteenth century. By depicting imaginative and outlandish events through the lens of (quasi-)scientific inquiry, the New Romance enabled readers to delight in fancy "without abjuring modernity's commitment to rational critique" (Saler 2012: 104). The strategies to accomplish this often relied on the inclusion of paratextual elements like detailed cartography (as in *Treasure Island* or *Twenty-Thousand Leagues Under the Sea*) or archaeological photos of potsherds and historical documents (both of which R. Rider Haggard used in the novel *She*). Other novels used documentary forms—like the epistolary

structure of Bram Stoker's *Dracula*—to depict the fictional characters and events of the novels as though they were real and had happened, or at the very least *could* happen. "The imaginary worlds of the New Romance," Michael Saler observes, "And the succeeding marketing genres of science fiction, detective fiction, and *fantasy* fiction proffered an alternative form of rationality, which combined reason and the imagination…[and] re-enchanted the modern world" (2012: 104; emphasis mine). The legacy of the New Romance would play an important role in the development of tabletop RPGs, particularly as wargames of the mid-twentieth century adapted in response to the changing face of modern warfare.

As America emerged victorious but not unscathed from the ashes of two world wars, both of which it had been reluctant to enter, it was apparent that the nature of war itself had changed, and so would the nature of the games that simulated it. With the introduction of nuclear arms toward the end of World War II, the existential threat of mutually assured destruction placed renewed emphasis on foreign policy and diplomacy in the wargames that the military used to train its officers. In 1950s America, commercial wargames like *Tactics* and *Diplomacy* (both published in 1954) reflected current diplomatic realities though the conflicts of such games were set in the past, providing a welcome escape from the looming specter of nuclear war. "For youths who grew up with the threat of conscription or nuclear annihilation," Jon Peterson observes, "the anachronistic warfare of the past must have seemed quaint and safe—totally under control" (2016: 19). And as midcentury commercial wargames plunged deeper and deeper into the past, anachronism eventually gave way to pure fantasy.

The earliest documented fantasy games were unofficial variants of *Diplomacy* set in J.R.R. Tolkien's fictional world of Middle Earth, which D&D co-creator Gary Gygax was himself a participant in; these games were played via post and recorded in the 1969 newsletter

Thangorodrim. Then a year later, in 1970, Len Patt's "Rules for Middle Earth" appeared in the New England wargaming newsletter *The Courier*. These rules allowed players to include trolls, dragons, elves, and—of course—wizards in their wargames. The historical record suggests that Patt's rules very likely went on to inspire Gary Gygax and Jeff Perren's wargame *Chainmail*, the game that would eventually morph into *Dungeons & Dragons* (Peterson 2016). In *Chainmail*, wizards can cast a small selection of large-scale spells appropriate to open warfare, such as granting swiftness to allied units (*haste*) [1], moving entire swathes of earth and vegetation (*moving terrain*), and conjuring poisonous mist (*cloudkill*). These spells—nearly all of which would later appear in D&D—are in addition to their two primary modes of missile attack: *fireball* and *lightning bolt*, which shared their physical dimensions with the standard "large catapult fire" and "heavy field gun" (i.e., a medieval cannon) of other wargames (Gygax and Perren 1975: 31) [2]. The wizard would become the basis of the magic-user class in the first iteration of D&D, alongside the cleric as its divine-magic analogue, sharing only the *detect magic*, *light*, and *protection from evil* spells between otherwise entirely different spell lists. It was into this world—steeped in the mathematical modeling of commercial wargames and the empirical detail of the fantasy genre that descended from the New Romance—that tabletop RPGs would emerge as a preeminent site for the imaginative conception of magic in the late twentieth and early twenty-first centuries. And it would be against the rapidly sedimenting generic conventions that followed that *Invisible Sun* would pursue its own methods of ludic re-enchantment.

Tabletop RPG Magic Systems Before *Invisible Sun*

To be abundantly clear: tabletop roleplaying games as they are currently understood did not exist until Gary Gygax and Dave Arneson published *Dungeons & Dragons* in 1974. D&D also remains the single-most popular tabletop RPG on the market today, with multiple video games, feature films, tie-in novels, and *Magic: The Gathering* card game expansions to its name. D&D originally billed itself as a ruleset for "Fantastic Medieval Wargames Campaigns, Playable with Paper and Pencil and Miniature Figures," but its origins were not in wargames alone (Peterson 2016: 23). Michael Saler notes that D&D was inspired by the "empirically detailed fantasy texts of Robert E. Howard, H.P. Lovecraft, Fritz Leiber and others, which had developed in the marketing genres indebted to the documentary fantasies of the New Romance" (2012: 101). The popularity of these pulp fiction genres, coupled with the 1960s mass-market paperback release of Tolkien's *Lord of the Rings* books in the United States, laid the literary foundations for the coherent and believable imaginary worlds of Gygax and Arneson's creation. Saler similarly observes that in D&D, "Fantasy was accompanied by strict rationality," and that "this combination of logic and fancy was pursued in the name of modern enchantment" (2012: 101). But for *Invisible Sun*, this particular brand of modern enchantment would lose something of its wonder over the course of D&D's long history.

Clerics joined magic-users in the first edition of *Dungeons & Dragons,* and in later editions and supplemental rulebooks, druids, bards, warlocks, sorcerers, and spellcasters from numerous other magical traditions would follow. The wizard's default model of casting a finite number of spells per day, each with predetermined parameters and effects, however, would remain the dominant procedural representation for the way nearly all magic worked in the game's multiple imaginary world(s). This spellcasting method, which required the spellcaster to daily allocate preformulated spells into tiered spell "slots" that were used up upon casting, is a

system that would later come to be known as “Vancian magic,” so named after author Jack Vance who Gygax listed as “Inspirational and Educational Reading” for *Advanced Dungeons & Dragons* in 1979 (224). As a simplified example, in the morning, a wizard studies their spellbook and prepares (among others) a *fireball* spell. The knowledge of how to cast the *fireball* is fixed in their mind up until they cast it, at which point the magic takes effect, and the wizard effectively forgets the spell and must rest again before they can muster up the energy to commit the spell to memory once more the next day.

In an earlier article for his newsletter *The Strategic Review*, Gygax also claimed to have modeled different aspects of D&D’s core magic system on the works of William Shakespeare, Robert E. Howard, Fletcher Pratt, L. Sprague de Camp, and J.R.R. Tolkien (1976: 3). Other systems later appeared as alternatives to the game’s core magic system, but the interconnectedness of Vancian magic to the rest of the game’s ruleset—coupled with the accumulated historical and cultural capital of Vancian magic within the realm of D&D and its fanbase—kept these variants to the periphery of the game. As *Dungeons & Dragons* swelled in popularity in the late 1970s, a legion of tabletop RPG imitators—each with their own slight variations on magic—swiftly followed. Many of the games that appeared immediately in the wake of D&D adopted point-based systems to track spell usage (which D&D also employed in one of its variant systems), but these games generally added little to the development of more nuanced rulesets to expand on the representation of magic in the space of tabletop RPGs. [3]

Some fantasy tabletop roleplaying games deviated from D&D’s Vancian magic system, while others abandoned the notion of prepackaged spells altogether. In 1987, Jonathan Tweet and Mark Rein-Hagen designed *Ars Magica*, a tabletop RPG about Hermetic wizards in a fantastic vision of historical medieval Europe (not to be confused with standard medievalist

fantasy, which often *resembles* the European Middle Ages without directly referencing it). Tweet would later go on to co-design the third edition of D&D alongside *Invisible Sun*'s Monte Cook, and Rein-Hagen would later create the extremely influential RPG *Vampire: The Masquerade*, which would include meaningful elements from *Ars Magica*'s lore. *Ars Magica* implemented a combinatorial spellcasting system where any active verb from a list of five could modify a noun from a list of ten (resulting in fifty possible combinations). Players could cast open-ended spells like *creo ignem* ("I create fire") or *rego mentem* ("I control [the] mind"), which earned the game early praise for being so "earnest, colorful, and meticulous in its development of a magic system with a plausible, coherent rationale" (Rolston 1988: 88). That the game should receive praise for the plausibility and coherency of its magic system speaks to perhaps both a preference for verisimilitude (*qua* a New Romantic form of rationality) and the possibility that other magic systems leading up to *Ars Magica* had been less successful in striking that skillful balance between artfulness of theme and ease of computation.

In 1993, the games publisher White Wolf took *Ars Magica*'s concept of combinatorial magic a step further in its newest game, *Mage: The Ascension*. At its height, White Wolf claimed a quarter of the roleplaying game industry, at the time making it one of the biggest competitors *Dungeons & Dragons* had ever faced (Appelcline 2014: 7). Mark Rein-Hagen provided additional design for *Mage* and helped thread the connective tissue between his previous work on *Ars Magica* and his then-current project, the massively popular narrative-driven tabletop RPG *Vampire: The Masquerade*. *Mage: The Ascension*, alongside *Vampire, Werewolf*, and numerous other game lines White Wolf published, was set in the "World of Darkness." This shared universe was a dark, gritty, and hopeless vision of our own, reflecting the disaffected ennui of the 1990s Goth and punk subcultures from which the game lines drew significant inspiration.

Compellingly, *Mage*'s magic system engages directly with the World of Darkness's explicit postmodernity; in a setting where human life is cheap and inherently meaningless, *Mage* reframes subjectivity—and subjectivity's power to ascribe meaning—as the premier site of magical and political power. This design was likely also strongly influenced by the rise of chaos magick in the 1970s and 1980s, which itself emerged from many of the same countercultures that the World of Darkness had already drawn on for its inspiration and which similarly positioned subjectivity as the primary engine of magically affecting change.

One of the central conflicts in *Mage* is that of the "Ascension War," though the degree to which the game centers on this conflict varies across editions. Of the two primary factions in the Ascension War, there are the Traditions, mages who practice different kinds of magic directly inspired by an assortment of real-world spiritual systems, and then there is the Technocracy, a clandestine global conspiracy of mages who exert control over the non-magical masses by cultivating widespread dependence on scientific and technological progress. In the fiction of the game, consensus among the unawakened masses ("Sleepers") dictates the limits of reality, meaning that what is possible is defined solely by what is broadly believed to be possible. In light of this core conceit, *Mage: The Ascension* is as much a game about conflicts between personal beliefs and ideologies as it is about spells and charms.

The game's "dynamic magic" system relies entirely upon the manipulation and combination of nine different aspects of reality called Spheres, each of which govern a specific facet of the world, such as Matter, Time, and Entropy. Using whatever tools align with their personal vision of how magic works, each mage threads together elements of whatever Sphere they require to achieve the desired effect. Notably, *all* magic follows these rules. In battle, a Christian mystic may pray for an archangel to smite their enemies while a Flash Gordon-inspired

scientist uses a raygun to vaporize their foes (both are considered “magic” within the rules of the game). Players in either scenario add together the same amount of dice to achieve a numerically and procedurally identical effect—only the in-game fiction is different. *Mage*’s grand unified theory of magic reaffirms the game’s core theme of postmodern subjectivity, suggesting that all acts transgressing the limits of accepted reality essentially constitute magic, regardless of their ontological or epistemological premises. The text of the second edition rulebook uses Roger Bannister’s 1954 four-minute mile as a mundane example of skill and belief transcending the perceived—and thus cosmically self-imposed—limits of reality (1995: 66).

Nevertheless, *Mage* also reaffirms diegetic description over non-diegetic procedure as the preeminent site of meaning-making during the course of play. Spheres are the *lingua franca* between mages of all stripes, and all spellcasting procedurally transpires through the same core resolution mechanic: the player rolls a number of dice equal to their Arete (an abstract measure of their enlightenment) while attempting to overcome a difficulty set by the magnitude and outlandishness of the spell’s intended effect. Though the “Traditions and factions [of *Mage*] interpret the Spheres very differently…the basic paradigm remains the same” (1995: 67). The universalizing effect of this design decision undermines both the game’s social constructivist bent as well as its efforts to enchant. Because mages maintain these differing interpretations of the Spheres *solely* within the *fiction* of the game, and because these differing interpretations aren’t operationalised in the rules beyond that, the magic system’s design subordinates and implicitly forecloses representations made possible through player activity and whatever procedures may govern that activity. Players reciting their incantations at the table may enhance (or detract from) the experience of play, but according to the rules, such methods of engagement with the game aren’t strictly necessary.

Procedurality

Up until now, this article has largely used the language of rules, mechanics, systems, and player activity to describe one of this paper's central concepts: procedurality. Procedurality may, of course, broadly refer to the quality of having—or being characterized by—processes and procedures, but game scholars have produced narrower definitions that better illustrate how procedures relate to gameplay. Proceduralism as an analytical framework in game studies owes much of its theoretical foundations to Janet H. Murray's 1998 book *Hamlet on the Holodeck: The Future of Narrative in Cyberspace* and Ian Bogost's 2006 *Unit Operations* and 2007 *Persuasive Games*. Murray argues that to write procedurally is to author rules that generate a representation "rather than authoring the representation itself" while Bogost similarly understands procedurality as "the fundamental notion of authoring processes" (Bogost 2007: 4, 12). In a proceduralist framework, games are understood through their capacities to "convey messages and create aesthetic and cultural experiences by making players think and reflect about the very nature of the rules, in the way the rules allow them to" (Sicart 2011). The author's use of rules, processes, and mechanics—those elements of play that actively shape the lens through which the player views the ludic experience—is central to this analysis of *Invisible Sun*.

In *Game Magic: A Designer's Guide to Magic Systems in Theory and Practice*, one of the proverbs that game scholar Jeff Howard espouses is an imperative for designers to "reduce the gap of player performance" (2014: xxvii). Elaborating, Howard states, "To enhance player immersion and engagement with a magic system, reduce the gap between player action and character performance by allowing players to master some of the techniques and knowledge

wielded by their characters” (Ibid.). Bogost makes the similar—albeit broader but no less relevant—observation that “tighter symbolic coupling between user actions and procedural representations” augments the player’s “dialectical engagement” with a game’s causal model (2007: 42). Paradoxically, while procedurality is (to some) a defining attribute of games and other interactive media, tabletop RPGs as a whole have struggled at times to meaningfully reinforce these causal models where magic is concerned. By contrast, *Invisible Sun* provides four powerful examples of Howard’s and Bogost’s proceduralist principles at play.

Invisible Sun

In the fiction of the game *Invisible Sun*, the players’ characters are *vislae*: mortal spellcasters who left the world of the Actuality years ago during a great war before taking refuge in the gray, banal, and magicless world of the Shadow (the name given to the illusion we mistake for our real world). At the start of the game, the player characters have finally returned from Shadow at the end of the war to resume their lives in the surreal world of the Actuality. This premise sets up the characters, much like the players themselves, to be powerful but naïve. The game draws clear and self-declared inspiration from a number of sources, listing in one of the game’s four core rulebooks (*The Way*) the artistic works, movements, thinkers, and belief systems that influenced the development of the game and its setting. Included—among many others—are Surrealism and Salvador Dali, Doctor Strange in all his incarnations, alchemy, the Tarot, chaos magician Peter J. Carroll, the Victorian poet and occultist A. E. Waite, and the graphic novel *Promethea* by comic-book writer and magician Alan Moore (Cook 2018: 124). At the outset, it is clear that we are not in medieval Europe anymore.

In *Invisible Sun*, the players' characters can belong to one of four magical orders—the Vance(s), Weavers, Makers, and Goetics—each of which possesses its own unique form of magic inspired by fictive, gamic, and historical practices. There are also the Apostates, a fifth "order" of vislae who reject the teachings of the four formal orders and instead possess the ability to counter and dispel the magic of others. Similarly, *all* vislae reject the seemingly quaint and outdated title of "wizard"—another hint that the magic presented in *Invisible Sun* is not the familiar stuff of English boarding schools and fantasy adventuring games. In addition to the game's four asymmetrical magic systems, *Invisible Sun* boasts a litany of minor cantrips, long-form rituals, and general-use spells available to all vislae, as well as ephemeral magic items and stronger objects of power. This article only discusses the first four orders and their magic, as Apostates do not possess a strong thematic or mechanical identity beyond spurning the other orders, and *Invisible Sun*'s communal magic is not especially novel when compared to the game's predecessors.

Vislae from the Order of the Vance (also called "Vances") learn prewritten spells and store them in their memories, a practice inspired so directly from the eponymous Vancian spellcasting system of *Dungeons & Dragons* as to border on pastiche. Even the spells themselves pay playful homage to D&D's nomenclature, with evocative eponymously-named spells like *Buela's lamp* and *Uriale's vecordious action*. *Invisible Sun*'s variation on Vancian magic, however, capitalizes on the game's own emphasis on materiality. Several of the odd-shaped components in the ominous black cube shown on the game's Kickstarter campaign page are intended for player use. Vances are expected to fit a number of differently-sized spell cards into a limited amount of space on a larger placard. Smaller cards have the descriptions for weaker spells printed on them, with larger and larger cards containing evermore powerful spells. As a

Vance progresses in their character development, their mind expands, which is reflected by an accordingly increased allotment of space on the placard, meaning that the player can store more—or simply more powerful—spells in their memory. In determining which spells the Vance will fix into their memory, the player must choose not only between the different effects made possible by each spell but also how much figuratively "mental" and *literal* space each spell occupies. Computer gamers may recognise the *Tetris*-like arranging of spells within a confined space as resembling the inventory management systems of digital action RPGs like *Diablo* or *Deus Ex*, but by defining the parameters of the mind as an actual space, *Invisible Sun* references an older, more esoteric tradition: the mnemonic practices associated with premodern occult thinkers like Ramon Lull and Giordano Bruno. "Memory palaces" and "theaters of memory" were the interior, imaginary spaces that classical and Renaissance scholars created to actively store their memories [4]. For the early modern magicians who often employed such techniques, memory was not a passive function of cognition but an aspect of the mind that could be manipulated and expanded through meditation and ritual practice. Similarly, whether deliberate or incidental, the Vance player's own embodied practice of finding space to house one's memory—in a simultaneously partly real, partly imaginary place—hearkens back to these thoroughly wizardly operations.

The combinatorial magic system of the order of Weavers in *Invisible Sun* resembles those of *Ars Magica* and *Mage: The Ascension*, as Weavers blend together large, abstract concepts such as Blood, Winter, and Freedom to cast their spells. Nested within these larger concepts called "aggregates," *Invisible Sun* provides "qualities" and "absences": each a set of additional one-word tags that more closely define what exists within the purview of an aggregate and what is anathema to it. A spell that combines the threads of Fire and Moonlight, for instance, could

produce a magical illumination but not heat, since heat is listed as an "absence" of Moonlight, regardless of the inclusion of Fire in the spell (Cook 2018: 69). Where the Vance (and by extension, the Vance's player) experiences magic through the more traditional dungeon explorer's logic of solving problems with the ingenious use of highly specific tools, Weavers traffick in taking soft ideas and fashioning out of them a more finely tuned instrument, all while bearing in mind the limitations of the concepts invoked. At first blush, the aggregates of *Invisible Sun* may resemble the Spheres of *Mage: The Ascension*, particularly as they share the characteristics of being expansive categories that a player may freely mix together to produce more specific effects. But since the Spheres of *Mage* govern discrete aspects of reality (Matter, for instance, pertains to all non-living gasses, liquids, and solids and their chemical compositions), they collectively resemble the makings of a physics engine for the game: a set of rules that define how the world *mechanistically* operates. Aggregates, on the other hand, encourage the Weaver to adopt the poetic logics and associative thinking of real-world sympathetic magical practice, encouraging players to perceive the world through its symbolic organization rather than its atomic one. It is difficult to overstate how significantly this departs from traditional magic systems design, particularly within the realm of tabletop RPGs. But just as the Vance encourages its player to conceive of their memory in the same spatial sense that a wizard written by Jack Vance might, the Weaver asks of its player conceive of their own imagination as an "organ of knowledge" as one inhabiting—and perhaps momentarily adopting—an enchanted worldview might (Hanegraaff 2013: 5).

Using rare ingredients, catalysts, and stabilizers, the Order of Makers in *Invisible Sun* fabricate magic items following a flowchart called the "Maker's Matrix" (Cook 2018: 62). The process of creating a magic item—the finer details of which are left to the player and Game

Master to decide—closely resembles both the trial-and-error experimentation associated with medieval and Renaissance protoscientific alchemy on the one hand and the "push your luck" mechanics of contemporary strategy board games on the other. While Vances must carefully predict what spells they will need for the challenges that lie ahead and Weavers must make do with whatever spells the symbolic logics of their aggregates can support, Makers contend with the unpredictable and risky dimension of magic: its ultimate incalculability and unknowability. Many steps in the Maker's Matrix run the risk of producing an unexpected side effect or crafting an item that does something entirely other than what was intended. Or, worst of all, a disastrous mishap may occur. The Maker's unique random generation tables closely resemble those of beloved D&D magical mainstays like the Rod of Wonder, the Deck of Many Things, and the sorcerer's "wild magic" effects. Each of these examples still exist in D&D's most recent edition. Similarly, the Maker's random generation tables are—like those in D&D—not entirely removed from how the classical world conceptually linked the uncertainty of lotteries with the practice of divination (*sortes*). And this connection between aleatory and the divine remains very much alive in gamer culture today. There abound playful superstitions about lucky dice, "cursed" dice, and of dice "misbehaving." Players sometimes sentence their unruly dice to serve time in "dice jail" or to sit in the corner wearing miniature dunce caps. In Max Weber's view of the disenchantment of the world, there exists an implicit belief that the world can, eventually, become fully knowable. But through the Maker, players can distance themselves from that disenchanted possibility to instead inhabit and—more than any other order—*embrace* the uncertain and unknowable.

Lastly, readers familiar with the *Ars Goetia* of the grimoire *The Lesser Key of Solomon* will recognise the namesake of the fourth formal order of *Invisible Sun*, the Goetics. The Goetics

in *Invisible Sun* conjure, converse, and make pacts with otherworldly entities, namely angels, demons, ghosts, and various spirits of elemental and primordial forces: a fitting theme to round out the orders as most real-world belief systems undergirding the lived practice of magic include—and, indeed, hinge on—the existence of intermediary spirits as the agents of supernatural action. Though *goetia* in our world is characterized by its extremely technical ritual operation (the term “ceremonial magic” being sometimes used in both contemporary and historical texts to specifically connote spirit conjuration), the careful arrangement of candles and the fastidious inscription of intricate diagrams in *Invisible Sun* is reduced to the following: “The Goetic makes whatever preparations they feel necessary, such as forming a protective circle” (Cook 2018: 75). Perhaps deliberately unceremoniously, *Invisible Sun* subverts the obvious expectation that the player will be expected to describe their rituals in exacting detail, and the game instead leverages the tabletop RPG medium’s most abundant substrate: conversation. After conjuring the being, the game expects the Goetic’s player to interact with the spirit using persuasion, bribery, coercion, or trickery in a process called “colloquy.” While dice rolls and tables with numeric modifiers and bribe values provide a broad mechanical framework for this dialogue, colloquy centers the core activity of discussion between the players and the Game Master as the ritual through which the magic is enacted. Within the magic circle of the tabletop roleplaying game, utterances already adopt a certain kind of performative magic. The very act of declaration itself constitutes the action it describes, and the Goetics merely reify this intrinsic procedural property of the game within the gameworld. Few acts could be more embodied. In the colloquy of *Invisible Sun*’s Goetics, the rules that guide the player’s speech are not simply the framework that shapes the conversation but the explicit means by which player actions are more tightly coupled to their procedural representations.

Conclusion

Among its many novel contributions to the tabletop RPG design sphere, *Invisible Sun*'s multiple magic systems place critical re-emphasis on procedurality as a route to enchantment. This is in stark contrast to a long history of magic in tabletop RPGs where description on what transpires in the gameworld has long subordinated the role of non-diegetic player activity in articulating key differences between different kinds of magic. In *Chainmail*, Gygax described the wizard's key missile attacks, *fireball* and *lightning bolt*, as having hit areas functionally identical to catapult fire and cannon fire. In *Dungeons & Dragons*, meaningful differences between arcane and divine magic exist only insofar as the players are willing to describe those differences, since clerics, druids, and wizards (among a host of other character classes) all cast spells in the Vancian manner, with many sharing access to a number of spells between them. In *Mage: The Ascension*'s postmodern vision of Awakened magic, all mages—Viking soothsayers, Hermetic magi, and Technocrat scientists alike—achieve the exact same magical effect using the same dice rolls and in-game statistics; divergent descriptions of how these effects are achieved in the fiction of the game mark the only meaningful site of difference between their reality-transgressing magical acts.

The historian Arthur E. Imhof once wrote, "Our life cycles have become more predictable, calculated, and uniform, and, in so doing, they have also become more colorless, more interchangeable, and more monotonous" (1996 [1984]: 36). Though Imhof was speaking of how contemporary postindustrial life contrasts with that of early modern German agrarian life, his words ring relevant nonetheless. This article argues that a similar interchangeability between

fireballs and catapults, between divine prayer and arcane formulae, between Hermetic ritual and hyperscience may have rendered ludic magic similarly colorless and monotonous. The gossamer-thin gloss of description has become a shorthand for even the most sophisticated game designs to abstract—and thus to some extent *ignore*—the tactile differences between distinct forms of magic. In doing so, these games have diminished the variegation of Weber's "great enchanted garden" and reduced magic to a monolith scarcely different from Enlightenment rationality (1922: 270). The history of some of the most popular and influential magic systems in tabletop RPGs—which were defined not by operative differences in magical tradition but by superficial descriptions of their differences—reveals the more precise nature of ludic disenchantment that inspired *Invisible Sun*'s quest to make "magic magical again."

Much in the same way that scientific rationality defined the mentalités of the late nineteenth century, so too does procedurality characterize life in the twenty-first. Where Weber saw a rational, alienated world oriented around the flows of bureaucracy, the one around us becomes increasingly algorithmic and mediated by computational technologies. And just as Saler argues that rationality in the New Romance could produce modern forms of enchantment, procedurality has its own unique capacity to enchant. Games of all sorts—mobile games, computer games, console games, board games, card games, tabletop roleplaying games—show no signs of declining in their popularity. And as these artifacts accrue evermore cultural influence, occupying ever larger swathes of the media landscape, scholars of culture and the supernatural must contend with the specific ways that procedurality, as one of the unique attributes of games as an expressive medium, shapes representation. We must attend to the modes by which interactive media represent esoteric currents, take note of the interleaved

histories that inform those modes of representation, and acknowledge the ways that such histories have come to privilege certain modes of representation over others.

[1] Spell names are presented throughout the text, regardless of game line, using lowercase italics, except in the case of proper nouns, which are capitalized.

[2] While this article cites the third edition of the rules for *Chainmail*, Jon Peterson's *Playing at the World* confirms the same rulings existed in the first edition of the text (2014: 42).

[3] Though it is worth noting that even in its first edition in 1977, *Chivalry & Sorcery* included an extremely robust set of magical materials with associated astrological signs and correspondence tables as well as an exhaustive list of demons that magicians could summon within the game. Ironically, though the designers regarded players' preference for "'newer' and 'bigger' and 'better' stuff…[as a] product of a technological mind," multiple magazine reviews criticized the game's ruleset for being far too complex for most players.

[4] Dame Frances Yates's 1966 book on the topic, *The Art of Memory*, enjoys the distinction of being one of Modern Library's 100 Best Nonfiction Books of the Twentieth Century.

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