
Examining Literacy Practices in the Game Magic: The Gathering



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The author discusses Magic: The Gathering as not only a card game but as situated in New Literacies as a Discourse and community of practice with rich, complex, and multimodal literacy practices. She describes apprenticeship to the game from the perspective of a novice and a long-time player and argues that entering its Magic Discourse depends on the requisite vocabulary, multimodal texts, and embodied literacy practices. She discusses the game in relation both to literacy and to play and reviews relevant theory and research, giving concrete examples from her own experience. The author describes the game as a rich, complex literacy tool that can foster important literacy practices in its players. **Key words:** card games; literacy; Magic: The Gathering; New Literacies

Introduction

I HAD NOT HEARD OF MAGIC: The Gathering (MTG) before I met Paul, who introduced me to the game when we were doctoral students at Michigan State University. Before he invited me to play the game, Magic—and his excitement and fascination with it—seemed foreign and mysterious, something outside my realm of knowledge (or, to be honest, even my interest). When he first talked about it, he shared large foldout graphics and discussed the “Multiverse,” “planeswalkers,” and much else that made no sense to me. The background of the game he spoke of seemed abstract, without connection to the nuts-and-bolts of the game that he eventually invited me to join in. Only as we sat across from each other and he explained, corrected, and modeled game rules and strategies, did I begin to appreciate the complexity of the game play. Learning the basic rules, card types, and game play phases, I noted that my limited understanding of specialized and context-specific uses of vocabulary overwhelmingly hindered my ability to play strategically. Furthermore, even as I continue to play, I still

struggle to comprehend fully the multiple interrelated and complex texts on the cards (as well as numeric interplay with card text). And there was more—Magic is a physical game. Paul arranged his cards in particular ways, stacking *mana*, and moving his creatures to the battlefield in particular positions. He seamlessly placed counters on creatures and computed increased statistics. My illiteracy relative to the game also limited my physical interaction with the cards and game play. Despite my struggles, I know more now than I did back in graduate school, and as a literacy scholar, I have viewed my experiences in the context of literacy research and appreciate the game as a rich, multifaceted, multimodal, and embodied text.

As a newcomer to the Magic Discourse, I plunged into the position of a struggling literacy learner in a language very much foreign to me. Understanding the vocabulary and the role of the different type of texts on Magic cards became the tools I required to gain access to that mysterious world of Magic to which Paul initially exposed me. In what follows, I invite you into my apprenticeship to the Discourse and community of practice of Magic. Paul, my patient mentor, accompanies and demonstrates how I am still learning and acquiring the myriad literacy practices of Magic. While I believe my experience with literacy and Magic is relevant and offers important insights about literacy, cognition, and game play, I acknowledge that my experiences and the conclusions I draw do not represent those of all players or all the complex interactions between literacy and the aspects of Magic. My story should not be essentialized or generalized. Instead, I invite you into my unique experience of Magic and hope it can provoke you to think through the different processes involved in literacy and learning.

Twenty Years of Magic: The Gathering, a Literacy Tool

I was twenty-seven when Paul—an avid MTG card collector and player with years of experience playing the game—taught me to play one weekend that we both spent otherwise procrastinating work on our doctoral term papers. He showed me his collection and carefully crafted decks with excitement and pride. He had several decks that stand out in my memory—goblins, fairies, and elves. After Paul first taught me to play, I grew attached to the fairies and elves decks, and, much to his dismay and ire, I often beat his decks, even though I was a novice (which shows how much credit should go to his deck building and mentorship in teaching me the game).

Magic: The Gathering begins as a tale of American ingenuity. As I dug into its background and learned about its origins, I discovered that a doctoral student named Richard Garfield created the game. He had initially developed a board game he called RoboRally, which he pitched to Wizards of the Coast CEO Peter Adkinson.¹ Although Adkinson did not buy RoboRally, he suggested that Garfield create a more nuts-and-bolts game for players “waiting in line at conventions.”² Garfield went back to the drawing board and, thus, Magic was born, debuting two years later.³ The first Magic Prop Tour followed. In these early years, Magic was produced only in English. The game has since exploded in popularity, and its players live around the world—some twenty million of them.⁴ So, Magic cards are produced in dozens of languages. Players can access the digital *Magic Online* and *Duels of the Planeswalkers* on computers and game consoles. New cards are constantly released, and players crowd into comics and gaming shops to buy individual cards or booster packs to build decks for tournament play and to engage in the world of Magic.

The game of Magic is set in the Multiverse. The Multiverse is vast, with endless numbers of worlds stretching into infinity. These worlds are called planes; each plane of existence is unique, having its own story and history. In Magic, the journey of a planeswalker in the Multiverse is one of soulful self-discovery, grit, and power. Magic players are planeswalkers, and the decks they construct allow them to enact battles they encounter in the different planes. As Wizards of the Coast produces more planes, new dynamics on these planes, and new cards, the resources and potential battles of planeswalkers are limited only by players’ motivations and imaginations.

The Magic player needs to construct decks for game play. Deck construction is strategic in a concrete way, but it is also an act of creation rich in background knowledge, meaning, various literacy practices, imagination, and personal flair. Concrete requirements for construction require players to make decisions about costs and gains. Upon opening a booster pack or reworking existing decks and swapping out new cards to revise decks, players have to choose card composition carefully. Magic decks have several major types of cards: lands, creatures, enchantments, artifacts, sorceries, instants, and planeswalkers. Lands produce mana (magical energies), and mana fuel the casting of these cards or spells. These decks were constructed around what is called a tribal strategy, bolstering the effects of playing one type of creature, like fairies. Enchantment and artifact cards have some permanent effect on a creature or creatures, a player or players, or the game; sorcery and instant cards have a temporary effect on a creature or

creatures, a player or players, or the game. The strategic decisions in Magic deck construction are radically variable across thousands of cards and strategies.

Deck construction includes player background knowledge, meaning, various literacy practices, imagination, and personal flair. Players bring levels of understanding of play to Magic decks and games. For instance, knowledge of strategies and play types, as well as player archetypes and the social dynamics typical in a game of Magic, prompts players to make imaginative and personal choices in game play. Beyond the strategic math of deck construction, players choose to build decks around particular artists, build decks specially to address particular players or play styles, and build decks with idiosyncratic attention to aesthetics or language.

As in nearly all card games, once players have decks, they take their spots on opposite sides of a table and cast spells until one reaches a victory. The most conventional Magic game sees creatures and other spells deal enough damage to drain an opponent's life total from twenty to zero.

I invite readers to think of Magic as more than a game—in fact, as a rich, complex, and multifaceted text. I encourage readers to think of Magic players as members of an exclusive community with specialized knowledge. And I challenge readers to consider how the various components and actions of Magic play exemplify literacy processes. I hope this discussion suggests the ways to see that Magic fosters and grows the literacy skills of its players. I frame the discussion by pairing literacy theory and research with examples from Magic texts and game play. I begin with the notions of Discourses and communities of practice to illustrate the specialized and situated world of Magic. I discuss the literature about vocabulary acquisition and use it to explain how Magic fosters vocabulary acquisition and its conceptual development. I examine embodied cognition to show how the physical aspects of Magic game play mediate vocabulary development. Finally, I situate Magic as a living, multidimensional space that reflects and adds to our knowledge of literacy more broadly.

Theoretical Framework

Magic players do not exist in isolation. Magic is a game played with others. When an individual states, "I play Magic," she implies her membership in a large community of Magic players. This player has specialized knowledge of the game that solidifies her membership in that community. The theoretical framework

that guides my discussion and analysis of my knowledge about Magic rests on the notion of learning as socially situated. Specifically, I use James Gee's⁵ concept of "Big D" Discourses and "little d" discourses, Jean Lave and Etienne Wenger's⁶ notion of communities of practice, and Lev Vygotsky's⁷ theory of social constructivism to the frame my experiences. I also discuss my experiences in the context of literacy research, particularly research on vocabulary because it contributed much to my learning curve. I connect this literacy research to Discourses, communities of practice, and Vygotsky's work. I further dissect how my limited knowledge of the Magic vocabulary affects my physical interactions in the game through the theory of embodied cognition.⁸ Together, these components reflect the multiliteracies required to engage authentically in Magic game play (something I am still developing). Of note, my experiences could also be framed through play theory.⁹ However, the thrust here rests on the very notion that I am inexperienced in the play of Magic and the academic field of play and gaming. I therefore situate my experiences within my own area of expertise: literacy and education. I offer this approach to provoke further discussion among literacy specialists and experts in play theory.

("Big D") Discourses and ("little d") discourses of Magic

Gee uses "Big D" Discourses to describe the "saying (writing)-doing-being-valuing-believing combinations" that represent "ways of being in the world."¹⁰ This is the "language we must say" and the ability to "write the right thing in the right way while playing the right social role and (appearing) to hold the right values, beliefs, and attitudes."¹¹ "Little d" discourses refer to normal stretches of connected speech that are comprehensible.¹²

Imagine the Discourse of academia and all the specialized ways of talking, thinking, acting, communicating, and so on, required to engage in that world. As a member of the academic Discourse I have particular saying-writing-doing-being-valuing-believing combinations. For example, in my academic writing I know that, depending on the situation, I must adhere to particular style guides such as those of the American Psychological Association (APA), the Modern Languages Association (MLA), or the *Chicago Manual of Style*. I value research-based arguments and analysis. When conversing with other members of this academic Discourse, I can mention "doing a lit review," and other members of the Discourse immediately understand the meaning, action, rationale, and beliefs that underlie my statement. Discourse members understand how my epistemological stances influence my view of learning and the way I conduct my research.

Gee would describe the academic Discourse as a type of “identity kit” that, he says, “comes complete with the appropriate costume and instructions on how to act, talk, and often write, so as to take on a particular role that others will recognize.”¹³ Those outside academia may feel lost when they overhear a colleague and me discuss the challenges I am having with a lit review. Becoming a member of a Discourse requires extended time and learning, and these must always be socially situated and mediated. Becoming a member of the academic Discourse sometimes consumes the entirety of the process of acquiring a doctoral degree, and during that time (and often after), new scholars frequently experience what has become known as the imposter syndrome. Joining the Magic Discourse requires a similar process of thorough learning, and the socially mediated acquisition of its identity kit also takes time, so the ability to become a recognized member of the Discourse is far from instantaneous or easy. It requires both broad and intensive knowledge and the acculturation of ways of being in the Magic world.

Members of the Magic Discourse know the Multiverse that forms the backdrop for the game; they know the rules of the game; they know how to speak and move when playing Magic; they know that an individual player identifies with her or his deck. Members of the Magic Discourse also employ a specialized vocabulary that only members understand and deploy competently. We easily identify those outside the Discourse of Magic not only because they do not know rules of the game but also because they lack knowledge about its discursive practices and specialized vocabulary, its ways of reading and acting upon the cards, or the craft of building decks.

In his discussion of Discourses, Gee references the term *mushfake*, which Nancy Mack wrote about in her study of prison culture. She defines *mushfake* as “do[ing] something less when the real thing is not available,” such as when “inmates make hats from underwear to protect their hair from lice, the hats are *mushfake*.”¹⁴ A player completely new to Magic will spend significant time *mushfaking*—making due with limited knowledge to meet the demands of a Discourse he or she is not yet part of. Such *mushfake* makes a player stand out as one who does not yet have the Magic identity kit. To a new player like me, the way a seasoned Magic player identifies with the game and the characters in the game seemed at first foreign, as did the many specialized vocabulary and speech acts necessary for game play. The process of learning to play Magic—of becoming a member of the Magic Discourse—takes time and is fraught with complexities. *Magic—a Community of Practice*

Lave and Wenger's¹⁵ notion of communities of practice resembles Gee's concept of Discourses and helps us think about the process of becoming a true Magic player. These communities have "shared cultural practices that reflect their collective learning."¹⁶ Communities of practice require competence and experience. The notion of competence—what it takes to act and be recognized as a knowledgeable member—is similar to Gee's Discourse identity kit. Experience requires an ongoing participation in the Magic community. The notion of competence has several components: joint enterprise, mutuality, and a shared repertoire. In the community of practice of Magic, a player must be competent enough to contribute to the joint enterprise of Magic game play, which requires an ability to interact and establish norms with other players, which then contribute to joint game play. Together, these produce the shared repertoire of "communal resources—language, routines, sensibilities, artifacts, tools, stories, styles, etc."¹⁷ Relevant to gaining membership to the Magic community, Wenger explains that communities of practice "grow out of a convergent interplay of competence and experience that involves mutual engagement. They offer an opportunity to negotiate competence through an experience of direct participation."¹⁸

Thus, capable members of the Magic community of practice acquire the necessary experience to become competent through extensive interaction with other players. Longtime members of a community are referred to as old-timers, while those outside the community who wish to be a part are known as newcomers.¹⁹ Newcomers cannot automatically become a part of a community of practice, just as an individual outside a Discourse cannot automatically become a member of a Discourse. Lave and Wenger suggest that a newcomer has to be apprenticed into the habits of a community of practice through a process they call legitimate peripheral participation.²⁰ The concept of legitimate peripheral participation describes the learning relationship between newcomers and old-timers that results in enculturation into the community of practice. Moving from newcomer to old-timer, novice to expert, requires more than understanding the rules and components of the game. Literacy practices, such as developing a specialized vocabulary and understanding how to leverage this knowledge to inform strategic game play, are steps in gaining the competence and experience assumed in Magic's community of practice. Because of the significant overlap between Gee's notion of Discourses and Lave and Wenger's concept of communities of practice, I use these terms interchangeably to describe my experiences.

Literacy: An Essential Key to Discourse and Community of Practice Membership

As I have discussed, the vocabulary of Discourses or communities of practice becomes an essential component of negotiating and belonging. In Magic, negotiating belonging and joining the Magic Discourse requires not only an understanding of the individual words themselves. Discourse membership requires a nuanced understanding of how the words are situated in the game and how these situated meanings drive physical actions and strategic game play.

Research tells us that vocabulary is essential to literacy because of its powerful and positive relationship with reading comprehension.²¹ The vocabulary required to understand and play Magic, like the rules of the game, take time to learn, which we find reflected in the literature on vocabulary acquisition. Most of the words we use we learn incidentally as we become immersed in language day-to-day, and we develop deeper understandings of these words over time in multiple contexts for multiple purposes.²² It is through “extended periods . . . of coherent language experiences that are most conducive to efficient vocabulary learning.”²³ Clearly, vocabulary acquisition is also incremental in nature.²⁴ For a beginning Magic player, extended and repeated experiences of game play that naturally require explicit attention to specialized vocabulary makes literacy central to developing the knowledge required to become a member of the Discourse and community of practice.

The level of vocabulary and its use vary, and the same proves true for Magic game play. Although traditional vocabulary learning includes memorizing words, testing, learning dictionary definitions, and using words in sentences, these do not produce extensive vocabulary knowledge.²⁵ The surface level use of vocabulary and just knowing the dictionary definition of words simply are not sufficient. Harnessing word knowledge as a tool of the Magic Discourse leads to the rich, multidimensional, and expressive vocabulary we want. This knowledge of vocabulary requires a fertile environment. Research suggests that the contexts in which individuals acquire firsthand experiences with texts, authentic and purposeful goals, and peer-to-peer social interactions provide the most fruitful environment for vocabulary growth.²⁶ The social interaction required for Magic game play fosters social word learning, and meaning (at word and game level) is constructed²⁷ among players.

Magic showcases this sort of context for learning vocabulary—a print-rich environment (each individual card is its own multifaceted text), a purposive context motivated by the interest of players and their engagement in the game,

and an interaction that varies infinitely with each turn of play and every round of the game. Another facet of Magic as an aid to learning vocabulary involves the complexity of the words. The words players encounter in the game are not those they would encounter in everyday conversation, in the typical school textbook, newspaper, or magazine, or in simply reading for pleasure. Anthony Smith and Robin Angotti²⁸ note that some words may have common meanings different from their meanings in specialized or domain-specific contexts as in a Magic game. Words like these are more difficult to teach in formal schooling situations because they are relatively esoteric. Thus, students need to encounter them in multiple texts as well as find opportunities to use them in various other written and oral contexts.

Word knowledge is also interrelated. Words are not isolated units and, therefore, our understanding of words relies on our knowledge of the domain in which the word is used.²⁹ In the context of Magic, many of the words used are archaic or situated in the domain of history or mythology. A player's knowledge of these literary and historical traditions will affect her understanding of words within this domain and the degree to which she can apply them to the Magic context.

In formal instruction, receptive students gain a knowledge of these words, but the chances are low they will develop the productive vocabulary found on the most advanced end of the vocabulary knowledge continuum described by Isabel Beck, Margaret McKeown, and Richard Omanson.³⁰ However, in Magic game play, players have a context for developing just such a deep, productive vocabulary. Each turn of play involves multiple phases, each of which a player narrates using the specific terminology on each card. Each decision differs based on the phase of the game, the other players' decks, the other players' specific cards in play, and the specific strategies each player uses. As Sam Stoddard writes, "Magic can be a hard game, and simply reading the cards isn't enough to fully understand how good a card or a strategy is. . . . Playing with them is still by far the best way to understand what is good and what isn't."³¹

On Theros (a plane in the Magic Multiverse inspired by Greek and Roman history and mythology), the *bestow* feature allows a player to employ representative cards as creatures or as aura enchantments on the creatures she controls. "Bestow" is understood both conceptually and strategically. In the Greek and Roman texts, the word *bestow* evokes the gods and titans, perhaps Prometheus; strategically, *bestow* is a versatile game mechanic, allowing the player to cast a creature or a buff to a creature, depending on the player's needs. In these ways,

the player gains through play a better understanding of the concept of a word and its use. On just a few cards in the Theros set, I collected complex words like “fearsome,” “stature,” “elusive,” “stalk,” and “presume,” which in some ways contribute to understanding the hexproof mechanic (especially within the same history). And, again, I saw the mutable and evolving interplay between the card texts that result in myriad, layered combinations of which this complex vocabulary is capable.

Each card includes text meant to categorize, conceptualize, and understand its functions. A collection of complex terms from cards include “vigilance,” “shroud,” “trample,” “lifelink,” “haste,” “sacrament,” “primal,” “discord,” “jubilation,” and “cipher.” The player lexicon must include not only this normative vocabulary but also a larger working vocabulary about deck themes and strategies (e.g., “Bant,” “Jund,” “burn,” “mill,” “aggro,” “control”), card types and strategies (e.g., “bounce,” “splash,” “removal,” and “stack”), and play parameters and formats (e.g., “standard,” “modern,” “legacy,” “commander”). In this way, traditional language and traditional notions of literacy (i.e., vocabulary, reading comprehension) are central to Magic.

Word Use and Learning in the Social Sphere

The use of the specialized vocabulary in Magic always occurs in the social sphere—either face-to-face among players, in online play, or when an individual plans deck choices for future use. In the last two cases, although we process the vocabulary internally, it is still mediated socially in the context of simulated interaction with another player or careful choices related to future interactions. Vygotsky proposed a theory of social constructivism³² in which meaning does not occur or develop solely at the individual level but first occurs between individuals.³³

Acquiring a specialized vocabulary to help gain entry to the Discourse or community of practice of Magic, a newcomer goes through the various stages of socially mediated mastery of new words (or old words used in new ways). Such learning is incremental. Vygotsky’s notion of the zone of proximal development seems relevant to the notion of a newcomer apprenticing to an old-timer in Magic’s community of practice, including an apprenticeship related to the Magic lexicon. Vygotsky considers the zone of proximal development³⁴ as the ideal context for learning or problem solving. Potential for problem solving exists between the “actual development as determined by independent problem solving” and the “potential development as determined through problem solving

under adult guidance or in collaboration with more capable peers.”³⁵

For a new Magic player, the zone of proximal development involves learning under the guidance of a seasoned but patient Magic player (as opposed to being thrust into tournament play in a game shop). A Magic old-timer can provide the scaffolding³⁶ for a newcomer’s acquisition of a Magic identity kit, including particular literacy practices. In Magic, players gain mastery of concepts and routines only after extended play. Without these experiences, players cannot achieve intricate, internalized knowledge of its specialized vocabulary, game mechanics, in-game communication, and similar nuances of the game play. Vygotsky describes internalization as the process of moving from external to internal mental processes or knowledge.³⁷ For Vygotsky, any knowledge always originates from external social interactions, which only afterward can be internalized into individual thought and knowledge. In Magic, we see that the processes necessary for gaining competence occurs through social game play. The ability to internalize a comprehension of Magic depends on negotiating meaning through experience with others. Vygotsky’s notion of internalization extends to every aspect of the Magic identity kit—from game mechanics to specialized vocabulary to understanding the relevance of the Multiverse as a backdrop to the Magic community of practice. To be a true member of the Magic Discourse and community of practice—to move beyond instances of mushfake—a player must internalize its specialized vocabulary and independently activate a knowledge of these words in novel game play. Ultimately a player will also transfer her knowledge to non-Magic contexts.

I have discussed the socially situated nature of Magic and the ways that literacy is integral to the identity kit requisite for its Discourse. Learning a specialized vocabulary in particular is required to become expert at its game play. In this way, Magic itself proves a powerful literacy tool of the kind detailed and described in the literacy research, one that features an ideal context for learning vocabulary.

At the same time, the reading of Magic cards of course requires overall reading comprehension. Again, contemporary research shows vocabulary to be essential for literacy development because of its powerful relationship to reading comprehension. Building from vocabulary, I note that the fundamental literacy skill needed to play Magic is comprehension—the ability to read and understand connected text. On a Magic card, there are multiple segments of text, some longer connected segments (flavor text and abilities and power); phrases (card title); and segmented and numeric text (tap and add +1/0). Comprehension involves

not only decoding and reading text but also taking into account background knowledge and using particular strategies to understand unknown words and phrases. In this way, readers negotiate meaning. Readers use metacognitive strategies to work through the comprehension process—and these can be subconscious or conscious. They include such strategies as rereading, looking for contextual clues, and pinpointing the vocabulary essential to the meaning of a sentence. Good readers actively engage in these strategies to tackle and make meaning of new and complex texts.³⁸

Physicality of Literacy and Magic

Comprehension involves embodied cognition. As Kelly Mix, Linda Smith, and Michael Gasser explain, “Embodiment is what happens in real time and space” and therefore “time and space are incorporated in our mental representations in meaningful ways.”³⁹ Embodiment affects cognitive processes with language. Meaning is situated in how we think about the physical properties and ramifications of a construct. Arthur Glenberg notes, “to a particular person, the meaning of an object, event, or sentence is what that person can do with the object, event, or sentence.”⁴⁰ Applied in Magic, we find that the physical time and space of Magic as Discourse and game space facilitates embodied cognition. The actual and imagined strategies and game play of players reinforce their understanding of the game’s linguistic components (vocabulary and discourse). Therefore, the physical movements of the cards by the players accompany their internal comprehension and use of vocabulary. Specific embodied actions and understandings facilitate both foundational comprehension and basic practice in the Magic Discourse. When thinking about reading and embodied cognition, we see how the cognitive process of reading links to the physical self—that the actions we engage in are part of the process of making meaning. When we think of a particular word or read a passage of text, we visualize accompanying actions, and our brain simulates the actions as we engage in this thinking. Lawrence Barsalou writes, “Comprehension is grounded in perceptual simulations that prepare agents for situated action.”⁴¹ In Magic, we comprehend key terms that are often nouns but that imply and require an action (think of a thing like “haste”) and become verbs in the context of the game. Having a thing like haste as the attribute of a card signals an accompanying action for the player—moving the card onto the battlefield

but also in the mind, embodied, imagining that creature charging forward. The word is thus not only vital for the accurate and competent playing of the game and use of the creature, but it is also requisite for the player to have an embodied notion of the word different from its grammatical, dictionary-defined use in everyday discourse. As John Lenarcic and James Mackay-Scollay write, this embodied comprehension in Magic produces “an intellectual ballet amongst” the players.⁴²

Multiliteracies of Magic

The New London Group⁴³ describes new and multiliteracies as those beyond what we think of as traditional literacy (linear texts). These theories⁴⁴ explain how modern reading and textual interaction include more than reading traditional books but also reading classrooms⁴⁵ and Magic games. Jerome Harste reiterates the point that “students learn more about literacy on the streets than they do” in classrooms.⁴⁶ These new literacies can be visual and technological, and like those of Magic, they are multilayered and multimodal.

What we see with the texts of Magic are Discourse and literacy practices that do not occur in traditional linear reading that links text together in long meaningful units. The Magic text is multimodal and has multiple components both connected and disconnected—the card, the multiple texts on the card, the literacy Discourse practices of a member of the Magic community, the embodied literacy acts, and the specialized vocabulary that guides meaning, action, and thought.

A component of the literacy practices of Magic also involves understanding the overarching backstory for the game. Understanding the backstory (Multiverse and planeswalker narratives) and its accompanying literacy practices was essential knowledge I had to develop—essential to the Magic Discourse identity kit and fundamental for competence and engagement in the Magic community of practice. At the highest level in Magic, there is the Multiverse or the metanarrative, the broad narrative backdrop for the game. Then there is the planeswalker whose identity informs her relationship to her deck, her purposes, and her passion for the game. A player’s identity informs the cards she chooses to build decks and the personal chemistry she uses to create a synergistic, balanced, and competitive deck. The cards themselves offer rich, multifaceted textual, visual, numeric, creative, and invented components of literacy.

For me, more significant to my initiation in the Magic Discourse were the multiple literacy practices instantiated in the game itself. These literacy practices do not align with the traditional practices we associate with the formal literacy learning and reading that goes on in schools. Proponents of New Literacies studies urges us to think about how the new literacies of individuals (often called out-of-school literacies) inform, bolster, or improve our thinking about traditional school learning and teaching. They want us to consider just what literacy itself consists of. Gee,⁴⁷ in *What Video Games Have to Teach Us about Literacy and Learning*, explains that good games incorporate learning principles supported by contemporary research in cognitive science. Although Gee's discussion centers on video games, many of his assertions help explain the ways Magic operates as just such a good game that facilitates learning.

Gee describes the learning good games offer in contrast to the learning offered in schools. According to Gee, good games give "explicit information both on-demand and just-in-time, when the learner needs it or just at the point where the information can best be understood and used in practice"⁴⁸ as opposed to "outside of meaningful contexts and outside their own goals."⁴⁹ In Magic, information—and thus learning opportunities—occur on demand and just in time through every aspect of game play and preparation. Using the example of learning vocabulary, word knowledge is acquired in repeated, purposeful, unique contexts.

Gee also suggests that a good game "often operates within, but at the outer edge of, the learner's resources, so that at many points the game is felt as challenging but not 'undoable'"⁵⁰ and that "for many learners it is these times, when they are operating at the edge of their regime of competence, when learning is most exciting and rewarding." The experience of advancing from newcomer to old-timer in Magic reflects this same process. When a newcomer is scaffolded in play by an old-timer, the learning space of challenging-but-do-able creates the ideal zone of proximal development.

Again, Gee says games allow the player to be an "'insider,' 'teacher,' and 'producer'" (not just a 'consumer') able to customize the learning experience... from the beginning throughout the experience."⁵¹ This is a core element of the allure of Magic for players—they create their own worlds and take on identities of planewalkers in the Multiverse. Taking ownership of learning fosters motivation, prompting continued Magic engagement and continued opportunities to grow specialized vocabulary knowledge.

Finally, Gee mentions that a good game "repeatedly confronts players

with a similar type of problem . . . until players achieve a routinized, taken-for-granted mastery of certain skills.”⁵² Every Magic game follows this same basic set of mechanics. Thus, similar problems—although different in form each turn and round—will arise in each (e.g., when to use haste, when to invoke a spell). With each subsequent game play experience, players’ knowledge and mastery of strategies become more routine. Again, multiple, unique encounters with words increase comprehension.

Situating the literacy learning aspects of Magic within Gee’s framework of good games and good learning offers further insights into how Magic encompasses multiliteracies and how the multimodal nature of the game makes it an excellent literacy tool. Gee’s discussion also reiterates how Magic is a Discourse that fosters learning. He states that in the context of massive multiplayer games, players “collaborate in teams, each using a different, but overlapping, set of skills, and share knowledge, skills, and values with others both inside the game.”⁵³

The Framework in Action

To illustrate my goals here, let me return to the origin of my interest in the topic—two doctoral students, Paul (old-timer, experienced Magic player) and me (Autumn, newcomer to the game), playing Magic. Sharing a series of Magic dynamics will show the multiple literacy practices I have described put into practice. This includes identifying the Discourse and community of practice of Magic through deck construction, considering cards and Magic fundamentals through requisite vocabulary and fundamental reading comprehension skills, exploring the dialogic meaning making and embodied cognition in the social act of playing Magic, and describing how Magic game play encapsulates the theories and research findings of the New Literacies movement. This should illustrate how Magic has promoted my literacy development within its Discourse and has helped me move along the continuum of newcomer to old-timer. Although I do not consider myself an old-timer (I am still a novice player), I can be considered a peripheral member of the community of practice,⁵⁴ somewhere along the newcomer to old-timers continuum. Indeed, it is still common for me to have to mushfake in the midst of game play. And Paul still corrects and mentors me in my development during play. My example starts with a new card and imagining a new deck.

Paul and I sit across from each other. Paul has decks that are like well-oiled

machines, each a creative product he has put hours into. I have not ever created a deck before, so Paul lets me choose which deck I want. I choose the elves and switch between the elves and the fairies in my subsequent play. As a new player entering the Multiverse, I become aware of the importance of background knowledge and schema to situate my understanding of the game. I quickly learn that each card is a text unto itself and that my everyday and professional literacy knowledge and skills are not sufficient to understand the text on the card, the symbols on the card, the meanings of the titles, the specialized verbs, the flavor text, or the interactions between the powers on some cards and those on others. I struggle to learn the nuts-and-bolts game play mechanics (e.g., the stages of a turn, when each type of card can be played). I find that to “pass turn” does not mean to pass one’s turn as in some other games (i.e., to skip this round of play), and I note connections between some abilities, like “flying” or “trample,” which aligns idiomatic English with game play. What often seems straightforward and normal for Paul appears foreign to me. He also knows nuances of different planes and conflicts in the Magic metanarrative—Innistrad, Alara, Lorwyn, Shandalar—and that these other planes take on lives of their own, rich with distinctions and characters.

I am Kiora, the Crashing Wave, planeswalker.⁵⁵ I stand tall and proud, my blue skin shining iridescent with a spray of water coming from a cascading wave behind me. A mauve bodice clings to my curvaceous body, enhancing my chest, showcasing my lithe and toned waist, a trail of the fabric flowing behind me. My face is serious and purposeful but shows innocence. Fins crown my skull—I am a regal queen of the sea. Mauve tentacles rise up behind me in the waves and craggy mountains peak through the waves and fog in the distance. The card in the deck that introduces me shows my mystique, but it also shows my concrete attributes. I am from the sea, but I command creatures from both sea and land.

Using the planeswalker Kiora as the center of my deck, I note that Kiora is both water and land and that fact shapes how I see myself positioned in the game. I imagine I control the water. Knowing I will face battle as I traverse the various planes in the Multiverse, I must choose the creatures in my army wisely, and choose instants, spells, enchantments, and artifacts carefully. I must strategize the balance between permanents to fuel my creatures and have enough creatures to effectively attack my opponents. I begin to imagine the questions that highlight my relative literacy. Having played a little and talked about Magic academically, I believe that water decks and land decks contrast red decks and are more nuanced and narrative, but I do not know whether these qualities are inherent in the cards

or require a specific deck design. I imagine there are strengths and weaknesses in water and land decks, while I also imagine the strategies that opponent decks might use against Kiora and the need to counteract those strategies. But I am not widely versed in Magic strategies or in strategic deck construction. My experiences playing Magic mostly make me consider the relative speed of the deck versus opponent decks, imagining how I can manage the expense of creatures, especially the big, powerful ones. Similarly, Kiora suggests building from her two colors, and so I spend time considering the best ratios of colored creatures and the best ways those creatures might synergize. Speaking of creatures, while I have seen creatures with flying, Kiora makes me wonder about playing with creatures with swimming.

Engaged in legitimate peripheral participation—knowing enough to know I am not an old-timer user of the Magic Discourse—I asked Paul to talk me through my ideas. I shared everything above and narrated other questions, including interest in avoiding cards that were complicated (i.e., filled with text) and in better understanding the phases in a player's turn. Paul returned questions, highlighting a collection of Magic Discourse of which I remain largely ignorant. Deck construction, he suggested, likely starts with format—decks can vary from forty to one hundred or more cards. He noted that there are relatively established land-to-nonland efficiency ratios in these decks. I speculated that twenty creatures would go in a forty-card deck, and he raised an eyebrow. As I spoke, he pointed to vocabulary and concepts in Magic and the community that I was missing. He noted my inordinate strategic focus on creatures and for calling creatures “armies,” but he also criticized my use of “land” and “sea.” In Magic one of the card types is land, and among those lands there are five (or six): mountain red, forest green, plains white, island blue, and swamps black (and, perhaps, wastes colorless). My talk about Kiora muddied the Magic Discourse in this way. In fact, to an old-timer, Kiora is likely a blue green planeswalker, and corresponding creature and noncreature spells are blue, green, or blue-green. Kiora also needed to be situated against Thassa, God of the Sea, something I did not know.

By participating in the community of practice and acculturating the Magic Discourse, through these and similar interactions with old-timers, I move from a newcomer and peripheral participant into a fuller and more richly literate player. In this way Magic serves as a dynamic literacy tool.

To illustrate the multiliteracies I need to negotiate as I choose cards for my deck and the literacy ecosystems each card represents, I introduce Nimbus Swimmer,⁵⁶ a blue-green creature card that might be effective in a Kiora deck. On

the Nimbus Swimmer card, there are several fundamental literacy components. For instance, the title engages vocabulary and linguistic skills, the illustrations tap visual skills, the card's type and abilities draw on vocabulary, linguistic, background knowledge, rules, and connection to other cards. The flavor text, the italicized text at the bottom of the card, requires a player to understand the metanarrative, enriches and illuminates card title and abilities, and offers deeper meanings to ponder in philosophy and worldview. The numeric texts on the card require the player to comprehend the mathematical components and their interaction in the rules of Magic. Readers of this article who have never played Magic should be able to point to portions of the card that require vocabulary (even symbolic) and other literacy elements for basic text comprehension. The vocabulary or linguistic components were aspects of the cards that required me to develop specialized knowledge. This often spurred me to do research to better understand the cards and the game.

When I consider Nimbus Swimmer, for example, I associate the term "nimbus" with clouds, and on the card, I see wisps of clouds between the spires of buildings and the Nimbus Swimmer soaring alongside a flock of far smaller white birds. Nimbus means a large gray rain cloud or a luminous cloud or a halo surrounding a supernatural being or a saint. Yet the idea of the word nimbus used in this way, as an adjective or part of a compound proper name, did not work in my understanding of the language. This lack of one-to-one correspondence between the meaning of nimbus and my initial reaction to the card image requires me to return to the card for a better understanding of the meaning. I hypothesize that the massive, wide-winged, emerald-green, ray-like creature might evoke a dark raincloud moving in the sky. One of Nimbus Swimmer's abilities is flying, and I speculate this creature of the sea, like Kiora the Crashing Wave who commands him, can travel beyond the water that is his home.

I note that Nimbus Swimmer has the creature type "leviathan" and that this is a word I do not know. My immediate association with the word is in use with phrases like "a leviathan task." Although I have read the phrase in a context like this and perhaps heard it used at some point, I am not sure of the pronunciation. My association with the word does not illuminate the use of it for a creature type, but since it is a type of sea creature I assumed leviathan was related to the sea. Google shows me Old Testament sea monsters. Merriam-Webster's definition includes a sea monster defeated by Yahweh in various scriptural accounts; the political state, especially a totalitarian state having a vast bureaucracy; and something large or formidable. The definitions are followed by a note that the

word can be an adjective (as in a leviathan task). Nimbus Swimmer is decidedly a large sea monster. Since I have never used this word myself, I use the audio function available through Merriam-Webster so I can hear the pronunciation. This also provides me with new insight since when I have read the word in my head I have read it as \li-vin-thē-ən\ (*luh-vin-thee-in*). But the correct pronunciation is \li-ˈvī-ə-thən\ (*luh-vye-uh-then*).

In the flavor text, I come upon a word I am unfamiliar with: Simic. Google reveals that Simic is not an idiomatic English word I am familiar with. It is a word coined by Magic and used to describe a faction on the plane of Ravnica. The Simic are the megalomaniacal genetic splicers of Ravnica, unsatisfied with the conventions of nature. The implication in the flavor text is that the Simic genetically modified sea creatures to be large and make sea creatures equally as large that could fly. Thematically, then, the card prompts me through an understanding of Simic within the Magic Discourse to question whether this Simic hybrid creature would be aligned with Kiora.

Understanding Nimbus Swimmer also requires understanding the numeric aspects that are requirements for its abilities and its capacity. To be cast and enter play, Nimbus Swimmer requires the player to pay any amount of mana (X) beyond blue and green. Players must understand the mathematical and strategic Discourse of Magic to understand that part of the card, how that X affects the creature (i.e., adding counters) and results in the creature's size and combat abilities (i.e., X will be both Nimbus Swimmer's power and its toughness). For instance, the player should know that if she pays 1GU (or one mana of any color, one green mana, and one blue mana), Nimbus Swimmer will be a meager 1/1 creature; if she pays 9GU, Nimbus Swimmer will be a 9/9; and given both scenarios, Nimbus Swimmer is a versatile card in a blue green deck.

Comprehension in Magic (and in everything) involves cognitive embodying. In the example of constructing a deck around Kiora the Crashing Wave, the planeswalker archetype invites me to think of myself as Kiora. Magic promotional materials directly solicit this sort of embodied participation. Doing so, even in a newcomer position, helps develop the habits of mind Magic players deploy and prompts a greater understanding of the Magic metanarrative and the planeswalkers within it. Although most Magic players are not cosplayers, it is worth noting that pop culture today includes cosplay—a phenomenon in which fans dress as and embody the objects of their fandom. An import of Japanese pop culture, cosplay is roughly equivalent for the average American to an adult Halloween with often elaborate and precise costumes. Kiora and all the other

Magic planeswalkers command considerable cosplay at pop culture conventions. Related to cosplay, and this very visible form of embodied cognition, are other fan products, like fan art and fan fiction. These texts are remixed and adapted Magic texts, a process through which the artist or writer understands and appreciates the central Magic text and displays embodied cognition through the act of representational creation.

Playing Magic offers more subtle examples of embodied cognition. Thinking again about *Nimbus Swimmer*, comprehension of the card and the game would prompt old-timer Magic players to distinguish themselves from newcomers in one clear way—they would bring physical dice or counters, since *Nimbus Swimmer* calls for them (i.e., $X + 1/+1$ counters). *Kiora the Crashing Wave* similarly calls for the player to use *Kiora's* emblem and tokens for three kraken creatures she can produce. Of course, what counts as a legitimate or acceptable counter, emblem, or token depends on the mediated play context. In all but the rarest cases, players narrate their experiences while playing. Thus, adding counters (or just about anything else in game play) is described, understood, and verified by both the player and her teammates and opponents. Players do any number of actions that result from not just how they read and understand cards and the game itself but also from the way the players together read and understand the game. Interpretation disputes must be talked through and resolved, sometimes by deferring to an on-site rules judge (who is fundamentally a third element in each player's embodied cognition).

Magic includes some basic guidelines for board arrangement and the physical placement and movement of a player's deck, cards in play, graveyard, cards in exile, life and other tallies, and more, but any observation of Magic play at a Friday Night Magic event shows that each player develops a rationale for Magic that is evident in the manner in which she positions her cards. Most players "sleeve" their decks, meaning they cover their cards in protective sleeves so they are not damaged (particularly since individual Magic cards routinely cost more than ten dollars and can run into the hundreds of dollars). The face of the sleeve is visible, of course, but like many decks of playing cards, players may choose any range of decorations for their sleeves. Similarly, most Magic players use play mats, essentially large mouse pads designed to protect cards from tables, and these mats are also decorated. Both sleeves and mats often depict player position within the Magic community and metanarrative; that is, I might choose *Kiora* sleeves and a *Kiora* play mat if I were truly excited about *Kiora* and wanted to display that to other players. How one places decks and counters on her mat,

though, varies. Each player comes to understand and habituate a way of shuffling, tapping lands to pay for spells, gesturing to indicate the playing of a spell, or the movement of cards in play between various states (e.g., attacking, tapping, enchanting, and counting commander damage). Players sometimes add physical reminders to the game to keep track of complicated triggers and turn conditions (e.g., perhaps remembering that three things happen at the beginning of a turn).

Yet at its most subtle level, embodied cognition in Magic happens when the player shows comprehension of the cards and the game based on recognizing texts and negotiating those texts with the player's understanding of language and the concrete world in time and space. As I mentioned, key terms and abilities are often words that may be nouns (a thing like haste) but that imply and require an action—and become a verb—in the context of the game. Having a creature card with haste signals action for the player to take—moving the card into the play but also keeping it in the mind, embodied, and imagining immediately that creature's ability to charge into battle. The vocabulary word is thus simultaneously vital for accurate and competent playing of the game and use of the creature, but it also requires the player to have an embodied notion of the word that may be different from its everyday dictionary definition. Again, there are many such interactions in reading, understanding, and playing Magic.

As I have mentioned, Magic shows how the multiple and complex literacy actions work together. To read and understand *Kiora the Crashing Wave*, I must employ a fundamental vocabulary and several comprehension strategies. To contextualize and understand the card within the Magic game and community, I apprentice the Discourse. Like members of the community of practice, I habituate ways of speaking, understanding, and participating according to the experienced old-timers of the Discourse. My personal experience included mediation between print and online sources, among Magic products and fan-created content, and between my knowledge and that of my old-timer colleague.

Conclusion

Traditional, conservative, and outmoded literacy practices prompt mastery through routine, structured interaction with vocabulary and systematic deconstruction of canonical, long-form texts (e.g., novels) in academic settings. Contemporary literacy research and practice show that intense literacy engagement and learning does not depend on large swaths of connected text, and literacy

skills develop in and out of schools and formal curricula. We know that physical interaction can be a part of thinking about literacy practices, because sometimes understanding of texts generates physical moves. I have described Magic as a text and activity that pushes against traditional notions of literacy and offered an experience that helps exemplify how contemporary notions of multiliteracies and connections among embodiment, vocabulary, and comprehension fit within the contemporary paradigms in the study and practice of literacy. Allowing for application and action or play—or reading without full mastery or comprehension of a text or words within a text—is generative, and experimentation with meaning and usage can be part of developing deep comprehension, most usefully when accompanied by mentorship of an expert.

I find it worth noting how the richness in Magic advocates for the game and for other traditionally dismissed texts and experiences. Magic evidences literacy skill development in ways analogous to comics and picture books, for instance, that have been increasingly shown to be purposeful and strong texts for literacy development.⁵⁷ So understood, neither Magic nor comics nor picture books seem limited to the realm of childhood or juvenile literacies. That fact itself marks a boon for a more liberal and egalitarian understanding of how we become literate.

NOTES

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