Between

Notes on Narrative as Medium and a Media Ecology Approach to the Study of Storytelling

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Storytelling appears to be a distinctively human characteristic, so much so that Walter R. Fisher, a scholar of rhetoric and communication, suggests that we substitute *homo narrans* for *homo sapiens*, as designation for our species (1987). Although sapience refers to wisdom, a concept difficult to define, it is generally viewed as a product of thinking, which is an activity that is not unique to human beings, given that cognitive processes are clearly observable in other forms of life. All living things engage in some form of information processing, animals in particular share with us the process of sense perception, and many species also have the ability to visualize, both in regard to memory, and planning and imagination (as well as dreaming). In sum, it is not the capacity for thought that makes us human, nor the wisdom we may (or may not) derive from that capacity. Rather, in following Hannah Arendt's call to think about thinking (1978), it is arguably the fact that, as human beings, we enjoy the capacity for a distinctively human form of thought, thinking in words, in language.

Linguistic thought, however, presupposes language acquisition, a process that begins with interaction with significant others, via the spoken word. First, we learn how to speak out loud to others, and then we learn to speak to ourselves, silently (albeit not necessarily so), internalizing speech as thought, and also internalizing the social roles that accompany speech (Mead 1934), and serve as a form of metacommunication for interpreting the meaning of our messages (Bateson 1972, 1979). We go through a similar process when we learn

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how to read, first learning how to read out loud, and then how to read silently (although subvocalization is often still involved), and this mirrors a historical process, as silent reading was rare if not entirely unknown before the printing revolution that began in 15th century Europe (McLuhan 1962). It is reasonable to posit that human development recapitulates human evolution, and that the evolution of spoken language preceded its internalization as silent thought. The relationship between language and thought has been discussed by scholars such as George Herbert Mead (1934), Lev Vygotsky (1986), and Julian Jaynes (1976), and by Walter Ong (1967, 1971, 1977, 1982, 2002), a literary scholar whose work is central within the field of media ecology (Strate 2006).

As another foundational scholar in the field of media ecology, Lewis Mumford (1952), observes, it is neither thought, intelligence, or wisdom that distinguishes human beings from other forms of life, nor the commonly observed fact that human beings have opposable thumbs that facilitate tool use and technology, for it has long been recognized that animals are capable of using and even making tools, and in particular are able to produce such elaborate constructions as beaver dams, bird nests, and insect hives. Mumford instead suggests that the most important contribution of the opposable thumb is that it enabled us to carry objects in our hands, freeing our mouths for complex forms of vocalization. Or as I like to put it, it is not opposable thumbs, but opposable tongues, dialogue and conversation, that is the key to understanding our species. In other words, what makes us human is our capacity for symbolic communication, and especially linguistic communication, language taking the physical form of speech, reflected in our biology both by Broca's and Wernicke's areas in the cerebral cortex, and the unique structure and placement of the human larynx. Language and other forms of symbolic communication give us the ability to engage in what Alfred Korzybski refers to as time-binding (1993), the ability to preserve information over time, accumulate knowledge by passing it on from generation to generation, and evaluate it in order to make progress in our understanding of the world; time-binding, according to Korzybski, is what separates us from other classes of life.

Like time-binding, narrative is unique to our species because it is a product of our capacity for language and symbolic communication,

for, as poet Rosemarie Waldrop put it, «animals do not hunt for a story» (2003: 32). Indeed, narrative is synonymous with story-*telling* because it is primarily a linguistic form. It may be possible to tell a story through a sequence of pictures unaccompanied by words, or by some form of pantomime, but these are also types of symbolic form, as Susanne Langer makes clear (1953, 1957). Moreover, a strong case can be made that such forms of nonverbal narrative could only be possible after language has given rise to story-telling as a practice, and that nonverbal narrative requires individuals who are already familiar with linguistic narrative, and therefore able to fill in what has been left unsaid. While it is possible for imitation and play-acting to serve as representations of actual actions, as Gregory Bateson observes (1972, 1979), such significant gestures do not approach the complexity of narrative structure. Moreover, historically, Denise Schmandt-Besserat has shown that the practice of arranging images in linear sequence only appears after the invention of writing, and follows the example of written characters following one another along a straight line (1996). And pantomime, as a purely silent form, appears to have originated in early modern Europe, in conjunction with the printing revolution and the newfound practice of silent reading.

A media ecology approach to the study of narrative would therefore begin with the idea that narrative form is derived from the medium of language. As the linguistics scholar Edward Sapir explains:

> Languages are more to us than systems of thought transference. They are invisible garments that drape themselves about our spirit and give a predetermined form to all its symbolic expression. When the expression is of unusual significance, we call it literature. Art is so personal an expression that we do not like to feel that it is bound to predetermined form of any sort. The possibilities of individual expression are infinite, language in particular is the most fluid of mediums. Yet some limitation there must be to this freedom, some resistance of the medium. In great art there is the illusion of absolute freedom. The formal restraints imposed by the material—paint, black and white, marble, piano tones, or whatever it may be—are not perceived; it is as though there were a limitless margin of elbow-room between the artist's

fullest utilization of form and the most that the material is innately capable of. The artist has intuitively surrendered to the inescapable tyranny of the material, made its brute nature fuse easily with his conception. The material "disappears" precisely because there is nothing in the artist's conception to indicate that any other material exists. For the time being, he, and we with him, move in the artistic medium as a fish moves in the water, oblivious of the existence of an alien atmosphere. No sooner, however, does the artist transgress the law of his medium than we realize with a start that there is a medium to obey.

Language is the medium of literature as marble or bronze or clay are the materials of the sculptor. Since every language has its distinctive peculiarities, the innate formal limitations — and possibilities — of one literature are never quite the same as those of another. The literature fashioned out of the form and substance of a language has the color and the texture of its matrix. The literary artist may never be conscious of just how he is hindered or helped or otherwise guided by the matrix, but when it is a question of translating his work into another language, the nature of the original matrix manifests itself at once. All his effects have been calculated, or intuitively felt, with reference to the formal "genius" of his own language; they cannot be carried over without loss or modification. Benedetto Croce is therefore perfectly right in saying that a work of literary art can never be translated. Nevertheless literature does get itself translated, sometimes with astonishing adequacy. This brings up the question whether in the art of literature there are not intertwined two distinct kinds or levels of art — a generalized, non-linguistic art, which can be transferred without loss into an alien linguistic medium, and a specifically linguistic art that is not transferable. I believe the distinction is entirely valid, though we never get the two levels pure in practice. Literature moves in language as a medium, but that medium comprises two layers, the latent content of language — our intuitive record of experience — and the particular conformation of a given language — the specific how of our record of experience. Literature that draws its sustenance mainly — never entirely — from the lower level, say a play of Shakespeare's, is translatable without too great a loss of character.

> If it moves in the upper rather than in the lower level — a fair example is a lyric of Swinburne's — it is as good as untranslatable. Both types of literary expression may be great or mediocre. (Sapir 1921: 221-223)

Sapir's discussion of language as medium forms the basis of the argument put forth by media ecology scholars Edmund Carpenter (1960) and Marshall McLuhan (1964) that the terms "language" and "medium" are interchangeable, and therefore that media are languages in their own right. It follows that each medium has its own particular grammar, a set of rules and structure for making meaningful messages, and therefore each medium has its own particular bias towards the kinds of content that works best with it; for example, the bias of language makes it conducive to abstract ideas in a way that the bias of images does not, whereas the bias of images make them conducive to concrete description in a way that the bias of language does not. Generalizing from Sapir's linguistic relativism, different media provide us with different tools for thought, and help us to construct different views of the world. The biases of media also differ in regard to factors such as their use of symbolic form (language, images, music, etc.), the senses they utilize (speech and hearing as opposed to writing and vision), their ability to communicate over space (e.g., writing on stone as opposed to writing on paper as opposed to electronic transmission of information), the speed at which messages are communicated (based on available transportation systems until the advent of instantaneous communication via the electronic media), communicate over time (e.g., ephemeral speech as opposed to permanent monuments as compared to the massive but volatile storage capacity of computer databanks), the volume of information that can be communicated (e.g., ever-increasing as we move from speech to writing to typography to electronic media), the accessibility of information (few barriers when it comes to speech and audiovisual media as opposed to writing, more barriers for complex writing systems than simple ones like the alphabet), and conditions of attendance (whether we experience a narrative as a group gathered together as an audience, as individuals

reading a text in isolation, as individuals attending to a broadcast alone and yet part of a vast, dispersed mass audience), etc. The idea that every medium has its own particular bias is fundamental within the field of media ecology, and summed up by McLuhan's pithy phrase, «the medium is the message» (1964: 7). Neil Postman introduced the term media ecology, which he defined as the study of media as environments (1968, 1970). In this sense, Sapir explains that language, as a medium, is the environment within which literature emerges and grows, influencing literature according to its biases, just as the natural environment influences the organisms that inhabit it. Media ecology scholars take the position that the same kind of environmental effects based on media biases influence the way that we think, feel, act, perceive the world, organize ourselves collectively as a society, and maintain ourselves as a culture (Strate 2006, 2011, 2014).

Narrative as Medium

Narrative is generally recognized as a *form*, its content being the specific stories we tell. Recognition of form-content relationships predates but also parallels that of the medium-content relationships that McLuhan emphasized (1964), and within the field of media ecology the term *form* can be used as a synonym for *medium*, whether the reference is to symbolic, aesthetic, or technological form. Moreover, the fact that narrative form is contained within the medium of language is in no way problematic, for as McLuhan explains, «the content of a medium is always another medium» (1964: 7), an idea that Bolter and Grusin adopt and refer to as *remediation* (1999). In other words, media can be nested within other media, as for example the medium of speech becomes the content of/is remediated by writing, the medium of writing becomes the content of/is remediated by printing, and the medium of printing becomes the content of/is remediated by electronic text. Other kinds of relationships are also possible, for example between the technique of alphabetic writing as a medium, and the various writing surfaces and implements that can be

used in conjunction with the alphabet, constituting the material media of writing. Narrative can therefore be understood as a particular technique that emerges out of language, and therefore as a medium within a medium.

In *Media and Formal Cause* by Marshall and Eric McLuhan (2011), the biases and effects of media are linked to the Aristotelian notion of formal causality, one of four causes put forth in Aristotle's *Metaphysics* (along with material, final, and efficient cause, the latter being the only form of causality generally recognized today). When writers have the sense that the story is writing itself, that the demands of the narrative call for certain events to occur in the storyline, that certain choices must be avoided because they would violate the needs of the narrative, that characters take on a life of their own, and the story must be resolved in a certain way, they are feeling the effects of formal cause. As a medium, narrative has a bias that imposes certain constraints on the story's composition, which in turn leads to the tendency for narrative to follow certain recognizable patterns that distinguish it from other forms, such as lyric and lists. Form is not confined to the source or the message, but is environmental in nature (media ecology being the study of media, aka form, as environments). The storyteller does not invent narrative form, but rather lives within narrative as an environment. We are brought up with stories, receive them as part of our cultural heritage, and are guided by them; the storyteller follows a narrative tradition, and is very much influenced by the expectations of the audience or readers (in this sense, the audience or reader, as context, can be seen as the cause of the particular story, rather than the storyteller).

As medium and form, narrative can also be understood as a kind of language, with a specific grammar of its own, a view consistent with narratology's emphasis on the structure of storytelling (Propp 1968; Todorov 1969). As a language within a language, narrative also performs the same kinds of functions as language. For Korzybski, language gives us the ability to create mental representations of the world, inner maps of the actual territory we inhabit (1993). The world itself is chaotic and overwhelming, with vastly more information than

we can possibly absorb, and through what Korzybski referred to as the process of abstracting, we select out and take in part of the available information through sensory perception, and continue to select and order what we perceive through our use of language and symbols. Korzybski famously stated that the map is not the territory, our descriptions of the world should not be mistaken for the world itself, although they often are. Maps, however, may be structurally similar to their territory, and therefore help us to understand and anticipate what we will encounter in our environment, and navigate through the world. In this sense, some maps are better than others. The process of abstracting can also be equated to a process of mediating between ourselves and our environment, as the primary function of media (Strate 2011).

Narrative represents one approach to abstracting, helping us to make order out of the chaos of the outer world, to impose a comprehensible and predictable structure and a sense of continuity on a series of events. This is what we, as human beings, do as meaning-makers, in the way that we relate to and relay our experiences. In journalism, it is not an accident that reports are referred to as stories, as it is through narrative that we make sense of the information we gather about our environment; in rhetoric and persuasion, the efficacy of narrative as a technique is well understood, and in public relations and strategic communication the goal is often expressed as *getting the story out*. Narrative form is by necessity a simplification of the complexity of reality, a means of making our experiences easy to convey, easy to share with others, and easy to understand. Narrative also makes our experiences easy to remember (Ong 1982; Havelock 1963). And just as we internalize spoken language in the form of silent thought, we internalize narratives, making ourselves the heroes of our own stories, modeled after the narrative archetypes of our culture (Becker 1971, 1973; Campbell 1968; Campbell – Moyers 1988; Strate 2008). Narrative helps us to make sense out of our own lives, to explain our past, and to provide a sense of what we might be in store for us in the future. The stories we tell help us to understand, in simplified fashion, what it means to be living in time, with memory and anticipation, following a

journey from childhood to adulthood, for youth to old age, and from life to death. Is it any wonder that all forms of religion and spirituality are grounded in storytelling, whether we refer to such stories as myth, or as scripture?

I have been using the terms *narrative* and *storytelling* interchangeability, and I want to stress the fact that narrative refers to story-*telling*. The term *narrative* is abstract and subject to reification, and it is important to keep in mind that narrative is not a *thing*, but rather a term that refers to a human activity, telling stories. And for a story to be told, there must be someone to tell it to. Because the study of narrative so often is based on the reading of texts, it becomes easy to lose sight of the fact that stories are fundamentally *social* phenomena. It is worth nothing in this regard that individuals with autism, who characteristically have great difficulty with social interaction, also have difficulty attending to and understanding narrative, and prefer other forms of expression (Strate 2006). Storytelling is produced by social interaction, a product of transactions, of relationships between human beings. Narrative represents a relationship between source and receiver. Simply put, narrative is a medium of communication, mediating between sources and receivers. There is no narrative without a narrator. And narrative also requires a narratee, although it is possible for the narrator to take on that role as well. It becomes easy to lose sight of this fact because we tend to focus on texts rather than contexts, to pay attention to the content and ignore the medium, which brings us back to "the medium is the message" as a call to pay attention. For this reason, Postman described the media ecology approach as *context* analysis (2006).

Narrative and Media

The emphasis on narrative as text and the fact that we tend to equate it with literature is a reflection of a literate bias. The term storytelling as a synonym for narrative serves as a reminder stories were first and foremost tales that were *told*, which is to say that they

existed within the medium of speech, of the spoken word, for tens of thousands of years before the writing was invented. Even after the introduction of writing, most narrative was communicated via oral performance, the products of oral composition, as part of an oral tradition. And for most of the history of writing, especially prior to the invention of the printing press with moveable type in 15th century Europe, writing mostly was used in the service of rhetoric, oratory, recitation, and dramatic performance; even solitary reading was reading out loud, with silent reading all but unknown in scribal cultures (McLuhan 1962). We might further consider how well the sum of all written narratives composed throughout human history would compare with the total number of unrecorded stories that are shared through interpersonal exchange each day.

As a form and medium unto itself, narrative has structural elements that are independent of the other languages and media that it is expressed through, e.g., character, plot, and setting, that is, agents performing actions in some kind of sequence, constituting a distinct whole that is greater than the sum of its parts. While what is universal to narrative is of interest to media ecology scholars, the greater emphasis in the field lies with the ways in which narrative changes and evolves in response to changes in media and technology. This forms the basis of much of the literary criticism of McLuhan (McLuhan 1969; M. McLuhan – E. McLuhan 2011; McLuhan – Watson 1970), Ong (1967, 1971, 1977, 2002), and others who follow their lead, such as Elena Lamberti (2012), B.W. Powe (2014), Jerry Harp (2010), and Thomas Zlatic (2012), N. Katherine Hayles (1999, 2002), and in her own unique way, Camille Paglia (1990). The ways in which media and technology affect narrative form can include the material conditions of authorship and composition, including the technologies, languages, and varieties of symbolic form used to construct narratives; the experiences of authors working in different media, for example novelists who also wrote for newspapers, magazines, or worked on screenplays; the self-conscious incorporation of our response to the media environment, for example authors response to printing, or to the technologies of modernity; and the unconscious effects of the media environment, as

changes in the mode of communication lead to changes in culture and consciousness. And perhaps the most significant example of this last factor is the shift from orality to literacy.

In oral cultures, where there is no means of preserving knowledge outside of collective memory, narrative serves first and foremost a mnemonic function, fixing knowledge in the concrete and memorable form of agents performing actions, and functioning as a kind of tribal encyclopedia (Havelock 1963, 1982, 1986). For example, instructions on how to accomplish a given task are encoded in story format, while abstract phenomena, forces of nature for example, are given anthropomorphic form. The catalogue of ships in the *Iliad* is often cited as an example of how dry information such as a census is transformed into oral narrative by necessity, in that lists, as a form and medium, only appear after the invention of writing (Goody 1977). The centrality of narrative to culture was diminished by the introduction of the written word, and arguably further reduced by more recent innovations involving the mechanical reproduction of images and the electronic transmission of information.

In oral cultures, narrative can only be performed, and there is no clear distinction between oral performance and oral composition, since there can be no pre-existing text, no verbatim memorization, only repeated retellings in which no two performances can be alike. Oral narrative is therefore characterized by multiformity, each performance differing according to occasion, audience, and mood of the performer, and all the more so from one performer to the next, and from one generation to the next. This allows for a great deal of fluidity and flexibility within oral cultures, but also requires the adoption of a conservative approach because knowledge can so easily be irretrievably lost, resulting in an emphasis on tradition, on traditional narratives, and the use of formulas and clichés (Ong 1967, 1982); an emphasis on novelty and variety in narrative are therefore very much a product of the written word. Understanding that narrative has a history that begins long before the invention of writing is essential in understanding the nature of narrative as well as its history (Scholes – Kellogg 1967).

Literary studies reflects a literate bias towards the text (Ong 1982), so much so that the term *text* is used as a metaphor for all sorts of cultural artifacts and events that have nothing to do with pages and documents, whereas the exact opposite should be the case, that the text is understood as a process and form of symbolic action. It is perhaps understandable, then, that in the field of communication, with its long connection to speech and rhetoric, it is drama, derived from performance rather than text, that is the most powerful metaphor, and applied as *dramatism* and its variants to rhetoric (Burke 1945, 1950), as well as psychotherapy (Berne 1961), and in the theory of symbolic interaction in social psychology (Goffman 1959, 1963, 1967; Mead, 1934). Media ecology scholars also favor this metaphor, as opposed to scholars associated with cultural studies and its media studies offshoot, in part because the spoken word is primary (writing being a visual representation of the sounds of language).

Oral performance is dramatic performance, so that we cannot fully understand oral narrative by just studying written texts, even if they are records of oral performance, as is the case of the *Iliad* and the *Odyssey*. Significantly, Milman Parry arrived at his breakthrough understanding of oral composition in the early 20th century by comparing the Homeric texts to contemporary singers of tales practicing in Serbo-Croatia (Lord 1960; Parry 1971). Even after the establishment of a literate culture in ancient Greece, we cannot fully understand the Attic playwrights for example, without taking into account the evolution of oral performance from a single singer of tales into one divided among three singers still utilizing Homeric diction, the addition of the chorus, and the staging of the play (Havelock 1982). Similarly, textual analysis of Shakespeare's plays that ignores the requirements of the spoken word, the constraints of stagecraft, and the need to appeal to a live audience can easily result in mistaken conclusions about the meaning and motivation of the narratives. The same is true for modern audiovisual narratives, as dramatic considerations cannot help but come into play, albeit in different ways than in live theater, for example, in film and television's emphasis on the close-up of the human face, and the use of editing to create a

narrative montage (Eisenstein 1942, 1949). In this way, film, radio, television, and other media of the last century and a half introduce new kinds of narrative, and this is not limited to dramatic formats, as Scott McCloud demonstrates in his work on comics as a graphic medium (1993).

Even when it comes to written narrative, Ong (1967, 1971, 1977, 1982) emphasizes the presence of oral residue, texts being composed in large part to be read out loud, and writers often having been educated with an emphasis on rhetoric and oratory. It is not until we achieve the high literacy of full immersion within print culture that we get such purely visual writing as that of Henry James or Jane Austen, and with it the move away from an external narration of events and towards an inner thought world, ultimately leading to the stream of consciousness narration in the early 20th century. And there is indeed a certain irony in the use of the term *voice* as a metaphor for literary style, in that voice is exactly what is absent when language is coded as visual marks on a writing surface. Handwriting might retain some sense of connection with the author, some of what Walter Benjamin calls *aura* (1968), but it hardly has the same deep connection to identity as an individual's voice, and in any event that too disappears through typography. Writing renders presence problematic (Ong 1967, 2002), although we find ways to compensate through communication. But as communication, writing introduces the odd situation in which the narrator is separated from the narratee, and must be separated in order to compose the narrative. As Ong points out, «the writer's audience is always a fiction» (1977: 53) and the same is true of the author from the point of view of the reader, the paradox being that we find that we need to be alone in order to communicate effectively through the written word. The electronic media bring about what Ong terms «secondary orality» (1982), a mediated orality, which restores voice to audiovisual narrative to a large extent, but in an unprecedented, disembodied manner.

Mediating Character and Plot

Characters in oral narrative serve a mnemonic function, as figures that vital knowledge is attached to, and for this reason they tend to be characters that facilitate audience attention and message retention, i.e., characters that are larger than life, figures that are divine, semidivine, or royalty, heroes and villains that are extraordinary if not supernatural, monsters that are bizarre and otherworldly (e.g., a cyclops, a gorgon, a minotaur). In other words, they are the characters of myth and legend, or what Northrop Frye refers to as mythic and romantic heroes (1957). In keeping with the formulaic quality of oral narrative, oral heroes are flat characters, stereotypical, stock characters, associated with formulaic epithets (heroes are brave, noble, clever, etc.) that function in large part to fill the metric needs of poetry and song (Lord 1960; Parry 1971). Written narrative opens up the possibility of creating well-rounded characters, as can be seen in biblical narrative and ancient Greek and Roman biography (Auerbach 1974; Strate 2008). In Frye's terms, mimetic characters are introduced, first high mimetic, followed by low mimetic characters. As writing provides a means of preserving knowledge outside of human memory, narratives no longer need to serve the same mnemonic function that they once did, so that the mythic and legendary figures of oral culture are no longer necessary, and the mechanism by which they were created, oral tradition, no longer available. Oral narrative requires an economy of expression that is no longer necessary with writing as a medium, and the increased volume of information that writing affords allows for more information to be communicated about narrative characters, making them more individual and idiosyncratic, as well as more historically accurate, but above all easier to relate to and identify with, more like ourselves. The greater the volume of information being communicated, the more narrative characters are humanized, and lowered in relation to ourselves, until we reach the age of celebrity, which emphasizes character types that are just like us, completely ordinary, and even ironic in Frye's terminology, inferior to us or

otherwise just the same as us. Changing media environments have resulted in shifts from oral to literate heroes, and from print to electronic heroes (Strate 2008), and this is reflected as well in the way that mythic and romantic heroes are portrayed in film and television narratives.

Oral narratives are characterized as episodic in regards to plot (Ong 1982; Scholes – Kellogg 1967), and this is due in part to the improvisational nature of oral composition, which takes place simultaneously with oral performance (Lord 1960; Parry 1971), working along lines similar to jazz in its variations on a theme. Singers of tales are described as stitching together their narratives by drawing on formulas, formulaic expressions, and formulaic episodes, and there is no set sequence by which the parts of the story are told. As the tales are traditional in nature, audiences already are familiar with the story, so there are no surprises other than the ordering of the episodes, and it does not matter if the singer begins at the beginning or end, or mostly like somewhere in the middle, *in medias res*, thrusting us into the midst of things, where the action is, in order to capture the audience's attention. Events that occur earlier can be related later in the performance, in some ways similar to the use of flashbacks in audiovisual media, but the better analogy would be to storytelling in interpersonal interaction, when the storyteller forgets to add a part of the story, then later interrupts the forward flow of the narrative to fill in the missing details. The oral composition can also be shortened or drawn out by the addition of more episodes, depending on the situation. But the main point is that it is not until the introduction of writing that we could step back from a sequence of episodes, examine them objectively, and edit them to create a linear narrative or story line (Ong 1982; Scholes – Kellogg 1967). Again, linear narrative takes the form of drama in ancient Greece, and is reflected in the discussion of plot in Aristotle's *Poetics*. Of course, written narrative does not require linear plotting, it only opens the door to the possibility, but the idea of narrative progressing from beginning to middle to end originates with Aristotle, and informs narrative composition from antiquity onward, with further elaboration such as the concept of the climax, perhaps best

known today in conjunction with Freytag's pyramid. Edgar Allen Poe's 19th century invention of the detective story is particularly noteworthy in its use of a linear narrative and closure of plot (Ong 1982), and of the secondary narrative that the detective pieces together, usually beginning with the end of the narrative (e.g., the dead body), and then through the discovery of clues, piecing together different parts of the narrative until the whole story is revealed. While the secondary narrative is about piecing together a sequence of events, the emphasis in the primary narrative shifts from external action to the interior landscape of the mind, as the detective tries to get inside the head of the perpetrator, to understand the way that the other person thinks and sees the world. This is the first step towards stream of consciousness narrative, and reflects a shift from writing as a representation of the spoken word to writing as an externalization of inner thought (Nystrom 1987).

In the 20th century, we encounter the breakdown of linear narrative in literature as well as in audiovisual media, reflecting the new secondary orality and electronic culture. This is apparent not only in modernist and postmodernist literature and independent and avant-garde filmmaking, but in the episodic structure of many radio and television programs, as well as the never-ending storylines of soap operas and many other serials that involve multiple, overlapping plot threads. The departure from linear narrative is manifested in new media through the introduction of hypertext narratives modeled on branching storylines (Bolter 1991; Landow 1992; Strate 1996), through the evolution of computer games as interactive fiction (Montfort 2005), and through transmedia narratives (Jenkins 2008) that need to be pieced together via entirely different media (e.g., film, books, video, computer games, websites, etc.). New media theorist Lev Manovich goes so far as to suggest that digital technology has replaced narrative with a new form (or medium), the database (2001), an interesting argument, but one that does not take into account that narrative is itself a medium and technology, and one that has been central to human life for tens of thousands of years.

Closely related to the distinction between episodic and linear narrative is the contrast that Joseph Meeker paints between comedy and tragedy (1997). Comedy, he argues, is a narrative form universal to all cultures, and involves a form of picaresque play in which heroes are concerned with living in harmony with their environments, with just getting by, what Meeker refers to as the comedy of survival. Tragedy, on the other hand, is peculiar to western cultures, and features heroes who try to possess and master their surroundings, and in their hubris in thinking they can control their environment, bring about their own doom. Although he does not make the connection between these two forms and orality-literacy comparisons, Meeker's literary ecology fits well with a media ecology approach, as comedy originates with oral narrative, works with episodic plot structure, and then evolves as a genre within written and audiovisual narrative, while tragedy can be understood as the unique product of a literate culture. McLuhan notes that oral culture is associated with acoustic space (1962, 1964), which places us inside our environment, surrounded by and at the center of our environment. This is the way that we experience the world through our sense of hearing, and it is an inherently subjective position, as well as one that is conducive with living in harmony with our environment. Literacy, he argues, moves us into a visual space, as exemplified by Euclid's geometry, the development of perspective in art, and Newtonian physics. In visual space, we stand outside of the world, as outsiders looking in, voyeurs and spectators. That is how we experience the world when we rely on vision alone, especially utilizing the fixed point of view associated with reading, the literate gaze or stare, and it is an inherently objective stance, giving rise to the ideal of objectivity, but also to the idea that our environment consists of objects that we can manipulate, possess, and control. This alien and alienating vision is associated with the idea that we are not a part of nature, that nature is an other that we are in conflict with, an idea born out of the literate cultures of the ancient world. Literacy, then, is the basis of tragedy as Meeker understands it, and not surprisingly, McLuhan relates Shakespearean tragedy to the fact that he was grappling with the novelty of the literate culture emerging in Elizabethan England,

that Hamlet's indecisiveness, for example, is a direct effect of his bookishness. As tragedy is so intimately bound up with literacy, it may well be that a contemporary lack of understanding of true tragedy as a narrative form is a byproduct of the postliterate culture emerging from our electronic media environment.

In oral cultures, collective memory requires the use of memorable techniques, form, or media, and this includes narrative, and also the forms we associate with poetry and song. When oral narrative is remediated by the written word, poetic diction is remediated as well, as can be seen in the texts of Homer, Hesiod, and the Attic playwrights. And while poetic technique evolves and expands through writing, epic poetry and verse drama constitute the first and primary form of written narrative, with prose emerging gradually as an entirely new form unique to writing as a medium (Godzich – Kittay 1987). As we become more fully immersed in literate and typographic culture, prose narrative becomes the norm, and narrative poetry the exception, for poetry and storytelling alike. Prose opens the door to the new narrative form that appears in the wake of the printing revolution, the novel, along with the short story, and which quickly become the main manifestation of narrative in print culture. Along with this typographic innovation comes the concept of fiction itself, which is to say the distinction between fiction and nonfiction, a distinction not made in oral or scribal culture (Scholes – Kellogg 1966). Fiction follows typography's bias towards specialization in representing writing for writing's sake, a narrative form that makes no claim whatsoever to representing real events. Ironically, while completely divorcing itself from reality, fiction came to be evaluated almost entirely by the criterion of realism, along with a sense of originality and novelty that did not and could not exist before the printing revolution. The strict separation of fictional and nonfictional narrative characteristic of print culture has broken down in the electronic media environment, through forms such as the docudrama, as has the absolute association between fiction and narrative, through non-narrative fictional products such as study guides for Klingon, the language of an alien race from the *Star Trek* series.

Conclusion

Understanding narrative as a medium in conjunction with media ecology as the study of media as environments suggests a need to study narrative as an environment. The tendency to think of narrative as a text serves as an impediment to this alternate approach. The shift from oral to literate media environments amounts in a shift in experience and understanding of narrative, from an event and a transaction between storyteller and audience in oral cultures, to a thing and object in literate cultures, whether in the concrete material sense of a particular copy of a book, or in the more abstract notion of the specific content that appears within multiple copies of the same work. Inklings of narrative as environment can be gleamed, however, in the literate sense of getting lost in a story, being transported to another place and time through reading. More generally, the seemingly universal phenomena of using personal narrative to make sense of our world, the ways in which we turn ourselves into the heroes of our own stories, the extent to which the internal monologue or dialogue of consciousness amounts to an inner self playing the role of narrator or storyteller, all point to the idea of narrative as a process of abstracting and mediating, mapping the territory, creating a view of the world, and constructing our perceived environment.

In literary criticism, the tendency to focus on character and plot also works against an understanding of narrative as environment. It is in the nature of environments to be in effect invisible, that is, to serve as background in a figure-ground relationship (Sapir 1921; McLuhan 1962, 1964). Media are environmental because they mediate between ourselves and our outer environment, and in coming between us and the outer world become the environment we actually experience, but also because they quickly become routine and therefore ignored in favor of the content they convey or the way in which they are used. Unless the technology or form is entirely new, or ceases to function properly, we generally do not pay attention to the medium itself,

which is why one of the main tasks for media ecology scholars is to bring media back into conscious awareness and make them the object of study, because media, rather than content, have the more significant effects on us, individually and collectively. The problematic nature of figure-ground relationships that media ecologists seek to correct is mirrored in literary criticism's traditional focus and value placed on realism as a criterion. Realism highlights the elements of character and plot, and deemphasizes the narrative element concerned with environment, the setting. For this reason, science fiction and fantasy narratives in particular, along with offshoots such as alternate history and magic realism, have until recently been denigrated because they concentrate on the development of highly original settings rather than character and plot (Strate 1993, 2011, 2015).

The creation of fictional environments within narratives has become increasingly more prominent over the past century, however. J.R.R. Tolkien's extraordinary achievement in building a fantasy world began with the medium of language, through the creation of Elvish tongues, out of which he created not just a history, but a territory called Middle Earth. Together with James Joyce and George Orwell, Tolkien's heightened awareness of language can be linked to the introduction of secondary orality via radio and sound recordings. In a very different way, the comic book industry gave birth to a kind of collaborative world-making, beginning with a character from one series appearing in another character's story as pioneered by DC Comics, leading to the launch of the Marvel Universe in the early 1960s, an approach that Marvel has now successfully replicated in the motion picture industry. Broadcasting, in introducing programming consisting of episodic series, necessitated the creation of a kind of guidebook, manual, or 'bible' for each series to make sure that different writers and directors working on the program maintained a level of consistency from one episode to another. In doing so, they also created worlds or universes, that is, settings and environments for their characters, out of which individual plots could be constructed. It is no accident that what may well be the most successful narrative format on television has been the *situation* comedy, situation being synonymous

with environment in this respect. The sense that episodes are windows into a larger universe was not lost on fans of the programs, as fan fiction, pioneered by *Star Trek* enthusiasts, served as further explorations of the fictional universe, giving rise to new kinds of transmedia narratives (Jenkins 2008), further expanded upon in more deliberate fashion following the success of George Lucas' first *Star Wars* film in 1977. The creation of fictional environments gave rise to the trend towards multipart narratives in publishing, film, and television, e.g., the *Harry Potter*, *Hunger Games*, and *Game of Thrones* series, among others. The use of the term *game* in titles also reflects the fact that gaming has moved increasingly towards the creation of narrative environments, from the original *Dungeons and Dragons* game inspired by Tolkien that utilized computer-generated statistical tables, to the interactive fiction genre that included author Douglas Adams writing the text for the 1984 adaptation of his *Hitchhikers Guide to the Galaxy*, as well as an original game entitled *Bureaucracy* released in 1987, to the turn towards cinematic narrative associated with *Myst* in 1993, which remains the dominant mode in gaming narrative today. Hypertext narrative also brings the concept of the environment to the fore, the narrative serving as a kind of architecture or garden that the reader navigates through (Bolter 1991; Landow 1992; Strate 1996). The web being a hypertext writ large, the online environment offers new possibilities for narratives based on nonlinear navigation.

Social interaction also functions as an environment, as we enter *into* conversations and relationships, and it is worth recalling that narrative in oral cultures was not characterized by the strict separation between narrator and narratee, storyteller and audience, that took hold in literate cultures with the separation in time and space between author and reader; the breakdown of that separation is often cited as a characteristic of new media narratives such as hypertext. Moreover, in oral cultures, audiences participate, by singing along, through call and response, and by reminding the storyteller of elements of the narrative that had been left out or otherwise requesting the addition of certain elements (or that they be passed over). While older forms of audiovisual media that follow the mass media model are consistent

with the literate tradition of active sender and passive receiver of messages, new media are participatory in nature, whether by way of direct and immediate feedback mechanisms and opportunities for interaction and collaboration, or through programmed interactivity with the medium itself, or through the users' ability to upload and disseminate material in the form of blogs, podcasts, video sites like YouTube, etc. Indeed, we might well speculate on the multitude of personal narratives expressed through blogs, podcasts, and webcam videos. Looking towards the future of narrative in an evolving media environment, I would point to such innovative experiments as Bob Stein's social book platform (<a href="http://www.livemargin.com), Douglas Rushkoff's *Exit Strategy* (2002) involving an experiment in open source annotation, Michelle Rae Anderson's *Venice is for Lovers* (2011) based on her innovative online digital *Miracle in July* novel, and Robert Blechman's award-winning humorous mystery novel *Executive Severance* (2011) composed entirely on Twitter.

Tablets and smart phones have been remediating works produced by and for chirographic and typographic media, while adding hypertextual functionality to narrative and non-narrative alike; they have also played a role in renewing interest in interactive fiction. Features such as the touch screen and the ability to change the position of the screen, turning it from vertical to horizontal and back again, have allowed for new narrative applications take advantage of the bias of mobile media, notably *Strange Rain* first released in 2011, *DEVICE 6* in 2013, and *Sailor's Dream* in 2014. While highly creative, these apps do not take full advantage of the mobile aspect of tablets and smart phones, as compared for example to Walking Cinema's location-based apps that go beyond the gaming concept of mobile-based scavenger hunts to the creation of a series of documentaries in which the storytelling is linked to actual exploration of a city, e.g., *The Legend of Casteo* for Venice released in 2005, *Murder on Beacon Hill* for Boston released in 2009, *Posts from Gloucester* for the Massachusetts fishing town in 2012, and *Museum of the Hidden City* for San Francisco to be released in 2015. Embedding narrative in real spaces and places utilizes

location-based software based on GPS tracking, and will no doubt increasingly incorporate augmented reality software to create an audiovisual and textual overlay on the physical world, making use of the devices' cameras and displays, and eventually of wearable technology such as Google Glass. On a much more limited scale, Disney has been extraordinarily innovative in the creation of specially built narrative environments through the media of theme parks and rides, with Universal's contributions in this area also worthy of note. Still, locations have their limitations, and stories have always offered a means of travel independent of physical transportation and the necessity of *being there*. In this respect, virtual reality technology represents the ultimate potential for full immersion in a simulated narrative environment, with Oculus Rift, purchased by Facebook in 2014, poised to lead the way.

The future of storytelling lies in the continued shift away from narrative as text, and towards the fuller development of narrative as environment. In conjunction with the electronic media and especially the new media, narrative will increasingly involve interaction and collaboration in its creation, and its reception, social narrative as a form, and social storytelling as an activity. And in keeping with the bias of new media, narrative will increasingly involve programmed interactivity, and gaming. These and other mutations are aspects of the continuing evolution of narrative, as it interacts with other media, at each turn releasing bursts of creativity, what McLuhan referred to as hybrid energy (1964). Despite the appearance of a many new non-narrative forms, the medium of narrative remains as intrinsic to human life as language itself, and storytelling survives as a distinctively human, and humanizing activity.

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