

ABSTRACT

Title of dissertation: VISUALIZING TRANSMEDIA NETWORKS:
LINKS, PATHS AND PERIPHERIES

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‘Visualizing Transmedia Networks: Links, Paths and Peripheries’ examines the increasingly complex rhetorical intersections between narrative and media (‘old’ and ‘new’) in the creation of transmedia fictions, loosely defined as multisensory and multimodal stories told extensively across a diverse media set. In order to locate the ‘language’ of transmedia expressions, this project calls attention to the formally locatable network structures placed by transmedia producers in disparate media like film, the print novel and video games. Using network visualization software and computational metrics, these structures can be used as data to graph these fictions for both quantitative and qualitative analysis. This study also, however, examines the limits to this approach, arguing that the process of *transremediation*, where redundancy and multiformity take precedence over networked connection, forms a second axis for understanding transmedia practices, one equally bound to the formation of new modes of meaning and literacy.

VISUALIZING TRANSMEDIA NETWORKS: LINKS, PATHS and
PERIPHERIES

by

Marc Nathaniel Ruppel

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For Ken K., a truly beautiful mind.

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Chapter One:

INTRODUCTION

*Let us imagine that on a recent trip to a local bookstore, you notice a book called *Personal Effects: Dark Art* by JC Hutchins and Jordan Weisman. Intrigued by the bulging packet of 'effects' glued to the inside cover of the novel, you purchase it and take it home to read. Once home, you open the packet and spill out its contents on the table, finding a character's driver license, torn photographs, birth certificates, death certificates, maps, handwritten notes, typed letters and incident reports from a psychiatric ward. Curious, you turn to the first page of the novel. Over the course of the next several hours of reading, you notice several references to these objects, many of which compel you to inspect them in closer detail. Pressing on, you find other points in the text that seemingly also compel you to action, to visit a website, or dial a phone number. Eventually, you do, only rather than finding dead-ends, you instead find other invitations to explore further, invitations that have led you far, far away from the printed page where your journey began....*

*Let us also imagine that, based on a series of compelling advertisements, you recently decided to begin watching the television show *HEROES*. During a close up shot in one episode, you notice a business card that is exchanged between two characters with a web address for www.primatechpaper.com. After typing the address into your web browser, you explore the site, stumbling upon a page that allows you*

to submit your email address for further correspondence. Some weeks later, you are contacted by a woman named Hana Gitelman, aka 'Wireless', who suggestively possesses the power to manipulate electronic media and who you are told you can learn more about in graphic novels located online. At the conclusion of one such novel, Gitelman is seen travelling to a cemetery, but you never see her arrive. Until, that is, about a month later when Gitelman appears in the background of a shot of the television show, meeting with other characters as gravestones frame their conversations. Soon after, though, Hana disappears again, only to reappear in the midst of yet another graphic novel and then, a handful of issues later, she is killed. Even so, in the second-to-last panel of the graphic novel detailing her death, you notice see a computer screen with a prone cursor awaiting input. In the next panel, a web URL is typed on the screen. Typing this URL into a browser, you are greeted by a person, someone sounding suspiciously like Hana Gitelman....

In the two hypothetical situations above, we encounter a series of traversals that have become wholly typical of contemporary expressions, in which an audience becomes engaged with a fictional world across a series of platforms, their movements encouraged by the content itself. In J.C. Hutchins and Jordan Weisman's *Personal Effects: Dark Art* (2009), for instance, what begins as an exploration of static texts and tangible, fictional objects later becomes an investigation of psychiatric websites,

patient art, conspiracy theories and supernatural events, very little of which is found in pages of the novel. Similarly, to piece together the fate of Hana Gitelman in *HEROES*, we must follow an equally complex trail that weaves and winds its way across television, the Web and, eventually, print. Yet, much like *Personal Effects: Dark Art*, no one of these spaces on allows us to get the entirety of Gitelman's tale. Instead, in order to piece together the *events* of her (possible) demise, we must locate and navigate a pathway that is nested in two seconds of screen time, the HTML source code of a website, various web videos, the hand-drawn computer screens of a graphic novel and even our own email inbox. Navigations like these are the foundation of *transmedia fictions*, defined here as *multisensory experiences where fictional information is dispersed in a controlled manner across a diverse set of modalities and platforms*. But, like the numerous media that compose a transmedia fiction, this dynamic has many names: 'transmedia storytelling' (Jenkins 2006a), 'transmedia intertexts' (Lemke 2008), 'entertainment supersystems' (Kinder 1991), 'hyperserials' (Murray 1998), 'hypernarratives' (Lunenfeld), 'digitexts' (Caldwell and Everett 2003), 'honorific remediations' (Bolter and Grusin 1999), 'new intertextual commodities' (Marshall 2004), 'multimedia strategies' (Lévy 2001), 'multimedia transpositions' (Ryan 2004a) and, more broadly, '360° content' and 'cross-media narratives'.¹

¹ Following Christy Dena (2009), however, my use of the term *fiction* here, instead of 'storytelling' of 'narrative' is a conscious move away from considering transmedia as a *single* mode of discourse (such as

Regardless of the nomenclatures, in transmedia contexts a fictional world is not simply the product of one platform but of several: a controlled combination of digital and analog media; of gameplay and narrative; aural, oral, visual, tactile and interactive platforms; imageless novels and image-laden graphic novels; of newspapers, films and television shows and DVDs; video games, interactive fiction and electronic poetry; CDs, mp3s, live performances and recordings of live performances; phone calls, text messages and emails; weblogs, wikis and websites. In a paradigm shift of the first order, contemporary productions are currently treating the *whole* of the medial ecology as a multimodal palette that allows a fictional world to be realized with a vast expressiveness. Such a shift has already created within it new genres of fiction, such as the Alternate Reality Game (ARG), where audiences and the platforms they use on a daily basis (such mobile phones) are incorporated into the fictional world as important characters and objects in their own right. Here, characters communicate with the audience via email or phone calls or in live performances as if they existed inside the story. All of this, in its own way, is a push for a more immediate fictional experience. As J.C. Hutchins remarks, 'Each medium has its weaknesses, [but] they all excel in delivering compelling content and emotion, but in different ways. So why not combine them?' (Andersen 2008).

narrative) and into a conception of the form that works through multiple modes (such as narrative and interactive gameplay).

But how exactly does this combination take place? How might it be possible to link both analog and digital platforms in a manner that encourages audience integration? These questions *matter* because in a very real way, the meanings produced by such activities are already *rooted in* matter composed through swirling, interloping modal signifiers promoting a series of interpreted *connections* between media. Here, the creaking sounds of a house in the novel *House of Leaves* can be heard in the speakers of a car passing by on the street, playing a CD related to the book; certain sequences of the film *Southland Tales* become an interface for a series of websites and graphic novels; the television show *Buffy the Vampire Slayer*, though cancelled at the conclusion of its seventh season, can continue in season eight as a graphic novel; a scavenger hunt for the 'missing' chapters of Steven Hall's *The Raw Shark Texts* novel are strewn across the Web, libraries and even countries; hundreds of thousands of players work collaboratively to geo-locate ringing payphones across the US in order to get the chance to speak live with a fictional character in *I Love Bees*; a manuscript read by a character in the television show *LOST* can be purchased as a print novel through Amazon.com; a series of songs can be heard live with improvisations or in static recordings, and then read about in an art book, seen in an art gallery, and manipulated on the Web in *Greendale*; audiences are compelled to use their cellphones to speak to characters they watch on their monitors while simultaneously interacting with fictional websites

and email addresses in *www.UNNEXCLUSIVE.com*; here, even *smell* becomes a mode of meaning, as in *The Maester's Path*, where certain audience members were sent kits containing multiple vials of scents—ranging from campfires to grasslands to horse barns—each related in its own way to the fictional world of the *Game of Thrones* TV show and novels.

The entirety of this study is premised on addressing a single question: how do we 'close read' transmedia fictions such as these in a way that accounts for both the nuances of the individual platforms—the novels, games, films, websites, live performances, mobile apps and TV shows—as well as the nuances of the larger transmedia engagements that structure them? In other words, what does it mean to get our hands 'dirty' while engaging with transmedia productions? While close reading a poem or novel, we might look for the ways that words or phrases repeat themselves or how the organizational structure of the work reflects the thematic concerns it communicates. Similarly, in close viewing a film, we might pay attention to the camera's framing of the shots, the *mise en scene* of a particular location, or the way that a character's dialogue is challenged by the imagery of the sequence. We can also close 'play' games, paying attention to the design of the levels, the way the game structures our inputs or resists them, or the way that gender and sexuality are communicated as interactional elements. In short, we have a vast array of methods at our disposal that allow us to come into *close*

contact with a number of genres, platforms and media. But, as of right now, we have *none* that help us to close ‘read’ a transmedia fiction. This is the result, I will argue, of the lack of a consensus object of study and an inability (or unwillingness) to come into contact with the individual properties of each platform. When looking at transmedia fictions, do we study the media in isolation or in combination? As a field of discourse in itself or as the product of a specific discourse field? As platform-specific outgrowth (i.e. originating in TV or film) or as a platform in its own right?

In the context of these distinctions, my main concern in this introduction is to differentiate the various (historical) approaches to transmedia fictions, focusing in particular on the object of study they promote. In such accounts, systemic analyses of commodity systems give way to more nuanced takes on transmedia meanings, but only in a manner that brings us no closer to an understanding of the textual navigations we are required to make in order to create the conditions necessary for sequentiality, interactive depth and fictional world building. By shifting our focus from large-scale accounts of transmedia to examinations based on finding concurrencies of practice at their most individuated level, I argue that we can locate a new model through which to conduct transmedia studies, a model premised on the formal location of connective elements between diverse platforms. Here, in a single panel of a graphic novel, a five second sequence of a video game, or a hyperlink of a website, can we find a model to not only engage with the individual

media themselves but also, in doing so, with the materiality of transmedia as a wholly unique platform of expression in its own right.

(re) Defining Transmedia

As is evident in the examples above, transmedia practices work to distribute narrative properties across platforms, environments and time, marking them with cross-modal affects and structuring meaning as a local to global process of integration. In *Assassin's Creed* (2007-present), for example, a narrative that began in a video game has become inordinately interwoven with comics, film, websites and touchscreen device applications. This is so much the case that specific story sequences happen as highly acute and highly multimodal realizations, where what's only briefly implied in a five second segment of video game cutscene is exploded in an audience's movement in-and-out of animated film shorts, the pages of a print novel and the geographies on an interactive iPad map. Transmedia practices, however, also position objects as newly manipulable entities entrenched in the functionality of a fictional world. Here, projects like the *Cathy's Book* series come bound with packets of tangible artifacts ranging from lipstick-stained napkins with working phone numbers scribbled inside of them to coins, jewelry and maps with hidden messages revealed through folding and creasing them. When interpreted in conjunction with the content of the book, larger meanings are revealed that draw and depend upon multiple elements in the project used in conjunction and not in isolation.

‘Reading across media’ in this way, Henry Jenkins argues, ‘sustains a depth of experience that motivates more consumption’ (2006a: 96). What’s remarkable about transmedia fictions isn’t simply that such recombinative compositions happen, but that they often happen with such a high-level of coherency. The use of different media, then, not only functions by giving us fresh perspectives on a fictional world, but also separate points-of-entry into it, where ‘any given product is a point-of-entry into the franchise as a whole’ (Jenkins 2006a: 96) and local (at the level of a single platform) and global (at the level of multiple platforms) comprehensions co-exist and are co-constructed. Indeed, in discussing *The Matrix* franchise (1999-2009), for instance, Jenkins describes a film franchise of such complexity that, to ‘truly appreciate what we are watching, we have to do our homework’ (ibid, 94) by increasing our contact with the additional media in the project, ranging from a series of video games to graphic novels to animated short films to websites to a massively multiplayer online role playing game. As Jenkins remarks, ‘When previous generations wondered whether they ‘got’ a movie, it was usually a European art movie, an independent film, or perhaps an obscure late-night cult flick’ (2006a: 94). *The Matrix*, however, drew upon and encouraged this inadequacy in the film trilogy as a means of creating narrative complexity, of forcing audiences into other media channels where answers might lie. As Jenkins explains:

The filmmakers plant clues that won't make sense until we plant the computer game. They draw on back story revealed through a series of animated shorts, which need to be downloaded off the Web or watched off a separate DVD. Fans raced, dazed and confused, from the theaters to plug into the Internet discussion lists, where every detail would be dissected and every possible interpretation debated (2006a:95).

The Matrix is 'entertainment for the age of media convergence, integrating multiple texts to create a narrative so large that it cannot be contained within a single medium' (2006a: 95). 'In the ideal form of transmedia storytelling', Jenkins argues, 'each medium does what it does best—so that a story might be introduced in a film, expanded through television, novels and comics; its world might be explored through game play or experienced as an amusement park attraction' (2006a: 96).

The specialization Jenkins speaks of here—a specialization that I will later argue is related to network-oriented design—works by forming a multiplicity of medial perspectives through which to examine the often cipher-like universe of projects like *The Matrix*, pushing audiences, towards a more idealized mode of 'reading'. Here, organic convergence, where someone is surfing the web while watching TV, couples with cultural convergence, where audiences participate in the co-production of meanings in large-scale projects, in order to construct a fully realized and fully engaged interpretation. An audience's engagement also allows

the accumulation of a narrative capital, an 'additive comprehension', in the words of game designer Neil Young (Jenkins 2006a: 123), that brings a complexity of understanding to previously encountered texts which can then be spent online on message boards and dispersed toward heightened understanding of a massive fictional universe.

The Roots of Transmedia Practices

Stepping back, for a moment, it's important to briefly note that the foundations of transmedia practices are, of course, 'not entirely new' (Jenkins 2006a: 119), even though the intentions and methods we see exhibited toward their creation *are*. As Jenkins has observed, transmedia is rooted in practices that have developed over time, historically as a function of unequally distributed literacies. Biblical stories, for example, had to reach the illiterate as well as the literate and were, therefore, cast broadly in stained-glass windows, tapestries, sermons and live performances (Jenkins 2006a: 119), each often contain subtle expansions that were only perceptible when considered as a whole. Illuminated manuscripts and early print texts such as the Diamond Sutra also sought to provide multiple modes of complimentary engagement in their interweaving of image and words. Later, artists like William Blake played with these arrangements by contrasting the words of his poems with images in a manner that forced a consideration of the meanings of each mode. Charles Dickens, generally considered a master of serial storytelling, was also keen, as Steven Jones observes, in

‘cultivating an interactive relationship with his readers’ (2008: 42), receiving letters from them, adjusting his stories in response, overseeing even the placement of ads and illustrations and ensuring that each serial installment of his stories was published near the real-life news of local municipalities. We can similarly trace the melding of interactivity, gameplay and narrative in the explosion of artifacts surrounding *Uncle Tom’s Cabin*, where a series card games allowed audiences to role-play as characters, and locate a related impulse towards branding objects by orienting them in a fictional world in the diffusion of artifacts surrounding the novel and film *Trilby*, where audiences could snack on foot-shaped ice cream novelties (Trilby’s feet were featured centrally in early parts of the novel), purchase hats seen in the film, and listen to the film’s music played live in theaters on phonographs at home (Gitelman 2004: 65). Likewise, David O. Selznick and his company, Selznick International Pictures, branded, produced and sold films like *Rebecca* (Hitchcock 1940) as environments that extended far outside of the movie theater, going so far as to commission a line of home furnishings that promised to transform a house into a livable version of a fictional world (Edwards 2006: 39).

As an aesthetically evocative term, however, *transmedia* didn’t come into circulation until around the late 1960’s, when artists began working in more experimental models such as *happenings*, which mixed live performance with mixed-media aesthetics. David Medalla, for

instance, referred to his project/ art collective *The Exploding Galaxy* (1967), which mixed drama, dance, happenings, poetry and psychodrama, as a 'kinetic confluence of *transmedia* creators' (Medalla 1967). Similarly, director Stewart McKenzie described his 1969 staging of JG Ballard's *The Assassination Weapon* as 'A Trans Media Quest for Reality' (McKenzie 1969) that incorporated multiple sensory engagements—from film projected on a rotating sphere to live performances and music—in order to communicate the fragmented nature of our lived and mediated experiences. Transmedia fiction as it is described in this study, however, as a series of *controlled* distributions of content that works towards building a fictional world, has its closest antecedents in projects like L. Frank Baum's *Wizard of Oz* series. As Jenkins observes, Baum was deeply invested in the 'concept of the author as world builder' (Jenkins 2009b), and presented himself 'as the "geographer" of Oz, giving a series of mock travelogue lectures, where he showed slides and short films, which illustrated different places within Oz and hinted at the events which had occurred there' (ibid.). Additionally, as Jenkins further notes, Baum elaborated 'not simply through the books but also through comic strip series, stage musicals, and films, each of which added new places and characters to the overall mix. Some of the Oz books were novelizations and elaborations of stories introduced through these other media' (ibid.). In *Oz*, sequences of events

unfold slowly over time and media, hinted at in one platform and expanded through another.

While Jenkins aligns these authorial drives with a corresponding audience predilection toward what Janet Murray calls the ‘encyclopedic’ completeness of contemporary fiction (Murray 1998), it’s also apparent that in current transmedia fictions what’s being conveyed isn’t simply fictional information, but an intentionality of *practice* that aligns multiple media, multiple creators and multiple audiences under the banner of *intentionality*. As Geoffrey Long argues, ‘true’ transmedia expressions exist when ‘each component of a transmedia story is designed as canonical from the outset’ (Long 2007: 40). In Dena’s view, the multiple platforms utilized in a transmedia experience are ‘intended to be part of the [same] meaning-making process’ (2009: 109) and, as such, they contain information that works co-constructively to structure an audience’s experience of the fiction. In focusing on *both* the practices and processes that give rise to transmedia fictions, as well as the ‘end-product traits’ (Dena 2009) of their realization in and across platforms, we can begin to recognize the presence of *design strategies* that orient the fiction towards local and global comprehension. Because of the multiplicity of inputs involved in the creation of a transmedia fiction, these strategies of design are correspondingly located on multiple axes of production and distribution (cf. Kinder 1991; Murray 1998; Dena 2009; Jenkins 2006, 2009a, 2009b,; Long 2007, 2011; Mittell 2006; Gray

2010; Evans 2011; Lunenfeld 2000; Marshall 2002; Proffitt et al. 2007; Jones 2008), with practices that involve and negotiate (often simultaneously) some or all of the following:

- multiple producers/ authors working in conjunction
- the various socio-cultural and economic models of a specific mode of expression (e.g. those involved with realizing a movie from screenplay to screen, or a video game from code to console, which often involve different creative divisions, market tendencies, distribution norms, etc.)
- the material considerations of each medium/platform (i.e. the support systems they work through, be it the paper of a book or the platters of a computer)
- an audience's tiered preferences for engagement (i.e. do they aggressively seek out transmedia engagements, or prefer only one or two media? Do they involve themselves in collaborative pursuits with other audience members, or prefer to lurk in the background?) (Dena 2008)
- the *design* of the fiction (i.e. does it involve *extending* an already established narrative in transmedia ways or creating one designed as transmedia from the beginning?)

In considering the complex demands of coordinating these processes, Jeff Gomez, CEO of Starlight Entertainment, advocates for the role of the 'universe steward', a single person, a 'shepherd for very large tent-pole

intellectual properties who will be responsible for co-ordinating and creatively escorting the property across multiple media platforms' (Gomez, cited Baage and Gomez 2009). Such a role, Gomez adds, is 'above and beyond studio politics, above and beyond licensing, above and beyond even the producers, directors and actors who are involved in creating the individual components of the universe' (ibid.).

In a recent blog post titled 'A Criticism on the Lack of Criticism', however, transmedia designer Brooke Thompson observes that 'one of the biggest problems hindering the growth of transmedia (and all the various things that fall under it, such as ARGs) is the absolute lack of critical looks at projects' that contain the *same* breadth of knowledge as those Gomez sees comprising the role of universe steward. 'That's not to say that criticism doesn't exist', Thompson further argues, 'it does, but it's scattered in conversations and hidden in forum posts or mailing lists. And it is, usually, not about a project as a whole and, instead, focuses on a single issue or is a broad look at the field' (Thompson 2010). For Thompson, the lack of such a body of critical activity is the result of the fact that 'the commitment required to fully experience a transmedia project, especially one as complex as an ARG, is far greater than the commitment required for films and video games (or books or music...)' (ibid.). Here, rather than spending anywhere between two and forty hours with a project (as is the case in film and video games), transmedia fictions often ask that the audience become engaged over a period of

weeks, months or even years, seeking out and negotiating multiple platforms in the process. Citing this post as evidence of the need for a more developed and publically-pronounced infusion of transmedia criticism, transmedia producer and theorist Geoffrey Long (2011) argues that a ‘necessary bifurcation of transmedia criticism into two categories’ is needed, one that works towards both ‘a richer, deeper understanding of transmedia among academics and professionals [through] an equally rich, deep form of transmedia *criticism*, [while] broadening the audience for transmedia experiences requires transmedia *reviews*’ (Long 2011: 12). The most important aim of transmedia criticism, Long further argues, is in the ‘shaping of a *language* of transmedia experiences, through the discovery of a set of standard best practices’ (2011: 14). By ‘speaking the language’ (ibid.) of transmedia experiences, then, we might better understand and implement its form.

(Inter) Disciplinary

But what is the ‘language’ of transmedia? And is it reasonable to expect that anyone knows how to speak it on their own? The issue here, crucially, is locating the proper place to approach the interpretation of transmedia fictions in a way that upholds the unique integrity of the form. Much like the early study of video games, research into transmedia practices seems ready-made to support the inputs of a widely interdisciplinary set of fields, ranging from, to name just a few, narratology, media studies, social anthropology, art history, textual

studies and, fittingly, game studies itself. Regardless of this spread, or perhaps because of it, the study of transmedia practices has become a matter of certain sort of gentrification, one that substitutes a lack of consensus (not that this is necessarily a needed thing) for an opportunity to transit within one's own field.

Consider, for a moment, the almost undeniable pull: the existence of a storytelling technique crafted through books, film, games, etc. calls to those who specialize in individual media, while the existence of their combinatory use calls to the larger concerns of media studies theorists. To define transmedia projects as *narrative*, for example, would seemingly mean that the 'toolbox of narratology', as Marie-Laure Ryan calls it, would have to be unpacked and then put away for each platform in use. We might talk about a transmedia project that begins as a novel, but to discuss a film that might also be a part of the project would require a different approach entirely. Relatedly, to employ a *transmedial* definition of narrative might allow us to develop the idea that transmedia interpretation exists on the level of the cognition, as a mental image 'built by the interpreter in response to the text' (Ryan 2004: 8), but such an observation does little to assist us in understanding the triggers and traces of this mental image as it is formed by the textually-realized aspects of an expression, nor does it highlight the specific properties of

transmedia structures as *conceptual media* in their own right.²

Conversely, to define transmedia fictions as *games* would mean to empty them of the narrative richness that so often structures audience engagements.³ We might also discuss the larger systemic media fluctuations that might have given rise to transmedia expressions, but we'd lack a vocabulary to discuss the individual contributions of the *storytelling* capacities of each medium. We might focus on the economic conditions that gave rise to the structures of transmedia practice, arguing that transmedia projects are an example of the increasing monetization of narrative 'brands', but this does little to illuminate the artistic or aesthetic complexity being developed within such frameworks.

It is, of course, dangerous to discount the value of this sort of disciplinarity, especially so early on in the study of transmedia practice.

² This is not to say that a transmedial definition of narrative cannot benefit from the study of transmedia practice. If transmedia fictions are viewed as mental images enacted over a series of sites, transmedial studies of such phenomena might look at the way, for instance, fictional locations or the common traits of certain characters are communicated across sites. Transmedial studies might also concern themselves with the role of each medium in the production of the complex narrative, asking questions of 'why' a particular site is used to tell a particular story (such as graphic novels for prequels), alongside more commonplace questions such as 'how' that site's material bases handle story on their own. Similarly, the presence of *migratory cues*, which promote connectivity between sites can be seen as a ratification of transmedial narratology, in that these cues operate through material/ modal equivalencies between sites. Migratory cues also reflect key aspects of Ryan's (2003: 4) schema defining the mental template for narrative construction. Here, narrative is a mental model constructed by the presence of a world populated by individuated agents and objects, events linked by causal relations and 'the development of a network of connections gives events coherence, motivation, closure, and intelligibility and turns them into plot' (such a consideration forms the basis of the methodology proposed in Chapter Two, 'LINKS').

³ These distinctions are especially important in distinguishing what Christy Dena (2009) calls the *transmodiological* nature of transmedia projects, where multiple designers working in the fields of game and narrative design must find non-mode specific elements that can work across sites. What I later call *migratory cues*, signs in one site that point toward content in another site, make use of transmodiological methodologies, but only *because of* the network functions that necessitate it. But, as we will see, non mode-specific approaches abound in cross-sited contexts, most visibly in the form of the use of medium-as-mode as an organizing concept, giving rise to site structures that possess elements of other media.

However, much like Espen Aarseth (1997) argued at a similar juncture in the study of electronic textuality, the isolated attempts at applying the knowledge of multiple fields in the context of a new model of communication amounts to a limiting sort of academic colonialism, one in which we move further away from defining the object of study on its own terms and further into defining it through *other* terms related to prior discourse. In doing so, we risk the confirmation of not the worst of each field, but the *best*: narratologists, for example, might see in transmedia practice a validation of medium-free definitions of narrative, but in doing so they ignore the media themselves; media studies theorists might identify the interpenetrations of each platform, but at the expense of the content they support; game theorists might see transmedia practice as a means of play, but only at the expense of story. While the efficacy of each position is undeniable, this multiplicity brings us no closer towards answering the question I asked at the outset: what do we study when we study transmedia fictions?

Approaches to Transmedia Research

In looking at the body of research that has preceded this study, several telling trends emerge which highlight the difficulties in defining and delimiting the generalized 'stories across media' language that pervades most non-academic accounts of transmedia practice. Dena (2007) notes that the history of transmedia theorization displays an inherent tendency towards specialization that moves it from systemic

studies of commoditized tie-ins and ancillaries (i.e. toys, t-shirts, etc., cf. Kinder 1991) to more recent examinations of the traits of transmedia practice (i.e. those dealing with world-building and narrative-specific platforms, cf. Jenkins 2006; Long 2007; Dena 2009; Evans 2011; Rose 2011).⁴ In the following section, I will highlight two approaches to defining the object of study in transmedia fictions: the *commodity-based* approach and Jenkins's seven principles of transmedia operation. In each case, I argue that while the research itself is illuminating with regard to large-scale transmedia understandings, they do little to highlight the way that the nuances of the individual platforms work towards enacting transmedia meanings.

Commodity-based Approaches

Commodity-based approaches to transmedia practices tend to treat transmedia projects as economic *properties* that share certain semiotic concurrencies best explained by an allusion to their paratextual and intertextual resonances. To study transmedia practice as a commodity system, then, is to examine what P. David Marshall describes as a 'serial form of production where each product in the series is linked through a network of cross-promotion' (2002: 70). These productions are, importantly, 'rarely pure: when we buy a newspaper, watch a television programme, go on a Web site or pick up a magazine, advertisers have projected themselves into the content' (Marhsall 2002: 71). When

⁴ See Appendix 1.1 for a chart comparing several approaches.

transmedia practice is described as a commodity system, the whole of each transmedia output is treated as a series of promotional exchanges, a 'complex of significations which at once represents (moves in place of), advocates (moves on behalf of) and anticipates (moves ahead of) the circulating entities to which it refers' (Wernick 1991: 182). In other words, both narrative and non-narrative artifacts are treated equally as *products* or *brands* (Meehan 1991) through which a given intellectual property is propagated. Commodity system approaches consequently stress the demarcational work of copyright, which, in Jay Lemke's terms, allows them to be protected as property and distributed by synergistically horizontal and vertical integrations of content and media, where each brand refers to both itself and those artifacts it shares the brand with.

Within this circular referentiality, where one product refers to another recursively, we can locate the impulse towards both intertextuality, the presence of a Text A in a Text B (through devices such as generic adherence, allusion, pastiche, etc.) and paratextuality, the formal-material (i.e. cover page, table of contents, review excerpts) and socio-cultural mechanisms with which a text is situated. The intertextual and paratextual axes of the commodity system, however, are less concerned with the function of meaning in each text individually or where these meanings might have originated, but rather to further an analysis of what Couldry (2000) describes as the 'textual environments' of their production. In analyzing the *LOST* franchise, for instance, Steven

Jones (2008) positions paratextuality as a means of drawing attention to what D.F. McKenzie famously referred to as the 'social text', the 'collaborative nature of all texts, and on the afterlife of texts in the world, as they are published, read, and often reconfigured by readers and interpreters' (Jones 2008: 9). The environment of the 'social text' has its own distinct 'flows' (a term coined by Fiske [1987] to describe the rhythm of television programming), including 'the material structures of textual production, the material structures of distributing texts, [and] the process which tends to order how we read, what connections we make between texts, what texts we screen out, and so on' (Couldry 2000: 81). Consequently, a paratextual analysis of the *LOST* ARG becomes, for Jones, a means of assessing 'the viewers' or players' pleasure in following the official 'hacks' or media repurposing, crossing the threshold between text and outside world...even if we know that structure is at bottom (at the bottom line) a marketing device for an entertainment product' (Jones 2008: 27). 'Paratextual overlap', as Jones calls it, works towards creating a 'transactional space...indistinguishable from 'PR'' (2008: 25). 'The whole point', Jones continues, 'is that the marketing is simultaneously the entertainment' (ibid). Similarly, but much more caustically, Peter Lunenfeld writes that Sony's handling of the transmedia aspects of William Gibson's *Johnny Mnemonic*, spread across film, graphic novels, video games and clothing, represents a 'proliferation of paratextuality', a 'dubious corporate synergy...blending text and the

paratext...pumping out of undifferentiated and unfinished product'
(2000: 15).

This 'undifferentiation', it seems, becomes a space of intertextual resonance and, more importantly for the concerns of this thesis, an object of study in itself. In a groundbreaking essay describing the effects of Saturday morning television on children, Marsha Kinder (1991) refers to the burgeoning literacy that is being developed through the intermingling of narrative and commodity—i.e. the use of television cartoons as a vehicle for promoting larger consumption of film, toys, video games, etc.—as a literacy predicated on the recognition of *transmedia intertexts*, the 'relations between television and cinema as compatible members of the same ever-expanding supersystem of mass entertainment' (1991: 40). Kinder argues further that loose, universal applications of intertextual theory such as Fiske's work 'prevent us from seeing how intertextuality can function as a form of commodity formation' (1991: 45). 'Within particular social and economic contexts', Kinder states, 'the recognition of specific allusions makes certain intertextual relations pay off—especially at the point of purchase' (1991:

45).⁵ Additionally, as Jennifer M. Proffitt et al. note, undifferentiation manifests itself as the repetition of content across platforms, not 'the continuation of a brand's arc' (2007: 241) that we so often associate with transmedia fiction. Using *The Matrix* as an example, Proffitt et al. argue that charting this flow requires an attention to not only the films itself, but also the paratextual and intertextual aspects of its situation, such as the making-of featurettes released to sustain interest in the property, and also to the 'ancillary narratives' (2007: 246) found in the video games and animated shorts set in *The Matrix* universe. In doing so, a 'megatext' is created, one born of a 'synergetic strategy' with an 'emphasis on intertextuality' (Proffitt et al. 2007: 247).

Proffitt et al.'s notion of the 'megatext' is perhaps the clearest enunciation we have of the systemic leanings of the commodity approach to transmedia practices and fictions. When considered in this context, both paratextuality and intertextuality produce perspectives of transmedia that collapse the distinctions between story design and flow. The paratext—a place of entry and exit, context and text—becomes 'the essence of the text...it's *all* paratext, in concentric circles rippling out into

⁵ Much like Jones, Kinder considers operations such as these an erasure of the boundaries between John Fiske's distinctive categories of *horizontal intertextuality*, i.e. intertextuality organized by characters and genre, and *vertical intertextuality*, i.e. intertextuality organized between a 'primary text, such as a television program or series, and other texts of a different type that refer explicitly to it' (Fiske 1987: 109), such as 'station IDs, journalistic articles and criticism' (Kinder 1991: 46). As Peter Lunenfeld notes, the way that paratexts and intertexts are conceived has consequences for how we conceive of transmedia expressions: 'the melding of publishers with moviemakers, television producers, and comic book companies, and the development of media conglomerates like Time Warner, Disney/ABC, and Sony—has bloated the paratext [and the intertext] to such a point that it is impossible to distinguish between it and the text' (2001: 14).

the world' (Jones 2008: 43). Similarly, intertextuality becomes a substitute for speaking about textual connection in a lexicon lacking such a vocabulary, one where an assumed 'allusional' property is imbued in products without concern for *how* or, moreover, *where* these connections take place. In other words, when *everything* even cursorily related to a fictional world—from films to video games to t-shirts to action figures to breakfast cereal—can be considered a part of the same undifferentiated 'megatext', there is little room for discussions of the ways that meanings can be made from textual triggers located *specifically* within a single, fictionally-contributing platform. While this isn't the aim of commodity-based approaches, developing the language of transmedia research *depends* on these types of operations, as they allow us to see the ways that by reading *individual* iterations of meaning we can understand the *whole* of the transmedia expression.

The Principles of Operation Approach

Much like a commodity-based approach, Henry Jenkins's notion of 'transmedia storytelling' is inherently systemic; that is, it examines projects like *The Matrix* as contents circulated across media only here, it is the loosely defined 'narrative' components of the system that shift. Consequently, his analyses are concerned less with the nuances of each site's meaning than with the dynamics of their circulation, the literacies they reflect and the cultural understandings they require. In series of blog posts titled 'Revenge of the Origami Unicorn' (itself a response and

an update to his earlier book chapter ‘Searching for the Origami Unicorn’ (2006)) Jenkins further elaborates upon what he sees as the primary distinctions necessary in understanding transmedia practices:

- 1) the difference between *spreadability*, ‘the capacity of the public to engage actively in the circulation of media content through social networks and in the process expand its economic value and cultural worth’ (Jenkins 2009a) and *drillability*, where transmedia projects are uniquely positioned to ‘encourage a mode of forensic fandom that encourages viewers to dig deeper, probing beneath the surface to understand the complexity of a story and its telling’ (Mittell 2009);
- 2) the difference between *continuity*, where a unified experience is created across media through the use of diverse content in each iteration, and *multiplicity*, where ‘the possibility of alternative versions of the characters or parallel universe versions of the stories – [act] as an alternative set of rewards for our mastery over the source material’ (Jenkins 2009a);
- 3) the difference between *immersion*, ‘the ability of consumers to enter into fictional worlds’ (Jenkins 2009b), and *extractability*, where the audience ‘takes aspects of the story away with them as resources they deploy in the spaces of their everyday life’ (ibid.);
- 4) the process of *worldbuilding* where, as opposed to simply writing a story, fictions are instead constructed towards establishing their

own 'logic, practices and institutions' (ibid.) in a manner that reflects the corresponding 'desire of audiences to map and master as much as they can know about such universes, often through the production of charts, maps, and concordances' (ibid.);

5) the transmedia construction of *seriality* 'as a hyperbolic version of the serial, where the chunks of meaningful and engaging story information have been dispersed not simply across multiple segments within the same medium, but rather across multiple media systems' (ibid.);

6) the ways that *subjectivity* defines and redefines a fiction via the perspective of multiple characters residing in the fictional world (ibid.);

7) the shifting relationships between how audiences consume a text and how they *perform* it in transmedia contexts, where they make their own unique contributions to the world (as in fan fictions, wiki creation, etc.) in a manner outside of the officially intended meanings (ibid.)

While Jenkins's distinctions are admirably applicable, allowing us to examine a transmedia property by way of its use and re-use of these traits (we might, for example, look at how continuity and subjectivity play out over the course of a project), questions such as *how* seriality is formally located within diverse platforms, *how* world building as an organizational conceit might structure and be structured by seriality,

how analog and digital media are made to work in (re)combination and *how* we can conduct a ‘reading’ of a transmedia fiction *without* recourse to referencing its *entirety* is never fully developed. This is a point that Jenkins himself readily concedes:

There still is a lot we don't know about what will motivate consumers to seek out those other bits of information about the unfolding story – i.e. What would constitute the cliffhanger in a transmedia narrative - and we still know little about how much explicit instruction they need to know these other elements exist or where to look for them. (Jenkins 2009b)

Echoing this concern, Long also notes that we need to begin engaging in ‘close analyses of transmedia experiences...breaking them down and figuring out why they work and why they fail’ (2011: 30). Only by figuring out what ‘makes them tick, [can we] push the medium forward’ (Long 2011: 30-31). But what does makes transmedia ‘tick’ as a conceptual platform in its own right and, moreover, what makes it tick on the level of the individual platforms themselves? Is it even necessary to make such a distinction? Central to Long’s call for close readings of transmedia expressions is the notion that a true transmedia critic needs to be versed in *both* transmedia as a form as well as each of the individual media that support it so that she might be able to readily criticize a film or a novel or a video game on its own accord along with commenting on the contributions it makes to the whole of the project. But where are these

contributions located, and how might we more acutely analyze them as formal traits in themselves, marked and molded by the stroke of the pen in a handwritten fictional letter, the distant skyscraper of a video game's open world and the hyperlinks revealed by solving an online puzzle? In other words, what formal strategies, traits and processes can we point to and say *this* is where a platform contributes while *this* is where it fails?

The answer to these questions and a potential starting point for a uniquely transmedia mode of criticism lies, paradoxically, within the same body of research that produced the questions in the first place. Alongside the range of systemic research into transmedia practices, there also exists a common thread to these approaches, a remarkable, yet undeveloped, predilection towards the language and evocative resonance of the 'network' as the key material feature of transmedia expression. Talk of the 'network' as literature, while rampant in literary studies for at least a half a century,⁶ is given a new identity in this context. Marsha

⁶ The question of literary meaning-as-network is not a new one. For example, as his structuralist leanings gave way to a more poststructuralist bent, Roland Barthes described text in its ancient, etymological terms as a 'galaxy' (1977: 5) or 'weave of signifiers', a 'tissue' of the 'stereographic plurality' that defines all interpretation not as consumption but as a 'play' between the potential, 'shifting' (1977: 15) meanings of language and the ebb of constantly (in)determinate meanings produced upon reading and re-reading a text. Text here, much like in Julia Kristeva and Jacques Derrida's conceptions, is never simply 'itself' but rather only a material instantiation of larger social and cultural connections, of the intertextual influence of genre, for example, or of the heteroglossaic nature of language itself, each of which remove from literature the self-produced mythology of isolation, and excise the seeming precision of language with an openness that renders its multiplicity as the only certainty, one where meaning is wholly subjective and completely lacking authorial control. Indeed, in Kristeva's conceptions, all texts form a 'network of alliterations' which set up 'associative chains that criss-cross the text from beginning to end and in every direction' (Kristeva 1980: 169).

Kinder (1991), for example, speaks of a '*network* of intertextuality constructed around a figure or a group of figures in pop culture' (122), one that cuts across several modes of image production from t-shirts to toys to video games to comic books to television to film; Eileen R. Meehan (1991) writes of the network of 'intertexts' linked to *Batman*'; Jay Lemke (2006) speaks of the creation and interpretation of massive franchises as a function of '*networks* that cross the boundaries of genres and media'; Jennifer M. Proffitt, Djung Yune Tchoi and Matthew P. McAllister (2007) speak of the 'flow' of commodities that governs networks of texts like *The Matrix*. Similarly, Peter Lunenfeld (2001) describes *Johnny Mnemonic* as belonging to 'an ever-shifting *nodal system* of narrative information' (15)

But, as Juliana De Nooy (1998: 215) points out, these networks are not limited to the intertextual, deconstructive impulse of language-as-meaning, and also reveal themselves in Derrida to be composed of networks of material significance as well, networks of 'graphic procedures: the strokes of a grapheme, the arrangement on the page, the length of the line, the blanks, etc.' (Revolution 219). Furthermore, Derrida conceives of phonic and graphic language as *coupture*—of cutting and sewing—as a series of 'links' which can be cut as pasted, removed and re-inserted, assembled through disassembly, always echoing both itself and a multiplicity of meanings. While Derrida's flirtation with the material dimensions of the page are significant, they are cast under the same shadow as the nature of language itself—as a detachable, mutable series of meanings where form echoes a similarity forms, and in this process becomes formless. This formlessness is what John Fiske refers to as the in-between of intertextuality (1987: 108). For Fiske, like Derrida, intertextuality does not 'take the form of specific allusions from one text to another and there is no need for readers to be familiar with specific or the same texts to read intertextually' (ibid). Rather, an intertext exists as a relationship between texts, where one text is read by a 'range of textual knowledges...brought to bear upon it' (ibid).

Lubomir Doležel refers to this idea as the domain of the 'absolute intertextualists', those who feel that all texts, no matter their makeup or origin, are intrinsically intertextual. Oppositely, limited intertextuality (cf. Genette 1997) holds that intertexts exist only where there are direct, 'traceable' elements that can be located from text to text. For Genette (1997), these 'palimpsestic' elements are generic, but can also be extended to allusion, commentary, parody, pastiche, plagiarism, irony, paraphrase, travesty and quotation. In this sense, intertextuality can be seen as a feature that, if not the dominant mode of postmodern fiction, is at least one that if foregrounded, with intertextuality highlighted in the playful manipulation of generic tropes, pastiche and bricolage that so characterize postmodern works. In both the universal and limited senses of the term, then, intertextuality can loosely be seen as a series of connections between two (or more) texts that exists on the basis of similarities—either borrowed, stolen or inherited—between them.

in an 'era of *network* proliferation' (18) and Steven Jones (2008: 43) refers to the predominantly 'networked' texts of properties like *LOST*. More broadly, Pierre Levy (2001) ascribes the viability of a 'multimedia strategy' (45), when 'the release of a film occurs simultaneously with the sale of a video game, the distribution of a TV series, T-shirts, toys and so on' (45) within the larger context of '*networked*' organizations' (154). Ivan Askwith (2003), in examining transmedia television shows such as *LOST*, also remarks that 'such programs are now produced and marketed not as self-contained texts, but as the foundation of *larger networks* of related products, content extensions, activities, and spaces' (52). Jill Walker (2004), in defining what she calls 'distributed narratives', describes projects where meanings are 'exploded... sending fragments and shards across media, through the *network*'. Aaylish Wood (2005), elaborating on Jenkins's examination of *The Matrix* as a function of complexity, a '*network* of interrelated texts...created through a series of iterations on a story' (13); Henry Jenkins (2006) notes that 'new *networks* of distribution' have made possible new transmedia modes of content circulation (157); Henrik Örnebring (2007) speaks of the '*networking*' capabilities of transmedia design (450); and Mikael Wiberg (2009) argues that media will become more 'liquid' than 'solid' due to cross-media designs that position content 'across different media formats and...*networks*' (210).

In many ways, we might more broadly characterize these accounts as ratifications of Manuel Castells' (2001: 1) inversion of Marshall McLuhan's proclamation that the 'medium is the message'; in a contemporary media environment, Castells argues that instead the 'Network is the Message'. In such a context, the domineering logic behind transmedia proliferation is not to carry out another platform's message in new cultural and material frameworks but, instead, to push towards a connectivity that only networked models can provide. Whereas previously we might have said that all novels yearn to be films or, more relevantly, all films yearn to be video games (or vice-versa), we might now as plausibly argue that *all* platforms, regardless of their material capacities for connection, yearn to be networked.⁷ Such an understanding informs the primary goal of this study: to take the invocations of 'networks' in transmedia research at their word, and treat transmedia fictions and practices as *networks of meaning* that can be fruitfully and revealingly analyzed. The analysis of transmedia networks begins by looking at the often acute ways that connection occurs between platforms (i.e. within a single word, image or sound), and the ways that these connections

⁷ Similar discussions also surrounded the advent of electronic literature. In an article titled 'The Contour of a Contour', for example, new media theorist Dave Ciccoricco (2003) recounts the numerous ways that early hypertext fiction—non-linear fiction distributed through the links and vertices of an electronic environment—was also categorized by a common vocabulary, all relating to the ebbs, flows and topographical verandas of what Michael Joyce (1995) calls a 'contoured' system of information'. The link-vertex structure of what Ciccoricco refers to as 'network fiction' stems directly from the digital topography it is composed within—the electronic space of the computer. As such, the materiality of what we might more precisely call 'Net-work fiction' is the same as the platform it is constructed within, and therefore holds only a superficial relationship to transmedia networks (even as transmedia networks, as we will see, sometimes utilize hyperlink-like modes of connection).

influence the larger networked meanings that take place in the project as a whole. Rather than simply saying that a platform must stand on its own *and* contribute to the system of meanings it is intended to be a part of, networked considerations of transmedia fictions instead illustrate the ways that the *whole* is invariably nested in its *parts*, which need to enact numerous relational levels of connection in order for global comprehension to take place.

Defining (Transmedia) Networks

Before exploring the implications of applying a network approach to transmedia fictions, though, it's worth defining what exactly a network is and how it functions. Put simply, a network is a system of connections. Within a network, a *vertex* (also called a 'node') connects with another vertex through the presence of a *link* (also called an 'edge'), a mechanism that allows for connections to take place. Networks can be anything, from the social networks we see exploding online (where a person is a vertex and some affinity between them—business colleague, friend or family—is the link binding them) to the biological networks informing cancer research to the citation networks of academic papers to the Web itself, where websites link with each other through hyperlinks and servers link with other servers through data protocols. Because of the often massive size of their elements, networks are studied as dynamic and complex systems, changing over time and exhibiting small and large-scale characteristics that influence the flow of information, as

is the case in the famous ‘six degrees of separation’ model that holds that in many small-world networks: a vertex is on average only six connections (at most) away from any other vertex in the network. Additionally, certain vertices can take on unique characteristics depending on the way they are connected to other vertices in the network. For example, a vertex with a large number of incoming and outgoing connections functions as a *hub* in the network, ensuring that connections take place even when other, less connected vertices falter. On the other hand, if a hub vertex fails, the overall connectedness of the network suffers greatly.

Traits such as these, considered fundamental to network theory, also come to play a large role in defining the operations of transmedia fictions. In defining transmedia fictions as inherently *network-oriented* models of communicative design, the goal isn’t simply to take the large body of transmedia research using network language at its literal word, but instead to force us to ask some difficult questions about the nature of the transmedia meaning and, moreover, to develop a methodology for *close reading* transmedia fictions at the exact points where one platform connects with another. When defining transmedia fictions as networks of fictional information and interactions, and transmedia practices as models of an implicitly network-oriented design, the following questions (at minimum) come to bear directly on our understanding of the form:

- What constitutes a *vertex* in transmedia fictions?

- What constitutes a *link*? Are there different link types?
- What are the conditions necessary for connection? Is it possible to de-limit them in a way that restricts connection to transmedia-specific usages?
- How are different platforms (analog and digital) effectively connected to each other in transmedia practices when they materiality doesn't allow for it?
- What can we learn from a network approach to transmedia that isn't possible in more broadly-conceived theoretics?
- What are the limits to the network approach, and what do these limits tell us about certain transmedia practices?
- How do audiences traverse a transmedia network, and how do they locate and 'read' the network in a way that allows for local and global comprehension?
- Are the network motifs in transmedia fictions? If so, what does each accomplish with regard to audience traversals, narrative development and interaction?

In short, approaching transmedia fictions as networks demands that we begin to consider questions pertaining to the ways that transmedia fictions communicate meanings through an interlinked system of modal and medial affects. In network theory, for example, the focus is on the relationships between elements, not the attributes of the nodes

themselves (e.g. people, biological data, etc.). While a simple transmedia project utilizing two or three platforms might have more predictable arrangements, what happens when there are *hundreds* of unique contributions in the project, each of which is selectively connected to each other? To consider ‘reading’ a project of this size and complexity is daunting. How do we begin to separate the multiple functions of different media? How do we consider one storyline without excluding others? What do we mean by a narrative ‘sequence’ in such a context? While the bulk of this study is dedicated towards acutely answering these questions, I want to briefly define here what I refer to as a vertex or, more specifically, a *site* of meaning in transmedia contexts, as doing so allows us to also further define transmedia networks themselves.

Sites

‘A complex system is made up of ‘a large number of parts that have many interactions’

—Herbert Simon (1996: 183)

‘Texts have a *site of appearance*; simply, they have to appear somewhere.’

—Gunther Kress (2003: 48)

I define transmedia networks as complex fictional systems structured by the connections between their individual components. In this context, the term ‘site’ is used to denote the locationally specific spaces where the content of a transmedia fiction can be found. A site

functions much like a vertex does in network theory, as an entity that is linked to another entity, but the term alludes to a more specific series of distinctions. In this regard, my use of the term *site* is a conscious move away from the broad categorizations that terms like '-media' in discussions of 'cross-media' bring, where '-media' encompasses the entirety of the communicative spectrum, from speech to writing to moving image, without seeming regard for the material supports that each must take on. In the context of this thesis, a *site* is partially synonymous with a 'platform' in that it represents a unique material means through which a message is sent that distinguishes it from other information. I also use the term in line with the various discourses deploying the term *site* as a locus point of interaction—a 'site' of meaning. As the quote leading this section suggests, texts 'have to appear somewhere', that is, they have a locationally specific ontology which differentiates them from other texts.

Sites are also inherently *modal*, i.e. they are based in some mixture of image and sound and gesture and smell and writing, and sites are also *medial*, i.e. they are composed of the material elements that support modal and multimodal resources. In the most generalized sense, sites are composed of *modes* through which content is filtered and supported by medium. I define modes, following Gunther Kress and Theo Van Leeuwen (2001: 21), as 'semiotic resources which allow the simultaneous realisation of discourses and types of (inter)action'. Some of the primary

modes through which communication operates are *image, writing, sound, and gesture*, a spectrum that 'can be realised in more than one production medium' (Kress and Van Leeuwen 2001: 22). But in Kress and Van Leeuwen's accounts of mode, narrative is itself a modal resource 'because it allows discourses to be formulated in particular ways, because it constitutes a particular kind of interaction, and because it can be realised in a range of different media' (2001: 22). So in this sense, when we speak of the multimodality of a particular site, we are not only speaking about its coordinated use of color, image and/or writing, but also its use of narrative or non-narrative (such as games) modes of organization.

From the perspective of content, a site represents a narrative *unit*, a bounded and marked realization of some aspect of a fictional world. In this context, a site can be both *complete*—such as an episode of a television show or a film—or *segmented*—such as a chapter in a book, or a short paragraph of information revealed by solving a puzzle in an alternate reality game. Something like a Massively Multiplayer Online Role Playing game can be considered both as a complete site in that it presents a fully-formed fictional world, but also segmented, if we view it from the standpoint of certain missions that take place within that world. Such a distinction is also a question of interactional possibility. For the purposes of this study, I primarily use complete sites as network vertices because doing so illustrates the ways that a single platform can support

multiple paths through a network. While site-to-site relationships can form on a mono-media and segmented level (such as the serialized content of a web series, multiple issues of a graphic novel, or the various chapters of a Choose-Your-Own-Adventure book), transmedia movements only *truly* occur when multiple, distinct platforms are traversed in order to access larger experiences. This is because each platform—from a novel to a mobile phone to a television show—constitutes a specific material, organizational and interactional logic that is distinct from other expressions.

It is argued here that in order to truly develop a sense of how transmedia meanings function, we need to pay attention to how media specificity influences design practices (cf. Dena 2009). In this sense, when a site is incorporated into a transmedia framework, it contributes specific communicative properties and interactional patterns. These properties might exist at certain points in mono-media, site-to-site relationships (as in a season of a television show that develops a single story), but it is the incorporation of them into a larger system of meaning that gives transmedia practices its true aesthetic language. Such a view is wholly compatible with Dena's recognition of the need for transmedia practices to be founded upon the use of 'distinct media' with 'haptically distinct [modes of] interaction' that result in 'peculiar end-point experiences' as audiences engage with more than one interaction technology (2009: 55). In other words, while we can and often do access

something like a digital graphic novel in the course of a transmedia experience, we access this content through a keyboard, a mouse and a monitor, and this is a wholly different experience than holding a graphic novel in one's hands, noting the textures of the pages, the stiffness of the binding, the smell of the ink. Additionally, transmedia experiences often also draw upon the location or attention-oriented specificity of a site and the inability to fully transpose the materialities of another site *without some sort of physical traversal between platforms*. That is, as we reach towards the coffee table for a graphic novel that exists in a transmedia network with the film we are watching on our television, the material separateness of these two sites and the modal affordances that each require constitute a true representation of transmedia movement as a transaction between two or more separate sites of engagement.

These distinctions inevitably also invoke a large degree of intentionality. Indeed, as Jenkins (2006), Dena (2009) and Johnson (2012) strongly assert, *how* we demarcate transmedia experiences is less important than accepting that transmedia practices represent 'a way of thought, a way of conceptualizing storytelling and experience...that is not limited to a single form or medium' (Johnson 2012). In a conceptual model of transmedia, for instance, multiple design practices can be afforded. Dena, for example, observes how *intercompositional practices*—where a single narrative is segmented across multiple media—feed into and support *intracompositional practices* by way of an intercompositional

structure being incorporated into an often mono-medium expression. Intercompositional expressions can be readily seen in transmedia fictions such as *The Matrix* or *HEROES*, properties in which a large degree of narrative coherence and continuity rests upon an audience's engagement with multiple sites. Intracompositional practices, by contrast, involve the incorporation of intercompositional frameworks into larger meanings in other sites, as is often the case with Alternate Reality Games that are integrated into a 'driver' platform such as a film or video game. In *Why So Serious?*, a prominent example of an intracompositional practice that worked respectively to bolster meanings in the *Batman* franchise, audiences worked collaboratively to solve puzzles and engage in location-specific tasks such as locating ringing payphones and organizing fake protests in order to gain access to additional units of narrative information that might then add to their experience of the *Halo 2* video game or *The Dark Knight* film. (In Chapter Two I will present a series of visualizations of *The LOST Experience*, an intracompositional ARG set within the universe of the *LOST* television show, that illustrate just how much of a rupture intracompositional frameworks are within the more regular patterns of serialized content often found in a transmedia fiction.) Consequently, in intracompositional phenomena, what was previously considered a *series of sites* in isolation (such as the body of sites comprising an ARG) can come to constitute a *single site* that feeds into a larger network of meaning.

A related distinction also needs to be made with regard to the fictional role that a site plays in a transmedia network. While the next chapter will consider a number of different link types, several of which exist *externally* to the fictional world of their respective projects, the conception of a site utilized here is based solely on its role *internally to the fictional world it helps to compose*. In other words, a site is only classified as such if it either a) makes a meaningful contribution to the casual-sequential events of the fiction and/or provides a new perspective on them (as is the case in a video game that picks up the events of a graphic novel, or novel that re-tells these events from a unique character perspective) and/or b) it exists as an object or artifact within the fictional world itself (such as a character's journal or a website constructed to represent a fictional company). In drawing these distinctions, we can move past the broad categories of branding that commodity-based approaches tend towards, where every aspect of a fiction is united under a single logo or title as, for example, would be the case with something like a lunch box being given the same weight as the film that inspired the images on it.⁸

Finally, while not a formal trait in itself, the term site is also intended to invoke the word 'sight' as an allusion to the notion that it is in us—the audience—where the integrated demands of transmedia practices are found, even as they are cued by specific formal features.

⁸ In the next chapter, I further discuss such external markers in terms of their potential to *link* meanings across sites.

Here, with our contact with each successive site, we are called upon to re-integrate, re-interpret and ultimately connect the divergent content, materiality and modalities that each site offers. In other words, we quite literally are made to 'see' a transmedia fiction in a different way through every successive site traversal. This idea is also key to the notion of *narrative convergence* (Ruppel 2009), and one that helps to explain the attraction of audiences to transmedia productions: here dialogue is read *and* heard, telephones ring and websites answer our emails, characters and locations are (en)acted, drawn, rendered and played. The multiplicity of these integrated material and narrative affects might more readily be theorized as the *chiasmic* impulses of transmedia practice.

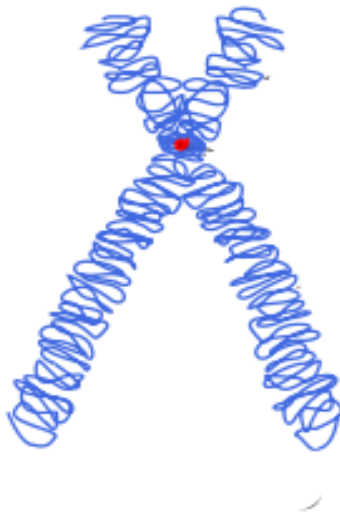


Figure 1.1: An Illustration of Chiasmic Recombination. The red circle in the middle is the point where two chromosomes pair and recombine.

In genetics, *chiasma* are overlap points between two halves of a chromosome where genetic information is exchanged and (re)combined, thereby creating new structures. Extending this definition as a metaphor

can help to understand the ways that transmedia fictions force a similar recombination of *cognitive* materials. In transmedia interpretive processes, chiasmic interpretation and recombination is a process of making connections between two or more sites or rejecting them; of matching word to image, image to sound, sound to interaction; of treating narrative comprehension and assemblage as the multiplicative *product* of a series of sites and not just as a *process* of these sites' interactions with larger artifact-specific and socio-cultural intertexts. Instead of clicking on a link or typing a phrase, a chiasmic understanding of transmedia focuses instead on the ways that audiences plug in content from one site into another, creating a cognitively integrated space with characters, spaces and objects drawn and described, filmed and rendered, watched and controlled. Rather than a nebulous concept, however, this study argues that the triggers of chiasmus in transmedia practices are *locatable* properties related to network functions. In other words, chiasmic integration can occur at points promoted by a transmedia producer, or by the free-form interpretations and imaginary leaps of the audience. Chiasmus is transmedia practice's unique 'threshold' of exchange, its own liminal space where the content and modes of two or more sites congeal.

In short, chiasmic integration is a key dynamic in understanding how meanings are produced in transmedia networks, one that anchors the 'free-floating topology of network space' (Ciccoricco 2007), where

connections can occur without concern for any directedness, in specific points in what we more commonly call *narrative*. But even if such claims are accepted, we are admittedly no closer to discovering the repeatable triggers where transmedia meanings are made in both local (mono-sited) and global (multi-sited). We can talk about networked meanings in transmedia fictions, but without a way of understanding them as dynamical processes, the discussion will remain broadly systemic. This is where network visualization comes in. By locating the multiple sites of a transmedia network and developing a methodology for understanding and locating the links that connect them together, the impetus for network visualization is made. Using software related to its study, we can visualize transmedia networks as often massive graphs and locate the points where chiasmus is structured and given form by a series of sites, thereby allowing for a developed and revealing look at the pathways that form around different sites. In developing an approach that recognizes the points where transmedia networks function, the spaces where analog often meets digital and story meets object, we are locating what can only be called the 'logic of the network' itself, a logic that, it will be argued, shows itself in the structure and design of both the individual sites themselves as well as the networks of meaning that they form.

The Structure of this Thesis

On 18 June 2009, the BBC announced what many perceived to be a groundbreaking development in the history of audience ratings

measurement. Referred to in boldfaced headlines as the 'holy grail' by Broadcast Now magazine (Rushton 2009), the 'Cross-Media Insight' (CMI) system would attempt to measure an audience's engagement not just within one medium, but across several media, often simultaneously. The CMI, which tracks multiple audience inputs across a digital signal, seeks to remedy this, tracking 'how individuals 'pick and mix' content in different media' (Bain 2009) in order to get a fuller view of how, when and why they engage the platforms in the way they do by measuring 'viewing across all platforms from the viewer's perspective' (Bain 2009). This study as a whole is attempting to do for our understanding of transmedia practices and fiction what software like the Cross-Media System attempts to do with audience viewing patterns: to take a 'first person' view of what transmedia pathways are composed of, to demarcate the points where massive fictional universes become narrative sequences, and examine the link and network structures that enable such pathways to be traversed by diverse audiences.

In the next chapter, 'LINKS', I propose the basis of a methodology for analyzing transmedia networks based on the recognition of what I call migratory cues, external (i.e. brand markers) and internal (i.e. located through story) linking mechanisms present in many transmedia projects that allow for the exchange of narrative information from site-to-site. Migratory cues are network edges in the form of fictional information that allow an audience to shift from one site in a transmedia network to

another without any loss of engagement. Here, however, migratory cues take on forms endemic to a range of media. I argue that the connections that arise between sites in a transmedia network are tools that enable highly-specific spatiotemporal narrative leaps, defined fictional object-orientation, intermedial penetrations and cross-modal integrations. Importantly, migratory cues are highly directional, that is, they point towards content that might not always point back at the other site. The multiple informatic and modal trajectories of these links, I argue, have direct consequences on how both audiences interpret transmedia fiction and genres might be differentiated within transmedia practices.

Chapter Three, 'PATHS', extends these ideas and tests the feasibility of migratory cues as network edges by using them to generate datasets for graphing and visualizing a series of transmedia projects ranging from simple (i.e. 1:1 relationships between two diverse platforms) to complex (hundreds of vertices and edges with multiple intersections). Using NodeXL, a robust social network visualization tool, these graphs represent the first large-scale attempts to accurately plot a transmedia network and, as such, they reveal several compelling facets of the union between transmedia meaning and design that have previously gone unnoticed. Because a path in network terminology is defined as a sequence of edges, it is possible to identify the presence of cross-sited narratives, stories told exclusively through the intersections of several platforms whose edges are located at neither a material beginning nor

end. I also demonstrate that by calculating and visualizing each graph's metrics for criteria such as In- and Out-degree (i.e. the number of incoming and outgoing edges in a site) and power relationships (where one site/platform displays an uneven amount of connecting control in the network), we can subsequently analyze the role that each site (or platform) plays in creating and sustaining narrative engagement across the network from both a quantitative and qualitative perspective.

Chapter Four, 'PERIPHERIES', serves as a counterpoint to much of what came before it. As such, I present a series of transmedia projects where the fluidity of media form is privileged over the networked expansion of content. Here, I examine a more experimental vein of transmedia practice, one that I argue is rooted in an oral-conceptual fluidity. Incorporating projects such as Neil Young's *Greendale*, Steven Hall's *The Raw Shark Texts* and Darren Aronofsky's *The Fountain*, I explore the way that transmedia practice often works through transremediation, the conscious and controlled enaction of remediative design as a way of exposing the platforms and processes of distributed meaning. I conclude by offering a glimpse at what experimentations such as this as well as student visualizations of transmedia networks show us about the nature of contemporary literacies as a whole, literacies that require a realignment from Gunther Kress's notion of the reading path of the 'new screens' of new media technologies to the 'new networks' of

transmedia practices, where old media meets new media in startlingly complex ways.

Chapter Two:

LINKS

'If the arresting power of a photograph, or the immediacy of a video presentation, or the kind of intimacy that comes from listening to the recorded human voice...if those are media or better ways to convey information in your story, then by God *toss a link* inside your book to send people to that website or medium so they can experience that so that you're *not wasting words* trying to articulate something that could just as easily or more easily or more emotionally convey a narrative impact in other media.'

—JC Hutchins, co-author of *Personal Effects: Dark Art* (2009)

In 2006, NBC entertainment began releasing a series of graphic novels which tied into their new series, *Heroes*, a television show about a group of people who begin to realize they have extraordinary abilities. Coinciding with each new episode, a new graphic novel was released that worked towards extending certain plot lines, providing background information about certain characters and events, and introducing other novel elements that might later impact the television show. In October of 2006, however, NBC appended the graphic novel page with the following message:

Think you've read them all?

Maybe, but have you found all the hidden surprises?

No sooner than this message was released did the message boards and forums dedicated to *Heroes* explode in a flood of speculation: what were

these secret links, and how did they function? On 9th Wonders, site of a *Heroes* discussion forum, a user named HERO took it upon himself to find the answers to these questions. In order to do so, he extracted the XML data document tree associated with each graphic novel and, in the process, found that it contained a not-so-subtle reference to the placement of 'EASTER EGG CODE' in its lines:

```
<heroes>
  <helptext> </helptext>
  //===PAGE1
  <smallpage1>jpgs/Suresh_01_ad_sm.jpg</smallpage1>
  <bigpage1>jpgs/Suresh_01_ad.jpg</bigpage1>
  <page1Hs1coordAX>0</page1Hs1coordAX>
  <page1Hs1coordAY>0</page1Hs1coordAY>
  <page1Hs1coordBX>1600</page1Hs1coordBX>
  <page1Hs1coordBY>0</page1Hs1coordBY>
  <page1Hs1coordCX>1600</page1Hs1coordCX>
  <page1Hs1coordCY>2429</page1Hs1coordCY>
  <page1Hs1coordDX>0</page1Hs1coordDX>
  <page1Hs1coordDY>2429</page1Hs1coordDY>
  <page1Hs1link>
    http://clk.atdmt.com/TLA/go/nbcnl060480000053tla/direct/01
  /
</page1Hs1link>
<smallpage2>jpgs/micah_01_sm.jpg</smallpage2>
<bigpage2>jpgs/micah_01.jpg</bigpage2>
<smallpage3>jpgs/micah_02_sm.jpg</smallpage3>
<bigpage3>jpgs/micah_02.jpg</bigpage3>
// == PUT EASTER EGG CODE HERE
<page3Hs1coordAX>0</page3Hs1coordAX>
<page3Hs1coordAY>0</page3Hs1coordAY>
<page3Hs1coordBX>1600</page3Hs1coordBX>
<page3Hs1coordBY>0</page3Hs1coordBY>
<page3Hs1coordCX>1600</page3Hs1coordCX>
<page3Hs1coordCY>2429</page3Hs1coordCY>
<page3Hs1coordDX>0</page3Hs1coordDX>
<page3Hs1coordDY>2429</page3Hs1coordDY>
<page3Hs1link>javascript:openwindow()</page3Hs1link>
<smallpage4>jpgs/micah_03_sm.jpg</smallpage4>
<bigpage4>jpgs/micah_03.jpg</bigpage4>
<smallpage5>jpgs/micah_04_sm.jpg</smallpage5>
```

```

<bigpage5>jpgs/micah_04.jpg</bigpage5>
<smallpage6>jpgs/micah_05_sm.jpg</smallpage6>
<bigpage6>jpgs/micah_05.jpg</bigpage6>
<smallpage7>jpgs/micah_06_sm.jpg</smallpage7>
<bigpage7>jpgs/micah_06.jpg</bigpage7>
</heroes>

```

Figure 2.1: The XML Code from a *Heroes* Graphic Novel. Seen here is a series of XML classification tags that define the role of the different elements that are part of the object, in this case, the digital graphic novel. Here, alongside elements related to displayed images and website URLs, sat the message, ‘PUT EASTER EGG CODE HERE’ (highlighted in bold).

Located in between an image tag and a page coordinate, the Easter Egg Code—a reference to the popular children’s activity of searching for hidden eggs—held for many the possibility of hidden meanings, a chance to go deeper into the *Heroes* universe. The excitement of the find, however, soon gave way to disappointment: after clicking on the image on page 3 and subsequently searching through several other graphic novels, these Easter Eggs revealed themselves to be predominantly nothing more than behind-the-scenes and promo photographs of the show, and not the more substantial fictional content many hoped it would be.

Nevertheless, this didn’t stop the speculation that there one day might be more to these embedded links than what was already revealed. ‘Sidney’, another 9th Wonders user, speculated that perhaps ‘possible [future] updates could reveal info not covered on the show’ (<http://boards.9thwonders.com/index.php?showtopic=17582&view=findpost&p=44633>). Others, like a user named *Skavin*, even went so far as to use a SWF decompiler (a tool that translates Flash code into a format

readable by humans),

(<http://boards.9thwonders.com/index.php?showtopic=17582&view=findpost&p=61428>) to extract a page of a graphic novel that oddly was embedded as a Flash file (rather than a PDF page or a .jpeg image). Here, it was noted that there was a crucial difference between the embedded file and the file accessible through normal means in the form of a red magnifying glass positioned over a character's hand:



Figure 2.2: Embedded (left) vs. Normal (right) Image in *Heroes* Graphic Novel

Clicking on the magnifying glass, however, led neither *Skavin* nor anyone else anywhere, a fact that brought many to conclude that while the

structure of *Heroes* contained several attempts like this one at enacting connections between sites, many of these engagements were half-baked: that is, they only existed as potential links without any real target, red-herrings whose presence suggested more than they actually delivered.

This is a fitting context with which to begin discussing the concept of connection in transmedia fiction, as it points to a very pronounced and even more practiced aspect of audience engagement: the rampant, incessant and game-like search by audiences in transmedia practices for some sort of *connection*, for hidden meanings that might reveal themselves to be crucial frames of understanding, between the sites of a transmedia fiction. Many audiences view the finding of such links as a primary process in itself, an informatic ‘hunting-and-gathering’ (Jenkins 2006: 130) that would lead them to go as far as examining the source code to a digital graphic novel in the hope it might reveal a link to a hidden space of content. Importantly, this type of engagement is fundamentally developed at the level of the narrative design of many transmedia fictions, albeit often in a much more nuanced and sophisticated manner. Here, however, rather than being a hidden, embedded aspect of the platform’s code (as the example of the XML is above), we might oppositely say that the creative links which govern narrative coherence, continuity and growth within transmedia practices are embedded in structures that exist *regardless* of the platform being engaged, structures endemic to narrative expression at the most

essential level. To conceive of connection in transmedia fiction, then, is primarily to conceive of specific elements of that fiction as potential links.

This isn't some abstract, theoretical approach to transmedia connection, though. As we will see, the recognition of links in transmedia fictions has a manifest, traceable and, at times, tangible presence in certain sites, embedded within the code of the narrative itself. This means that not only are transmedia connections a formal trait of the sites themselves but, in working across media, they can also be seen as a formal trait of transmedia practices as a potential *platform for design in their own right*. Indeed, in conceiving of connection in transmedia fiction as a process of transcoded linking mechanisms, we can locate what might very well be one of the *central* communicative aspect of this platform: the ability to maintain multiple levels of connection simultaneously through multiple link types, each of which support both local and global comprehension.

New Models of Connection

Whether it is a book, a film or a video game, media's capacity to work constructively with other media has been, at best, a contestation between a work's narrative and the contexts surrounding it. In each case, whether it is an ambiguously worded passage, a film's visual quotation of a photograph, or the cutscenes of a video game that substitute interaction for filmic engagement, the ability of narrative discourse to work outside of a singular medium has had enormous

cultural, artistic and theoretical ramifications, giving birth to a wide array of meanings. Roland Barthes playfully deemed such communications as ‘tissues’ of connectivity (1977: 64) that exist between all expressions. Even more broadly, when we speak of the connections between two or more sites of meaning, the discussion is centered on one of three things: either the text’s ability to construct *meaning* outside of itself (the intertextual approach), the text’s ability to construct meaning *through* itself and its ephemera (the paratextual approach) or the medium’s ability to incorporate or approximate *other media* (the intermedial approach).

In the introduction to this study, I mentioned that one of the dynamics that needs to be considered with regards to transmedia fiction is the notion that transmedia practice itself represents a new way of interacting with both media platforms and the stories they can tell. Additionally, these new interactions can in some ways be traced to an attendant burgeoning of what might be called transmedia literacies, the ability to at least recognize and accommodate the demands and rewards that *connection* places on its audiences. It’s also important to recognize here that even under the guise of presenting audiences with a more medially and narratively inclusive model of storytelling, the burden of meaning construction still lies in the sites themselves, and the ability to construct connective pathways between them. The need to incorporate this connectivity into the sites utilized in transmedia design has spurred,

in turn, a newly recognizable feature within these sites that allows these connections to take place. I call this feature a *migratory cue*, but we might do better first discussing it in the context of network theory, as a specific type of *edge*.

In network theory, an edge is defined as a line drawn to show the connection between a set of two elements. In this regard, an edge is entirely relational, poised in the space in-between one site and the next and, importantly, existing as a border between them. There is something powerful and evocative, I think, in the equivocation of connection in networks with the fringe, the place where the boundary of one vertex ebbs into somewhere in-between, where connection signals the beginning or presence of a second site but also the end of the origination point itself. Much like the front and back covers of a print book announce a seeming threshold between situational and fictional content—a paratext of meaning—so, too, do the points of connection between the vertices in a network constitute thresholds in their own right, liminal spaces not of isolation, but of association. Yet the term 'edge' also implies a beginning and an end. For example, webpages and their corresponding use of hyperlinks can be conceived of in this context not as closed, seamless entities but, rather, as porous, tunneled and tunneling spaces littered with multiple edges or perimeters that, when activated, relocate us to another place on the network. Importantly, we seldom find every link on a page orderly fixed to its top or bottom, but rather encounter links in

sidebars, text, images, and sometimes even hidden from sight. This does not mean that there isn't an organizational logic to most webpages, even certain standardizations, but that there is no single, discernible edge to the page itself outside of the framing that our screens arbitrarily assign to it. Most pages exist with multiple edges, multiple points of contact and, as such, they are never wholly themselves but always a mix of potential peripheries.

This is, in many ways, an ideal context in which to conceive of connectivity in transmedia practice: not as a series of links occurring regularly at the beginning and ends of each site of meaning but rather as a scattering of signifiers placed throughout a site's content as edges announcing the potential presence of another platform where an audience's engagements can grow. If we conceive of a link as an edge, then the material beginning or 'end' in a site, measured by the running time of a film or the final cutscene of a video game, is never wholly the *transmedia* end. Instead, we might look for scattered evidence of the site's boundaries, places where meaning ceases to be a fully isolated construction, borderlands that stretch to other, more diversely mediated vistas. While this may sound suspiciously close to an intertextual conception of textual connection (cf. Dällenbach 1989; Kristeva 1980; Genette 1997 [1982]; Allen 2000), where a work's construction is always littered with content and contexts linking it to other expressions, in a transmedia network, edge location and definition occurs *only* as a

function of elements that can be readily and materially *located* in another related site. This means that larger intertextual connections that occur through, for example, elements of genre should not be considered edges in a transmedia network, even as these elements work to structure our understanding of the site we are engaging with. Instead, the edges found in transmedia fictions are *marked* by the content and modalities of each platform, present in places that we can quote, copy, play. In other words, they are specific where intertextuality can be broad, and directed where intertextuality is often indirect, drawn from a specific fictional universe whereas intertexts are drawn from both broad and specific cultural expressions. The edges of a transmedia network, then, are formal traits in themselves. They can be located in the midst of a site through a controlled distribution situated within the logic of the fictional space being created, built through a multiplicity of modal affordances. While I previously defined the term 'site' as the full enunciation of a medially distinct and uniquely realized body of a transmedia fiction, most sites exist in multiplicity, that is, as a novel with hundreds of pages, a film with hundreds of thousands of frames, a video game with multiple levels, camera angles and styles of play, a website with numerous hyperlinks, images, videos or audio files. Faced with such multiplicities, it is the job of migratory cues to segment and suture these sites in acuity (i.e. at the level of a single page or work, a single location or object, a single link or

image), resulting in a distinct entity that nonetheless can contain multiple peripheries.

In this sense, migratory cues are one of the most important elements of transmedia practice. They allow narrative information to function in a capacity that assists an audience in cognitively integrating multiple modal inputs, and they facilitate the recombinative interpretation across sites. Yet it is simply not enough to say that we are learning to ‘read’ media again when we engage with transmedia fictions. Indeed, an audience’s processing of the links between sites is often a means of imbuing media with the capacity to function outside of itself, to use its own specific material bases as a means of connecting one medium with another. In this regard, migratory cues are undeniably materially specific, yet they still must allow for a somewhat immaterial relation between sites, one where narrative extractability takes precedence over a specific medium’s capabilities. As we will see, the dual material and immaterial demands of migratory cues often force a similar duality of non-narrative and narrative information within the sites themselves.

Migratory Cues: A Working Definition

According to Webster’s Dictionary, a cue is a signal (as a word, phrase, or bit of stage business) to a performer to begin a specific speech or action or, in its transitive verb form, a prompt. As a biological term, the phrase ‘migratory cue’ refers to the signals (ranging from the length

of daylight periods, temperature of the region or internal circadian rhythms) that certain animal species use in order to know the proper time for them to migrate to a different climate. Additionally, migratory cues also allow these animals to orient themselves within multiple environments and transition between them without losing their sense of place (Able 1993). Relatedly, the word 'migratory' in the context of its transmedia use refers to the act of mentally 'shifting' the content from one site and blending it with the content of another. Following this, the 'cues' are prompts or signals that promote an active linking of content between multiple sites. In one sense, a migratory cue is any sign in a transmedia fiction that assists an audience in making correspondences and connections between sites. These signals can take the form of virtually anything within the site, from objects to characters to events to even a word written in a seemingly unremarkable passage of a novel.

In another sense, though, a migratory cue is a prompt that, upon its location in a given site, forces an audience to process, internalize and project the narrative information of one site and blend it with the information found in another site. In other words, migratory cues are *active* cognitive constructs, devices of storytelling through which various narrative paths are marked by producers and located by an audience through activation patterns, the recognition of both the cue itself as well as the content that it directs the audience to. In this regard, migratory cues represent an always present potential for 'movement' within a

transmedia fiction. Much like an individual who, in moving from one home to another packs her belongings, changes locations and then unpacks in a new environment, the cognitive action required by a migratory cue spurns a similar packing and unpacking of internalized content from site-to-site. Upon recognizing a migratory cue's potential trajectory across sites, we aggregate the content we already have had contact with, shift our vantage point to another site and, often, another media platform, and then deploy this knowledge as tool for understanding the events of the subsequent site. While many transmedia fictions are structured so as to support audiences that recognize the cue as well as those who do not, the full complexity of meaning and modes possible in a transmedia fiction is in many ways dependent on the effectiveness of migratory cues as connectors.

Migratory cues, then, are the means through which information is expanded and recontextualized, shaped and bent. But how do migratory cues function in both local and global contexts? And what happens when a cue isn't followed? Are there different levels of connection a cue can manifest? In what follows, I will attempt to address questions such as these pertaining to the nature of migratory cues as they exist in contemporary transmedia fictions. Even so, it must be said that the distribution of these markers is a dynamic process, subject to shifts in both deployment and structure. Consequently, my work here is only to provide a potential (and by nature partial) account of some of the ways

that migratory cues work towards creating transmedia meaning, and not an exhaustive view of the subject. This chapter, then, will look at the specific functions that all migratory cues, regardless of their typologies, share. Additionally, I will highlight some of the functional modes of migratory cues as interpretive and linking devices, arguing that only by understanding the multifaceted nature of migratory cues as both an internally and externally emergent textual feature can we begin to assess their role as enabled storytelling devices.

Source/Target Completion

Since migratory cues exist as a polarity between two or more sites in a transmedia network with different locational centers, their efficacy depends entirely on the ability of the audience to locate the cue from its source, project the content associated with it and complete the projection in the targeted sign or correspondence point of the subsequent site. Yet even so, these cues can and often do go unnoticed by an audience if their awareness of transmedia is either 1) incomplete insofar as the existence of other sites; 2) incomplete insofar as previously engaged content does not imbue the cue with significance at the current point of involvement with the transmedia fiction. While the marking of migratory cues by transmedia producers imbue a site with heightened potential connective significance, this does not guarantee that a cue will be followed to completion, as the cue in isolation contains only a *potential* significance at the moment of its location, existing as a marker of a movement

without destination. In order for a migratory cue to function fully, then, it must find its completion in the targeted domain of another site. In other words, the projections, associations and blending of content between sites is only truly realized when these actions are confirmed through the content of the site (or sites) the cue is directing to, and not at the moment of recognition that a cue is, in fact, a cue. To invoke Pierre Levy's terminology (1998), all migratory cues begin as *virtual* components of transmedia storyworld significance that are only *actualized* when they are coupled with the information present in another site. Migratory cues can only provide a *link* to another site's content and, even if these cues exist as narrative information in their own right, the content that they point to is only the complete end of the cue, waiting to be populated further by extended contact with the site. Without this coupling, migratory cues are emptied of their potential connective meaning and are relegated to their functions within a single site (see section on External Cues for more in this regard).

The projection, however, that is necessary for migratory cues to produce both narratives and storyworlds larger than those within a single site requires a *source-target* dynamic that is unique to transmedia in its ability to highlight certain textual features where contact and internalization has occurred as well as force an audience to anticipate the location of the completion point. While some links are stronger than others, all migratory cues require source-target completion in order to

function connectively. The term *source* used here refers to the site from which the migratory cue was first located and processed as such. This site is quite literally the basis for the entirety of the cue's operations, as it's through here that the initial connections are made and content is culled. *Projection*, in turn, refers to both the cognitive action of internalizing and summarizing the content contained in the source site as well as the deployment of this knowledge towards a second (possibly undefined) site, where the knowledge will be compared, contrasted and perhaps even contested by the content of that site. *Completion* and the corresponding notion of *completion points* refers to the process of validating the information from both the projection and the marked cue itself through a point in a second site where correspondences are made between them. Every migratory cue has a completion point where the cue's direction is verified even though, as we will see, the form that these completion points take can be as varied as the medium itself, the spatiotemporal dynamics of the narrative, or causally-oriented constructs. Finally, the term *connection* here describes the creation of a pathway between sites, a means of providing unity to (usually) disparate media channels and, in some cases, enacting a narrative sequence between sites. Connection also implies that there is sufficient evidence in the site outside of the completion point that correlates with one's internalized storyworld knowledge, thereby validating the sites as unified

on at least some external or internal level, usually both. Figure 2.3 illustrates this dynamic:

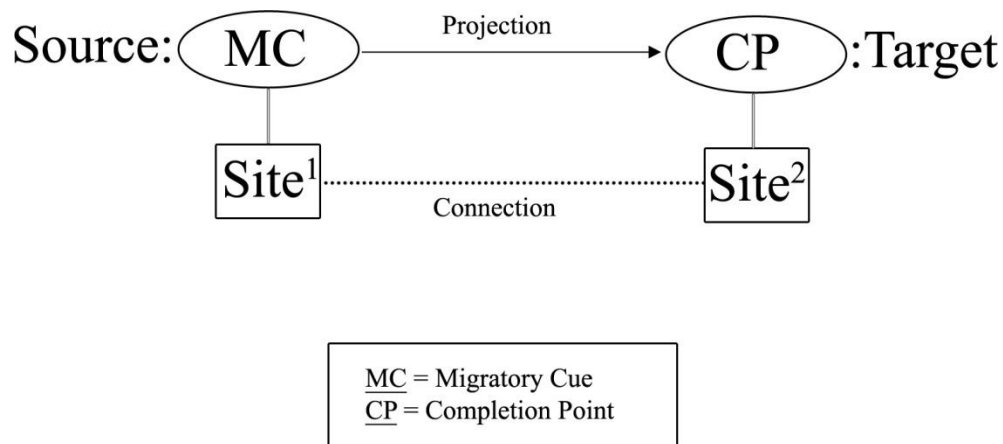


Figure 2.3: Migratory Cue Source-Target Projection

Figure 2.3 should be read in a clockwise manner. Our projection from the source domain, the migratory cue from Site¹, meets its completion point in the target in Site², which allows the connection between the two sites. Once this connection is made, it is directionally oriented, meaning

that once the cue is followed, there may not be any link leading back to the source site (see Directionality, below).⁹

Importantly, although it is likely that source-target projection occurs after each relevant site has been fully engaged and internalized, each migratory cue also acts in a possibly interrupting manner. When a cue is located, projected and followed, it creates a potential rupture in the event plane of the story of both the source and the target sites (see Figure 2.4). In the source site, the content that is engaged prior to locating the cue is maintained and deployed to the target, where it assists in creating new meanings when coupled with that site. Since

⁹ It is highly likely that as the logic of transmedia practices further permeate narrative output, we will increasingly see mechanisms built into storyworlds and universes which allow for a site to be imbued with transmedia connection at a later date. In other words, we will see open migratory cue sources without necessarily finding a corresponding target for completion. Indeed, many of the examples used in this study can be said to follow the basis of this logic. The graphic novel, *Hidden Enemy*, seen in Figure 2.8, for example (see below), works retroactively to imbue the film *Revenge of the Sith* (2005) with a bi-directional cue. This is not what is meant, though, by an *open cue*. Since one of the primary capabilities of narrative cognition is the extension of the events of a storyworld past their material signification in a text, virtually *all* narrative is open-ended to some degree as virtually *all* narrative produces gaps. While film, for example, might seem like the medium most apt to work against this proposition, containing the potential to map story and discourse time (or ‘real-time’ and screen time) into one seemingly seamless entity, even here we can see where openness can emerge. Every camera shot, every film frame, obscures as much as it reveals. Mike Figgis’ *Timecode* (2000), for example, seemingly works against this proposition through its simultaneous juxtaposition and bisection of the screen into four quadrants, each of which follow four different characters as they interact, separate and move about their daily lives. Even as this maneuver opens up cinema for reconsidered conceptions of space and time, Figgis’ film is just as much an example of the inability for any medium to mark events as separate, yet have them be considered simultaneously. In short, Figgis works against any denials of openness that his film at first seems to suggest. This is a powerful way to view the openness of transmedia, I think, as it is only through post-engagement processing that the totality of a narrative can be ascertained and, further, extended through imaginative reflection. The choice to film an actor’s upper body leaves the lower half open, and so on. This is partially what is exploited by sites like *Hidden Enemy*, where the inability of one site to capture the totality of the events in a story leaves it vulnerable for exploitative connection by another. Open cues, by contrast, might be constructed for connectivity from the outset, purposefully designed to produce gaps that might be populated further down the line by other sites. This allows a transmedia network to be constructed post-hoc based on variable factors from interpretive response to audience reception and demand. As franchise/ universe models become more the norm, the presence of open cues will increase as well, becoming perhaps the most pervasive type of migratory cue utilized in transmedia, as well as the most pervasive model of narrative construction.

most internal source and target points do *not* occur at the beginnings of the sites they exist in, however, these projections can render a site incomplete; that is, if both the source and the target do not occur initially, any attempt to follow them directly from the point of their location, without completing the remainder of the site, will render both sites incomplete in lieu of completing the projection and establishing a different sequence of events.

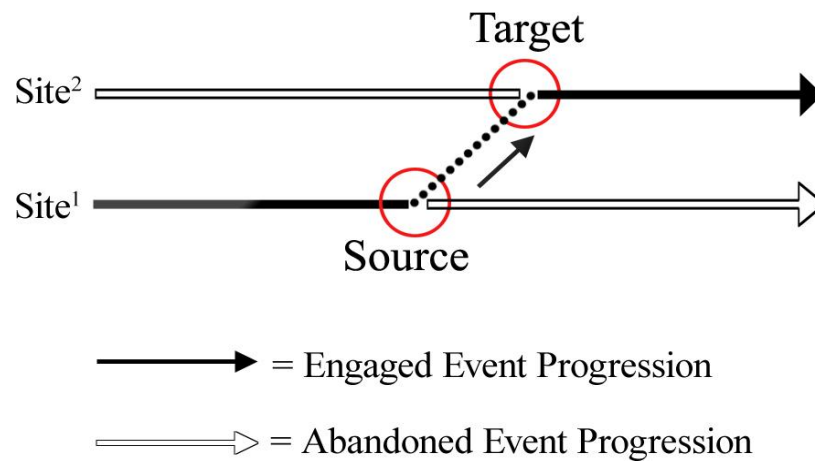


Figure 2.4: Cue/ Event Interruption

Directionality

Just as source-target projection and completion is crucial in the construction of migratory cues, so too does the *directionality* of the cue greatly impact the connective capabilities of a set of sites. A migratory cue's directionality refers to the ability of an audience to reciprocally follow a cue from site-to-site. To put this differently, the source-target relationship may be reciprocated bi-laterally between sites, rendering the source-target correspondences of one site the target-source correspondences of another. The different potential directional modes of migratory cues are as follows:

- Uni-directed (or un-reciprocated): the cue containing the source is *not* reciprocated by the correspondence point containing the target;
- Bi-directed (or reciprocated): the source is reciprocated by target, and vice-versa

For example, a website that exists internally to, or as a part of, a storyworld or universe that is found by following a migratory cue will not often contain a cue that leads back to the source site, hence its uni-directionality. In this sense, uni-directional cues often lead to object-orientations within the fiction, where the site itself functions as an object that exists internally to the logic of the story that can be manipulated and explored by an audience. This site is called a *termination point* if it contains no other cues, as it represents the literal 'end' of a particular

pathway through a set of sites. Additionally, the directionality of a migratory cue can also be determined by the transmedia network's *distribution time*, i.e. the external mechanism which divides a transmedia narrative into temporally distinct but not usually chronological units through the staggered availability of sites ready for consumption. A cue found in the initial sites completed by transmedia creators and producers and distributed by publishers for audience consumption, for example, may not contain cues that explicitly connect other sites. Consequently, a cue's potential connectivity grows in proportion to the number of sites available at the time of its site's composition.

Paratexts of Connectivity: External Cues

In Gerard Genette's landmark study *Paratexts* (1997), Genette discusses the external or internal ways that texts materially signify outside of the narrative content of the book, film or other media in play. Here, Genette speaks of the various ways that book covers, plot descriptions, logos and titles help to situate an audience's engagement with a particular work long before they actually engage with the content of the site itself. In the context of this study, paratextual elements function as *external migratory cues*, cues that exist outside of the internal fiction of two or more sites and ensure superficial connection between them. Here, connectivity is achieved broadly through brand markers, logos and other extra-fictional means of marking an artifact uniquely. These textual markers, importantly, do not possess any causal

relationship with the actions, events and characters in the fiction itself. As Genette notes, 'the paratext is in itself a text; if it is still not *the* text, it is already *some* text' that is constructed by 'groups of practices and discourses' (1997: 7). As Philippe Lejeune (1975) sees it, these practices shape the fringes of the text, 'which in reality controls one's whole reading of the text' (45). In this sense, the construction of external migratory cues is a process of marking sites that have some transmedia relation as well as differentiating them from other, unrelated sites. In other words, much like paratexts, external migratory cues situate fictional meaning, but do not contain fictional meaning themselves but rather only as a sort of shorthand for implying fictional relations.

A book's dust jacket, for example, acts as the 'first manifestation of the book offered to a reader's perception' (1997: 27), the most obvious function of which 'is to attract attention' (1997: 28). The outward contact points of a site, be it a dust jacket, the images printed on a DVD or even the titles of the artifacts themselves, work on several additional levels to situate meaning long before we even begin to consume the 'meat' of the site itself. Indeed, in transmedia fictions, these contact points form the first stage of external migratory cue relations, the signifiers of franchises, production entities and other related dynamics that act on a materially superficial level to unify the fiction. Whereas cover pages and related esoterics signify on one level the commercial branding, on another level the signs work as points-of-entry that allow for a certain degree of

uniformity between separate media artifacts and come to be associated with specific content in the process.

External cues, then, are our initial entry points to a transmedia world and, as such, they influence everything we encounter by acting as, as Genette elegantly remarks, a '*threshold*, or—a word Borges used apropos of a preface—a 'vestibule' that offers the world at large the possibility either of entering or of turning back' (1997: 2). Although Genette didn't anticipate the advent of transmedia, his language here seems especially suited towards this end, for it is in many ways through the paratextual elements that exist *externally* to the fiction of a site's composition—seen in the publisher's titles, logos and descriptions (what Genette calls *peritexts*)—that we enter into transmedia relationships, and begin to explore the stories that comprise transmedia narrative meaning.

This is, perhaps, an obvious point. But migratory cues are often not capable of creating the full set conditions necessary for interaction with other sites in a transmedia network. Although one might recognize a migratory cue in the context of a given site's narrative, this in itself does not guarantee that she will be aware of the other site(s) in the network where this cue reaches completion. As a consequence of this, most migratory cues that are comprehended internally to the fiction are also supplemented by contact with cues that exist externally to it. As an audience moves from external to internal cues, the potential for lost connections increases proportionately as the cues become more

numerous. As a result, there is an inverse relationship between internal and external cues and the degree of previous knowledge that is required to follow them. If, for example, someone misses an internal cue present in a website leading to a television show, the 'safety nets' in place for the re-connection between sites moves by degrees from internal to external cues until, finally, any signifiers of the franchise itself work towards providing a general connectivity to the network.

We expect, for example, that a video game titled *LOST* will make at least cursory associations with the other sites within the *LOST* storyworld, regardless of whether these sites exist in TV, the Web or in print, and regardless of the degree of verisimilitude between these sites. Usually, these references take the form of the name given to the universe itself and, consequently, information that exists on this level requires an audience to only make the broadest of associations with a given fiction. External cues exist, then, as franchise signifiers, where titles, logos, fonts and other related signifiers contributes to meaning.

Since branding such as this often only represents what Naomi Klein sees as a broad and sometimes purposefully abstract 'core meaning' (Klein 1999: 5), the narrative information contained on this level speaks only to the potentialities of a fiction, where the external cues becomes markers of a fiction both emptied of all specific narrative meaning (in that its generalized past the point of specific reference) and bursting with narrative potential (in that it semiotically encompasses

everything associated with that brand). This duality of meaning allows the narrative brand to function as both an entry point working towards franchise familiarity and a pervasive reminder for those already possessing some familiarity with the brand itself.

When viewed from this perspective, it becomes clear that external cues do have some capacity for associative narrative meaning, even if this meaning is confined to the differentiation and subsequent triggering made from the external cues themselves. The post-point-of-entry associations made through external cues occur both because of the fiction and in spite of it, heightening audience awareness of potential meanings and storyworld traits while simultaneously signifying no specific story information outside of the cognitive associations made by the franchise cue itself. Audiences possessing some familiarity will expect that, for instance, engaging with a site branded with *The Terminator* name will inevitably touch upon the war between the Skynet controlled machines who wish to eradicate humanity, and the humans seeking to disrupt and destroy Skynet in order to survive. It may also allude to cyborgs, John Connor (humanity's leader) and, on a cultural level, Arnold Schwarzenegger, who played the role of the cyborg terminator in each of the three feature films set within this universe. In other words, external cues provide the initial means through which storyworld construction is activated, where entry occurs and is marked or where previously processed and stored information about a given world is called

into play as generalized background knowledge through which subsequent narrative information is filtered.

Complimentary to external cues, the source-target operations of franchise-level cues occur on the level of direct correspondences between the titles and logos given to the universe. These correspondence points allow for the gradual interpolation of site-to-site content on the most basic level, and function in many of the same ways that basic: universe-level cues do (see below). Source and target, then, are nearly identical in franchise-level cues. As Figure 2.5 illustrates, franchise-level cues can function through both sign and signified, lending structure to a transmedia network even when the visual identity of sign does not. Consequently, the repeatability of a brand-signification lends it a connective capability that most take for granted, one that pushes past medial boundaries and establishes a semiotic 'ground zero' for initial entry into a transmedia narrative. Marie-Laure Ryan, in speaking about what she terms 'the question of fictionality' (1991: 46), writes that 'We regard a text as fiction when we know its genre, and we know that the genre is governed by the rules of the fictional game. And we enter into this game when our concern for the textual system of reality momentarily displaces our existential concerns for the affairs of our own native system' (1991: 47). In a similar sense, when an audience regards a series of sites as a transmedia fiction, uniquely in itself a work of mode and genre, they locate and recognize the initial external correspondence

points—in this case residing in the franchise-level cues—through which previous associations of a certain fictional universe, regardless of its medium, originated.

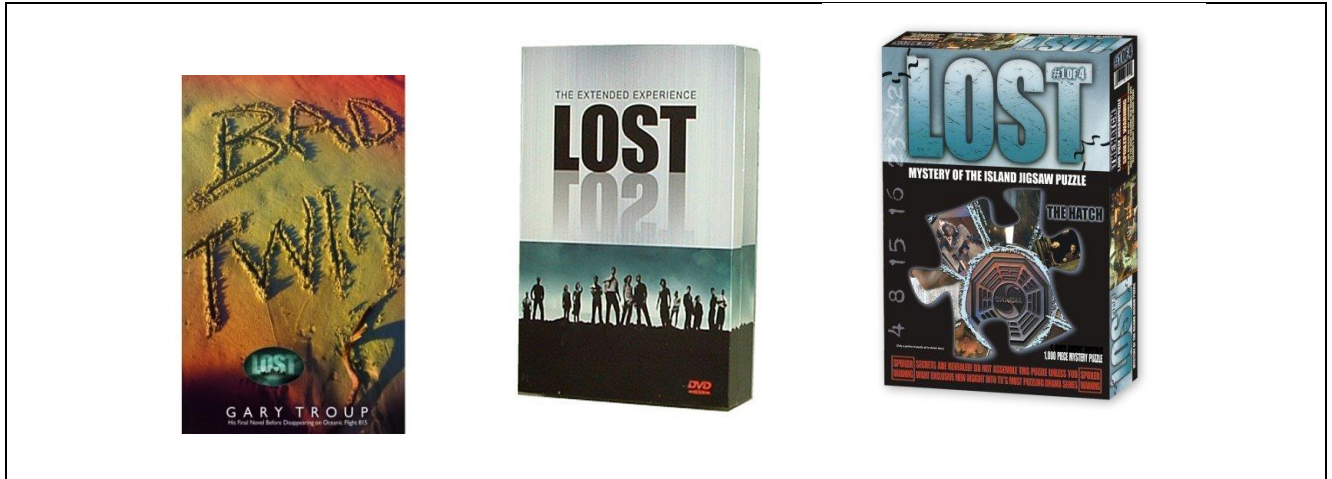


Figure 2.5: In the case of the *LOST* brand, franchise cues hinge on nothing more than the font of the title itself in order to provide the connections necessary to externally unify the sites in the network. Regardless of how diverse a grouping this might be, this franchise cue is used to designate everything from DVD sets to puzzles which, when completed, provide supposedly crucial insight into the *LOST* storyworld. Additionally, Gary Troup's *Bad Twin*, a novel based on a manuscript found at the crash site of Flight 815 by the island's survivors about the presence of a doppelganger, bears little resemblance to the plotting's of the *LOST* hub narratives. The franchise cue, however, marks the content of the novel as uniquely related to *LOST* and, even if a viewer did not follow the internal cues leading to the novel (see below), the franchise cue compensates. As a result, many have extracted significant contexts through which to interpret the other *LOST* sites.

Conversely, however, a brand's narrativity—its ability to produce the causal-sequential conditions necessary for narrative meaning to be made—is still tied to some degree to the media and market within which it is expressed. While a t-shirt and a graphic novel may both use the same brand markers, the expectations of an audience engaged with them are not the same, nor are the requirements of the audience when they begin to make associations and speculations as to the potential content of the artifact they engage. T-shirts do not usually 'do' narrative¹⁰; graphic novels are suited specifically to. But while this short analysis may seem somewhat dismissive of the potential narrative weight of external cues, we must be careful to jump to such conclusions. On the most basic level, these unities provided by external cues function as a means of cognitively associating content with a given visual identity, even upon our initial entry into a project.¹¹

¹⁰ There is a transmedia exception to this rule in 42 Entertainment's Edoc Laundry series, in which a series of puzzles is scattered across a line of t-shirts which, when decoded and plugged in the Edoc Laundry website, each reveal a subsequent 'chunk' of a larger narrative. Strictly speaking, although the t-shirts themselves aren't narrative, they do act somewhat as connectors of a narrative whose sequential operations take place online through the Edoc Laundry website where the codes are entered. This does not, I think, contradict my position on brand

¹¹ Interestingly, with newer properties it is often preferable to not attach a brand or franchise logo too early. Indeed, in the case of the first sites to be released in the *Cloverfield* network, for example, the goal of narrative comprehension results in the branding of the sites themselves through the connection of information present in seemingly disparate locations under a unifying and signifying narrative world. In this case, information about the storyworld itself is formulated prior to any naming of that storyworld itself. In contrast to this, the pre-film sites for *The Dark Knight*, with its familiar iconography, had no need to work through such issues.

Consequently, we might say that franchise level cues work on this level as cognitive artifacts which trigger memory, much like calendars, calculators or even computers work towards amplifying human cognition through physical/material objects. David Herman (2002) even makes the case that narrative in itself—as both a material manifestation and a mental process—is in itself a cognitive artifact, allowing us to categorize and make sense of our lives. Furthering this claim, Edwin Hutchins (1999) remarks that ‘The cognitive artifact concept points not so much to a category of objects, as to a category of processes that produce cognitive effects by bringing functional skills into coordination with various kinds of structure’ (260). In this context, external cues function not only as a means of demarcating one franchise from another, but also as triggers of a particular knowledge base that will be activated further upon engagement with that cue. Although a first encounter with an external cue might not elicit any subjective response from an audience, after engaging with a particular site, any subsequent encounters marked by the cue will necessarily trigger the stored knowledge sets associated with that particular transmedia narrative. This is the first level of connection that can be said to take place in a transmedia network¹², one that

¹² It is possible that epitextual references—those interviews, letters, forums, seminars, etc. where a creator or a work discusses its composition—also assist in the creation of connectivity between sites in a transmedia network. For example, in promoting *The Matrix*, producer Joel Silver made the following remark to *The Hollywood Reporter* in 2003: ‘The movies are spectacular. It's all based on this incredible story the Wachowski Brothers have created...It's a story that's being told in multiple mediums. We have this video game. We have animated shorts. We have a short film ('Osiris') opening with 'Dreamcatcher' in three weeks that sets up both sequels. If you see this short film, it kind of jumps you into the movie. If you don't see it, you'll still enjoy the picture, but it will be enhanced a little bit if you see the short.’ Similarly,

importantly might have a source, but no specific target, rendering it active in each instance where there's an external correspondence between sites.¹³

Direct External Cues

Outside of the associative properties of brands and franchise signifiers, we find another external means of connecting information in a transmedia network: the *direct external cue*. Direct external cues are explicit references toward other sites in a transmedia network, and can take the form of hyperlinks, titles, calls-to-action or distribution dates, providing an unambiguous, interpretively-inert means of linking the information in one site with that of another. Direct external cues are some of the most prevalent means of directing an audience's attention to transmedia interaction, but they are also expectedly some of the least

in speaking with EOnline.com also in 2003, Silver says that *The Matrix* will be "the first time anyone's told a story in multiple mediums." While the efficacy of this statement is debatable in lieu of, for example, *Star Wars* and *Star Trek's* ventures in multiple media, it's not debatable that, as Ivan Askwith notes in 'A Matrix in Every Medium', Silver is right—*The Matrix* is the first time that 'a *single* story is told through multiple media' (http://dir.salon.com/story/tech/feature/2003/05/12/matrix_universe/index.html). In each case, both Silver and Askwith's comments about him are fulfilling a vital role with regard to the functions of this transmedia narrative: they are providing the contexts for the necessary making site-to-site connections. The inability to place these comments within any one specific site, however, excludes epitexts from the main thrust of my study, which includes only site-based artifacts.

More recently, Showtime's *Dexter* has developed a habit of following each episode with an actor-led discussion of the transmedia components of the larger fictional world *Dexter* belongs to, including online, motion-based graphic novels and object-oriented websites. For *Dexter*, this is the primary entry point for many of the transmedia engagements that might follow, as there are seldom, if ever, any internal cues leading from the television show to other sites (the opposite, however, happens quite often).

¹³ There is, of course, an important exception to this rule that will be dealt with later on: in sites that exist strictly through object-orientation, external cues are often entirely absent, removed under the auspices of creating a more 'authentic' experience with the site. Here, external cue signification becomes a drawback to internal connection, as it positions two different ontological entities (extra-fictional and fictional) within the same spaces.

chiasmically integrated elements of a transmedia fiction. Much like franchise level cues, direct external cues openly break the fictive immersion gained through one's contact with a transmedia storyworld through the intrusion of an external and story-adverse voice¹⁴, one disassociated with both the events of the site and the events and capacities of the storyworld itself. In some sense, this voice can be most readily associated with the production entities responsible for creating the particular site of interaction—the publishers. As such, the means through which direct cues function is also indicative of content-leveled information. That is, in order to ensure some continuity between sites and resist disconnection, direct cues, like all external cues, work on the lowest levels of storyworld knowledge.


¹⁴ Although 'voice' in narrative has always been a part of the study of narrative, voice of publishers has not been. This avenue, I think, is a fertile one, especially for transmedia, as it implicates not only the peritextual aspects of transmedia narratives, but also the connective aspects as well.

JUNE 30 2008

ONE OF THE WORLD'S MOST FAMOUS ACTORS HAS DISAPPEARED.
BOXER SANTAROS AWAKENS DEEP IN THE NEVADA DESERT...
 ALONE, STRICKEN WITH AMNESIA. HE IS RESCUED BY A DRIFTER
 NAMED **FORTUNIO BALDUCCI**. ONLY TO DISCOVER THAT
 THE WORLD AROUND HIM HAS SUDDENLY CHANGED.

AMERICA NOW STANDS ON THE BRINK OF SOCIAL, ECONOMIC
 AND ENVIRONMENT DISASTER... APPROACHING THE THREE-YEAR
 ANNIVERSARY OF DUAL NUCLEAR ATTACKS ON TEXAS SOIL.
 AS **BOXER** STRUGGLES TO REGAIN HIS MEMORY, HIS PATHS
 CROSS WITH A MYSTERIOUS ADULT FILM STAR NAMED
KRYSTA NOW AT THE NEVADA/CALIFORNIA STATE LINE.

KRYSTA REVEALS HER PSYCHIC ABILITIES TO **BOXER**
 IN THE FORM OF A PROPHETIC SCREENPLAY THAT
 FORESHADOWS THE APOCALYPSE...



I II III IV V VI



THE PREQUEL SAGA BEGINS

WRITER/DIRECTOR RICHARD KELLY (DONNIE DARKO) UNVEILS THE PREQUEL TO
 HIS SECOND FILM, SOUTHLAND TALES. IN A SERIES OF THREE GRAPHIC NOVELS,



THE 2006 FEATURE FILM STARRING THE ROCK, SEANN WILLIAM SCOTT AND
 SARAH MICHELLE GELLAR, WILL CONSIST OF THE FINAL THREE CHAPTERS.

WWW.SOUTHLANDTALES.COM

ISBN 0-936211-75-X \$12.95 US
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Taken From: Richard Kelly (writer) and Brett Weldele (illustrations), *Southland Tales I: Two Roads Diverge*, Graphitti Designs (2007).

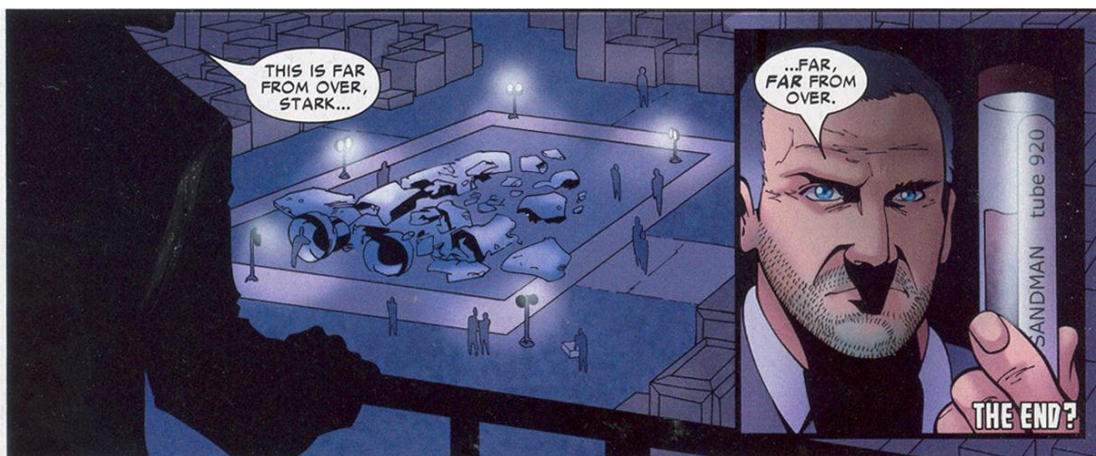
Figure 2.6: In the example here, we see several instances where direct external cues work to structure the connections between the sites in Richard Kelly's *Southland Tales*. The graphic novel itself is listed as chapter one of six in the 'Prequel Saga', and the other elements, such as the description of the role that the

graphic novels play with regard to the hub site, the film, and a website URL, each work to further ensure that the network remains intact, regardless of what connections are present while interpreting the narrative of the site itself. It's also worth noting here that with *Southland Tales*, since distribution time is not anachronistic with regard to the networked story time, the connections made by the direct external cues are only partial. In other words, since access to the timeline of the transmedia network is linear, the initial cues, seen here in *Southland Tales I: Two Roads Diverge*, are uni-directional in orientation. Other sites, such as *Southland Tales III: The Mechanicals*, include direct external cues that explicitly reference in both visual (dust jackets, etc.) as well as formal (ISBN numbers, prices) terms the other available sites in the network. In short, direct external cues are only uni-directional in proportion to the availability of the other sites in the network. Since the site presented here is the first to be distributed, the cues present point only toward either the eventual availability of other sites or, in several cases, direct reference to franchise-level cues, thereby creating an interlaced series of connections through external means.

Like all migratory cues, direct external cues function here towards the end of double-validating the information accrued in one site through its potential amplification and application in a second site. That this occurs outside of the storyworld, however, renders these validations latent, not manifest, awaiting further connection through the comprehension of two or more sites.

See
 "THE TUNNEL OF TERROR"
 Chapter Two of "FLASH
 GORDON" serial to be
 shown at this theatre next
 week.

Taken from: Frederick Stephani, *Flash Gordon*, Universal Pictures, (1936).



Learn the origin of Harley's powers by watching *GUIDING LIGHT* on Weds, November 1st on CBS. Check your local listings!

Taken from: Jim McCann (writer) and Udon (art) *A New Light*, Marvel, (2006).

Figure 2.7: Produced in 1936 for Universal Pictures, Frederick Stephani's *Flash Gordon* serials are often seen as one of the primary examples of the resurgence of the serial form following both the advent of sound in film and the Great Depression, both of which temporarily defeated the form due to cost. Although simplistic, end-cards like these portrayed several important pieces of information: the notion of a 'chapter' dividing a film (see Chapter 2: Site-to-Site Interaction for more on this) and the notion of this division being spread across a purposefully distanced story, discourse and distribution time. Even if the events of previous serials were often summarized at the beginning of the subsequent chapters, an audience was still expected to bring their knowledge of previous events to bear on the events of the current chapter. Yet even so, the continuity engendered by serial films was tenuous, as occasionally the content of prior chapters would be edited so as to allow for the continuation of the story, such as when a character escapes a life-threatening situation in one episode when previously they clearly didn't. In the case of *A New Light*, Marvel Comics' transmedia with the soap opera *Guiding Light*, these same truths hold. One story ends, and we are immediately given a cue as to where the next begins: 'Learn the origin of Harley's powers by watching *GUIDING LIGHT* on Weds. November 1st on CBS. Check your local listings!'. Of course, in this case the narrative shifts from printed graphic novel to television show. It's also worth noting, however, that the direct cue immediately follows an extremely heavy-handed storyworld-internal dialogue which hints that this narrative is 'Far, far from over', although without any guidance as to where it might continue. In this context, one can begin to see how external cues, especially direct cues, work in conjunction with internal cues in order to construct leveled content through which different audiences can interact with the transmedia network. While the words spoken at the conclusion of this site is ambiguous, the direct cue immediately following it is not, and in some ways works as a dialogue between external and internal cues.

Additionally, direct external cues are a means of externally working against any narrative closure that might have occurred internally to the specific site or sites engaged with prior to its encounter. Since most, if not all, direct cues are located on the final page, title card, back cover or closing credits of a site, any finality that the site once gained through the narrative's seeming denouement is almost immediately upset and reopened by the presence of the direct external cue. Although most audiences naturally allow for the continuance of a narrative after the site itself reaches its material 'end' (e.g. Kermode 1967; Smith 1968; Torgovnick 1981), this process occurs internally to the characters, locations, events and time of the story or, at least, internally to the constructed logic of that narrative. While direct external cues in this sense hold many similarities to the cliffhanger endings of serialized Victorian pulp fictions or the film shorts of the 1920's and 1930's in that they work towards continuous storylines while simultaneously working against the possibility of a single engagement with this continuity, they also act towards something altogether removed from the early days of this practice—namely, the *impossibility* of closure due to the existence of several narratively related yet (possibly) materially unrelated media channels. In other words, whereas previously distances between distribution dates spurned the serialized continuation of a storyworld and the distributed engagement of audiences, it is the material distance between sites in a transmedia network that results in direct external

cues holding continued influence over the construction of transmedia fictions, especially when the fiction pushes towards a point of either heightened multiplicity or the conclusion of further releases. In this regard, there is sometimes a shift in practices that transforms sites existing internally to the fiction into those that function through externally direct cues. But can we ascribe some of the same properties to cues that exist internally to the storyworld—cues that resist fictive breach—that we do to external cues? In order to answer these questions, I will now examine what are called *internal migratory cues*. Internal migratory cues are edges that constitute, I feel, the most advanced language of transmedia connection, and consequently, while external cues act as connective fail-safes across sites, only internal migratory cues can actually construct a *network* of narrative meaning, one that functions in ways that are simply impossible to conceive of in mono-media fictions.

Narratives of Connectivity: Internal Migratory Cues

In direct contrast to external migratory cues, *internal migratory cues* are signs within one site that are signaled, developed and completed within the logic and continuity of the fictional storyworld itself. Unlike external migratory cues, which are causally separate from the narrative sequence enacted across sites, internal cues operate exclusively by and through the characters, locations, temporalities and events of the storyworld currently being engaged. Although I've already touched briefly

upon a couple of examples where the paratextual elements that organize and define external migratory cues work collaboratively with internally based story information, internal cues generally work on different content levels than external cues do, relying almost exclusively on author-oriented information that seldom, if ever, breaches the fictional space of the narrative. Consequently, internal cues are by far the most ‘storylike’ of the two migratory cue divisions I’ve presented here. As a result, their efficacy depends greatly on the degree and type of site-to-site interaction that a particular audience has had. While external cues are designed purposefully to be ‘hard to miss’, one’s awareness of an internal cue is proportionate to the number of sites that are interacted with prior to encountering the cue. In other words, as much as the interiority of internal cues dictates the form they take in the storyworld, storyworld-external influences such as *distribution times between sites* and what I referred to previously as *retroactive planing*, where content not originally designed as, in this case, a migratory cue, gains heightened significance due to the presence of a cue in another site.

Since internal cues must function as seamless components of the narrative content of the site itself, the completion points they gesture to are necessarily situated on the *specific: story-level* as elements drawn from the larger, unrealized transmedia universe. In this regard, the seamlessness of the cue takes precedence over any linking capabilities it must possess. Internal migratory cues are *story elements first* and

connective elements second. This is to say that the integration of an internal migratory cue is a result of a doubly-signifying block of narrative information, which either is or isn't read as such depending again on the degree of interaction one has had with other sites in the network.

Specific: Story-Level Cues

Specific: story-level cues seek a much more integrated methodology for achieving connection between sites than external cues do. By employing specific: story-level cues, transmedia producers are looking to activate either causal-sequential or object-oriented meaning across sites. In other words, whereas external cues are always situated outside of the fictional world (even in cases where they are made to resemble an internal object), specific: story-level cues belong much more to the class of storyworlds, mental models built through contextual and predictive causality (Ryan 1991). Specific: story-level cues, then, are perhaps the closest constructs we can point to where traditional ideas about narrative—as a sequence of events in cause/effect relations occurring in space and time—are the most readily extended transmedia practice. Yet, as mentioned previously, most internal migratory cues cause a fragmentation in both the source and the target sites through which they act, necessitated by the fact that rarely, if ever, is an internal cue found at the material 'end' of the site in which it's found. Consequently, specific: story-level cues work toward defining *narrative planes*, where content is made to function in several sites simultaneously through

selective transmedia connection. In what follows, I will briefly outline some of the more defined examples of specific: story-level cues, from those that resemble their external counterparts to those whose linking capabilities are defined entirely through different means, ranging from material reference to planar intersection.

Intersectional Cues

As stated previously, the placement of migratory cues should be thought of as a *strategy* for organizing narrative, a means through which contact points can be created internally across sites. Consequently, intersectional cues work exactly as their name implies—by creating semiotic event-junctions between two or more sites through which source-target projections can be made. Intersectional cues are *shared* between sites; that is, their ability to function depends entirely on the degree of interaction an audience has had with other sites prior to engaging the sites with intersectional connectivity. Intersectional cues, however, should not be thought of as constructs related to adaptational pursuits, such as novel-to-film transposition. Instead, they are the momentary reflective collusion between two sites in a transmedia network, fragmented spaces where the content of one site explicitly reproduces the content of another, thereby facilitating source-target completion through the self-similarity of the two sites.

As such, intersectional cues are a highly-specific and highly knowledge-contingent means of enacting *multiple* sequences of events

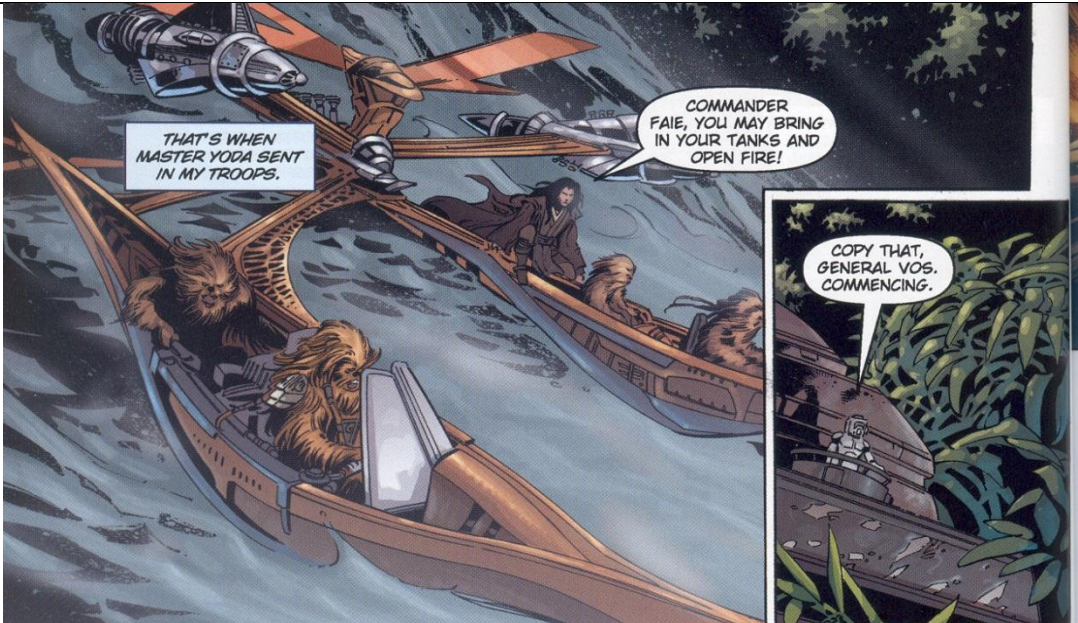
within a constrained space and time; in other words, they work by providing a sometimes split-second coordinate for where and when a given narrative bifurcates into two (or three or four) separate event planes, each with the same intersecting origin point. In this sense, intersectional cues acutely locate a moment in the narrative(s) that can act as departure point for several simultaneously distending event planes. While Marie-Laure Ryan argues that in narrative the ‘same event never occurs twice’ (2006: 102), transmedia networks often use intersectional cues to structure a single event as a convergent point for multiple sequences of events, which often diverge no sooner than they meet. Because of this, intersectional cues require the highest degree of internal knowledge of a fiction.

The narrative materials through which intersectional cues work are as varied as they are dynamic, shaping themselves to an audience’s prior storyworld knowledge and depth of interaction. They can take the shape of story elements, such as characters, locations and objects which work in combination with discourse elements such as shot compositions from a film being repeated in a graphic novel (Figure 3.5.1, below).





Taken from: George Lucas, dir., *Revenge of the Sith*, 20th Century Fox (2005).



THAT'S WHEN MASTER YODA SENT IN MY TROOPS.

COMMANDER FAIE, YOU MAY BRING IN YOUR TANKS AND OPEN FIRE!



COPY THAT, GENERAL VOS. COMMENCING.



I DIDN'T FEEL COMFORTABLE COOPED UP IN A TANK, SO I CHARGED IN WITH THE WOOKIESES, LED BY TWO I'D JUST MET --



-- NAMED TARDULLIL AND CHEWACCA.



WE DIDN'T WAIT FOR THE ENEMY TO COME TO US. WE BROUGHT THE BATTLE TO THEM.



Taken From: John Ostrander (writer) and Jan Duursema (illustrations), *Hidden Enemy*, Dark Horse (2006).

Figure 2.8: The above images represent what could be called a typical example of an intersectional cue. Although the correspondence points between the two sites are not entirely exact, they are similar enough to engage reciprocal content migration between the two sites. Again, though, it's not simply enough to make contact with one site in order to push forward with the cue's completion. Only through contact with each site can the recognition of intersections take hold, and connectivity be achieved. Once this recognition is made, the content of each site is internalized and then deployed within both recollected accounts of the events of each site, as well as in subsequent viewings, readings, etc. with the sites in question. In this case, Quinlan Vos, the Jedi whose actions we follow in *Hidden Enemy*, becomes a layered participant in the film *Revenge of the Sith*, where he was not shown. Conversely, we can also infer that the events of *Revenge of the Sith*, most of which are again not present in the graphic novel, are also taking place in the midst of Vos' actions. Importantly, all of this takes place in the span of about four panels in the graphic novel and, in the film, about ten seconds of screen time. However, it is obvious here that what we can call the hub site—the film—exerts considerable influence over the content of the graphic novel, where the integrity of the film's shot composition is maintained almost entirely. Not only does this partially denote the film as a hub site, but it also points to something much more practical—how the difference in distribution times between the sites (the film was released before the graphic novel) results in an uneven distribution of content value, or what I refer to in other points in this study as *narrative capital*. Also of note here is the simultaneous existence of basic: universe-level cues both preceding and succeeding the intersection, providing both a preparatory basis for the cue's function as well as a more general connectivity on the world level, even if the cue is missed.

Importantly, though, since intersectional cues rely almost entirely on an audience's previous knowledge in order for them even to be recognized as cues, one's recognition of and interaction with an intersectional cue is also a natural indicator of the level of their engagement with a fiction. For example, an audience that is playing a video game that shares an intersectional cue with a novel will only recognize the cue if they have previously had contact with the novel or, at least, the portion of the novel's content where the cue gains its significance. Put differently, the source-target relationship that all migratory cues depend upon cannot function as such without the means to define the roles involved in the migration. Whereas other types of migratory cues work by guiding an

audience from cue to site, intersectional cues work through highlighting certain events through the controlled repetition of elements. In this sense, intersectional cues do not guide but, rather, assist in *layering* the content that an audience has already made contact with through a temporary intersection of locations, characters, and events that acts as an event hub which directs perspectival meaning.

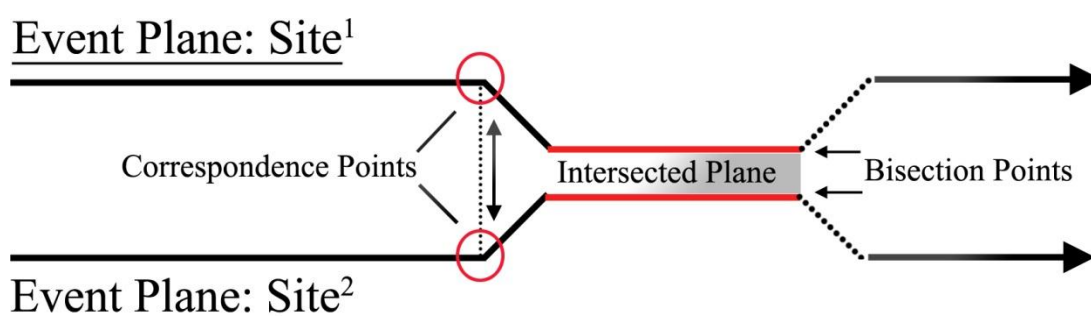


Figure 2.9: Intersectional Cue with Event Planes

As Figure 2.9 illustrates, intersectional cues work through multidirectional source-target correspondence points between sites, intersections that promote a chiasmic integration of the events of each site. This multi-directionality allows for source-target projection to be functional regardless of which site one has contact with. For example, if an audience makes contact with Site² prior to making contact with Site¹, then Site² becomes the source domain and Site¹ the target domain. The opposite also holds true. Importantly, however, since the intersections spoken of here are only temporary in their shared (event) spaces, there is

also what is called *bisection points*, where the intersected plane created by the cue once again splits off and resumes a more traditional mono-medial function. Once the intersectional cue has been identified, projected and completed, the content of both sites involved in the transaction are irrevocably changed on a cognitive level, with each containing the blended and layered content of the other site as a parallel context for understanding the content of the site. To resituate this formulation, in intersectional cues it is not necessarily the intersected planes that are important from a story standpoint but, instead, the events directly preceding and succeeding the intersections where the causal/ sequential narrative value lies. In this sense, these intersections are paradoxically both expansive and contracting, as the additional content that they help to situate is simultaneously an expansion of the information an audience has with regard to the complex storyworld as a whole, as well as a narrowing of story possibilities that might be projected into the gaps produced in the construction of both mono- and transmedia narratives. Conversely, though, whereas previously gaps in narrative might have been attributed to the ‘impossibility’ of two media functionally co-existing in one narrative (i.e. a print novel and a website), *direct internal cues*, which I will look at next, allow for the partial erasure of such divisions, letting media produce meanings outside of that which they are materially capable of producing.

Direct Internal Cues

As one of the primary methods for achieving transmedia connection, *direct internal cues*¹⁵ function through the deployment of website URLs, phone numbers, book titles and other related means of directly pointing toward one medium in another. As opposed to their external counterparts, direct internal cues manipulate and present these sorts of markers as belonging to the fictionality of the stories themselves. They are, then, highly object-oriented markers, directed edges which link to an often fully-realized website, book, phone or email account. Because of this, direct internal cues must necessarily take on a dual role both within and outside of the stories they are part of and the site through which they are located. As a result of this dual nature, direct internal cues should be viewed not only as transmedia links, but also as devices which attempt to help a medium to do something it cannot; namely, to incorporate another medium's material function in the context of an already established site and narrative, allowing, for example, a print artifact to incorporate the interactivity of a website as a function of site-to-site recombination (this dynamics of this recombination will be

¹⁵ Christy Dena (2009: 277) also observes a similar trait in transmedia fictions, calling them *catalytic allusions*.

examined in further detail in Chapter Four).¹⁶ Doing so, however, partially shifts the integral nature of migratory cues. In most migratory cues, the audience is asked to take story information from one site, internalize it and project and complete it in another site. Direct internal cues, though, these projections and completions not only remain intact, but that the incompatible modes through which they are made are also noted. While on the surface this is simply a way of saying that ‘books don’t do what a website does’, there is more at stake here. The presence of, say, an active phone number in a video game doesn’t just simply form a connection to another site. Instead, it positions one’s *recognition* of the cue’s functionality outside of the site it originates as a primary link in itself. While a direct internal cue initiates movement between sites, the larger audience recognition that this cue actually *functions* as more than a story artifact is perhaps the most significant dynamic of these cues’ functionality. For this reason, direct internal cues often function as *rabbit holes* or *trailheads* that point an audience towards an entry point of a transmedia fiction even though, as we will see, other cue types also can work in this capacity.

¹⁶ As more traditionally networked technologies (such as Web TV) continue to advance, it’s not hard to imagine that direct internal cues in TV shows or film will become even more pronounced for audiences to access and follow, without actually having to shift from one media channel to another. Indeed, both (the now defunct) HD-DVD and Blu-Ray technologies enable this sort of interaction when connected to the Internet, allowing audiences to zoom in and link to website URLs, newspaper headlines, logos and even food and beverage recipes that are found within the fictional content of the storyworld. The potential for new modes of transmedia here are immense, even if access to these technologies is still a huge hurdle for most audiences. Even so, this type of interaction would not change the central dynamics of what direct internal cues do—to connect sites via unambiguous means—as the narrative dynamics of such a proposition remain intact regardless of whether a user writes down the link and manually plugs it into a Web browser or simply clicks on a link through a Web enabled Blu-Ray disc.

Similarly, there is a formal-functional difference to direct cues that also must be made. Here, a distinction between digital and analog cues needs to be made, as it impacts the means through which we make a direct cue 'work'. For example, if we locate a website URL in a site with digital capabilities, it's not difficult to imagine clicking on a link that then takes us from one site to the next. When working from digital to analog sites (or vice-versa), though, the recognition of platform incompatibility means that strategies must be devised for completing the connection. While in some cases these strategies are intuitively simplistic (i.e. reading a direct cue from a print novel while sitting in front of a computer), in others, it sometimes requires a manipulation of the capabilities of the site itself, such as when a digital film needs to be viewed frame-by-frame in order to catch the name of a book seen briefly in the background of a shot. In other words, there are scalar degrees of directedness present in these cues.

A fitting analogy here might be the '555' numbers used in fictional cinema, television and even novels and video games in order to allow characters to speak about and reference phone numbers without the problem of having the phone numbers actually function when they are dialed. As a means of maintaining the fictionality of a particular storyworld, '555' numbers are paradoxically positioned in one sense as story-bound emblems of a fully functioning communication system that mimics our own. In another sense, however, the '555' numbers are an

intrusion, a jarring reminder that the space of the story is only make-believe. In short, the potential for immersion is severely limited or, at least, partially and momentarily inhibited by the inclusion of such devices.¹⁷ Compare this, for example, with Sean Stewart and Jordan Weisman's *Cathy's Book: If Found Call 650-266-8233* (2006), whose title alone benefits innately from its *lack* of a 555 prefix. The deployment of fictional space beyond one site replaces '555' phone numbers, fake websites and bunk email addresses with fully functional ones. Direct internal cues, then, are narrative structures at its most instrumental, deploying fictional cues as apparatuses to unify medial channels where their material boundaries simply won't allow for such unity. Although these media will always remain materially separate, the fictional integrity that is maintained across sites through direct internal cues, the lack of breach between what's internal to the story and what's functional in reality, allows the different sites to work together towards a common narrative goal.

¹⁷ It's interesting to note here that little, if any, research exists at this stage regarding the inclusion and use of '555' in fiction. This may speak above all else to how accustomed audiences have become to such devices in narrative, perhaps often going unnoticed for the most part. Even so, those paying attention to such things will inevitably be drawn out of the storyworld.

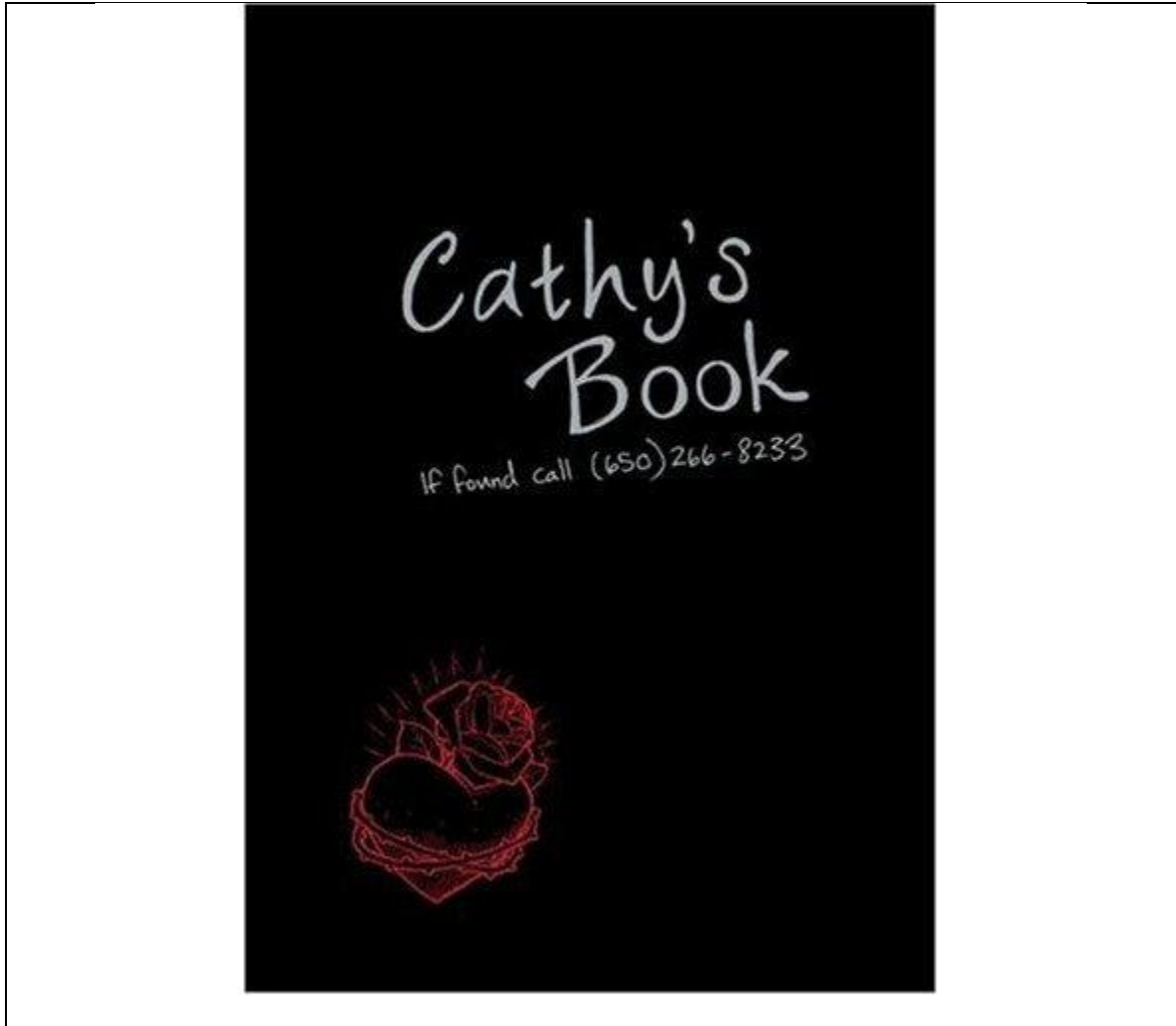


Figure 2.10: Sean Stewart and Jordan Weisman's *Cathy's Book* (2006) employs several cues leveled throughout the book, a mystery about the disappearance of a high school girl that contains a packet of evidence including napkins with lipstick stains, torn pictures, phone numbers, email addresses, etc. Most of these artifacts contain direct internal cues that allow connection to fully functioning sites internal to the storyworld, of which the phone number seen here is just one of many. Although the book can be read in a leveled manner without any contact with these other sites, there are several instances of what we might call open cues present in the text of the novel, gaps waiting to be fulfilled through the proper cue projection. To step back, however, it's interesting to note that what *Cathy's Book* doesn't contain here—namely, any reference to an author, at least on the cover of the dust jacket. Connection matters first and foremost here, with the phone number serving as an entry point to the narrative that exists outside of the text of the novel itself. Similarly, at later points in our contact with this narrative, our recognition of Cathy's handwriting begins to work almost like a franchise level cue, providing a superficial semiotic means with which to connect the sites in the network.



Taken From: Paul Shapiro, *Heroes*: Chapter 12 'Godsend', Tailwind Productions (2007).



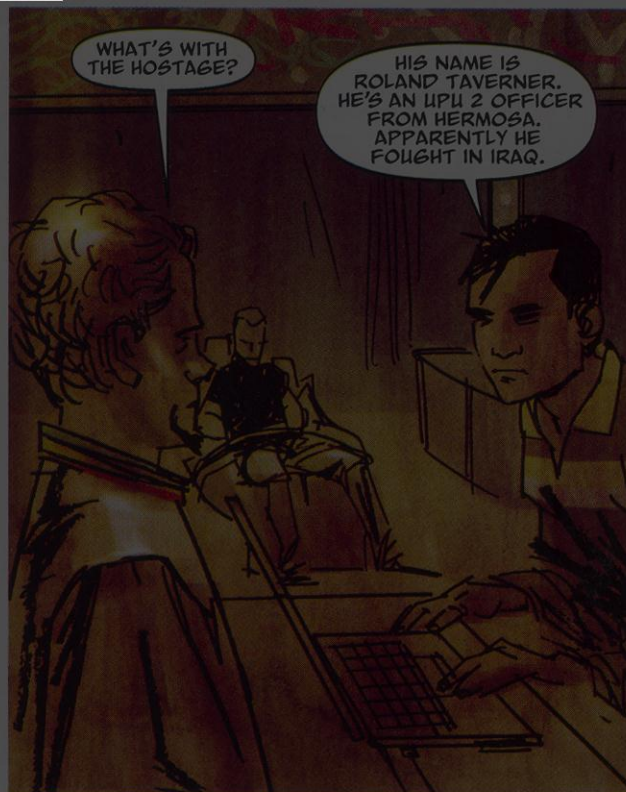
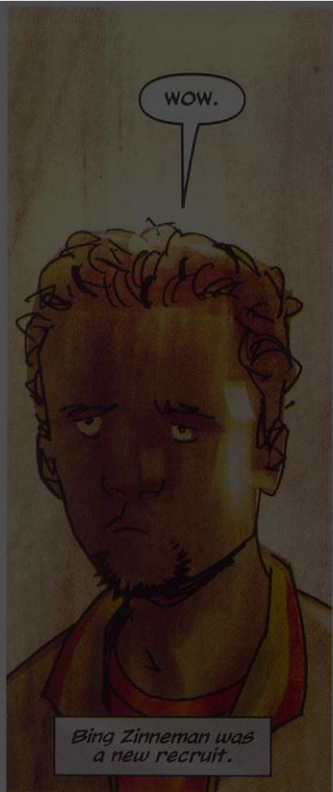
On the go? Visit us on your cellphone: text the word PAPER to 46622.

Call Now, Toll Free! 1-800-PRIMA16

Taken From: <http://www.primatechpaper.com>

Figure 2.11: As noted in several points of this study, NBC's *Heroes* is one of the more pervasive examples of transmedia in contemporary Western popular culture. Here, we see a unidirectional example of a direct internal cue (unidirectional in that there is no content that subsequently leads one [back] to the TV episode from which the cue originated). Prior to the permeation of transmedia logic, a character-to-character exchange of an object as potentially narratively empty as a business card might have occurred off-screen or without heightened emphasis. Here, however, when Noah Bennett exchanges his business card with another character, it becomes a moment of connective significance, even if the shot itself is only long

enough for a viewer to read the card and decipher the web address. Once this cue is followed (the target being the website itself), we encounter a similarly seamless and fictional website for the Primatch Paper Company, a front for the organization that Bennett works for. Following yet another direct internal cue—the phone number—one can opt into the *Heroes 360° Experience*, an alternate reality game set within the world of *Heroes*. In this regard, the direct cue also functions as a trailhead for the intracompositional integration of an Alternate Reality Game.





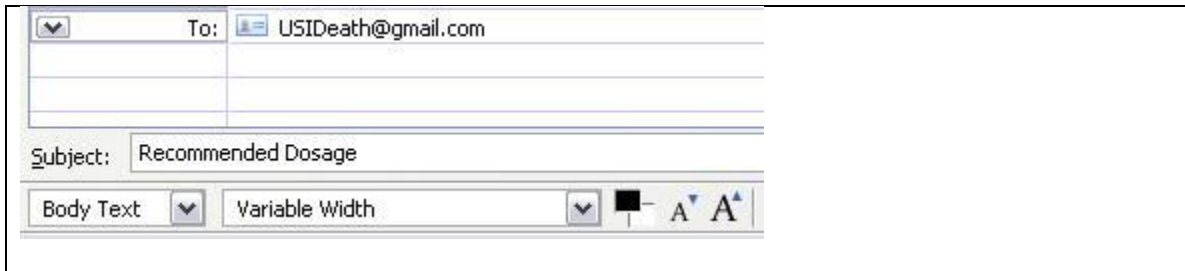


Figure 2.12: Richard Kelly's *Southland Tales* is another example where direct internal cues work seamlessly within both the fictional space of the narrative as well as the material space of the sites they engage. In this example, a website accessed by a character in *Southland Tales* graphic novel 'Mechanisms' corresponds to a website on the World Wide Web, www.us-ideath.org, a site where resistance fighters disseminate information. Further yet, split second 'glitches' on the USIdeath website provide yet another direct link to an email contact address where one can receive automated messages from the members of USIdeath.

Intermedial Cues

As one of the more unique modes of connection between sites that one finds in transmedia, *intermedial cues* connect a (potentially) full set of signs to its transposition in another medium. In other words, intermedial cues work by positioning one site's content as the sole content of another site. A book found by a player in a video game, for example, might be published separately and in its entirety in a second site. In doing so, intermedial cues display a dual logic of expansion/contraction that plays directly into their comprehension. On the one hand, we encounter site as a full realization while on the other, the site is compressed and often transcoded into another platform. The interplay generated by these logics is, as we will see, central towards marking certain sites and, more broadly, the media that support them with an internal fictional relevance.

Before moving on to the specific instantiations of these cues, however, there are several notions from more traditional conceptions of intermediality help in demarcating the role of this cue type. In discussing what he calls *overt intermediality*, Werner Wolf notes that questions pertaining to what he calls the “convincingly identifiable’ quality of the involvement of two (or more) media in a given work’ (1999: 44) are ‘not difficult with respect to *overt intermediality*, since in this case, the surface of the work in question, by definition, already shows that more than one medium is involved in its signification’ (ibid). As a special, ‘obvious’ case of intermediality, *overt intermediality* occurs when one medium is deployed more or less explicitly in another medium. As Wolf remarks, one of the most blatant examples of overt intermediality occurs in the majority of children’s literature, where illustrations often accompany verbal signs in a text. Although these illustrations usually isolate a moment in time of the verbal narrative, they also occasionally do more than that, offering information not present in the verbal signs themselves, thereby enacting a narrative where the hybridity of text and image is necessary in order to fully complete the sequence. Similarly, James Joyce’s *Ulysses* presents several passages where Bloom is singing passages from popular Irish folksongs, each of which bring their own content and context to bear on the narrative at hand. Even though the majority of these references are verbal¹⁸, they nonetheless account for

¹⁸ The difference between the two positions can be seen when referencing p.162 of James Joyce’s *Ulysses*,

the direct presence of one medium—or in Wolf’s formulations, ‘conventionally distinct means of communication’ (1999: 35)—in another with the goal of achieving expanded meaning.

Overt intermediality, then, is the explicit incorporation of medially-structured content of one medium in the content of another. Like intertextuality, (overt) intermediality requires the presence of some part of text (or medium) A in a text (or medium) B, where text B becomes what we might call the target site and text A the source site. While Wolf opposes overt intermediality to what he terms *covert intermediality*, in which the content one medium contains imbued with the underlying structures of another, differentiated medium (such as in ekphrastic poetry, where visual imagery structures textual expressions), we need not go this far in describing the dynamics of intermedial cues. Their doubly-signified existence—as both signifiers and signifieds of content in one medium as well as transposed signifiers and signifieds of a different content in another—lends a somewhat different weight to the more or less exterior correspondences we can make between the actions of intermedial cues and Wolf’s conception of overt intermediality.

However, we must make an additional distinction with regards to the source-target designations of intermedial cues. Whereas more

which contains an illustration of a musical scale with lyrics, and pg. 423 (and more or less the whole of Chapter 15) in which Henry is described as singing ‘in a low dulcet voice, touching the strings of his guitar’ the lyrics ‘There is a flower that bloometh’. Although both cases are what Wolf would call overt intermediality, the latter case would also qualify as covert intermediality as well, being thematized by music even through it is signified through verbal signs.

generally, migratory cues function through the projection of content from a source to its completion point in a target site, in intermedial cues the target site also functions akin to a host, where the source site is harbored and maintained *inquilinally* (i.e. like an organism who lives in the habitat of another species) through and within the material capabilities of the target site. As with overt intermediality, intermedial migratory cues (much like direct cues) also possess doubly-signified content; that is to say, both overt intermediality and intermedial migratory cues employ content that has salience in both its originating medium (or site) as well as the medium in which it gains its secondary context. Unlike intersectional cues, however, intermedial migratory cues present us with no attempts at transposing the signifiers of a particular site. Instead, the presence of an intermedial cue in a given site represents a producer's best attempts at retaining the material integrity of the medium in question, all the while incorporating the properties of this medium into a divergent site. In this regard, it could be argued that much like site-to-site interactions transform the means through which we interpret the stories present in subsequent sites, intermedial cues also force a transformation, only here this transformation not only enables the leveling of content, but it can also force the source site to reflect the narrative concerns of the host site at the time of the source-target completion.

For example, in an intermedial cue where a video game is featured in a shot from a film, we are, of course, not looking at the video game as it might exist on a console or PC. Instead, when we interact with such an artifact, we are instead interacting with only the transposed source as it is made to function as an inquiline within the target/host site. Importantly, however, this video game can function as an intermedial cue *if it exists outside of this cross-representational hosting* in another site. Put differently, whereas intersectional cues require a highly developed internal knowledge of the fiction (as well as a correspondingly developed recognition of the transcoding between platforms taking place), intermedial cues require an awareness of an equally highly-developed tendency of transmedia object-orientation. In other words, we need to assume that this ‘thing’ exists outside of the site that hosts it, and be equipped with the right skills to find it. This is, in many ways, an advanced form of sensemaking¹⁹, one that is predicated on searching Google and combing bookstores, libraries and the texts themselves (such as in the *Southland Tales* example below).

For example, the trailhead leading to *The LOST Experience ARG* was, for many, the novel *Bad Twin* by Gary Troup. While mentioned and shown only briefly as a manuscript in the TV show, *Bad Twin* nonetheless functioned successfully as an intermedial cue in that it spurred audiences to search it out. On May 3, 2004, for instance, an

¹⁹ See Kraus, Hansen, Ruppel and Bonsignore (2012) for more on how ‘sensemaking’ figures into larger 21st C. literacy frameworks.

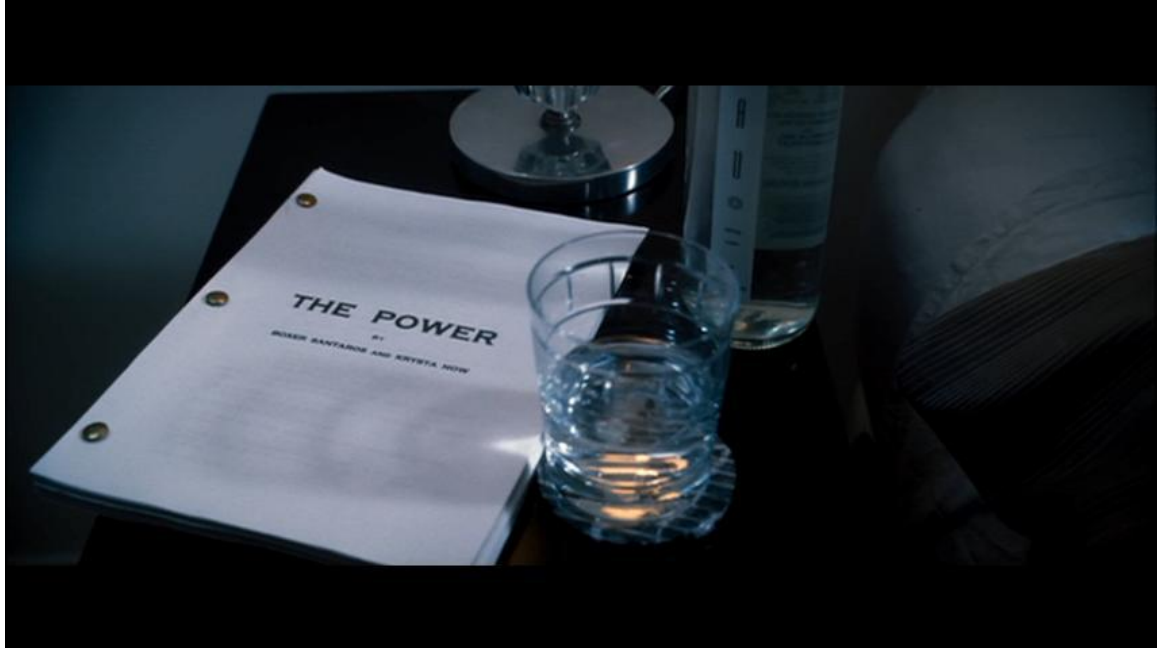
unFiction user named 'Loch' published an exclamatory post in the [Trail] section of *The LOST Experience* forum stating evocatively that he had begun 'Hunting down the path of the 'Bad Twin' (<http://forums.unfiction.com/forums/viewtopic.php?t=14746>). Loch, assuming that this manuscript was significant based on its present in the host site (the TV show), apparently conducted a simple Google and Amazon search for the manuscript. In doing so, he stumbled upon what he came to call some 'Cool in-game stuff' (ibid), namely, a description of the book with the following passage:

Amazon.com Exclusive: Author Gary Troup delivered the manuscript for his hotly anticipated thriller, *Bad Twin*, just days before he boarded doomed Oceanic Flight 815. Watch the recently uncovered video clip of Gary Troup on Book Talk interviewed by Laird Granger talking about the controversy surrounding his mysteriously out-of-print first book, *The Valenzetti Equation*, and his new novel, *Bad Twin*.

Soon after, the book itself was published and the source-target operations of the intermedial cue were completed.^{20,21}

²⁰ The awareness of intermedial cues, however, has its drawbacks. Having read about Troup's other book, *The Valenzetti Equation*, Loch and several others began looking for this work as well, coming across a website dedicated to its content. Only after following several cues from this website to other sites, did they then discover that not only did the book itself never exist, but that the websites they encountered in the process of discovering this were also fake, a ruse set up by another audience member that exploited this intermedial awareness.

²¹ *Bad Twin* is also a telling example of how a developed transmedia awareness can also backfire for those creating the fiction, disrupting the network as a whole if it does not conform to audience expectations. This will be dealt with at length in the next chapter, 'Paths'.



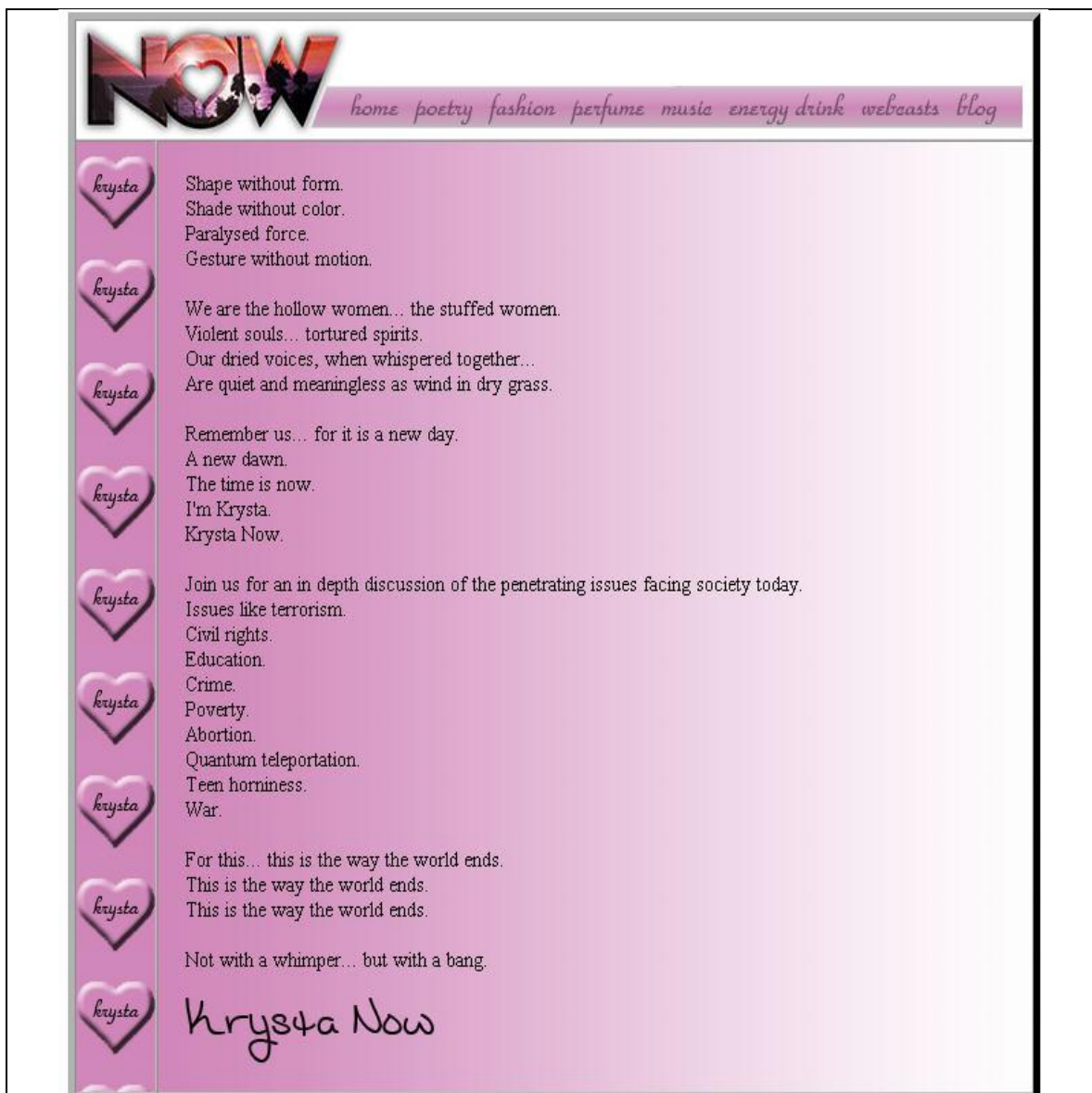
waiting for. His name was Cane.
Jericho Cane.

Jericho cracks open a BUD LIGHT and pours the cool liquid
down his throat.

DR. MURIEL FOX (V.O.)
He was the kind of man that God
forgot how to make... before *The
York Times* declared him dead.
(beat)
God... that is.

EXT. DESERT HIGHWAY -- DAY





Stills on pp.63-64 Taken From: Richard Kelly, *Southland Tales*, Sony Pictures (2006).

Taken From: <http://www.krysta-now.com>

Figure 2.13: Seen above are a series of images taken from a selection of *Southland Tales* film, graphic novels and websites. With the exception of the final screenshot from www.krysta-now.com (the target, not the source of the intermedial cue), each image contains evidence of intermedial cues, ranging from the script of a fictional, embedded film called 'The Power' which is found both interior to the film as well as identically reproduced in each of the graphic novels. Since one of the concerns of *Southland Tales* is the mediation of information and identity, these intermedial cues seem especially apt, calling into question any internal/ external divisions we might make between story and medium across sites. Indeed, when following *Southland Tales* from site-to-site, these divisions dissolve, leaving the intermedial cues to pinpoint locations, events and contexts through which the story of one site can mesh with the story of another. Worth noting here again, too, is the way that

intermedial contouring, the presence of the material form of one medium in the content of another site, forces a different interpretation of the film than might otherwise be noted. *Southland Tales* is much less concerned with 'old' media such as print and even film, and much more focused on 'new' media, such as the web and other digital technologies, each of which often work in their own right to include intermedial elements. Also of note: the presence of several direct internal cues these figures.

Sequence, Causation and Seriality

While so far I have argued that migratory cues comprise the primary connective tissue that binds sites into network arrangements, there is another, potentially larger, force at work in transmedia fiction that not only functions as a linking mechanism in its own right, but also helps us to further refine the specific functions of migratory cues: causation and sequence, an idea discussed earlier as a product of source/target connection in migratory cues that is given fuller consideration here as a connective faculty in its own right. The necessity of causal-sequential relations in narrative have long been a topic of research by narrative scholars as well as those interested in the cognitive aspects of storytelling, where sequence and causation are reflections of processural thought. Indeed, causality-sequentiality is seen as the key trait separating narrative structure from other modes of expression. Sequential operations—the perception that one event follows another if they are successive— is innately linked to the time of 'both its telling and its reception' (Phelan 1989: 15), a time that, in turn, gives rise to a sense of a certain causality responsible for this series of events. E.M. Forster's (1927) (in)famous distinction between 'story' and 'plot' hinges on such a

relation, with 'plot' possessing a causal property that allows events in succession to become narratively meaningful. For Forster, 'The king died and then the queen died' is a story, while 'The king died and the queen died of grief' is a plot, simply because of the insertion of a causal referent—grief—as a means of ascribing reason to sequential events. The relation of these two events, however, changes entirely based on the sequence of events that are positioned in relation to the two deaths. If we were to have read first 'A virus spread through the kingdom. The king died and then the queen died', we might naturally situate the virus as the cause of the deaths. Conversely, if we were to read 'The king died and then the queen died. A virus spread through the kingdom', we might also relate the virus to the deaths, but not as naturally.

In this sense, sequentiality is both *causal* as well as directional; that is, the orders through which we encounter certain events and states have an impact on the relations we might ascribe to them. This is, in many ways, a ratification of Emma Kafalenos's (2006: 23) contention that meaning in narrative is 'an interpretation of the causal relations between an event and the other events and situations one thinks of as related', relations that are often defined by preceding/proceeding information. Yet, as Brian Richardson (1997: 94) notes, 'mere temporal succession fails to provide a necessary condition of narrativity'. The placement of elements, successive or otherwise, is merely a matter of discourse, whereas causality, Richardson argues, is a 'necessary condition of

narrativity' (106), one that positions narrative not simply as a series of events, but rather as a *causally related* series of events. Even so, while the notion of causality—that one event or state is responsible for another—is a crucial one in narrative, the 'series' of events spoken of here, and even the conception of causality itself, is based at least partially on mono-media notions of narrative media, where both causality and sequence are bound (sometimes literally) within the same distribution platform, be it a book or a film, that are also consumed in a sequential (i.e. start to finish) manner. While we can rightfully say that causality is also sometimes delayed, deferred or recast by additional information found in sequels, prequels and other methods of mono-media temporal succession, causal-sequential mechanisms of this sort still often adhere to the discourse level functions of mono-media practices, that is, as a product of the materialities of the sites themselves. But if sequence is a discourse-level function and transmedia networks split this function between site and network, what happens to the causal-sequential mechanisms for comprehension? This is, I think, a key question to ask in transmedia contexts, as it points towards an attribute of transmedia fiction: the ability of transmedia networks to structure causal-sequential engagement as nested network functions, and not as functions strictly belonging to the sites that the markers of sequence—migratory cues—are found within.

To put this differently, if we consider causal-sequential relationships as a *connection* between a sequence of events as they exist in a given site and the conditions that gave rise to events, it's then possible to *split* these elements and defer them across both the time and space of several platforms. This is, in many ways, exactly what serialized narratives attempt to accomplish in a mono-media context—the endless deferral of narrative closure as a mechanism for sustaining audience engagement. Indeed, as Steven Jones notes of Charles Dickens, whose experimentation with the serial form cemented it as a viable artistic technique, serialization is ‘based on sketching a story outline, invoking a fictional world, and then filling it in’(2007: 5) over the course of a given time period. Additionally, serialization entails the *deferral* of absolute causal connection between the sequences of events depicted in the narrative while it simultaneously maintains the *expectation* of both regularized additional (weekly/monthly/yearly) content and, importantly, the relation of this content to the installments that came before it.

While this last point is obvious, it is also crucial, as the patterns of expectation related to seriality provide the conditions through which subsequent local and global connections are made—we know that even if a serial installment doesn't immediately ‘fit’ into our view of the narrative as a whole, some future installment will eventually come along that explains its significance. Yet as Robin Nelson (1997) notes, this local/global comprehension scheme has, in its own way, given rise to a

new form that distinguishes itself from both serial and episodic content in its incorporation of *both* self-contained and ongoing plotlines—the ‘flexi-narrative’. According to Nelson, the flexi-narrative produces both self-contained and ongoing storylines (as opposed to the merely ‘ongoing’ serial form) and, consequently, they require a degree of sophistication to both create and interpret not usually associated with serial or episodic forms. This is primarily because flexi-narratives require that audiences *representationally hold*²² a more global sequence of events while a more local sequence of events is introduced, developed and concluded. This means that it may be weeks, months or in the case of a fiction like *LOST*, years before we return to the specific time and place where this sequence continues, and we learn of the causal conditions that gave rise to it. Following Nelson, Jason Mittell (2006) calls this type of content structure *narrative complexity* in that these deferrals require a ‘procedural literacy, a recognition on the part of consumers that any mode of expression follows particular protocols and that to fully engage with that form we must master its underlying procedures’ (39).

These procedures, I argue, are at least minimally conditioned in transmedia fictions by the constant search for causal-sequential

²² Representational holding is a ‘cognitive process aimed at holding a mental representation in working memory over a period of time...until the corresponding material is presented in the other channel’ (Mayer and Moreno 2003: 45,50). When engaging with a transmedia project where there is little or no temporal distribution between sites (i.e. simultaneous releases), then, the ability to hold one modal input (e.g. text from a print novel) and blend it (video found on the web cued by the print text) with another is a key component in the chiasmic operations of one’s interpretation. As we will see, representational holding is a process that can be influenced or directed by certain network features formed through causal-sequential and cue-based connection.

meaning as it exists across a *network* of sites, where one site might initiate a sequence of events, another continue it, and yet another provide the causal conditions that structured these events. Importantly, much like flexi-narratives, this process may not correlate with the chronology of a site's release, with audiences often having to retroactively insert a new site's content into an earlier site's established sequence. In any case, the end result of such an (causal) ordering is the creation of connection between sites in a transmedia network, a linking that is bound by entirely internally fictive mechanisms. Because of this, there is an even greater demand placed on audiences looking for causal-sequential meaning in this context as transmedia fiction often established *multiple* sequences of events across numerous platforms. This is partially why intersectional cues are such a valuable tool in transmedia production—they locate a given time and place with pinpoint accuracy—but in doing so, they require an almost photographic knowledge of the events that previously transpired, thereby rewarding audiences who pay particularly close attention to the fiction.

While causal-sequential relations do not ask as much of the audience as intersectional cues, this type of connection, while nonetheless a valid (and widespread) edge in transmedia networks, is also heavily contingent on an audience's previous knowledge of the narrative and, importantly, the spatiotemporal boundaries of a given event. Since logic tells us that an event that happens in the *future* cannot

impact an event that happens in the *past*, causal-sequential meaning is, much like direct cues, *wholly unidirectional*, that is, locked into a trajectory that moves chronologically, even if the release of this information occurs through anachronistic means. Narrative sequentiality in transmedia contexts, then, is wholly the result of a pronounced directionality interceding in a multi-sited sequence of events ordered through previous knowledge. What's remarkable about this is that causal-sequential connection is the predominant edge type for most, if not all, transmedia networks, even though it demands quite a bit to be recognized. While causal-sequential connection is not, importantly, a transcoding between source-target affiliations in a site that *cues* narrative knowledge, it is nonetheless a *recognized* continuation of one site's content in another, even if this content is embedded in larger narrative multiplicities. Causal-sequential ordering, then, is both a crucial network process and a crucial network edge that exists as a *minimal* means of connecting two sites as narrative. Narrative in transmedia fiction can exist on a simple scale (i.e. with only a handful of sites) strictly through causal-sequential means, but complex networks can only function with the addition of migratory cues. (As I argue in the next chapter, however, this knowledge of causation and events is often pluralized by the features of the network itself, which allows for *multiple sequences* of the *same event* to exist simultaneously, something that no mono-media serial could ever hope to sustain). Additionally, the presence

(or lack thereof) of allusion often acts as a failsafe mechanism to accommodate for a lack of causal-sequential knowledge, and, consequently, it can be structured and deployed to coerce certain network engagements.

Conclusions: Differentiating Edges, Scalar Interpretations

(NOTE: Appendix 2.1 applies specifically to this section.)

The combination of both causal-sequential meanings and migratory cue edges work towards enacting a transmedia network that allows for multiple modes of engagement, structuring and suturing meaning as a product of several levels of internal knowledge of the storyworld. Because certain edges require large amounts of knowledge about the transmedia fiction in order to recognize them (intersectional, causal-sequential), while others require next to none (direct, intermedial), the links themselves can be said to function analogously to *strong* or *weak* ties in social network analysis.²³ In this case, a strong tie is formed by the location and connection enabled by edges requiring a high level of internal knowledge, knowledge that orders the events of the narrative into a coherent framework, while a weak tie refers to edges that require relatively low levels of knowledge in order for connections to be made. Understanding this, it's probable that while the strong ties formed by intersectional and causal-sequential edges inevitably structure the most

²³ In the context of social network analysis, a *strong tie* refers to a relationship that is close and intense, while a *weak tie* refers to a relationship that is more tangential and less frequently maintained.

defined paths through a transmedia network, it may, in fact, be the weak ties of direct and intermedial cues that act as bridges through which the significant transmedia connections exist. For example, in orientations where the source site contains a compressed or transcoded version of the target site (or its content), the presence of an intermedial/ direct cue usually leads an audience towards some degree of object-orientation with a fictional object that they have only had minimal contact with previously. These object-orientations subsequently tend to reveal knowledge that is otherwise completely inaccessible in other sites.

In another sense, causal-sequential connections serve as a revealing foil for migratory cues in that they highlight the large degree of platform-to-platform transcoding that takes place during a cue's location and any subsequent source-target correspondence that takes place. Yet even so, some further distinctions need to be made here. For example, intersectional and intermedial cues are similar in that they work by specifically matching the content of one site with the content of another. Importantly, however, intermedial cues contain the transcoded presence of another site as it is wholly realized in a particular platform but without much of the content that this platform supports (i.e. we can't read *LOST's Bad Twin* by watching the TV show). Intersectional cues, on the other hand, contain only the *content* of the source site transcoded to the material framework of the target site, thereby maintaining the source's semiotic integrity. To put this differently, while intersectional cues enact

an awareness of the remediated events of another site, intermedial cues initially function through what Petr Szczepinak (2002: 29) refers to as *intermedia* (with no 'L') reflexivity, the process of 'one media form taking over and [transforming] the structural components of another', thereby 'defamiliarizing' the hidden or structural features of each medium.

The result of this is a 'new hybrid form...that reflects the structural features of the colliding media' (ibid). Szczepinak cites instances in film, for instance, that exhibit intermedia reflexivity by positioning a photograph within a shot so that material ontology of both the moving image of cinema and the stilled image of photography is illuminated. Yet, again, the role of intermedial cues as *connectors* of multiple sites in a transmedia fiction means that this intermedia reflexivity is also, like the event planes of intersectional cues, pluralized. On one level, the presence of, for example, a panel in a transmedia-oriented print graphic novel that depicts a website might highlight both the graphic novel's analog materiality and the website's transcribed digital essentiality. On another level, though, the placement of this intermedial cue and the location of its target site, the working, interactive website, further reveal the material differences of each platform. Hybridity here is tantamount to potential network connection, where both the host and the target site gain salience through their linked (and linking) placement. Put differently, the source media present in the target sites are seldom left to signify on their own, instead becoming a part of a larger mosaic of

meaning that can be processed both as a function of the source site and exclusive to it. This allows the source site to exist in leveled connection to the target site which acts much more like a host for the other site than it does (re)mediator of its content. Again, it is in actions such as this that we can witness the potential power of a migratory cue in constructing transmedia interaction. Not only do these intermedial cues allow for increased, semiotically integral connectivity, but they also allow the platform to become a playful congregation of attempted remediation, a mosaic of the narrative and modal elements present in the fiction.

In this regard, intermedial cues seem to overlap in some ways with direct cues, which also enact connection through the presence of one site in another. It's useful to regard both direct and intermedial cues, then, as *object-oriented* cues that may or may not possess the ability to *cause* a specific sequence of events to happen. In other words, they may be much more closely aligned at times with *universe* elements than they are with *narrative* progression. With direct cues, for example, this distinction is often a function of the direction of the cue itself, and the ontology of the site that it targets. In the case of the Primatech Paper example shown above, if the direct cue leading to a website simply terminated there, without any other cues to lead us through it, this movement would amount to a shift from a *narratively* oriented site to an *object-oriented site* that allows for an interaction with elements of the universe of the fiction.

Direct cues, then, often engender object-orientation by linking to sites that are objects themselves. While these object-oriented sites can be used to connect to more narratively-oriented sites (and in this case, they do), thereby making them *bridges* in the network, more often than not the presence of a direct cue means that our subsequent interactions will lean towards object-orientation, rather than narrative progression. Conversely, intermedial cues are almost *always* object-oriented, always markers of universe-leaning interactions that take an object that is *compressed* by the materiality of a host platform and *decompress it* outside of that site's limitations. Direct cues direct audiences towards a site (or object's) location; intermedial cues take the objects flattened by one site and make them round. Object-orientation, consequently, is *always* highly directional since the object itself very rarely contains a link back to the site it was situated within (a fact that, as we will see, has a major bearing on the organization of the network as a whole). This means that object-oriented movements are not causal-sequential, while causal-sequential movements (such as those spurred by intersectional cues) are not object-oriented. While only direct cues contain all the information needed for migrating to another site, intermedial cues function through the assumption that the audience will search out the *decompressed object*.

Object-orientation can also be understood as a function of the scalar nature of direct and intermedial cues, particularly in the

placement of mobile technology as both a content carrier and content in itself. For instance, unless we are explicitly meant to do so, very rarely do we stop to notice the significance of a cellphone in a film, a laptop sketched in a graphic novel, or a portable mp3 player discovered by a player in a video game, as their use in these contexts often rendered as natural as our own. Conversely, fictional embedding in transmedia practice means that in order to operate as established sites in themselves, these same objects have a *functional relevance* to the fictional world in which they are placed. The result of this is not only the creation of a more 'believable' world, one containing the same technologies as our own, but one where we suspect that this object is or will be manipulable in some manner and that device-specific content will be accessible.

To put this differently, in order for a technology to *function* as a site of meaning, it often must first be *fiction* in another site, which is then marked and located via a direct or intermedial cue. Much like the ability of a smartphone to create mobile 'hotspots', areas of Wi-Fi internet access where various devices can be 'tethered' to the smartphone's mobile network, in order for object-orientation to occur in transmedia practice is always tethered in some way to a direct or intermedial cue whose edges are rooted in both fiction and function. Put another way, the fictional content of the embedded technology becomes a functionally *instructive* component of its use, one that mimics and enhances an

audience's engagement with it via a parallel use interior to the fictional world that embeds it. In other words, we learn *what* to expect of a given mobile technology and *how* to expect it by engaging with its embedding in another non-mobile site, integrating these two via a direct or intermedial cue.

The overlapping function of edges in a transmedia network likewise means that, outside of object-orientation, they can often work in conjunction to cement a particular meaning or pathway through a transmedia fiction, sometimes simultaneously. This idea is both exaggerated and revealed in Richard Kelly's *Southland Tales* in the form of a narrative interface that functions throughout the film site to channel and disperse causal, sequential and object-oriented meaning. In other words, it's an interface based entirely on the system of edges I've described here. Seen below in Figure 2.14 is a clip from *Southland Tales* that shows this interface in action. In it, we can see evidence of all three migratory cue types and, as I will explain, causal-sequential connection occurring, too. Pay particular attention here to the roman numerals on the side, as well as the scrolling date/months listed at the bottom of the screen:

Figure 2.14: The *Southland Tales* Interface (Kelly 2006)

http://www.youtube.com/watch?v=YkVF_v-KfE&feature=youtu.be

The clip above, taken some 3 minutes into *Southland Tales*, is immediately disorienting in the way that it approximates and reflects the

simultaneously remediated and intermedia reflexivity of the Web in a film. Prior to this scene, we are asked to handle a bewildering amount of information, all pertaining to the initiation, escalation and denouement of World War III, which began when a small town in Texas was obliterated by a nuclear missile. Yet while many critics and audiences responded to this opening hostilely, claiming that they never really found their footing in the film as a result (*Southland Tales* was famously booed at the 2006 Cannes Film Festival), I would argue that the interface, known more formally as the Doomsday Scenario Interface, or DSI, serves as much more than just a remediated filmic device and acts as a technology through which the sites of the extended transmedia fiction are brought to bear on the film itself in a manner wholly internal to the fiction.

Over the course of this clip, we are shown panels from the *Southland Tales* graphic novels, each of which was designated as a chapter in the fiction. The film covered chapters IV, V and VI; the graphic novels the ‘prequel saga’ I, II and III. (This is shown in the DSI by the corresponding chapters listed on the right-hand sidebar.) Notice that as we shift into the story of Boxer Santaros’s disappearance, Chapter I is highlighted, a loosely realized *direct cue* that leads us to retrieve the information garnered from that site and apply it to the current information. (Even if the graphic novels weren’t read, the chapter headings still serve to orient the narrative loosely in a past-present

structure.) Importantly, before the panels of the graphic novel flash intermedially across the interface, we are also briefly shown a map of the United States that is quickly segmented and enlarged over California. While this clearly serves its own purpose—to locate the story in a specific location—those who had read the graphic novel will also recognize this zooming and the subsequent grainy footage of Santaros walking across the beach as an *intersectional cue*, the most accurate spatiotemporal edge in a transmedia network, one that has some correspondence with the very first page of the Chapter I graphic novel and is reflected in the highlighted calendar seen at the bottom of the DSI (see Figure 2.15 below).

As we subsequently progress through the interface, an interesting thing happens. The incessant back-and-forth cuts between the panels of the graphic novel and the shots of the film begin to approximate a sequential movement through the narrative events, one that blends moving image and sound with the rough-hewn lines and texture of the panels. This movement reaches its apex in the final seconds before the DSI fades out and we hear in voiceover narration the following lines:

The government knew he had crossed the border back into California, but the circumstances of his return to the Southland remain a mystery....

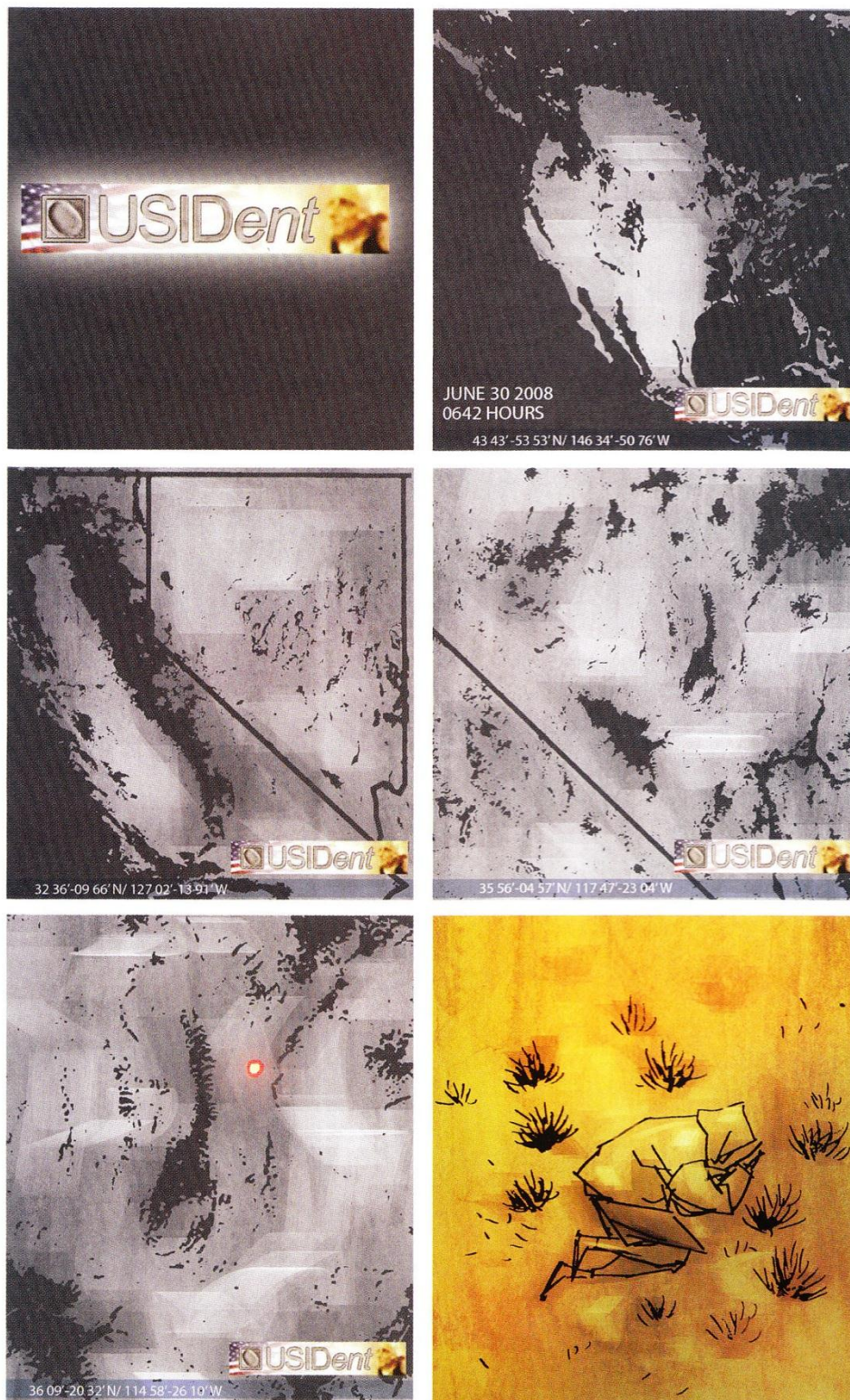


Figure 2.15: Opening of *Southland Tales* Graphic Novel (2006: 7)

The ‘mystery’ spoken of here is never solved in the film, only hinted at as a gaping hole in our knowledge (these gaps will be defined later in network terminology as *structural holes*). Indeed, the only means we have of figuring out how, exactly, Santaros managed to make his way across this space is in the first graphic novel which, importantly, ends with Santaros walking towards Los Angeles, the location where the film finds him, passed out on a beach, his movement (across fictional and medial space) finally arrested. There is, in other words, a *causal-sequence* to these events that can only be culled from a movement back-and-forth across platforms. While it is important to observe here the way that both the direct and intermedial cues function as transition elements, orienting the graphic novels within the film site (the same dynamic occurs later, too, when there are direct and intermedial cues that lead towards functional websites and the film script mentioned earlier), it is perhaps more important to note *where* these cues are found in their given site. In the film, the DSI becomes an incessant, almost rhythmic presence that continues to manage and funnel connected meaning. But these intervals are not predictable, nor are they positioned solely at the beginning or the end of the film. Instead, much like the cues targeted in the graphic novel, they take place in the midst of the sites that support them, edges that have no correlation to any material boundaries that might otherwise externally define them. The cumulative effect here, the product of the recombinatory dispersal of multiple edges, is a narrative interface that

mimics the artificial one of the film, one that creates a pathway through *Southland Tales* marked by a sequence of edges which bob and weave their way through film, graphic novel and, later, the Web.

In short, this integrated use hints at a network structure underlying the engagements of the cues. This interface is, I think, a fitting metaphor for linking in transmedia networks. An interface is, at minimum, a mediated juncture where interaction is coordinated between disparate systems. In the context of transmedia fiction, the internally fictional placement of edges is evidence of a *narrative interface* through which networked connections are made between platforms whose materiality do not allow for ‘hard’ linking. In this regard, the placement of edges across a transmedia network—the *design* of that network—is a formal manifestation of the narrative interface that marks pathways through the fiction, linking multiple platforms and creating cross-modal interactions in the process. As Herbert Simon notes, an interface can be thought of as a ‘meeting point...between an ‘inner’ environment, the substance and organization of the artifact [containing the interface], and an ‘outer’ environment, the surroundings in which it operates’ (1996: 6). In the case of transmedia fictions, the ‘inner’ environment can be seen as the narrative modes that situate the edges used for connection on a site-by-site basis. The outer environment, correspondingly, can be viewed as the larger system that forms when such connections take place, the network structure that results from selective linking. As we will see in

the next chapter, though, the topological and topographical network features formed by these pathways exhibit dynamic tendencies that foreground (and background) the always-multiple meanings structured by transmedia connection. Here, echoing Roland Barthes, the link is ‘not an (inductive) access to a Model, but entrance into a network with a thousand entrances’ (1975: 12) and, as we will see, a network with a thousand pathways.

Chapter Three:

PATHS

'The old media planning was about picking individual media. The new media planning is about picking combinations of media (and permutations of media, where sequence of exposure is important). This increases relevant media choice from a manageable few hundred to an unruly few hundred thousand. It also means comparing *apples* with *oranges*. Both tasks are well beyond the abilities of a planner with a notepad.'

—Erwin Ephron (2000)

Because of the presence and influence of migratory cues, the defining trait of transmedia fiction is found in its directedness, where narrative meaning becomes a product of the movement between two or more sites and the aggregative integration of content culled from them. This is a partially a question of meaning, but also one of *design*. In the network mode, cue placement, cue direction and cue definition influence not only the narrative form of each individual site, but also the processural means that audiences negotiate and navigate these meanings, coherently and chiasmically integrating them as they do so. It's worth remembering here that since a transmedia fiction's only internal guarantee at connection lies in the effectiveness of its edges. In such a model, serialized sequences of events, along with cue generation and dispersal, can be thought of as the principle framework that any potential network is built upon. Remove these edges, and we have only a loosely rendered, loosely realized set of sites that share a common language or code (what I referred to earlier as the *universe* elements of a

fiction). Since any edge in a transmedia network—cue or otherwise—works towards a scalar degree of connectivity between sites that share source/target affiliation, and since these edges work in combination across the network’s topology, the creation of pathways is not only a possibility, but also an *inevitability* of the network’s design. We can think of a transmedia fiction, then, as a series of these pathways, some more highly connected than others, that work by channeling meaning, funneling it, through specific signifiers unique to both the fictional universe itself (the platform-agnostic code structure) and other sites in the network occupying the same coordinates (the site-specific material structure). These networks, then, are inherently *dynamic*, that is, they produce complex and occasionally highly subjective meanings as a result of this directedness, passing through cue points that influence and guide meaning and medial-modal transcodings, spatial/temporal collusion and direct, object-oriented diffusion.

Yet some very real questions remain: in the words of poet Stephanie Strickland, (1999) ‘How can a dynamical system be represented by a symbolic one?’, that is, how can a system that models behaviors rather than practices be useful in interpretation? And further yet, what can any visual representation of transmedia fiction reveal to us about the meanings produced within such a framework? For indeed, if a viable method of studying the network topology and topography of transmedia is ever to exist, it is first subject to the inordinately intricate

process of interpretation that governs all narrative meaning, transmedia or otherwise. As stated at various points in this study, the efficacy of studying the network dynamics and orientations of transmedia fiction stems from three divergent goals: 1) to provide a means through which transmedia can be studied and classified as more than just 'loose' networks with no definable characteristics (and to identify those characteristics); 2) to use network functions to expose and develop corresponding transmedia network tropes that help to articulate the language of the intricate and highly complex series of interwoven sites culled from multiple cue points across the network; and 3) to use the visualized networks as a means of understanding and foregrounding a hermeneutics of transmedia meaning, a means of assessing what it means to 'close read' a particular fiction, especially those that are composed of hundreds of unique sites.

Directed Networks Defined

In order to move past broad categorizations of the 'network' that governs transmedia operations, I want to make an important designation here: highly-developed transmedia networks, rather than existing as randomized or individually oriented networks, can only function if they are *directed*, i.e. they possess links that are not always undirected. To repeat an earlier definition, a network is a system of connections. Since a network's form and functions are a direct result of the connections its vertices support, the differentiation of network types is mainly a function

of the degree to which the network exhibits certain types of connections and at what scale these features exist. Indeed, directedness, rather than being a *product of* a transmedia network, is in fact *the single defining trait* of its design. This assertion allows us to look for similarities across the spectrum of transmedia projects, but it also allows us to differentiate these networks as *genres* of transmedia practice based on the overall tendencies of their fictionally-oriented network motifs, the types of vertices they utilize, and the presence of migratory cues.

Within this complexity, transmedia networks use text, image, sound and interaction as cues, edges or links; they exploit sequence and depth as a function of the directedness of the network; and they promote recombinative, chiasmic blending at every pathed juncture. These aren't metaphorical designations, even as the network visualizations that follow in this chapter allow us to give a symbolic form to the circuitry of directed networks where there only exists a multiplicity of modes and narrative signifiers. Instead of metaphor, network categorization ascribes a certain degree of order to transmedia systems, an order that does indeed manifest itself in the organizing principles of each site and the content it supports. My belief that transmedia fictions represent a fundamentally new way of conceiving of meaning is, in many ways, situated in the nature of the network structures they rely upon. Unlike other projects that might closely or loosely be defined as 'networked' narratives—i.e. interactive fiction, hypertext fiction, MMORPGs that have

story-based quests, Alternate Reality Games which rely solely on digital technologies—the network that sustains transmedia is defined not by any specific material/technological undergirding but, rather, by the unique story elements that comprise and define its vertices and edges. The topology of the transmedia network, then—a topology composed of the number of links per vertex, the connectedness between simple and complex sites that the network exhibits, and the distances between vertices—is not as easily measured as a network with more formal material characteristics, such as the World Wide Web. What this means is that in attempting to determine the potential directedness of a transmedia network, we must not only take into account the narrative elements present in each site, but also the capacity of each site's own potential directedness, its ability to construct edges that point towards other sites. Put differently, if we look in the right places, we can *see*, we can *hear*, we can *touch* the places where this network is generated. It has a shape, a form, a *materiality* made visible through the fictive, multimodal environments of each site it is produced within. But what does it mean to visualize a network and, moreover, can this visualization be applied to strictly *narrative* elements?

Of Networks and The Net

In a groundbreaking article in *Nature* titled 'Diameter of the World Wide Web' (1999) Réka Albert, Hawoong Jeong and Albert-László Barabási set for themselves a task that seems even more monumentally

daunting today than it did some ten years ago: to produce a topological mapping of the Internet. As Albert, et al. describe it, the Internet is a 'large directed graph whose vertices are documents and whose edges are links (URLs) that point from one document to another' (130). 'The topology of this graph', they argue, 'determines the web's connectivity and consequently how effectively we can locate information on it' (130). The problem with attempting to map such a space, however, lies in what they call the 'open' or 'uncontrolled' nature of the Web: any one person or institution can add a document or link at random, thereby changing the nature of the topology continuously, making it impossible to catalogue every vertex, every edge. The solution to this problem was found by mapping the Web locally, and then taking those connectivity measurements and extrapolating large-scale features of the Web's topology from these measurements. To do so, they designed a robot script or 'spider' to 'scrape' the individual sites for data and compile a database with all of the URLs found on a document, and then subsequently retrace those links to retrieve all of the documents and URLs that were connected to the original document. The results were striking. Despite the massive size and exponential growth of the Web, its diameter, i.e. the shortest distance between any two points in the system, was only 19 links²⁴, engendering a graph where 'all information is just a few clicks away' (1999: 130).

²⁴ They also remarked that even with the predicted 1000% increase in the size of the Web in the years

Yet even so, within the Web's topology there are built-in structures of information that restrict or control its flow in more directed means. Some of this information is highly connected, other portions only available through certain vertices, while other parts of it are isolated completely. We might click on a hyperlink and follow its trail to several vertices, but there is no guarantee that we will be able to find our way back through the same pathway. Thus, the navigability of the Web is not open as it might be in a more semantic orientation (i.e. as a series of machine-readable descriptions rendered by code such as XML that allows for a much more highly integrated and searchable network of documents) and is, in fact, highly restricted by nodal degrees of access. This is precisely the dynamic that Andrej Broder, et al. (2000) sought to investigate in their now standardized characterization of the Web as a directed graph. Broder et al. discovered that the Web was not, in fact, a 'small-world'²⁵ phenomenon, 'the ball of highly connected spaghetti we believed it to be; rather, the connectivity is strongly limited by a high-level global structure' (2000: 310). This high-level global structure takes its form not as a unified network but, instead, a network whose functionality emerges from four distinct regions or continents, each of which are formed by smaller interactions between individual sites or clusters of sites: the IN continent, the Central Core (or what is known

following the article's publication, the highly connective nature of the Web would mean that this growth would only boost the diameter from 19 to 21 links.

²⁵ A 'small-world' graph is a network where the majority of vertices are not neighbors, but nevertheless can be accessed by each other through a small number of moves, or in Albert et al.'s terminology, 'clicks'.

otherwise as the [Giant] Strongly Connected Component (SCC)), the OUT continent, and the remaining Tubes, Tendrils and Islands, which constitute their own continent by virtue of their lack of connection to the Central Core. The result of this designation—seen below in what's now famously known as the 'bow tie graph'—gives a new topology to the undifferentiated work of Albert et al. (1999), one that allies the differing 'ideologies' of the Web's regions with an overall hierarchy of connective potentiality. Furthermore, the regional location of a document on any visualization of the Web has, according to Barabasi, 'little to do with the page's content' (2003: 168) and is mainly determined by 'its relationship, via incoming and outgoing links'. The Web, as a consequence of this, is far from the omni-connected, unified space that it is generally seen as. Rather, it is a fragmented, hierarchical, pocketed system that only functions proportionately to the nodal degrees and directedness it exhibits. Seen below is a rough approximation of Broder et al.'s graphing of the World Wide Web, exaggerated to illustrate certain fundamental topological principles:

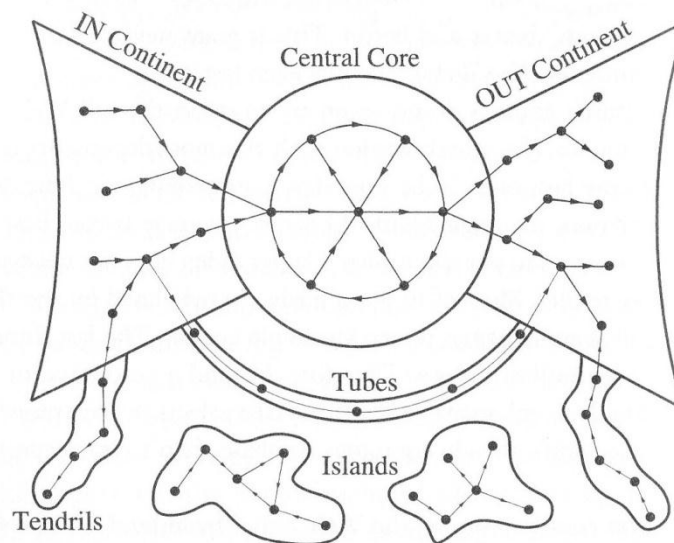


Figure 3.1: The Four Continents of the World Wide Web (Broder et al. 2000)

While large-scale analyses such as this continue to form the basis of a vibrant mode of network research, the application of network-based approaches to transmedia artifacts is, to my knowledge, wholly unprecedented. As such, the approaches and results that follow represent a first-generation attempt at understanding the meanings of transmedia fictions as networked operations. While the methods prescribed here are designed so as to be repeatable regardless of the project's makeup, it's entirely possible that new or more refined transmedia practices will be established that resist this approach (see Chapter Four for an examination of these practices).

The Language of Visualization

‘Information visualization is becoming more than a set of tools, technologies and techniques for large data sets. It is emerging as a medium in its own right, with a wide range of expressive potential.’

—Eric Rodenbeck (2009)

While the Web represents a highly-developed attempt at using network analytics to highlight the features of a complex and dynamic system, others have used the language of networks as a material-metaphorical means of highlighting the complex and dynamic elements of a *narrative* system in ways that extend beyond the metaphorical and abstract applications I listed in the introduction to this study. In many ways, the entire system of hypertext fiction (or as I called it in the introduction, ‘Net-work fiction’) is premised on the existence of an unseen network undergirding that structures the interactions of a user within a top-down system of cyclical narrative advances and retreats. Similarly, in the introduction to his now defunct *Book of Endings* (1994), Noah Wardrip-Fruin describes what he also calls ‘network fiction’ as fiction which is ‘organized as a network. It co-exists, and interacts, with other information that is part of a common network. It grows and changes. Over time, the network will continue to expand, connections will be re-routed in response to stimuli, particularly reactions from the Web community’ (Wardrip-Fruin 1994 as cited in Birrer 1996). At first glance, this statement appears to be a prescient one, hinged somewhere between a description of the producer (or ‘puppetmaster’)-audience

interplay of Alternate Reality Games and a somewhat utopian vision of what the future of networked fiction could be. Yet by reading in the prescience of Wardrip-Fruin's decade-and-a-half old statement, we reveal something about our current situation—while most common conceptions of 'network' fiction or 'networked' narrative do indeed involve vertices, links, hubs, circuits and other signifiers of network materiality, they do so from the position of a common digital or electronic base, a subsystem that creates and allows for a common language through which connection can be made.

Oppositely, though, there are those who have attempted to use network visualization as a means of revealing information in stories that might otherwise have gone unnoticed, with little consideration given to the platform that supports it. For example, in 1993 D.E. Knuth applied network visualization to an analysis of character co-occurrences in Victor Hugo's *Les Misérables*, treating each character as a vertex and each co-appearance in a scene as an edge. The resulting graph not only modeled a particularly intricate piece of fiction, but it was also one of the first applications of *social* network analysis to a literary work, arguing that characters and their relationships can (and should) be treated the same as 'real-life' human connections. Following this, Derek Hansen, Ben Schneiderman, et al. (2010) calculated a more detailed set of graph metrics using Knuth's *Les Misérables* datasets and, applying a more advanced visualization scheme that highlighted network features

including several measures of centrality (i.e. the measurement of how important a vertex [or in this case, a character] is to a given graph), they revealed an trait about the play long hidden: while the protagonist Valjean was still the most connected character, it was Gavroche, a street urchin, courier and a relatively minor character, came a close second, binding several major characters in the process of his interactions²⁶ (see Figure 3.2).

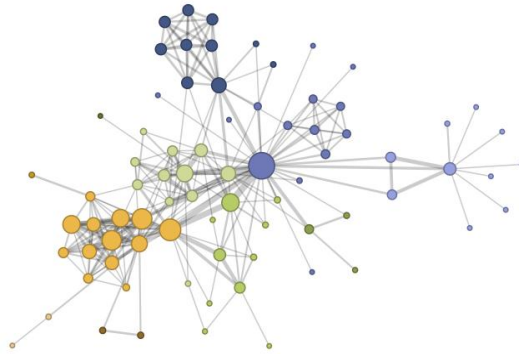


Figure 3.2: *Les Misérables* Character Co-occurrences

Perhaps the most prominent example of the use of network analysis in literary studies, though, is Franco Moretti's recent research on the application of network theory in attempting to better understand the way that *plot* functions in novels and plays. Here, Moretti makes a calculated shift away from 'the play proper' and towards a *model* of it, a move that reduces 'the text to characters and interactions, abstract[s] them from everything else, and [in the] process of reduction and abstrac-

²⁶ Moving in the other direction from micro- to macro- analyses, though, Franco Moretti (2007) uses network visualization to map the historical development of canonicity and genre in the print novel as it occurred on a massive scale, charting several countries outputs in the course of pushing for 'distant reading' as a technique that reveals aesthetic growth and meaning.

tion makes the model obviously much less than the original object' (2011: 4). But while Moretti ceases to talk about the plays 'proper'—the dialogue of its characters or the style of the writing—network theory instead allows for a 'distant reading' of often obscured components of plotting. For example, in Moretti's network analysis of *Hamlet*, the characters (vertices) are linked based on whether or not they have exchanged words (edges); since, unlike previous studies (Stiller, Nettle and Dunbar 2003) Moretti privileges the number of lines spoken as well as the direction of the utterance (i.e. a character who speaks to someone but does not receive a reply), Moretti's work incorporates both the *weight* of the edge as well as its directedness. In such a model, we can ascertain, for instance, that any character in *Hamlet* who is directly connected to royalty dies, whereas those on the outside of these circles live (see Figure 3.3):

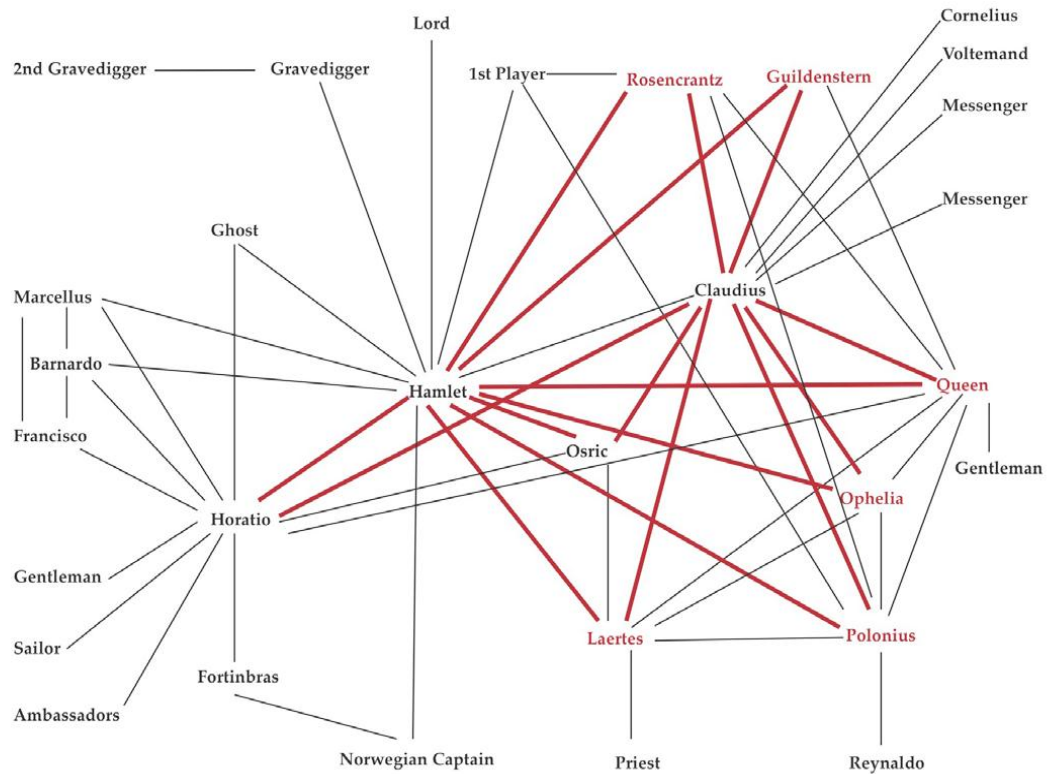


Figure 3.3: Franco Moretti's (2011) analysis of character connection in *Hamlet*

Another relevant study pertaining to considering narrative interactions as networks with less concern for visualization is a groundbreaking article titled 'Becoming a Nazi: A model for narrative networks' (2000) by Peter S. Bearman and Katherine Stovel. Believing that classifying narrative as a network could lead to a heightened understanding of the frameworks through which it functions, Bearman and Stovel took a non-fictional narrative compendium of accounts of how various people became and subsequently lived as Nazis during WWII

and, treating every discrete element within the narratives as a vertex and every connection that the author makes between them (what Bearman and Stovel refer to as 'narrative clauses') as edges, they mapped the narrative as a network of connections. Unlike Knuth and Hansen et al., who sought to tease social relationship data out of literary content, Bearman and Stovel's motivation was related to the idea that 'narrative data and 'network data' have many obvious similarities. Specifically, narrative, historical, and network data are locally dense, often cyclic, knotted, and characterized by a redundancy of ties. These similarities suggest that the analysis of narratives and event sequences using network methods may provide a promising avenue for analysis' (2000: 71). Furthermore, they state that 'By representing complex event sequences as networks, we are easily able to observe and measure structural features of narratives that may otherwise be difficult to see' (ibid). In doing so, they come to realize that not only can narratives be successfully treated as networks in their own right, but that applying network analysis to the *narrative* elements of a particular story revealed some striking parallels. Here, narrative depth could be treated as a the length of the paths in the network, centrality measurements could be treated as measurements of narrative influence, and connections and disconnections between elements could signify thematic as well as structural significance. In short, Bearman and Stovel were some of the

first to recognize the value of not just *speaking* about narrative meaning as a network but actually *treating* it and *analyzing* it as such.

Yet even so, Bearman and Stovel only saw similarities between narrative and network. This chapter (and the study as a whole), conversely, posits that not only does narrative in itself exhibit network traits, but that transmedia fictions are explicitly situated *within* network frameworks that structure narrative content in ways that exist outside of the elements of plot and discourse. Network analyses, then, help us recognize the corollary designs inherent to even *potential*, not manifest, complexity. Here, these frameworks form the basis of transmedia expression, the syllables through which larger, networked utterances are constructed. The trouble with extending current applications of network theory to analyses of fiction, however, is that they exist on two wildly different sides of the ‘proof-of-concept’ spectrum. On the one hand, analyses like Moretti’s are, by his own admissions, technically simplistic and ‘all made by hand, with the very simple aim of maximizing visibility by minimizing overlap’ (2011: 3). Such a reality, Moretti continues, is ‘not a long term solution’ but rather only one that privileges the role that subjective intuition can play in the definition of a network’s components and allows for the literary scholar to retain a central role in the production of her findings. As Moretti sees it, this methodology is ‘like the childhood of network theory for literature; a brief happiness, before the stern adulthood of statistics’ (ibid). On the other hand, analyses

such as Schneiderman and Hansen's, which rely on much more quantitative and sophisticated software for visualizing network traits in literature, position their results as abbreviated examples of social network dynamics, and not exclusively as literary models in their own right. In analyzing transmedia fictions as complex networks, this chapter attempts to find a middle-ground between these current polarities, one that allows for and in many ways requires both a subjective grounding in the expressions themselves as well as the 'stern' application of computational methodologies that allow for quantitative, results that complement this subjectivity and close textual contact. The divide between statistical, metrics-based results and those that privilege the researcher's own judgments is not unbridgeable. It is, instead, a matter of learning how to interpret network data *as* narrative analysis. The methods presented in this chapter will, at the very least, complicate the split between these approaches, and point towards a new paradigm for small and large-scale use of network theory in the humanistic research.

In order to test my general hypothesis—that transmedia fictions are *networks* where meaning is often a function of specific network behaviors—and also to test the efficacy of designating *migratory cues* as edges within transmedia networks, I will present a series of transmedia test cases with network dynamics ranging from simple to complex. Using the software NodeXL, a plugin developed for Microsoft's Excel spreadsheet to assist in the analysis and visualization of networks, I

have created a set of graphs that will be used to illustrate: 1) the ways that sophisticated visualization of (transmedia) narrative allow us to conduct both *close* and *distant readings*; 2) the ways that genre in transmedia fiction is often a function of the *direction* of the network's links; 3) the possibility that both the topology (the overall structure) and the topography (the traits exhibited by vertices) of transmedia networks often runs parallel to the narrative it structures; 4) the presence of multiple embedded pathways in and through a series of sites that constitutes a new kind of narrative organization, which I call the *cross-sited narrative*. To my knowledge, there are no previous studies that have employed either NodeXL or any other graphing software to visualize the topology of a transmedia project. This is namely, I think, because of previous difficulties in recognizing the edges of a particular site, a problem at least conditionally ameliorated by the inclusion of serial/sequential markers and the functions of migratory cues.

Even so, there are varying degrees of subjectivity linked to the internally-oriented knowledge necessary to identifying transmedia network edges and following their trajectories. This means that there is the potential for some variance in what might comprise a given transmedia network, especially those that exist with several hundred (or thousands of) links and vertices. A consequence of this is that while my typology of edges and migratory cues was designed in order to encourage repeatability when analyzing a transmedia fiction-- to present those

studying transmedia with a ‘common text’ possessing features that can be consistently identified-- transmedia fictions always have the capacity for acute individualization, as and audiences site-to-site interactions can vary widely depending on their knowledge of the network, its universe, and the sites they have access to. In order to partially account for this, each of the cases I present in this chapter are as ‘complete’ as possible at the time of writing; that is, they contain data culled from what can be thought of ostensibly as the entirety of the sites released. This reasoning has partially driven the projects I chose to use here, as each are ‘whole’ texts in their own way and not potentially *temporal texts*, texts whose meanings are only available for either a small window of time, or texts whose sites are inordinately impacted by the presence of subsequently distributed sites. In other words, the networks I present here are (at least momentarily) stable. While this distinction may seem to limit my method by rendering any judgments here post-hoc assessments, the system I present here is equally applicable to real-time transmedia visualization (i.e. on a site-by-site release basis), where pathways and network behaviors can be revealed as they occur. Indeed, this is perhaps the truest potential of this method, as it allows for not only a dynamic view of the network in question, but also a pre-view of such networks, where designers can attempt to simulate and visualize the network as whole and the paths created within it, and educators can use related methodologies as a means of furthering their students’ own

understanding of transmedia meaning as it occurs in real-time. It's also possible to view transmedia network visualization as an aesthetic extension of the fiction itself, a constellation of sites that act as a hubbed means of navigation through the project. In this final context, a transmedia network's organization becomes a map of both the fictional storyworlds and a way of incorporating network topologies into the topographical features of the fictional universe.

NodeXL

Developed collaboratively by the Social Media Research Foundation, Microsoft Research, Connected Action Research Group, the University of Maryland, the University of Porto, Stanford University, Oxford Internet Institute, Illinois Institute of Technology, Australian National University and Cornell University, NodeXL is a template for Microsoft's Excel spreadsheet that allows users to define a network's edge and vertex data either manually or through importation and, by clicking a button, see the network graph within the same screen. The value of NodeXL lies in its ease of use (no advanced programming languages are necessary, nor program-specific formats used) and options for customization—given a particular data set, NodeXL can be set to 'zoom, scale and pan the graph; dynamically filter vertices and edges; alter the graph's layout; find clusters of related vertices; and calculate a set of graph metrics' (NodeXL Overview, <http://NodeXL.codeplex.com/>). Additionally, networks 'can be imported from and exported to a variety of

data formats, and built-in connections for getting networks from Twitter, Flickr, YouTube, and your local email are provided' (ibid). Data sets parsed by NodeXL, for example, can then be visualized by highlighting certain attributes, such as the In or Out degree of a certain set of vertices (i.e. the number of links leading to or from those vertices) and, by selecting certain visualization schemes or by customizing a scheme unique to that network, NodeXL will display a graph that visually corresponds to the selected data, or whatever data the user wants to highlight. What this means is that networks can be filtered not only by the network metrics themselves, but also by other variables such as the time that the edge or vertex was first created, or in the case of something like data scraped from social networks, gender or marital status.

Yet most, if not all, datasets that have so far been graphed using NodeXL are those of mono-medial, mono-modal or conceptually-organized artifacts, such as citation networks of research papers (where the authors are vertices and edges are citations), or voting blocks of politicians (where edges are formed between politicians with similar votes). In either case, medium or platform doesn't matter—the network that forms is wholly *ideational*, defined not by a medium's capabilities, but of a research paper's citation of other papers, or a person's likelihood to vote a certain way. In other words, it is a researcher's definition of a vertex that acts as network binder. Oppositely, if one wished to graph something like the relation of a website like CNN.com to other websites, a

common digital foundation is obviously necessary, one that makes it possible to ‘scrape’ the websites for data by using scripts designed to locate edges-as-hyperlinks and follow them to their furthest extreme.

But transmedia fictions do not fully allow for either possibility, bound as they are to both a platform’s varyingly compatible materiality, and a narrative content that can be abstracted as universe elements shared by multiple sites, regardless of their makeup. In this sense, transmedia fictions represent a *multimodal* network, where different types of vertices make up its composition. But, unlike the case of a multimodal network that occurs online (where vertices might be differentiated as wikis, blogs, etc.), a transmedia network’s multimodal composition yields cues with often no common materiality, hence the need for narrative connection to make up for this lack. Consequently, the edges of a transmedia network aren’t entirely conceptual or material, and are located as an *in-between* function of the formal/material properties of the edge and its interpretive placement within the larger topology of the network. Transmedia fictions, then, are also *multiplex* networks, with connections that exist, on the one hand, as wholly platform-dependent signifieds (i.e. direct cues) and, on the other hand, as content-orientations within a particular narrative pathways (i.e. internally serialized cues).

NodeXL Population for Transmedia Projects

As I mentioned before, one of the tangible benefits of using NodeXL over other similar programs is the ability to easily utilize a rich set of visualization tools that enable complex network analysis and discovery. But NodeXL's true value for transmedia studies lies in its allowance of *manual* and semantic input of edge and vertex definitions. Unlike programs like *Pajek*, which depends entirely on autopopulated or 'scraped' datasets (i.e. datasets that have been harvested using an algorithm that automates their collection), and *yEd*, which allows only for edge and vertex attribute definition but also only manual network visualization through dragging and dropping edges and vertices into a preformatted grid, the population of a NodeXL template is entirely open to user description, where vertex name, edge direction and attribute definition (i.e. edge properties, vertex platform, etc.) are all customizable depending on the user's preference and the network's configurations, and its visualizations contain a number of complex algorithms that are executed by the software itself.

NodeXL's basic function as a network visualization tool is accomplished primarily through the use of two template-specific worksheets in Microsoft Excel. The first, labeled 'Edges' is seen in Figure 3.4 below, allows for edge definition by the importation or manual definition of the two vertices that the edge occurs between. Since transmedia networks are *directed networks* by virtue of the sequential

necessity of narrative and the *source/target* directionality of their cues, we have the option of designating the whole network as such in the template. When doing so, the vertex listed in the Vertex 1 column is the vertex pointing to the vertex listed in the Vertex 2 column, i.e. Vertex 1 → Vertex 2. In the second worksheet, 'Vertices', all of the vertices recorded in the Edge worksheets are listed, along with any corresponding graph metrics such as the In- and Out-degree of the vertices, as seen in Figure 3.5 below:

A311		GN159	
	A		B
1			
2	Vertex 1	Vertex 2	
3	S1E1	S1E2	
4	S1E2	S1E3	
5	S1E3	S1E4	
6	S1E4	S1E5	
7	S1E5	S1E6	
8	S1E6	S1E7	
9	S1E7	S1E8	
10	S1E8	S1E9	
11	S1E9	S1E10	
12	S1E10	S1E11	
13	S1E11	S1E12	
14	S1E12	S1E13	
15	S1E13	S1E14	
16	S1E14	S1E15	
17	S1E15	S1E16	
18	S1E16	S1E17	
19	S1E17	S1E18	
20	S1E18	S1E19	
21	S1E19	S1E20	
22	S1E20	S1E21	
23	S1E21	S1E22	
24	S1E22	S1E23	
25	S2E1	S2E2	
26	S2E2	S2E3	
27	S2E3	S2E4	
28	S2E4	S2E5	
29	S2E5	S2E6	
30	S2E6	S2E7	
31	S2E7	S2E8	
32	S2E8	S2E9	
33	S2E9	S2E10	
34	S2E10	S2E11	
35	S3E1	S3E2	
36	S3E2	S3E3	
37	S3E3	S3E4	
38	S3E4	S3E5	
39	S3E5	S3E6	

Figure 3.4: NodeXL Edge Worksheet

A60		GN159					
	A	B	C	D	E	F	G
1		Graph Metrics					
2	Vertex	Degree	In-Degree	Out-Degree	Betweenness Centrality	Closeness Centrality	Eigenvector Centrality
3	1-800-PRIMA16		1	1	0.000	0.000	0.011
4	9thwonders.com		1	1	1887.220	0.000	0.027
5	Assignment Tracker 2.0		7	1	13002.914	0.000	0.024
6	Evs Blog		2	2	4107.810	0.000	0.024
7	GN1		1	2	1.667	0.000	0.000
8	GN10						
9	GN100		1	1	290.971	0.000	0.002
10	GN101		1	1	782.410	0.000	0.006
11	GN102		1	1	313.410	0.000	0.002
12	GN103		2	1	346.714	0.000	0.001
13	GN104		2	1	476.905	0.000	0.001
14	GN105		1	2	4161.250	0.000	0.006
15	GN106		0	2	1817.250	0.000	0.006
16	GN107		1	1	1325.127	0.000	0.000
17	GN108		1	1	592.000	0.000	0.000
18	GN109		1	0	0.000	0.000	0.000
19	GN11		1	0	0.000	0.000	0.001
20	GN110		1	1	1450.260	0.000	0.000
21	GN111		0	2	96.516	0.000	0.012
22	GN112		1	0	0.000	0.000	0.000
23	GN113		1	1	0.000	0.000	0.000
24	GN114		1	0	0.000	0.000	0.000
25	GN115		1	0	0.000	0.059	0.000
26	GN116		2	1	4478.333	0.000	0.000
27	GN117		1	1	592.000	0.000	0.000
28	GN118		1	0	0.000	0.000	0.000
29	GN119		0	1	0.000	1.000	0.000
30	GN12		1	1	0.000	0.000	0.004
31	GN120		1	0	0.000	1.000	0.000
32	GN121		1	1	28862.667	0.000	0.000
33	GN122		0	1	0.000	0.000	0.000
34	GN123		1	0	0.000	0.000	0.000
35	GN125		1	0	0.000	0.000	0.000
36	GN126		1	1	592.000	0.000	0.000
37	GN127	Vertex Name Enter the name of the vertex.	1	0	0.000	0.000	0.000
38	GN128		1	3	28713.667	0.000	0.001

Figure 3.5: Vertex Worksheet with Metrics

Additionally, both the Edge and the Vertices worksheets can be fully customized by visual criteria such as the color, shape and opacity, and also, importantly, by whatever labels the user sees fit to include. In the course of attempting to graph several transmedia fictions using NodeXL, however, several crucial questions had to be asked with regard to the

software's ability to accommodate dynamic and accurate visualizations:

1) What criteria is used when defining edge direction when migratory cues can and often do work multidirectionally?; 2) Similarly, should external cues (i.e. brand markers) be included as edges alongside internal cues? What are the consequences of doing so?; 3) What features of transmedia fiction—from plot to distribution time to the focalizing perspective of the characters—should be included as possible filters for the network?; 4) What layout algorithm best visualizes the particular transmedia fiction, and what are the consequences for choosing one layout over another (i.e. what is obscured/ revealed)? 5) Is it possible to have a wholly objective view of the network's features, or are all of its functions the product of variably subjective interpretations of the content engaged? What might a partial mapping look like? While the answers to some of these questions will be addressed on a case-by-case basis, my general approach was as follows:

- 1) Edge definition: In deciding which order to list two vertices, I allowed the cue's function to dictate the direction of the edge. For example, since a *direct cue* containing a phone number is generally *unidirectional*, i.e. pointing to a site whose target does not function correspondingly as a source pointing back to the originating site, the site containing the direct cue was listed as Vertex 1, with Vertex 2 being the site of the cue's target. If this relationship was reciprocated, including Vertex 2 as the source and Vertex 1 as the

target in the subsequent row would result in an edge pointing to and from each site. This is complicated immensely, however, by the impact that a site (and cue's) *distribution time*, which often exists independently of the *story time* of that particular site. An intersectional cue, for instance, might occur between two sites whose distribution time is staggered, but since this type of cue's defining criteria is the shared occupation of a specific space and time in a transmedia universe, the cue is rendered bi-directional. In cases like this, *distribution time* was used as the criteria for edge definition, with the most recently released site being Vertex 1, the site *acting upon* or connecting with Vertex 2. Since direct cues are the most *object-oriented* migratory cues, directionality is seldom impacted by a site's distribution time. When dealing with internally serialized, temporally textual cues (the edges requiring the most internal knowledge to recognize), though, distribution time plays a major role. In order for certain networks to be analyzed not only by the sites involved in its creation but also the movement of audiences through the *story time* of the network, internally serialized cues were always defined sequentially, that is, by the time that a site intercedes in the story time of the fiction. In situations like these, Vertex 1 was always listed as the *prior* site (i.e. the site with an earlier distribution time) which then led into

Vertex 2, the most recently released site, a reversal of the logic I used to plot the other cues.

This last distinction touches upon the trajectories and flows of transmedia fictions. While the scalar functions of cue dispersal yield a multiplicity of meanings in the network, the transmedia practice of serialization produces a current through which the other, paradoxically *more* directed cues are situated. Although the stories told in a transmedia framework can and often do exist anachronously, the combination of temporally textual sites and variant distribution times work towards enacting serialization as a support for the network and fictional universe as a whole through the use of narrative sequentiality as an *insertion* mechanism for maintaining network integrity as a whole. What this means is that transmedia networks *embed sequence as a network feature* in itself that can be activated depending on cue direction. While this sequence might not always be apparent or foregrounded in the topology of the network when moving from site-to-site, the paths created by a cue's function and placement allow us to locate sequences and follow their trajectories. By adding the date that an edge was created (i.e. the date that the target site was released), and allowing internally serialized cues to have edges reflecting story time and not distribution time, we can then begin to visualize

and follow these paths for ourselves and can track the growing connectivity of the network.

- 2) External Cues: While external cues such as logos and other brand markers undoubtedly play a large role in the construction of a transmedia fiction, there is nothing inherently networked about their composition that might warrant their inclusion here. Let me briefly clarify this point. Even as a transmedia fiction's external cues work towards providing, among other things, an (external) visual identity for the particular universe, there is no guarantee that this identity will encourage causal sequence, as most external cues exist without any directional leanings. Even though the more traditional hallmarks of serialization—the 'To be continued in [insert site]...'—support causal linking, the truly unique mode of transmedia practice, the cross-sited narrative, cannot contain any external markers, by virtue of its embeddedness within the *internal* fictional space of a site. Similarly, many sites simply have no external markers at all, particularly the more object-oriented sites found through direct cues and the majority of the sites surrounding an ARG. While it might be worthwhile to graph a network and compare the connectedness of sites with and without external cues, this is not the goal of this study. By omitting external cues, then, we can fully visualize the internal workings of the various fictional modes in the network.

3) Since NodeXL allows each user to define unique attributes or labels for each network, it is possible to customize the software for use with transmedia fictions, particularly for the purpose of filtering the graph's contents to enable visualizations of a network occurring over distribution and story time, through characters, locations and objects, and as a cue-dependent and platform-dependent entity. As such, I created and populated the following columns for each transmedia project studied (see Figure 3.6 below):

a. *In the Edges worksheet:*

- i. *Labels:* each defined edge was labeled depending on the cue type it functioned through (does not enable sorting, but labels edges on graph).
- ii. *Platforms traversed:* lists the source and target platforms that the cue connects (i.e. TV to Graphic Novel; Web to Video Game, etc.)
- iii. *Cue Type:* also lists cue type (enables sorting)
- iv. *Plot:* allows for the insertion of information pertaining to character, location or events, and makes possible an approach to filtering based on a formula that searches for keywords contained in the column
- v. *Notes:* similar to Plot, this column contains specific information about the edge's construction, such how

the edge is a reflection of the cue type, how it fits into larger pathways, and other contextual information; also, allows for keyword-based filtering

- vi. *Perspective*: lists the focalizing agent(s) for the connected sites, allowing pathways to be studied as shifting perspectival movements

b. *In the Vertices worksheet*:

- i. *Labels*: each vertex was labeled depending on its platform, i.e. GN for graphic novel, Webisode, website URLs, etc.
- ii. *Date released*: specifies the date the site was released, as well as locates the date any connections were established between sites
- iii. *Date of Plot*: the approximate *plot time* of the events of the particular site; can be multiple times within a single site

	A	B	L	M	N	O	P	Q	R
1									
2	Vertex 1	Vertex 2	Platforms Traversed	Cue Type	Internal or External	Plot?	Notes	Perspective?	Volume
150	www.yamagatofellowship.org	S2E3	Web to TV	Event Plane	Internal		Kense's trip to the Hidden Fortress to obtain the Fire Scroll is shown in Kindred.	Documentary Style (focalization)	
151	www.yamagatofellowship.org	GN55	Web to GN	Event Plane	Internal		His victory over the Black Bear is shown in the graphic novel The Trial of the Black Bear.	Documentary Style (focalization)	
152	S2E3	GN54	TV to GN	Serialization/ Event Plane	External/ Internal		This graphic novel continues a scene from Kindred. The Rogue in which Maya and Alejandro escape has a California license plate and the logo for Costa Verde High School on the bumper, which may indicate that the car is Claire's stolen Rogue. This was confirmed in the graphic novel	Third: Limited	
153	GN54b	S2E3	GN to TV	TT Serialization	Internal		West mentions that a man in horn-rimmed glasses abducted him when he was younger. The graphic novel Special tells the story of this abduction. --> MASSIVELY	Two: Claire and West (thoughts in dif. Colors)	
154	GN62	S2E3	GN to TV	TT Serialization	Internal				
155	S2E4	GN56	TV to GN	Serialization/ Dimensionality	External/ Internal		During this episode, Mohinder and Matt watch Molly as she sleeps. The thoughts and images that are occurring in her mind while she is asleep can be seen in the graphic novel Molly's Dream. * Molly's Dream takes place between the time that Molly fell "asleep" in The Kindness of Strangers, and wakes up in Out of Time.		
156	GN56	S2E7	GN to TV	Serialization	Internal				

Figure 3.6: Customized Edge Columns

In what follows, then, are three unique NodeXL visualizations of *Skeleton Creek* that propose different ways to approach this problem, each revealing certain traits of the network and also revealing certain predilections towards the role of each site as a whole.

Skeleton Creek and Transmedia Network Topologies

Patrick Carman's *Skeleton Creek* (2009) is a young adult fiction containing small but important foundational transmedia elements and, as such, it can be considered a 'simple' transmedia fiction in that it contains only two sites with a series of direct cues between them. Dealing with the investigation into an old mining colony by Ryan McCreary and his best friend Sarah, *Skeleton Creek* is, like many novels integrated into a transmedia framework, an epistolary novel taking the form of Ryan's handwritten journal. Depicting a long period of time he spent bedridden

with a broken leg, this journal details the subsequent discoveries that he and Sarah make after she visits the mine late one night. While the print component of *Skeleton Creek* is undoubtedly a vivid example of the often object-oriented nature of transmedia sites, that is, it positions itself as an object existing within the fictional storyworld and/or universe of the transmedia project (at one point, the journal is even confiscated by Ryan's parents and not updated until he retrieves it), there is a slow but almost rhythmically scaffolded movement between the book and the sites existing outside of it, namely, the website Sarah runs that hosts the videos she sends to Ryan as her means of communication, videos that Ryan subsequently links to via direct cues and analyzes in his journal. Over the course of this iterative movement—from book to web to book—we uncover not only a vast conspiracy tied to alchemy, murder and the supernatural raging within the titular town of the fiction, but also a methodology for how to engage with it. In many ways, both Ryan and Sarah's affections for two seemingly opposed platforms—handwritten journal entries and online investigative and confessional videos—forms the basis for our own movement within this world, shifting our perspective from static print to dynamic video for the majority of the fiction. There is a fluidity to such a movement, though, one maintained by the words and deeds of the characters themselves, and our own interactions with a transmedia text whose sites are meant to be consumed simultaneously. Ryan's constant urging of himself to 'Go on.

Go back and listen' (Carman 2009a: 24), to 'Do it' and make 'One click' (ibid) on Sarah's link to find out more, represents not only the apprehensiveness of the character, but also our own interpolation into the code of the network that *Skeleton Creek* builds itself on, namely, the split between what I will refer to as the 'dyadic' and 'triadic' relationships between the sites of *Skeleton Creek*, and the ways in which any attempts to visualize them force one into several distinctive—and instructive—decisions about the nature of the transmedia network itself.

In the previous chapter, I highlighted the general tendency and functional necessity of migratory cues towards arrangements where 'source' and 'target' points were both definable and locatable. However, such an arrangement allows for only two possible models of transmedia movement: 1) a unidirectional movement from one site to another, with that site becoming the location of another source cue and so on; 2) a reciprocal source-target relationship such as that found in intersectional cues where movement is bi-directional, and source-target roles are interchangeable. Some transmedia fictions, however, also promote a movement that returns the audience to the source site by positioning elements in the target site that either allude to or are situated within the internal logic of the source site itself (i.e. reading a novel). In order to understand this concept more clearly, consider the relationship between Ryan and Sarah in *Skeleton Creek*. If we were defining these two characters in terms of social networking (and not transmedia

networking), we might refer to their relationship as a *dyad*, the simplest network form, implying a connection between two vertices or entities (i.e. people, institutions, etc.). In social networks, dyads are generally seen as both the strongest and most tenuously contingent sorts of links. A dyad lives only when both vertices assert connection, while breaking it involves only the dissolution of that connection by one vertex. Yet looking at *Skeleton Creek* in this way offers little, if any, insight into the dynamics of the network that supports the narrative functions of the fiction across platforms. But if we consider Ryan and Sarah as representatives of a particular platform, in this case print and the web, some interesting dynamics arise—the dyadic relationship ceases to become predicated on social tendencies, and becomes a consequence of the networking capabilities of each site. While the seemingly innocuous choice of the epistolary genre lends some immediacy to the proceedings, it also highlights a substantive distinction within transmedia analysis and visualization: the controlled movement between sites and, moreover, the paths that are created between them are often a hybrid of generic tropes within one medium, and character tendencies *towards* a particular medium as a rationale for incorporating the platform as a viable site within the given fiction. Ryan’s affection for print and the written word are clear almost immediately, with him stating almost immediately that ‘I think my favorite writers are those who admitted while they were still alive that they couldn’t live without writing...Write or

die trying. That kind of thinking agrees with me' (Carman 2009a: 5).

Ryan and Sarah, then, are already positioned as metaphorical stand-ins for their respective media choice. What happens when we treat them as such?

In Figure 3.7 below, we see both basic dyadic relationships modeled:

The Social Model

Ryan \longleftrightarrow Sarah

The Transmedia Model

Print (Ryan's Journal) \longleftrightarrow Web (Sarah's website and videos)

Figure 3.7: Dyadic Relationships in *Skeleton Creek*

In each case, the relationship between the two vertices is predicated solely on the consensuality each exhibits towards connection—Ryan and Sarah wouldn't be friends if one of them didn't want to be, just as the print and web components of *Skeleton Creek* wouldn't attain connection if direct cues didn't exist between them. Yet resistance to social connection is a choice; can the same be said about movement between platforms in transmedia frameworks? Many of those who have engaged with *Skeleton Creek* have remarked that it can be, that there is no single web video that is wholly necessary in comprehending the story as a whole. Instead, the videos act as content that exists in a parallel

structure to that of the journal, visualizations of the text in their own right or, perhaps, visuals which are then transcribed subsequently by Ryan himself. Indeed, this perspective is only strengthened by Ryan's summaries of each video's content immediately following the direct cues embedded in the journal, a component of *Skeleton Creek* that allows us to 'skip' over the links and engage only mono-sitedly with the print journal. But how might these relationships be visualized in a manner that highlights these traits? To be sure, visualizing a simple dyadic relationship offers little in the way of analytic potential, obscuring the dynamics inherent to even a simple transmedia fiction such as *Skeleton Creek*. But if we are only dealing with two unique sites, what can visualization offer?

The answer to this question can be found in the ways that we view the sites themselves. For example, if the book is viewed as a singular site because it contains the cues but the videos as discrete sites because each cue is different, we might end up with a visualization that resembles the following:

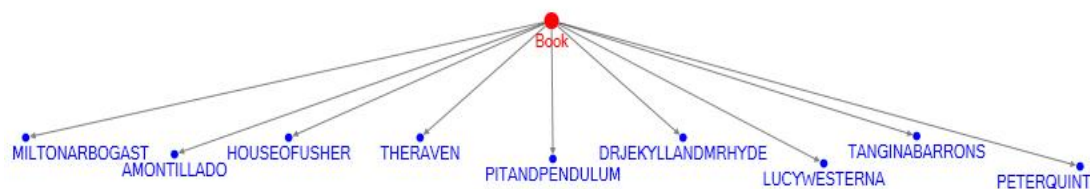


Figure 3.8: Print-centric Graph of *Skeleton Creek*

While we can readily see the importance of Ryan’s journal in the Print-centric graph, there is little in the way of analytics that can be done with it. All that can be said is that by removing the book, we remove all connectivity within the network, and the videos become isolated sites with no connection between them. The book becomes a vital hub in this regard, but one that is also flattened in its singularity, revealing little of the nuance and sophistication required to construct even a simple transmedia fiction constructed primarily through direct cues. So how can we give the network more depth without inherently altering the data we are working with?

The answer is simple: to treat the transmedia network of *Skeleton Creek* as a *novellic* structure in its own right, with each of Ryan’s journal entries (nine of which contain direct cues) as sites in themselves, an act which allows the chapters to work as network vertices. This allows us to track not only the placement of cues and the temporal growth of the network itself but also extrapolate a generalized theory of the basic

components of transmedia networks as a whole. In other words, by positioning each entry as a unique vertex, we can witness the startling complexity born in even simple transmedia practice, where the construction of knowledge that is both central and supplemental isn't simply a matter of emphasis, but of a network functionality tucked into chapters, pages and words. In other words, the novellic approach to design can be seen as a genre of practice in which the organizational tendencies of one form (in the case, the hub form—the novel) are mapped onto the site-to-site structure of the network. In Figure 3.9 below, *Skeleton Creek* is visualized as exactly this: a transmedia network born from the relationship between chapter division and time, platform and the links between them:

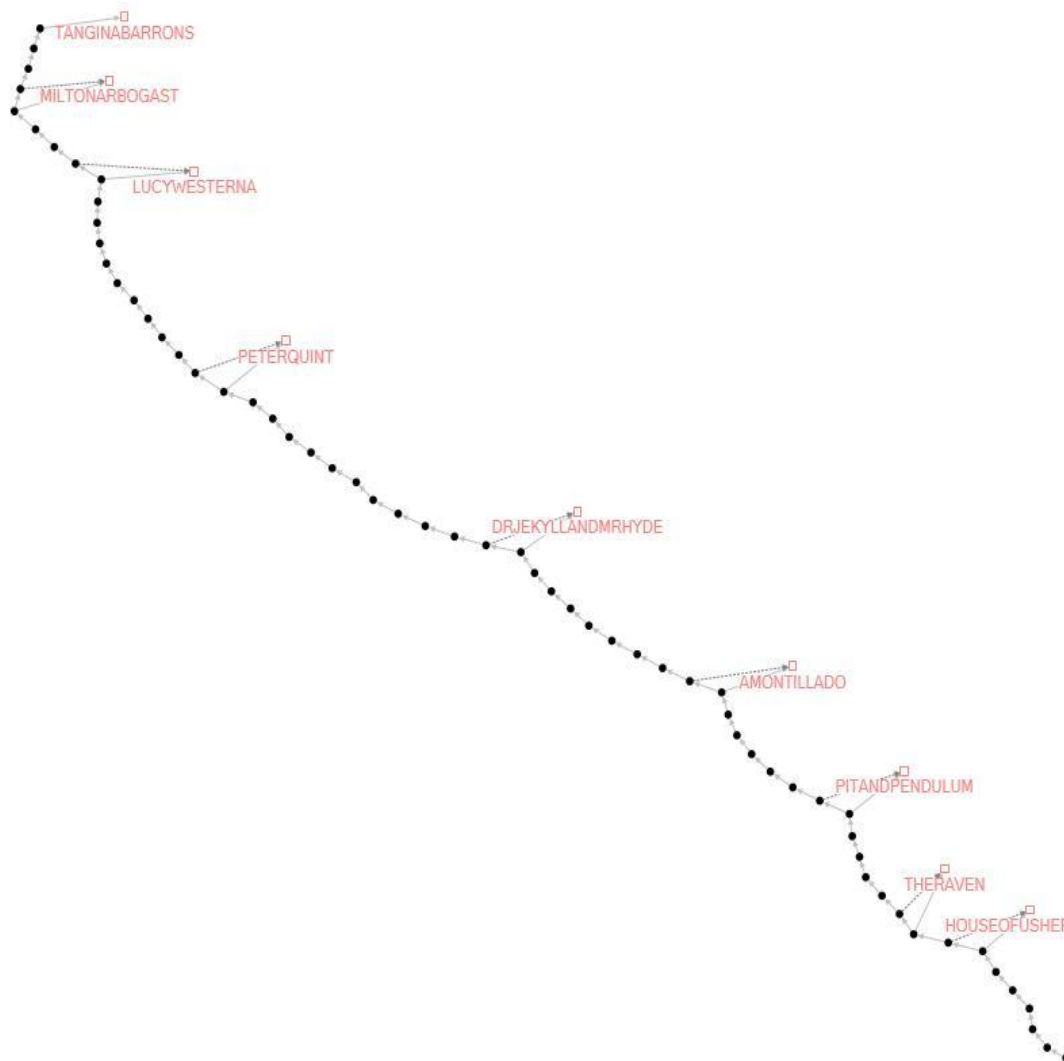


Figure 3.9: *Skeleton Creek* graph with Ryan’s entries and Sarah’s videos as vertices

Sequential Topologies and Time

In the visualization above, it is immediately apparent that *Skeleton Creek* is an inordinately *linear* graph, containing only *unidirectional* cues that promote progression through the network and no re-visitation of sites that have already been engaged. The network’s topology, then, closely resembles what Marie-Laure Ryan identifies as a ‘vector with side-

branches’, an ‘interactive architecture’ that ‘takes the reader through the story sequentially, but every episode offers an opportunity to branch toward external materials or optional activities that enrich the story’ (Ryan 2006: 104). Interestingly, the simplicity of *Skeleton Creek’s* arrangements allow us to see a trait of transmedia networks that is complicated immensely in fictions containing hundreds, if not thousands, of sites: the possibility that the network’s topology in many ways corresponds to the temporal organization of the fiction itself. Since much of the system for studying and analyzing transmedia networks is predicated on the defining feature of narrative—the causal-sequential relationship between elements—the correlation between serialized content and source-target correspondence, projection and completion can also be seen as a function of this causal-sequential necessity. Put differently, since a network is arranged primarily by connections and not through the date a vertex or connection is introduced (although as we will see, this facet of network analysis can also be exploited and visualized in a NodeXL framework), the relationships between vertices in a transmedia network often follow causal-sequential logics if they are not object-oriented.

We can see this dynamic play out simplistically in the *Skeleton Creek* graph: moving from the bottom-right to the upper-left of the graph is not only a movement through the vertices of the network, but also a progression through the time of the story. Since Ryan’s journal contains

the whole of the set of cues through which our transmedia movements are made, we can read this graph as an abstracted progression through the site that illustrates both the directional nature of most transmedia networks as well as the propensity of transmedia network topology to mimic the temporal arrangement of the entries. This is to be expected, given that Ryan's journal (like most epistolary tomes) is ordered chronologically, but as we will see in other more anachronous arrangements, this dynamic still holds true. Connection in a transmedia network, it seems, cannot help but be structured at least partially by the sequential ordering of the narrative itself, a fact that stands in direct contrast to previous networked literatures like hypertext, whose 'contoured' links-and-vertices (Ciccoricco 2003) resisted and outright rejected sequence as a method of creating narrative meaning. While we might imagine a scenario where anachrony is analogous with sequence via literary devices such as time travel, or the existence of alternate dimensions or planes of reality, to follow the connections between vertices in a transmedia network is often to follow a *pathway* that cuts across the temporal ordering of the narrative itself.

Triads and Structural Holes

While the dyadic relationships of networks form the minimal conditions through which a network can be formed (i.e. a link and two vertices), the dyad is in itself not a network but, rather, only a unit through which a network can begin, a relationship between two sites that

can then extend outward. From a macro perspective, *Skeleton Creek* isn't a network at all under these conditions—it is merely two sites made to work by transmedia connection. Yet, for the sake of illuminating the discourse operations of transmedia fictions, in considering the chapters/entries of the epistolary novel as sites in themselves we can witness the ways that even a simple vertex-link-vertex relationship can be nurtured into larger networked operations through the staggered use of cues, directional functionality and allusion. Thomas Choi and Zhaohui Wu (2009) argue that 'In order to capture the essence of a network, two things must be examined, at a minimum: how a vertex affects another vertex and how a link affects another link' (263). When merely a site-to-site correlation is considered between the book and web sites of *Skeleton Creek*, we cannot analyze the network functionality since there is only one link relationship to consider. By positioning the chapters and videos as unique sites, however, the basis of transmedia functionality is revealed. I would argue that such an approach is not only resistant to criticisms of distorting the 'true' nature of each site, but that it actually reveals it, illustrating the ways that even a single site contains multiple cues embedded at multiple junctures, and not just as a singular entity somehow imbued with connectivity.

To stress a point I made earlier about migratory cues, their functionality depends not only on the promotion of integrative movement between sites, but also a *chiasmic blending that is located at specific*

junctions within those sites. There is no ‘whole site’ connection but rather only a series of edges staggered throughout, imbuing a site with varying degrees of connective strength and migratory affects. In Figure 3.9 above, we can see the ways that this approach opens up network analysis in simple transmedia fictions. Importantly, it also reveals the location of several *triads* within the network. Defined initially by Georg Simmel as a series of three vertices where one acts as an intermediary for the other two (1950: 135), the triad has become the basis for sociological, management and production network analyses due to the tendency in triads for one vertex to mediate or ‘broker’ the contact of others. In this sense, as Choi and Wu argue, the triad is the smallest unit where networked operations can be located and analyzed. As they put it, while a ‘dyad shows how a vertex affects another vertex’ (2009: 263), dyadic analysis cannot, by its nature, show how a link may impact the structure and information of another link. The triad, then, is the ‘basic essence of a network’ (2009: 263) that allows for behavioral analyses in that it is essentially composed of, at minimum, two dyadic relationships culled from three unique vertices and two unique links.

In this minimal condition, triads are said to be *open* because they do not possess a third link that *closes* the connections between the vertices (Figure 3.10 below).

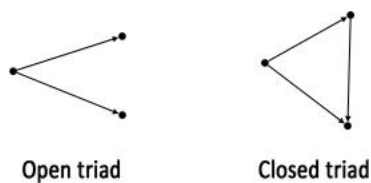


Figure 3.10: Open and Closed Triads

In a closed triad, knowledge is insular and contained by the *path* it circulates within. In an open triad, however, there is an obvious gap present between the second and third vertex that presents either an opportunity for closure by what is known as a ‘bridge’ link or the potential to remain purposefully open to exploit the advantages that brokering brings to the vertex where the relationships originated. In the latter position, the first vertex holds a position of power, one where information can be filtered between the remaining vertices depending on the strategic advantages of doing so. This power is ceded only if the other vertices somehow form their own connections, thereby closing the gaps between them. The space between the second and third vertex, though, is potent, and most social network analysis views open triads as containing inherently exploitable gaps between vertices that produce knowledge inequities leading to increased control over the information present at each site.

In the case of triadic relationships in *Skeleton Creek*, we notice in the visualization that each web video contains only a direct cue, a nonetheless strong link type, connecting a chapter to a web video. While

having a link as strong as a direct cue might seem to strengthen the relationship between the sites as a whole, if the link is removed (or remove an audience's willingness to follow the link), the site itself is also removed from the network, reverting its topology, at least locally, to a dyadic one. In this case, an audience skipping the videos and focusing strictly on the print book are accommodated through Ryan's use of *allusions* to the video's content, represented in the visualization above by the dotted edges directed towards the video by its preceding chapter. Audiences who follow the direct cues to the video and then progress through the next chapter complete the triad, creating information that is ratified at every juncture. The triads of *Skeleton Creek*, then, are found in the combination between the site of the source cue, the site of the target cue, and the site which sequentially follows the source cue site which, importantly, contains progressively weak allusions to the video sites as the book (and series) continues.

In even a simple example such as this, we can locate a conceptually important network trait, one that directly implicates continuity, sequence and audience integration of narrative and connection: the structural hole. Described by Ronald Burt (1995) as 'disconnections or nonequivalencies between [vertices]' (Burt 1995: 2) structural holes provide, among other things, increased opportunities for controlling information and its access. While the role that the connective features of transmedia fictions play in comprehension and network

creation have already been illustrated in the previous chapter, the widespread existence of structural holes and their subsequent brokering and/or bridging of information means that *disconnection* is also an important facet of transmedia practice, as it allows for the development of distinct knowledge circuits and pathways throughout the network. Located in the gaps created by open triads, the smallest minimal network units where they can be found, structural holes create value through the exploitation of the disconnections that create information inequity at each site. In transmedia contexts, this inequity can be found in the recombinative differences between both platform and narrative components. In platform gaps, value is created simply through the manifest differences between the materialities of the platforms themselves, with each providing unique information. In narrative gaps, differences between internal character perspectives, location shifts and various causal-sequential affects (i.e. the catalysts that allow for narrative progression) create value by altering the makeup of both the scope and content of the story. Since the majority of structural holes found in transmedia networks are created through both platform and narrative gaps, the act of negotiating even a simple transmedia fiction like *Skeleton Creek* consequently contains several such accommodations. Imagine, for example, that an iPad app adaptation of *Skeleton Creek* makes it impossible to proceed from chapter-to-chapter without encountering the videos. In a case such as this, the video is given

exaggerated importance as it is literally integral to our progression. As we will see, the progressive integration of structural holes in *Skeleton Creek* and the subsequent novels, *Ghost in the Machine* (Carman 2009b) and *The Crossbones* (Carman 2010) create and encourage a topology that allows for both mono-sited and transmedia engagements with the fiction. As we will also see, though, the development of structural holes in the latter novels creates a circuitry far different than in *Skeleton Creek*.

While structural holes exist as connective gaps, these gaps do not mean that each vertex is completely separate. Rather, structural holes ‘are buffers, like an insulator in an electric circuit’ (Burt ‘Social Capital’ 35). Vertices on either side of a structural hole, then, ‘circulate in different forms of information’ (ibid) which, in a transmedia context, is manifested by both content and platform differences and demarcated by a lack of a definite cue or even an allusion that closes the chapter-web-chapter triad. Furthermore, structural holes ‘separate nonredundant sources of information, sources that are more additive than overlapping’ (ibid). In this context, redundancy is defined as attributes relating to either cohesion, where two vertices contain relatively the same information, and structural equivalence, where the edges linking to a vertex are similar (i.e. one vertex with two of the same edges connecting to it from different vertices). Structural holes, then, are not simply defined by an absence of information but, rather, a differentiation of information as they relate to other sites in the network. While this is

seemingly another (more complicated) way of saying that ‘transmedia fiction is expansive’, much like the cues that define the network there are scalar degrees with which a structural hole exhibits non-redundancy that have a direct impact on the strategies necessary for maintaining continuity, sequence and causal mechanisms. To phrase this as a question, what possible impact/benefit might there be in encouraging structural holes in transmedia fiction?

Take, for example, the hole created by the HOUSEOFUSHER cue, the first transmedia movement promoted in *Skeleton Creek*. Informed by Sarah that she visited the apparently haunted dredge without him, Ryan is given a password to access a site containing a video filmed by Sarah at the location, a video which, importantly, ends abruptly and without further prompts. Also significant is the observation that the novel itself actually engages in what could be called a *narrative tutorial* of how to locate, follow and chiasmically integrate the cues themselves. Ryan, sensing the trouble that following the link/cue will entail, is hesitant at first, stating that ‘I am afraid to look at it again, because I know that after I watch it, I’m going to have an even more bewildering sense that my life has been broken into two parts—everything that came before this video, and everything that would come after’ (Carman 2009a: 24).

Interestingly, there is an inherent acknowledgment of the hole that is about to be produced in the network right in Ryan’s thoughts: his life, like the narrative itself, will be broken into two parts—everything that

comes before and after the video(s). Soon after, Ryan literally forces himself to stop writing so that he can go to sarahfincher.com and enter the password. ‘One click. Do it, Ryan. Do it.’ (ibid). At this point, the audience has one of two choices—either follow the cue to the site and watch the video, or to just continue reading and risk missing out on the information present there (presuming the allusion isn’t strong enough to accommodate skipping the video). In either case, the presence of the structural hole (i.e. the open triad formed by the potential lack of an outgoing edge in the web video) plays a direct role in defining what information is available to the audience. While *Skeleton Creek* is a simple transmedia fiction that encourages simultaneous use of both platforms involved in its creation, there is still a question of how necessary each site is in the narrative. Since there is no explicit cue present between the video and the chapter following the referring site (i.e. either a suggestion to ‘go back’ through a direct cue, or a cue to Ryan’s journal in the video), integration and causation must be managed by the audience themselves, a process is enabled enormously by Ryan’s allusions to the content of the video. After Ryan watches the video, he writes another journal entry detailing both his reaction and, importantly, a roundabout summation of the content present in the video. Immediately following the cue, Ryan writes simply that ‘Sarah went to the dredge without me that night’ (Carman 2009a: 26) and later recounts his meetup with Sarah that produced the following exchange:

'You think I made it up?'

She said it like she couldn't believe I'd even think of such a thing. Like she hadn't done it to me a million times before.

I thought it was all still part of the act.

'Don't get me wrong,' I said. 'It's some of your best work. You really scared me with those gear sounds and—what was that—a man at the window? You must have had help from someone. Who helped you?'

She shook her head. I can remember it so clearly.

'All I did was walk into the woods with my camera. No one helped me do anything...'

If this were a video, not a journal, I'd have to stop. I'd have to rewind. I'd have to play that line again.

(Carman 2009a: 27-28)

Contained within this conversation is a rather overt acknowledgment not only to the events of the video, but also to the multimodal differences that construct the network itself. In this sense, the exchange must not only recount events, but also transcode sounds and images into words. For those who watched the video, this exchange acts as a prompt through which recall of the video becomes an integrated component of the fiction as a whole, while those who merely carried on with the book find some degree of coherency through the allusions. In either case, these behaviors are facilitated, and not hampered, by the presence of a structural hole. In such an arrangement, the videos allow us first-hand interaction with an object described by another site via allusion. The removal of allusion, though, shifts the onus from the videos to more causal-sequential means and, as a result, the information found within them becomes crucial to understanding the fiction as a whole. The same can be said of events situated in or by structural holes—the greater the allusion towards them, the greater their function tends more towards

more broadly construed aspects of the fiction, such as general plot information.

But as the *Skeleton Creek* trilogy progresses in *Ghost in the Machine* (Carman 2009b) and *The Crossbones* (Carman 2010), there is a growing weight placed on Sarah's videos as a means of attaining continuity and sequence. This is done by increasing the breadth of the structural holes that permeate transmedia movements within the network by reducing the compensatory allusion coupled with it. More specifically, while direct cues at the conclusion of journal entries continue as the primary linking method, there is a pronounced lack of detail directed towards the recounting the events of the videos in Ryan's writing. Whereas previously we might have read pages of recap for one clip, now we might only read 'I couldn't go to sleep after watching Sarah's newest video...' (Carman 2009b: 18). In other words, while the methodology for defining and maintaining connection in the network is static across the books (direct cues and allusion), the gaps produced by the lack of what Burt calls distinct knowledge circuits on either side of the structural hole are widened by decreased allusion to the other site, thereby producing 'an opportunity to *broker* the flow of information' and funnel audiences towards more transmedia engagements with the content of the narrative.

In *Ghost in the Machine* (Carman 2009b), a lack of allusion produces circuits that require transmedia engagement in order for

coherency to be maintained. In one vital instance, Ryan makes plans with Sarah to return one last time to the dredge to find out, beyond any doubt, who is responsible for the mysterious ongoing in the small town. They also, however, plan to stream video of their expedition to Sarah's website in case something happens to them. Preparing for the trip, Ryan writes:

The password, in case someone comes in my room and finds my journal tomorrow because I've turned up missing, is FATHERARISTEUS. Just go to www.sarahfincher.com and put in those letters—FATHERARISTEUS—you'll find us. There's nothing left to say. It's time for me to go. (Carman 2009b: 181)

Following the cue to the website reveals video footage of a frantic Ryan and Sarah who, tracking clues they uncovered over the course of *Ghost in the Machine*, attempt to locate a hidden glyph containing the key to an alchemical riddle, one that presumably contains the secrets to a hidden stash of gold. Soon after the video begins, Ryan locks Sarah into a hidden room for her safety, and prepares to deliver the key to Old Joe Bush, the ghost who has been haunting their every move. As soon as Ryan encounters him, though, a park Ranger named Daryl Bonner who had been tracking them attacks Old Joe, sending him careening several stories off of a staircase, landing unconscious on the ground below. As Ryan releases Sarah and frantically runs down the stairs with Bonner, his father, who has ties to the nefarious activities, also arrives. And, much like a *Scooby Doo* episode, the unmasking begins. As we watch Bonner's fingers gather Old Joe's mask and begin to pull it upward, the

camera pans to Ryan's father who breathlessly asks 'What is going on here?'. The video then ends abruptly, and we are denied the knowledge of the face that lies behind the mask. That is, until we return to the book, where it is immediately stated, almost matter-of-factly, that 'It was Henry', Ryan's uncle, who had been acting as Old Joe Bush this whole time.

What follows in Ryan's journal is not a recap of the events of the video but, rather, only his version of *what happened after*. In other words, in the movements from book to web to book, the audience is not only forced to reconcile multiple modalities of information, but also to *construct a sequence of events*, a sequence that cannot be located solely in any one medium. Narrative meaning in this context is not only sequential and causal, but it is located in a way that prevents its full access through any one site and promotes access through multiple sites. In the case of *Ghost in the Machine*, the narrative pathways are identical to the structure of the network itself (which is nearly identical in topology to the *Skeleton Creek* graph), a topological and topographical trail that forces engagement with both book and video through the creation of deep structural holes that promote cross-sited sequencing and causation. While allusion helped to structure *Skeleton Creek's* videos as object-oriented elements (i.e. elements that allowed for the outward interaction with an object existing in the fictional storyworld), the lack of allusion present in *Ghost in the Machine* and, later, *The Crossbones* renders the

video content as much more causal-sequential as the structural holes too big to bridge without transmedia movement.

Personal Effects: Dark Art: A Different Perspective on Network

Motifs

The initial example of the *Skeleton Creek* network yielded much in the way of basic network operations but perhaps less in the context of *why* visualizing transmedia networks matters. This is primarily because the form of the transmedia network is nearly identical to the spatiotemporal and causal-sequential elements that comprise its narrative. Additionally, the predominantly *novellic* nature of *Skeleton Creek* meant that simultaneous usage of both of the sites comprising it was not only encouraged but, in the case of the increasingly deep structural holes that separated sequential elements, necessary in order to understand a story whose basis was increasingly globally cross-sited. In JC Hutchins and Jordan Weisman's *Personal Effects: Dark Art* (2009), however, a novel that is also integrated into a transmedia framework, there are far different network dynamics at play than in *Skeleton Creek*, dynamics which work towards situating the transmedia content as object-based *contextual frames* rather than sequential markers. In some ways, this should come as no surprise—the title of the book, *Personal Effects*—foregrounds the material nature of the network itself: the novel, again written in epistolary journal form by the protagonist, contains a packet of items belonging to Martin Grace, a blind man accused of

multiple murders who is housed in Brinkvale Psychiatric Ward (or 'The Brink', as it's known). As the events of the novel unfold, Zach Taylor, the young art therapist assigned with breaking through to Grace, begins to discover more and more about the significance of the 'personal effects' found in Grace's files, artifacts ranging from a driver's license to various business cards to an abstract painting and birth (and death) certificates. In many cases, these items lead directly to other sites, such as in a funeral card with a website URL listed on it; in other cases, it is only through the combined use of both novel and artifact where meaning is formed.

While it is worth noting that the novel itself is situated as an object, an 'effect' of Zach Taylor's (his journal), the network that is formed by the relations between the novel, the artifacts, and the other sites (phone voicemails, websites, etc.) are far from simply object oriented, and work towards situating *Personal Effects* as a different type of transmedia fiction than *Skeleton Creek*, one where narrative meaning attains its sequence from a single site, yet compounds and questions those meanings repeatedly through transmedia migration to other sites. Also unlike *Skeleton Creek*, there are very few explicit cues present in the novel, no characters urging us to dial phone numbers, click on URLs, and examine a particular artifact in a certain way. Moreover, we are simply given access to the majority of the sites in the network from the outset. In other words, *Personal Effects: Dark Arts* is not so much about

locating the sites themselves but, rather, locating the cues that connect the sites in a certain way, of finding narrative significance for a trove of objects belonging to the universe of the fiction. Importantly, none of the sites in *Personal Effects* contain a reference to Zach's journal, while Zach's journal contains numerous references to the other sites. The result of this is that network functionality and reconstruction is actually the *end goal* of *Personal Effects*, where like Zach Taylor himself, the audience must ascertain the significance of each of the artifacts and conclude whether they reveal information that might be causally-sequentially located. Consequently, any graphing of the *Personal Effects* network is ultimately an act that reveals a particular pathway through the fiction, of finding and following a series of source-target relations that determines our view of the narrative as a whole. Yet, in choosing to visualize *Personal Effects*, a telling set of choices must be made—should we: 1) view the book and its enclosed artifacts as a single site or multiple sites?; 2) View the book and its chapters as individual sites, much like was done with *Skeleton Creek*?; 3) Only list the sites that have been found to have cues pointing to/from them?. In all three cases, the end result will be a network constituted on wholly different ideational grounds, each scenario representing a fundamentally different way of seeing what, exactly, constitutes the object of study in *Personal Effects*. In other words, rather than looking towards visualization as a means of learning something about *Personal Effects* that wasn't revealed by the

sites themselves, we should instead view its graphing as a mechanism that reveals what we have *already* learned about the fiction. The result of this is yet again an inordinately linear graph, albeit one whose effects are vastly different than those of the *Skeleton Creek* networks:

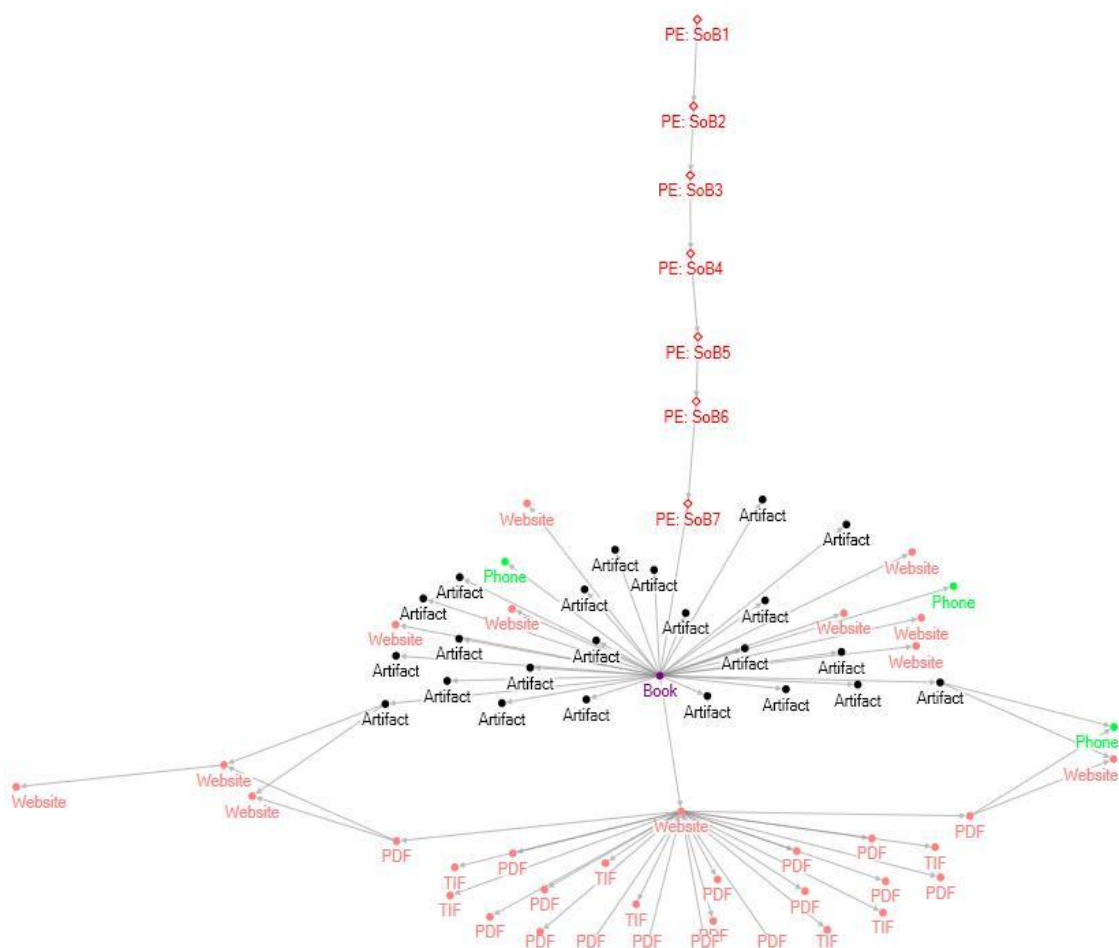


Figure 3.11: *Personal Effects: Dark Arts network*

The *Personal Effects: Dark Arts* graph presents a rather revealing structure—a central component composed of two nearly identical clusters and a single cue connecting them, with each cluster containing a hub in the form of either the book (top cluster) or a website (bottom cluster) found from a direct cue in the book, www.brinkvalepsychiatric.com. Additionally, there is a pathway leading *towards* the central component of the graph (which contains the two clusters) that is formed by the serialized *Personal Effects: Sword of Blood* audio prequels that are alluded to in the second line of the novel, but not directly causally implicated in its narrative. The sheer number of open triads present in the graph suggests a dynamic alluded to in *Southland Tales* interface example: that the design of the narrative itself is inseparable from the connections it makes. Indeed, in this view, the whole point of *Personal Effects: Dark Art* isn't to use transmedia connection, but to *find it*, to locate the points that the novel, the artifacts and other connected sites coalesce. In other words, rather than follow a pathway of edges, we *create* one based on the connections we make within the fiction²⁷. These pathways also illustrate the degree to which object-orientation in transmedia practices is really a function of edge direction. Since objects in transmedia fiction usually exist as functional artifacts that audiences can engage with, there is often a lack of edge

²⁷ Such engagements, however, are vastly influenced by the degree to which the audience can locate the connections in the network, a fact that positions transmedia network visualization as a potentially powerful tool for understanding contemporary literacies (see Conclusion for more on this idea).

reciprocation present in these sites. A driver's license belonging to a character in *Personal Effects* will most likely not include a link back to the print novel as it would violate the integrity of the object. The more uni-directional a link is, then, the more likely it exists as some kind of object in the fiction.

The LOST Experience ARG and Network Coherence

As the complexity of transmedia networks increases, it becomes immediately apparent that a basic visualization such as that of *Skeleton Creek* will often obscure as much as it reveals, as several hundred links and vertices cannot always be reduced to network tropes without a heavily subjective and labor intensive methodology for examining the graph vertex-by-vertex, edge-by-edge. Even then, paths will be obscured, clusters will remain undiscovered, patterns of connection left unseen. While *Skeleton Creek* and *Personal Effects: Dark Arts* were useful in ascertaining the ways that basic *narrative* and *network* traits are often mutually compatible (traits that are also on display in higher-order networks), the complexity of many transmedia networks yields traits that aren't immediately apparent without using methods that allow for computational as well as observational analyses. Although *Skeleton Creek* and *Personal Effects* contain elements that could be considered as belonging to an Alternate Reality Game (ARG), neither is wholly representative of that form. *Skeleton Creek* attempts to meld the affects of object-oriented network discourse and narrative sequence, while

Personal Effects: Dark Arts utilizes a similarly object-oriented discourse structure to, instead, create a network where the *potential* for connection is present at every turn of the novel's pages. Additionally, though *Personal Effects* contains traits usually associated with ARGs—passwords that need to be found, websites that contain hidden messages in their source code and hyperlinks, etc.—there is no 'end game' to the fiction, only the accumulation of information that may or may not figure into one's interpretation of the events. Connection is never an issue in *Skeleton Creek*; connection is always *the* issue in *Personal Effects*. Yet, in either case, only a single narrative is developed across and through the various sites. While the depth of this narrative can be influenced greatly by an audience's contact with other sites, the end result in both cases is a single story set with multiple variables. In many transmedia projects, however, the incorporation of more than one mode of transmedia practice is often a privileged model, with several stories often set simultaneously within the same storyworlds and universes, each contributing uniquely to both storyworld construction and Universe breadth but each also causally singular and defined by a unique transmedia approach, for example, simple transmedia sequences embedded within larger network structures. Such is ultimately the case with *The LOST Experience*, an ARG set within the universe of the television show *LOST*. Referred to by many as one of the most groundbreaking television shows—and fictions—in the history of the medium, *LOST* dealt with a group of plane

crash survivors who became stranded on a mysterious island, stalked by a cloud of black smoke, other inhabitants, and their own pasts.

Additionally, *LOST* is also generally referred to as a uniquely transmedia fiction, one that pushed the boundaries of platform-to-platform interaction, narrative depth and audience participation. Indeed, much of this assessment is a product of *The LOST Experience*, an ARG that sought to ostensibly provide participants with answers to several of the show's notoriously enigmatic questions, such as why the castaways were stranded on the mystical Island, what the significance of the set of numbers were that kept reappearing in various scenes, and what the Dharma Initiative and its parent company, The Hanso Foundation, were really after in studying the Island and its inhabitants.

Yet those who engaged in the ARG found few, if any, real answers to these questions but rather only a deeper exploration of the *LOST* Universe mythology. According to Carlton Cuse, one of *LOST*'s 'showrunners' (producers who are responsible for overarching narrative direction and continuity), this was always the intention, and not a failing of the ARG or *LOST*'s transmedia components as a whole:

The details of the Hanso Foundation's demise...it's tangential to the show but it's not unrelated to the show. We sort of felt like the Internet Experience was a way for us to get out mythologies that we would never get to in the show. I mean, because this is mythology that doesn't have an effect on the character's lives or existence on the island. We created it for purposes of understanding the world of the show but it was something that was always going to be sort of below the

water, sort of the iceberg metaphor, and the Internet Experience sort of gave us a chance to reveal it.
 (<http://www.buddytv.com/articles/lost/buddytv-interviews-losts-damon-4766.aspx>)

As we've seen, however, transmedia networks are often approximate, if not complete, reproductions of the temporal progressions of the narrative itself, so that as we navigate the network, we move through the temporal arcs of the story. But what might a tangential or, perhaps more precisely, *parallel* clusters of vertices and edges look like? How can we graph the 'below water' contexts through which the *LOST* universe was understood by those engaging in the ARGs? Put differently, what does a network with parallel (but not always causal-sequential) connections look like?

In attempting to visualize the relationship between *LOST* and *The LOST Experience* in NodeXL, I chose to list the whole of the TV series as separate episodes with serial links between each episode and each season so that the entirety of the show's run was viewed as one continuous pathway. I also included each *mobisode*, short episodes released for cellphones that took place at often indeterminate times in the *LOST* storyline, as a serially linked pathway that took place between the third and the fourth seasons of the show (VIDEO GAME?). The ARG, by contrast, was graphed with much more transmedia-specific methodologies. As mentioned previously, ARG's often traffic necessarily through *direct cues* whose hidden locations provide the impetus for the majority of the interactions that take place by the participants. The

difficulty with graphing these cues, however, is that the temporal nature of ARGs often means that the websites used in the gameplay might have either changed from their initial state to reflect updated content and new cues, or they might not exist at all upon revisiting them, their URLs redirecting to either a non-descript hosting service or, in many instances, a bleak '404 Page Not Found' error. In order to overcome this difficulty, I used a combination of my own notes from playing *The LOST Experience*, the often incredibly detailed reconstructions found on *LOST*pedia, which contain screenshots of websites, intricate puzzle recreations and other such artifacts from the ARG, and the Internet Archive to supplement the websites that couldn't be located the wiki. In this sense, the reconstruction of *The LOST Experience* and its subsequent visualization is ultimately one predicated on the communal interpretations and, moreover, interpretive structures present in the communities formed in response to *LOST*²⁸. With some noticeable exceptions (namely, the novel *Bad Twin* and its links to the TV show), what connections we see here, then, are less a response to the *repeatable* conditions of the sites of the fiction than they are a visualization of the recorded and sparse remnants of them. The visualization of the *LOST* network presented below, then, should also be considered a visualization of the interpretations of the audience who followed it. But there's also an element to the visualization

²⁸ Interestingly, it is possible that the same structures that support community interpretation and archiving in *LOST* reflect many of the networked interactions of the fictional characters in the show themselves. In other words, patterns of interpretation might mimic patterns of fictional interactions.

that reflects, I feel, the fractal nature of the *LOST* narrative itself, where every character possesses connections to both the island and each other that wind progressively outward from themselves until, in the end, there are affiliations between almost everyone present there. In this sense, the narrative complexity of *LOST* is really structured as a complex social network (Haynes 2010; see Figure 3.12, below), one where a person's close contacts often extend outward, linking them increasingly with a larger community of 'alters'²⁹.

²⁹ It's worth noting here as well that the term 'alter', used to refer to linked contacts in a social network, has a dual-meaning in *LOST*—not only do many of the characters have several 'alter' egos with different traits (Sawyer, for instance, has a criminal past but a benevolent streak that belies it), but, by the end of the show's run, there is literally an entire alter-world complete with idealized versions of the castaways that becomes vitally significant to the plottings of *LOST* as a whole. In this sense, social network analysis, as opposed to strictly transmedia network analysis, could yield a vastly heightened understanding of *LOST*'s often inordinately complex plot..

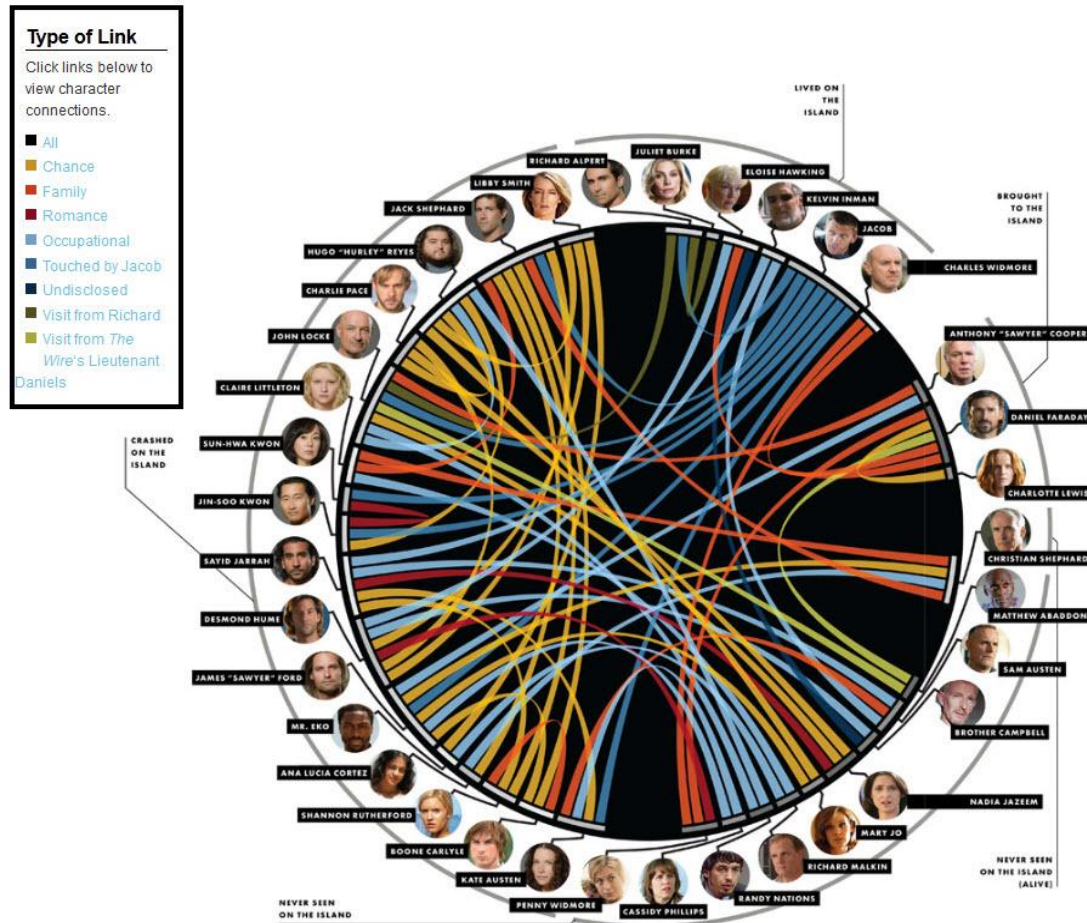


Figure 3.12: *Wired Magazine's Visualization of the Social Network Linking LOST's Characters (Haynes 2010)*

As the castaways gradually begin to make sense of their surroundings and themselves, they also begin to move further outward from their initial encampment, and in several cases, escape the Island entirely. In order to model such a dynamic, I chose to use a preset network layout titled 'Spiral' in NodeXL. With the 'Spiral' layout, vertices and links are, much like the plottings of the show itself, graphed as paths emanating from a central vertex, the first episode. Consequently, our movements outward from the center are similarly a movement outward through the

various times that a connection between vertices is made, a fairly straightforward proposition until *The LOST Experience* is figured in, where connections are crossed and highly directional. In what follows, I present a video that highlights this movement, and a series of graphs that also highlight different aspects of the *LOST* universe, ranging from the In-and Out-degrees of the network to the centrality of the sites themselves in the connections of the network as a whole:

Figure 3.13: Navigating the *LOST* network

<http://www.youtube.com/watch?v=D10nbw9HJfI>

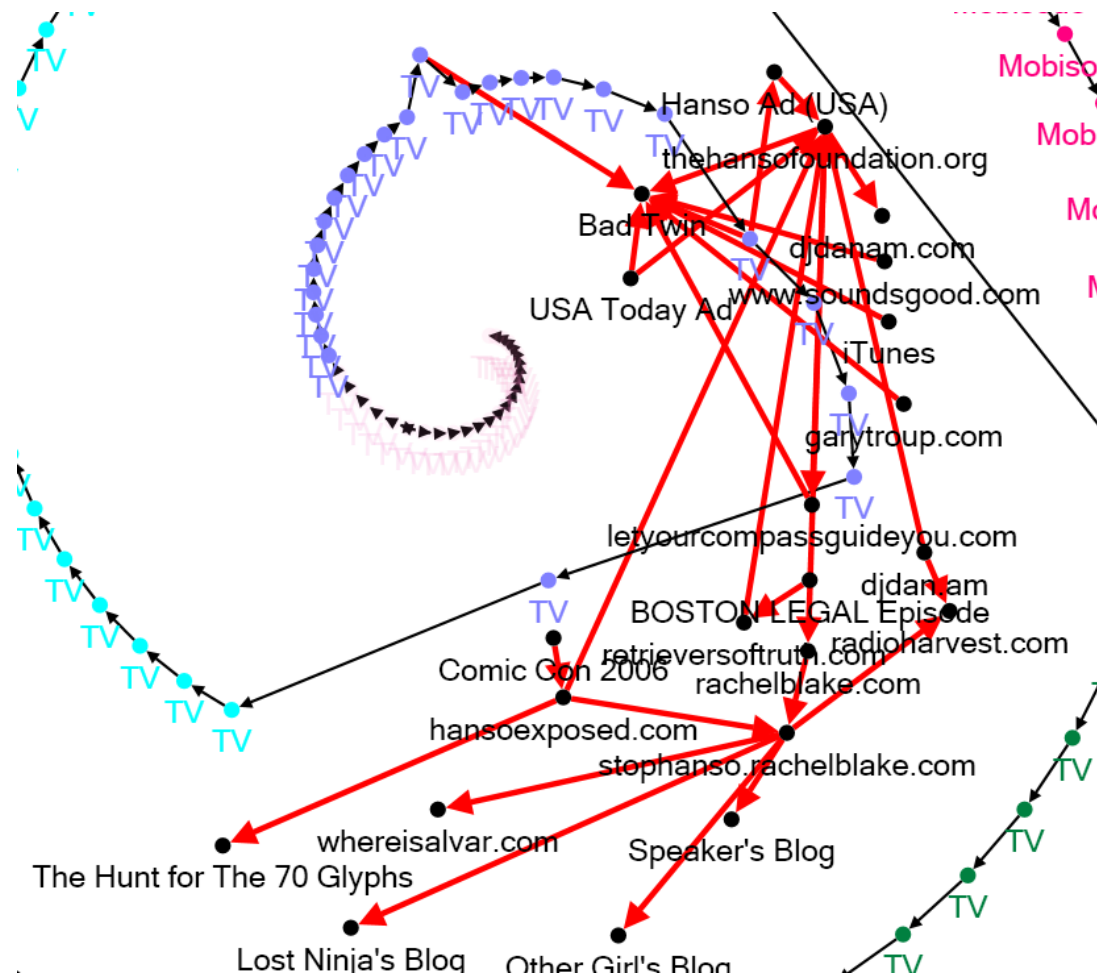


Figure 3.15: *The LOST Experience Close-up*

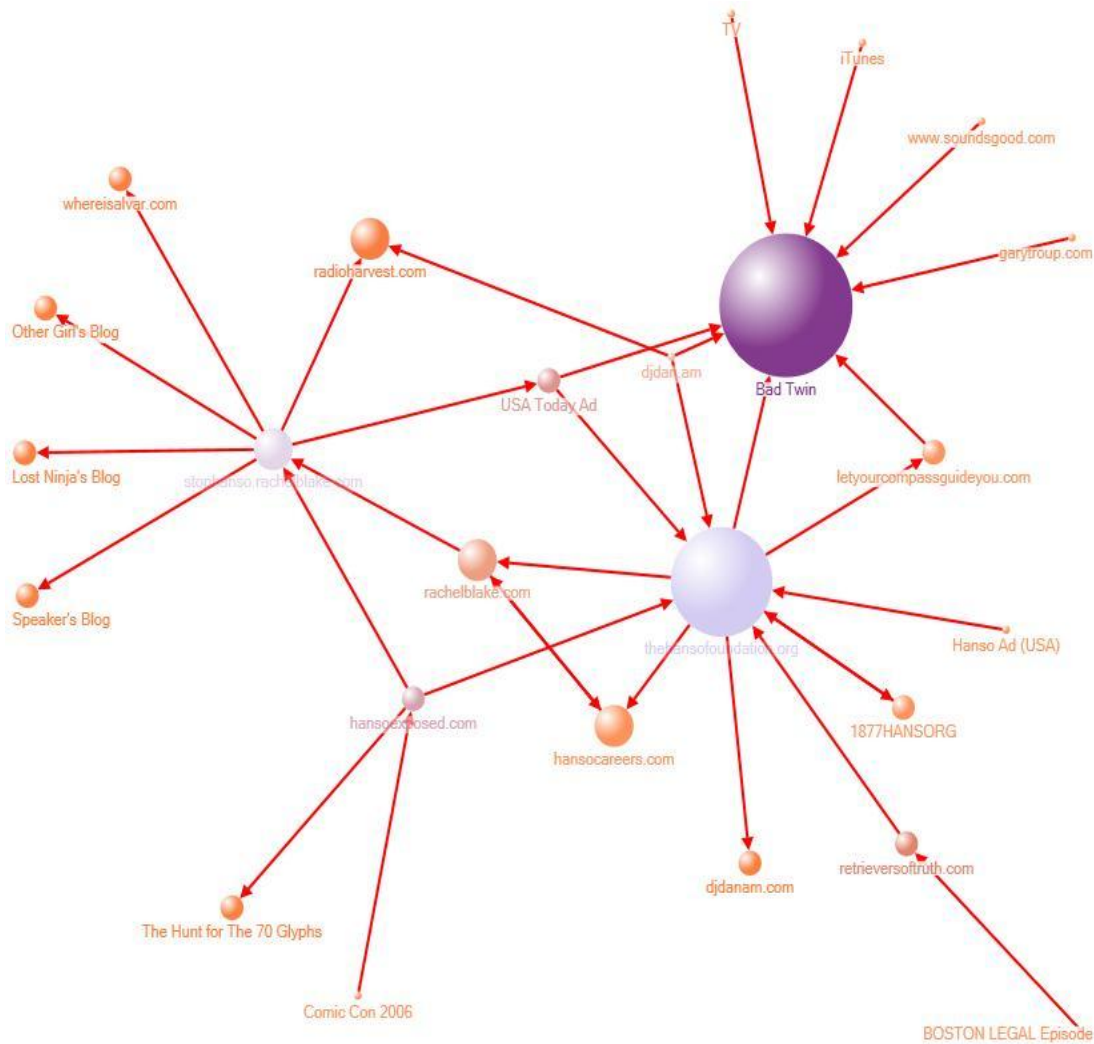


Figure 3.16: The *LOST Experience*, extracted from the larger *LOST* network.

[Darker blue vertices have a higher Betweenness Centrality; vertex size is a function of the vertex's In-Degree (with smaller vertices possessing smaller values, and vice-versa); vertex opacity is a function of a vertex's Out-Degree (the more transparent the vertex, the higher the Out-Degree)]

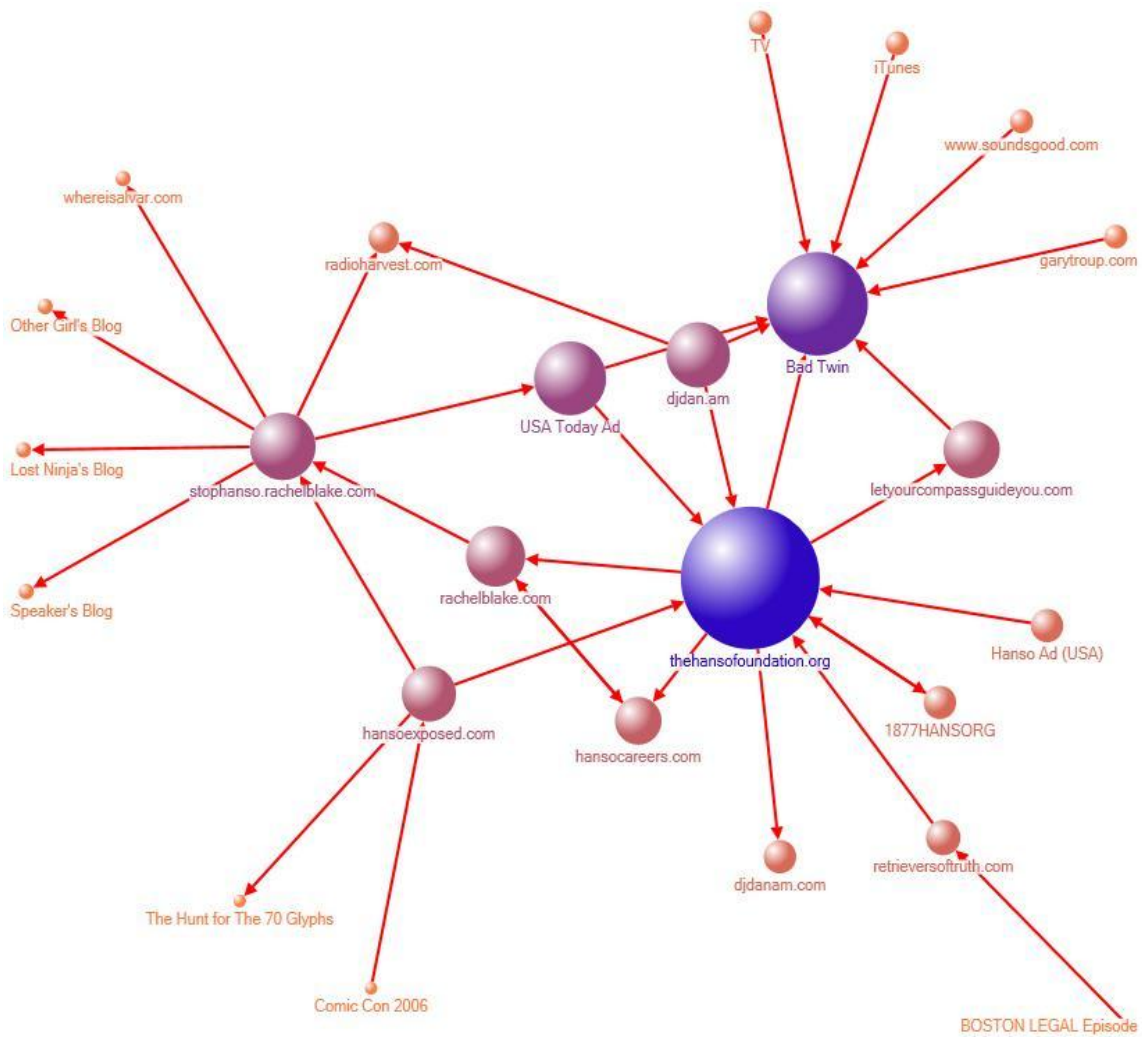


Figure 3.17: *LOST* with Eigenvector Centrality as a function of a vertex's size and color.

[Vertices with larger Eigenvector Centrality measurements are correspondingly larger in size and darker blue in color.]

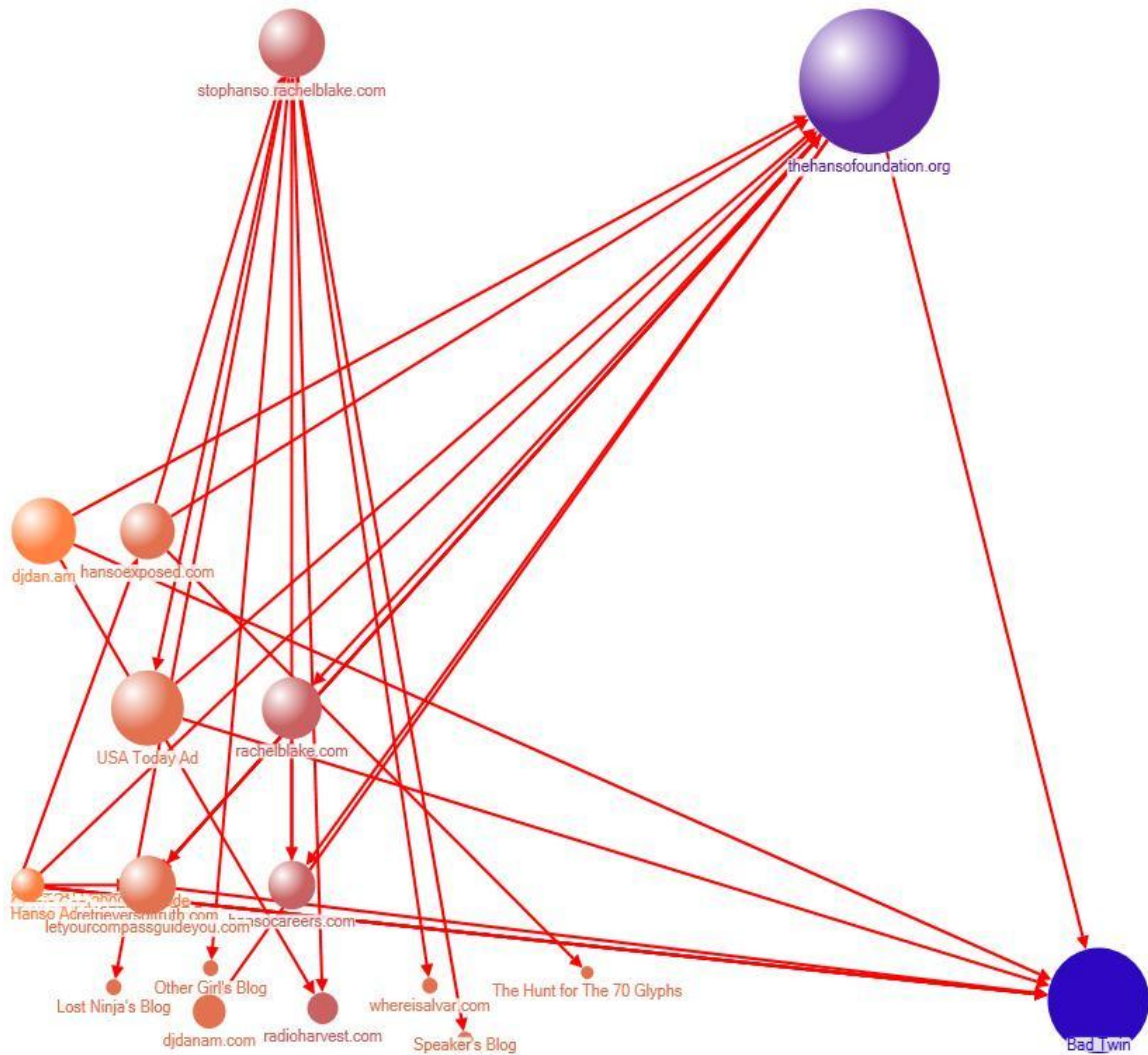


Figure 3.18: The *LOST* Network layed out as a function of Eigenvector Centrality, and positioned respectively on the X and Y Axes via In- and Out-Degree (i.e. In- and Out-degree measurements with higher values are placed further along their axes)

In Figure 3.14, we see the totality of the *LOST* network, with the TV shows and mobisodes following a linear pattern that moves spirally outward towards the show's conclusion. Omitting *The LOST Experience* ARG, it's apparent that while *LOST* has been consistently praised for its narrative complexity and plays on both serial and series formats, these benchmarks were achieved almost entirely though regular, *mono-media*

distribution, where the intricacies of plot and story were accomplished via a complicated interweaving of storylines and, perhaps more importantly, questions that were almost always answered with more questions. Complexity was not, however, realized through transmedia methodologies, at least as far as platform-to-platform dynamics are concerned³⁰. This is an important distinction, I think, that is only clarified by the graph itself, where the paths of *The LOST Experience* are designated by the wide red links (see Figure 3.15 for a closer view). It's interesting to note that in order to create parallelism in serialized content structures, the parallel content must exist outside of the more regular serializations themselves, otherwise there is the risk of it becoming *too* integrated within the normative structure of the serialization. This is seen clearly in all of the visualizations of *LOST* presented here, where *The LOST Experience ARG* exists as a highly-developed cluster of vertices with pronounced network motifs that intercedes in the otherwise non-remarkable structure of *LOST* as a whole. Importantly, it is precisely because of the directionality of the links that lead *from* the television show *to* the ARG that such a parallel structure can exist; if too many cues led to the television show from the ARG, it runs the risk of integrating itself too directly or, more importantly in a network context, creating vast structural holes that would need at least minimal allusional

³⁰ Even so, as I argue in the final chapter, *Peripheries*, this may in itself be a particularly transmedia phenomenon. In this case, however, transmedia practice becomes a mode that is then flattened and dispersed in mono-media contexts, allowing for complexity to emerge by positioning content in a layered or parallax hierarchy, complete with foreground/ background distinctions, character paths, etc.

cohesion in order to function as narrative. Consequently, by separating the causal-sequential elements of the ARG from the causal-sequential elements of the TV show and mobisodes, each cluster remained bound primary to itself.³¹

The Pragmatics and Poetics of In- and Out-Degrees

There is, however, one notable exception: the novel *Bad Twin*, a print codex set within the *LOST* universe written by a character, Gary Troup, who appeared only briefly in the pilot episode before being killed. His manuscript, however, survived, and was intermedially cued by the TV show in the first outward link leading to the ARG. In Season 2 Episode 13 of *LOST* titled 'The Long Con', a character named Hurley sat cross-legged by a fire on the beach, reading from a manuscript with curled edges titled 'Bad Twin' by Gary Troup. "Hey! Check this out! I found a manuscript in one of the suitcases. It's like a mystery book!", he exclaimed to another survivor, only to be ignored and dragged away towards some other task. While this is certainly a weak type of intermedial cue, its presence was an anomaly in an otherwise normal scene, a soft spot that was probed by many who recognized it for what it was and immediately conducted Google and Amazon searches for the book, finding listings for the novel with little to no information outside of

³¹ If we view *LOST* as a social network, it's also likely that graphing it will yield a similar parallel. Just as the *LOST Experience* ARG's structure exists outside of the *LOST* TV show's serialized structure, so too do the characters of *The LOST Experience* exist in social circles outside of those on the island, with little to no connections between any of them. Their partial concerns, however—investigating the motives of the Dharma Initiative and the Hanso Foundation—are still parallel (Ruppel & Hansen, forthcoming 2011).

them. The source cue was locatable, but the target was, at least at this point in time, fuzzy, to say the least.

The true nature of *Bad Twin*, and the location of the first real trailhead for *The LOST Experience*, didn't occur until some three months and six episodes later on May 3, 2006 in (and around) an episode named 'Two For the Road'. Here, the manuscript returned, finding its way into the hands of the roguish conman Sawyer, who is seen reading it on the beach. 'Sawyer, put the book down!' yelled Jack, leader of the survivors. 'It's not a book-- it's a manuscript! And I'm about to be the first and only person to find out who done it. I think I got it figured out', Sawyer replies. Almost instantly after Sawyer utters those words, the cantankerous Jack, much to the surprise of Sawyer, grabs the manuscript, tears off the ending tosses it into a nearby fire. Without concern for his own health, Sawyer reaches into the fire and pulls out what's left of the blackened, charred slab of typed paper, scorching himself in the process. But the manuscript is burned beyond repair, and it is never seen or mentioned on the show again. Ratified yet again by another inclusion in *LOST* (one that is, importantly, object-oriented but not causally situated), many went scrambling once more to search for the text, finding this time a full Amazon listing with author notes and links to interviews with Troup about the book. Additionally, the US broadcast of 'Two for the Road' also contained a commercial for the Hanso Foundation (in the UK, it was aired a day earlier with the broadcast of

the episode ‘Man of Science, Man of Faith’) with, importantly, a direct link to www.hansofoundation.org, the site where *The LOST Experience* first gains its momentum.

These connections can be seen in the initial movements through the ARG shown in Figure 3.13. Breaking the usual pattern of the serialized show, both the intermedial *Bad Twin* cue and the direct cue to the Hanso Foundation website are not only outward movements from the TV show, but also movements directed *inward* towards the nascent *The LOST Experience*. In one sense, this is a literal manifestation of the notion of driving an audience *towards* a particular object; in the case of transmedia networks, this direction almost always corresponds to the direction of the cues utilized. Yet in another sense, from the standpoint of the network there are two vastly different dynamics occurring here, dynamics that are tied directly to the number of links leading to and from each of these sites, motifs designated as the *In-degree* and *Out-degree* that each site possesses.

Bad Twin and the In-Degree Paradox

NodeXL provides a robust means to visualize many aspects of network behavior such as these, in a dynamic, illuminating way. By calculating a series of network metrics ranging from degree-oriented traits (i.e. the number of links leading to and from a vertex), centrality-oriented traits (i.e. the degree to which a vertex is connected to other vertices, particularly those that are highly-connected), betweenness-

oriented traits (the degree to which a vertex acts as a bridge or broker connecting other vertices together) and cluster-oriented traits (the degree to which a set of vertices displays cohesiveness and density, forming groups), NodeXL can assign properties to the visual elements of the graph that help to identify these motifs, a process that helps visually discover new patterns.. But what can advanced visualization methods like this teach us about the *LOST* network and, by extension, transmedia networks as a whole?

In order to answer this question, let's return to *Bad Twin*. While the novel was initially received with enthusiastic fan response (it debuted at #1 in the NY Times bestseller list), the excitement quickly tapered off, the result of a narrative that skirted the lines between the *LOST* universe and a more general genre-based mystery about a private investigator looking into potential human cloning. The intermedial cues, it seems, weren't in themselves an issue with regards to audience access, but the lack of ties to any other components in the network were. Indeed, as the novel progressed, the lack of any cues tying *Bad Twin* to the remainder of the *LOST* network crippled its role immensely. While both the Hanso Foundation and Charles Widmore (a shadowy figure who plays a large role in many of the events in *LOST*), are included in the novel, their mention is brief and, in the case of the Hanso Foundation, almost imperceptible. Indeed, the only mention of the Hanso Foundation is a passing reference to their name when Paul, the PI, gets off from an

elevator on the wrong floor and sees a strange lab with the company's logo adorning it. And that's it. No further connections are made within the novel, essentially isolating it from the rest of the *LOST* network. *Bad Twin*, it seems, contained a multitude of *inward* directed links, but little to no outwardly directed links. While this might seem like a shrewd move designed to sell books, the visualization of the *in-degree* metrics of the *LOST* network shows that there were consequences to it that were felt network-wide:

it is also the *most* connected site in the whole *LOST* network. Even so, *Bad Twin* is far from a liminal zone at all—in fact, it is a *terminal point* for many of the network connections that were made up to that point. By mapping the In-Degree of each vertex—the number of incoming links a vertex receives—to the visual attribute of size and color (see Figure 3.19), we can see the spaces in the network that show a privilege towards *incoming* connections. Surprisingly, *Bad Twin* displays the highest in-degree by far with a score of 9 (links leading to the novel from 9 different sources) compared with an average in-degree of 1.1. In a practical sense, these results might seem to reflect the material makeup of *Bad Twin* itself—as a print novel, and as a particularly object-oriented one at that, we might not expect it to link so readily to other sites. But as a terminal point in the network, one whose status has been privileged by the number of links leading to it, *Bad Twin* amounts to the structural network equivalent of a dead-end, a bricked in wall hidden behind an ornate door. In short, *Bad Twin* may have disappointed not simply because it didn't examine the universe of *LOST* in enough detail but also because there was no way to move from the site to any other locations in the network. To put this yet another way, *Bad Twin* didn't fail because of its in-degree but, instead, because it had no out-degree, no means of connecting its content to any other site. Consequently, it's not possible to view *Bad Twin* in casual-sequential terms but rather only in object-oriented contexts.

So what happens when we take the opposite tact and examine the network via the *out-degree* of its vertices? The results point to a tension within transmedia network that has, to this point, remained hidden, namely the correspondence between the plot-oriented concerns of a particular site and its status in the network as a whole:

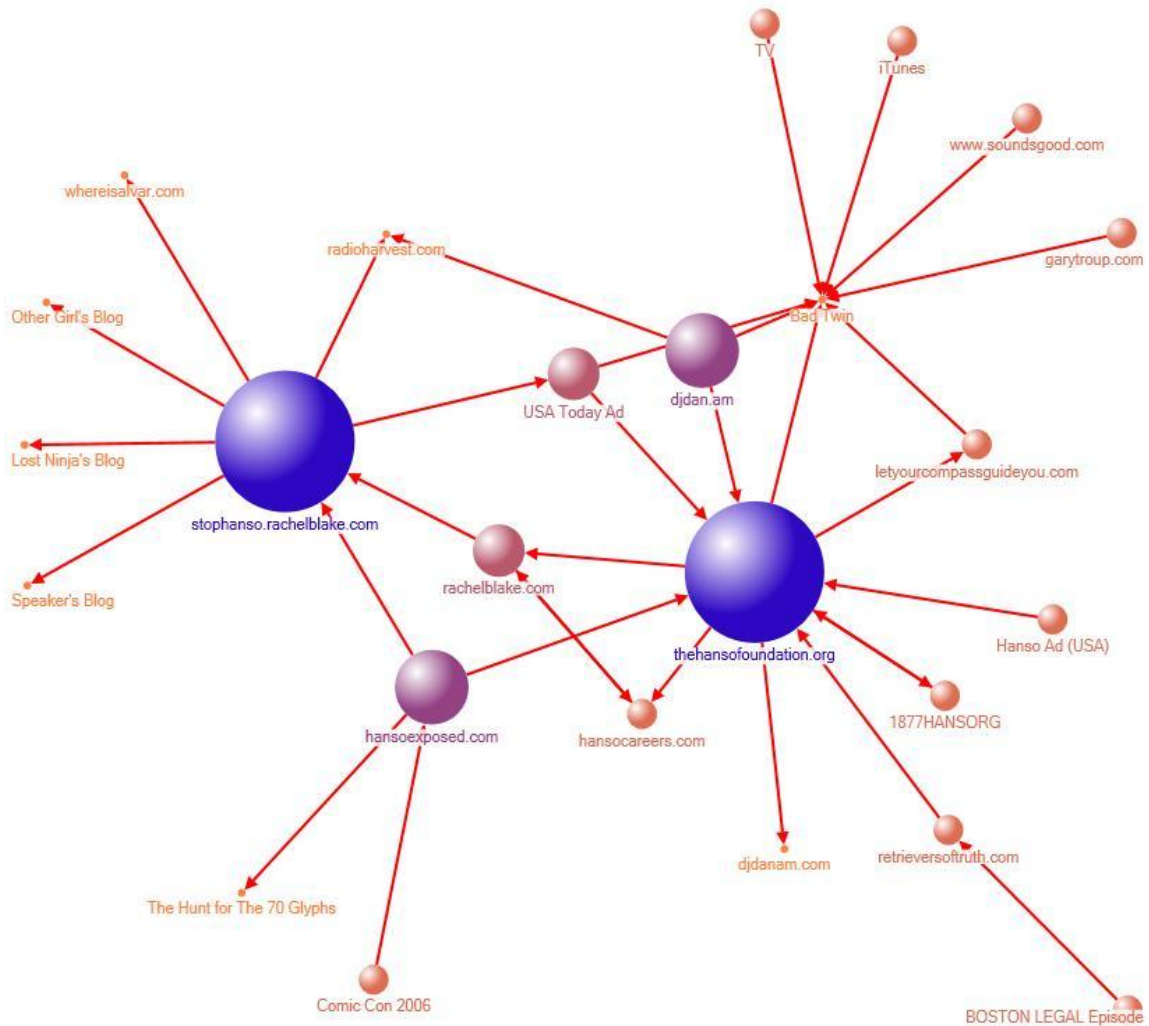


Figure 3.20: The *LOST* Network with Out-degree Visualized as Size and Color Attributes

Seen above in Figure 3.20 is a visualization of the out-degree metrics of the *LOST* network—the number of outgoing links in each

vertex—rendered with scheme that assigns vertex size and color as a function of higher values. In such an arrangement, *Bad Twin* is barely even noticeable, a small sphere surrounded by several larger ones, reflecting its isolated status as a terminal point in the network. Yet there are other, more pronounced dynamics of note here, dynamics located primarily on the stophanso.rachelblake.com and thehansofoundation.org vertices. As *The LOST Experience* ARG progresses, Rachel Blake's attempts to expose and ultimately end the operations of the Hanso Foundation by tracking down its executives are met with an equally forceful (if somewhat clumsy) counterattack from the Hanso Foundation itself, particularly by the actions of Thomas Mittelwerk, Hanso's sinister President and Chief Technologist. Acting through stophanso.rachelblake.com and working outwardly through a series of sites ranging from hansoexposed.com, djdanc.com and various blogs, Blake's investigation publically reveals that not only did Mittelwerk overthrow Alvar Hanso, the benevolent founder of his titular organization, but he also trafficked in organ harvesting and was plotting a genocidal biological attack in Sri Lanka. As Blake comes closer and closer to the truth, however, she meets resistance from Mittelwerk, who not only blows up the Hanso building, but also hacks several sites to challenge Blake and threaten global security.

Interestingly, the tension between both the two characters and their corresponding information campaigns can be readily seen in the

out-degrees of the network: as *The LOST Experience* progresses, the outgoing links from both stophanso.rachelblake.com and thehansofoundation.org form a series of pathways that reflect these nature of these tensions. In Mittelwerk's attempt to further his agenda, for example, he posts a series of job listings on hansocareers.com (the outgoing link for which is found in thehansofoundation.org) for, among other things, a personal assistant with experience in 'cryptography, comparative religion, molecular biology' and an organ courier with a 'a working knowledge of tissue-transplantation procedures and the latest pharmaceutical agents'. Recognizing the motives of these hires, Blake hacks hansocareers.com, posting links to the hack on both rachelblake.com and embedding one in hansocareers.com itself for a subdomain she created on thehansofoundation.org which acts as a guide for other sites in the network. Similarly, in order to counter what Mittelwerk felt was the expository information contained in *Bad Twin*, a press release was issued through thehansofoundation.org which was, in actuality, a reprint of a full page USA Today ad that denounced the book and guided readers via a direct cue to thehansofoundation.org where they could learn more about their practices. Predictably, Blake stepped in to counter this campaign with an outward link from stophanso.rachelblake.com that referenced both the ad and directed players to Mittelwerk's response. Once again, the *outward* nature of the cues here are often inseparable from the content they connect.

If we were to follow these connections over their distribution times (i.e. the time each edge connection was made), it would similarly amount to a record of the attack-counterattack narrative that *The LOST Experience* develops over the course of its run. Mittelwerk directs players towards one site, Blake counters by directing players towards either her hacks of that site or another site that challenges it. The out-degree measurements of the *LOST* network, then, come to represent the narrative tensions present in the ARG, where the expository movements from one site to the next build towards the takedown of Mittelwerk and the subsequent control of his expressive domains. Indeed, by the time the ARG reaches its conclusion on September 25 2006, Blake has managed to fully assume control of all of the outbound links directed from Mittelwerk's sites, a move that effectively renders him defeated.

Another measurement, Eigenvector Centrality, offers a similar take on the roles that Mittelwerk and Blake play in *The LOST Experience*. Eigenvector Centrality, or the measurement of how central a vertex is based on the *connections of the vertices it is connected to*, allows us a means of ascertaining a site's relative importance to the network it belongs to. A vertex might have a small number of connections, but if it is connected to vertices which in themselves are highly connected, it will receive a higher Eigenvector rating than if it simply the same number of connections to isolated vertices. In other words, because highly-connected connections yield a greater number of possible paths through

a network than do isolated connections, Eigenvector centrality is really about a vertex's importance to the network as a whole; remove a vertex with a high Eigenvector centrality, and the network is tangibly altered. Remove a vertex with a low Eigenvector centrality, and the disruption can be accommodated elsewhere. As Derek Hansen argues in discussing Eigenvector centrality, 'Networks are as much about the attributes and patterns of connection among neighbors as they are about the attributes and connections of any individual' (Hansen 2010: 41). In the case of the *LOST* network, a visualization based on Eigenvector centrality yields the following graph:

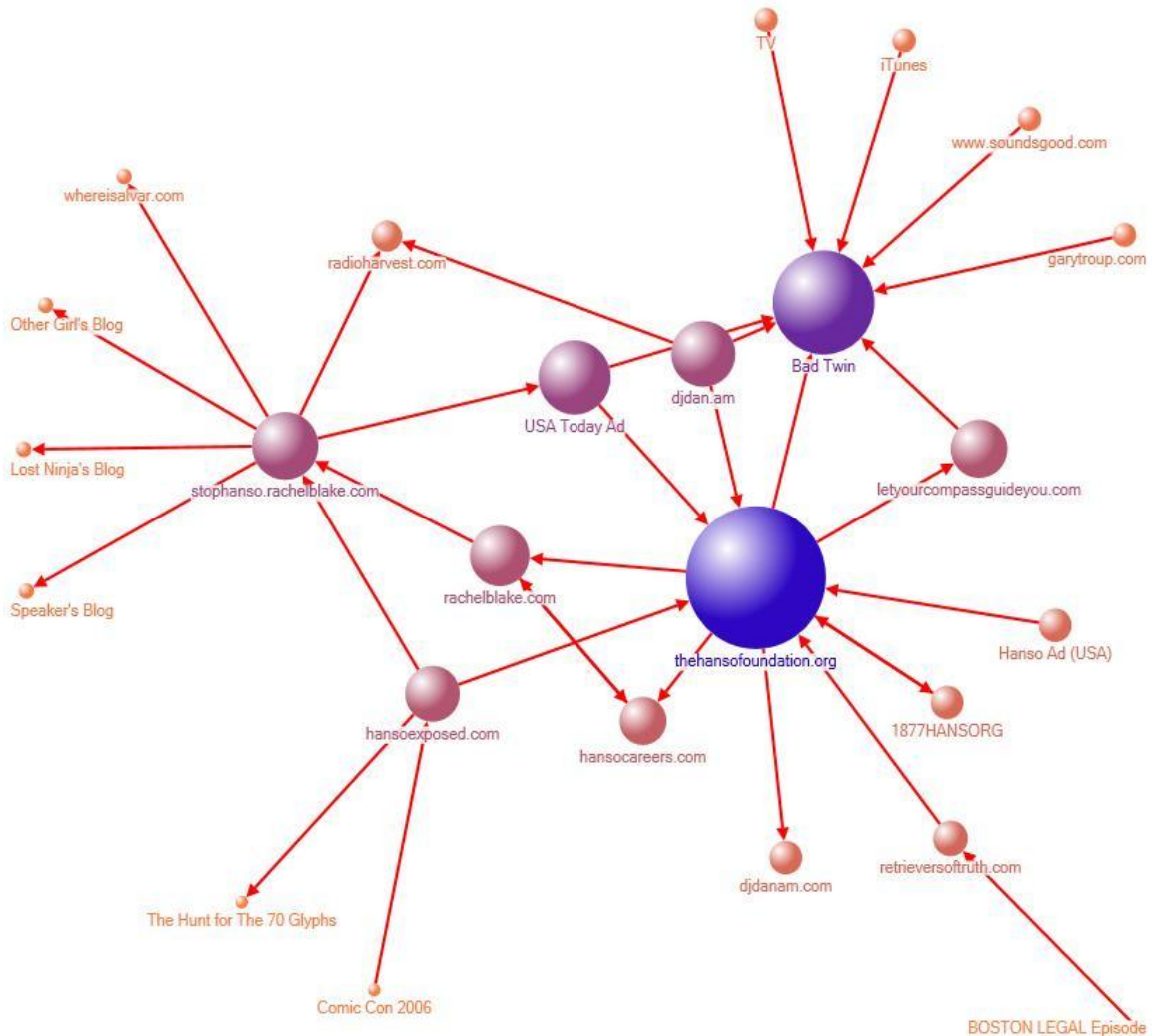


Figure 3.21: The *LOST* Network with Eigenvector Centrality Visualized as Size and Color Attributes

In this visualization, The Hanso Foundation is literally *central* to the entire network—it is the most centrally connected vertex of *LOST*, the component that, if removed from the graph, would render many of the connections present there incomplete, with vertices becoming islands that have no links connecting them to any other network location. Again, we can see here the incredible ways that transmedia network topography often mimics the narrative dynamics that it structures. Just as removing

The Hanso Foundation from the narrative of *The LOST Experience* would reduce it to incomprehensibility, so too would removing thehansofoundation.org from the network reduce the network's functionality considerably. We also can find here further evidence of the degree to which *Bad Twin* was positioned as a crucial network component and then stranded later on when its narrative didn't conform to the overall design strategies of *LOST*'s producers: *Bad Twin* is second only to thehansofoundation.org in terms of network centrality, yet it still functions only as a terminal point for the network, the space where numerous vertices converge, while the paths they created recede.

So what can we take from this that applies to transmedia networks as a whole? To be sure, not every transmedia network is concerned with power issues and the back-and-forth struggles between two individuals and, as much, we might not expect that in- and out-degree measurements have the same corresponding narrative significance. But if we view in- and out-degree metrics as a means of measuring which sites are positioned to be *acted upon* or *influenced by* other sites or, in the case of out-degree, *acting upon* and *influencing* the content or other sites, it becomes apparent that the direction of a vertex's links is ultimately a means of constructing a highly complex and incremental means of structuring transmedia interpretation as a function of networked operations of several sites. In-degree heavy sites are inordinately influenced by the modes, materialities and information of

the sites pointing towards them, while out-degree heavy sites are the ones doing the influencing. As such, it's possible to argue that by tracking the in- and out-degrees of sites, we can at least cursorily sketch out an order of influence for how interpretation is controlled in transmedia networks, one that leans heavily towards the perspectives of the platforms themselves. But even in the midst of these intricacies of design, *LOST* is a relatively small network, composed of less than one hundred sites. What happens, then, when the fiction in question contains two, three or even *four times* that number? How is coherence and continuity handled on such a massive scale? In order to address these questions, I turn now to a full-scale investigation of the *Heroes* network, a massive fiction whose strengths and shortcomings each are reflected by the process of visualization.

Controlling Complexity: The HEROES Network

'[T]he ultimate product of understanding is a causal network that represents the relationships between the causes and the consequences of events in a story.'

—Richard Gerrig
(1993: 46)

On September 25, 2006, the television show *Heroes* launched on US television, beginning a four-and-a-half year cycle that would create what is, arguably, the largest and most complex transmedia network ever conceived. Over the course of this time period, *Heroes* created a vast Universe of intertwining stories premised on the idea that human

evolution occasionally produces unique and ‘superhuman’ traits, with many of these numerous “gifted” individuals slowly realizing they have special abilities. Some, like the politically-minded Nathan Petrelli, can fly; others, like the small-town Texas cheerleader Claire Bennet, can heal themselves; while others, like Matt Parkman and Eden, can read minds and influence behaviors. In designating *Heroes* as a particularly complex network, however, I am not suggesting that it offers anything new or distinctive as far as content goes. Indeed, several storylines from *Heroes* seem to be lifted almost directly from various properties such as *The Watchmen*, *X-Men* and *Jazan Wild’s Carnival of Souls*, a graphic novel that ran from 2005-2006 and, as its creator Jason Barnes explains, is almost identical to Season Four of *Heroes* which preceded it (Barnes later sued the creators of *Heroes* for IP infringement). Even in such a dubious set of contexts, I argue that it’s still valuable to study *Heroes*—perhaps even more so—not because of the content of its storylines, but because of the way it *structures* this content in a transmedia network framework, leading to new relationships between characters, locations and objects than would have been impossible in the mono-media works that it may draw heavily from.

The act of visualizing *Heroes* as a network is a coupling of both organizational coherence and connection. This occurs because of an inherent bias that migratory cues and the causal-sequential aspects of narrative give towards directionality, a bias reflected additionally by the

internally-based story times that influence a cue's placement within the network as a whole. In practice, this means that in populating NodeXL with edges culled from *Heroes*, the date that the connection took place, i.e. the date of site's distribution, never took precedence over the dates existing internal to the fiction. However, the date of each connection (e.g. a site's distribution time) was recorded and used to sort the sites themselves. This allows not only for a dynamic view of the network's growth over time when each site is highlighted, but also a view of the important ways that sequence, causality and object-orientation are elements that become injected into the network's topology over time, and are not produced simply as a matter of synchronic serialized consequence. For example, a site released months after another site still might contain a cue that inserts itself (at least partially) into the sequence of events present there, albeit at a date earlier than those present at the prior site. If we were to chart the cue's direction based only on distribution time, the cue would inevitably point towards the prior site, when in actuality the content present there becomes interpolated into a prior sequence that is only then established. Both internal and external time, then, are crucial in constructing a functional network visualization, one that reflects both the network's connections as a dynamic that develops over time, and the network's narratives as a process that is realized over a fictional internal time.

Composed of some seven different types of sites (listed below), 345 unique vertices and 394 unique edges, the *Heroes* network is unquestionably one of the largest financially and artistically realized transmedia fictions in history, drawing from several transmedia frameworks ranging from simple transmedia sequences to ARGs, and a series of platforms ranging from TV to graphic novels to fictional websites to phone to text messaging to even, at one point, interactive fiction, *Heroes* deftly negotiates a vast multiplicity of modalities and an even vaster multiplicity of sites. In many ways, then, *Heroes* represents the most pronounced test yet of this system for studying transmedia fictions as networks. Quite simply, *Heroes* is massive, constructed of sites that work towards creating profoundly realized character pathways, temporalities and object-orientations. The question of how to address this kind of scale, though, is a difficult one, as with such a large degree of choice comes a large degree of variables, at least as far as *potential* audience interactions is concerned. Consider, for a moment, the number of possible permutations in the network. In the *Heroes* network, there is a nearly 1:1 relationship between sites and links (394 edges; 355 vertices). Yet if we imagine that these are 'random' sites, that is, sites that can be chosen without any thought given to narrative coherence, there are a nearly infinite number of permutations/ combinations ($345! = \infty$) that the *Heroes* network can take. In other words, without a highly developed means of structuring and maintaining connection amongst

sites, a network of this size would quickly descend into chaos. Of course, patterns of serialization have long established a means through which expectations of content distribution structure our engagement, providing an expectation of sequentiality that is dictated at least partially by the connections between each installment. While serialization within one medium is often easily maintained through the interaction patterns of the medium itself, in the case of complex networks such as *Heroes* the construction of connection and connectivity must rely on more than simply serialization patterns *within* a single platform, otherwise the result would be a network where each platform is serially related to only itself. In what follows, I define each of the sites involved in the *Heroes* network:

- The Television Show: Developed and distributed by NBC-Universal group over the time period of September 25, 2006 through February 10, 2010, the *Heroes* TV show spanned some 77 one-hour episodes and four seasons, each of which was subsequently broken into Volumes (Season One: Volume One, ‘Genesis’ [23 episodes]; Season Two: Volume Two, ‘Generations’ [11 episodes, shortened by the 2007-2008 Writer’s Guild of America strike]; Season Three: Volume Three, ‘Villains’ [13 episodes] and Volume Four, ‘Fugitives’ [12 episodes]; Season Four: Volume Five, ‘Redemption’ [18 episodes]). The *Heroes* TV show was a serial at heart, involving a large rotating cast of characters and multiply-

plotted episodes with both micro- and macro- narrative arcs that culminated at the close of each season and, in some cases, carried over to the next. At first a critical and audience hit, *Heroes* gradually declined in popularity as each season progressed, and was eventually cancelled on May 14, 2010 due to high production costs and diminishing returns. The *Heroes* TV show is referred to in this study by both its Season and its episode number (for example, Season One Episode Twelve would be listed as S1E12).

- The Graphic Novels: From the outset of *Heroes*, graphic novels were released in a somewhat regular pattern following the conclusion of each episode and, in off-season periods, on a semi-regular basis each Monday. Beginning the same day as the television show and ending on June 9, 2010, the *Heroes* graphic novels spanned some 173 issues, most of which were around 7-9pp. each and composed individually by dozens of different writers and artists. Unlike the TV show, the *Heroes* graphic novels were primarily focused on a select individual in the *Heroes* universe, with micro-serializations occurring through its run (i.e. 4-5 issue arcs). Importantly, these micro-serials were not always released in order, meaning that as a whole, the fluctuation of the stories contained in the graphic novels matched in many ways the TV show as character stories were introduced and then dropped for other stories, only to reappear again later on. Also, each Season

and Volume of *Heroes* was associated with a different set of graphic novels (Season One, Volume One: GN1-51; Season Two, Volume Two: GN52-103; Season Three, Volume Three: GN104-122; Season Three, Volume Four: GN123-144; Season Four, Volume Five: GN145-173).

- The Websites: In addition to the TV show and the graphic novels, *Heroes* incorporated several websites that were located directly within the fictional universe of the narratives. Primarily related to the *Heroes 360° Experience* and *Heroes Evolutions*, two branded Alternate Reality Games set within *Heroes*, these websites often served as hubs where character-audience interaction was maintained. Audiences could variously use the websites to access character profiles, object schematics and location maps, explore company websites and access videos and other media mentioned by not directly shown in other sites. Many of the characters in *Heroes* also ran weblogs and kept MySpace and Facebook pages, some of which contained important real-time information pertaining to different storylines in the series. Interestingly enough, unlike many of transmedia properties, the many websites of *Heroes* are still functional, allowing for a detailed recreation of the networks created through them.
- The Phone: At one point in Season One in both the TV show and certain websites, a phone number was shown that, when called,

directed audiences into the voicemail system of Primatech Paper, the corporate front for The Company, the nefarious organization that hunts down many of the characters in *Heroes*. Audiences could leave messages and access mailboxes via this number, and it ultimately directed them online to websites that introduced the ARG components.

- The Novel: On December 26, 2007, Del Rey publishing released *Saving Charlie: A Novel* by Aury Wallington. Cued by an intersection with an episode in Season One, *Saving Charlie* told the story of how Hiro, a time-traveler, went repeatedly into the past to save the woman he loved from being murdered by the evil Sylar, a plotline only hinted at in other sites. The novel contained no other cues other than those leading to it.
- The Webisodes: Beginning July 14, 2008 and ending November 30, 2009, the *Heroes* webisodes were essentially short-form TV episodes released online. Containing the same production values and many of the cast members of the TV show, the webisodes were aesthetically seamless with the TV show, yet focused on characters only seen the background of the TV episodes. A total of 30 webisodes were released by the time *Heroes* ended.
- The iStories: The *Heroes* iStories were a series of web-based text and, occasionally, image and video interactive fictions that allowed audiences to choose different paths in a branching, Choose-Your-

Own-Adventure style narrative. More often than not, each story wound up with the same narrative outcome since ‘failing’ meant returning directly to the beginning of the iStory chapter to start again. At one point in the iStories, audiences had to navigate to other websites in the *Heroes* universe, access content located there and then return to the iStory to plug it back in.

As we will see, though, these sites aren’t simply ends in themselves but, instead, valuable pieces that contribute uniquely to the overall functionality of the network itself.

The Heroes Network: A Topological Overview

Seen below in Figure 3.22 is a directed graphing of the *Heroes* network, rendered with the Fruchterman-Rheingold layout scheme³², with each vertex visually marked to signify the platform that it represents (see Key beneath graph for breakdown of platforms). It is important to note from the outset that the graph seen here is relatively untouched by any metrics calculations or layout preferences that NodeXL offers (and were seen previously in the *LOST* network). Instead, only slight adjustments were made that might aid in the graph’s legibility such as, for example, dragging a vertex a small distance to open space so that it

³² The Fruchterman-Rheingold layout algorithm is a *force-directed* scheme that treats vertices as ‘rings’ and edges as ‘springs’ that exist between them. The advantage of a Fruchterman-Rheingold layout is that in modeling a push-pull propulsion between vertices and edges, the visualized graph guarantees that topologically ‘close’ vertices will be visualized as such, and vertices that are farther apart are also graphed correspondingly. This is particularly useful in transmedia network contexts as it places similar elements, i.e. elements that contain shared or closely-related events, in a position relative to that closeness, making the graph itself a potential chart of the narrative relationships it models.

doesn't overlap with another vertex. I mention this because it is important to remember that in highly complex networks, that is, networks that display significant topological and topographical features that influence their functionality, it is the patterns of connection that in themselves influence the graph's layout and subsequent behaviors. Because of this, the graph seen below represents a network constructed and shaped entirely on a combination of patterns of serialization, causal-sequential relationships and migratory cue prompts. In other words, it is a graph built and sustained through internal narrative connection, with each vertex's location positioned relative to the connections it maintains. In this regard, what's fascinating to note about the *Heroes* network is not simply that the network itself maintains a large degree of connection given the somewhat untested use of transmedial link types, but that it does so in a way that gives rise to larger topological network features, such as scale-free distribution, that are usually observed in more unruly networks such as those found in biology (genetics, viral outbreaks), computer science and sociology. We must remember that the aim of this study isn't to show that transmedia fictions represent a network of texts as they are externally bound and branded (such a pursuit would only show the minimal conditions for networked connection) but, instead, that the internal mechanisms of transmedia connection—mechanisms that link regardless of the materiality of the platform—form a much more robust and intricately distributed network that is reconstructed at

various levels of complexity by audiences engaging with and *interpreting* the transmedia fiction as narrative. Or, should I say, *narratives*, because as we will see, the directionality of the *Heroes* network yields not one but many narrative pathways, each unique in their material and modal composition, as well as the spatiotemporal parameters that they cut through:

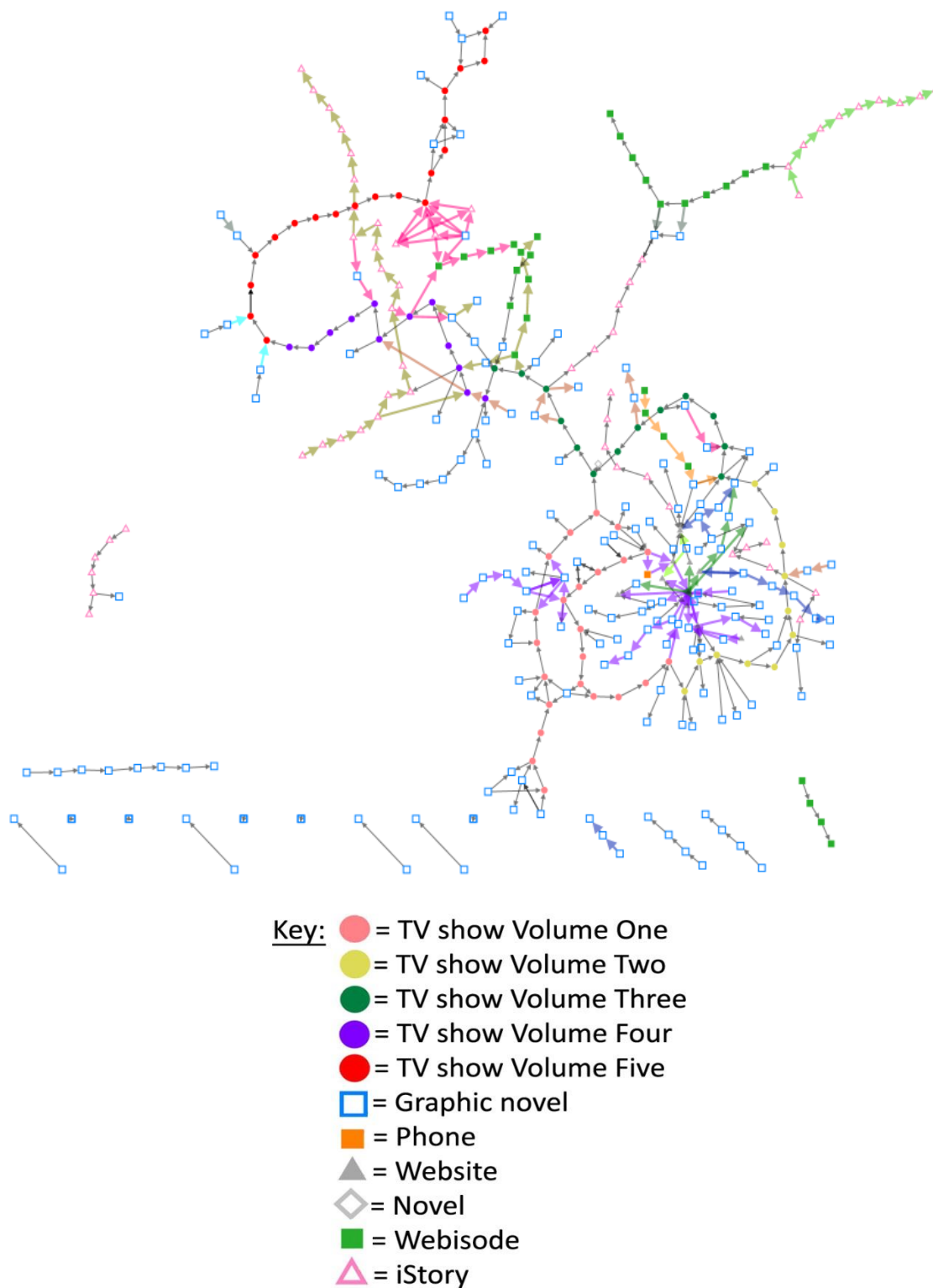
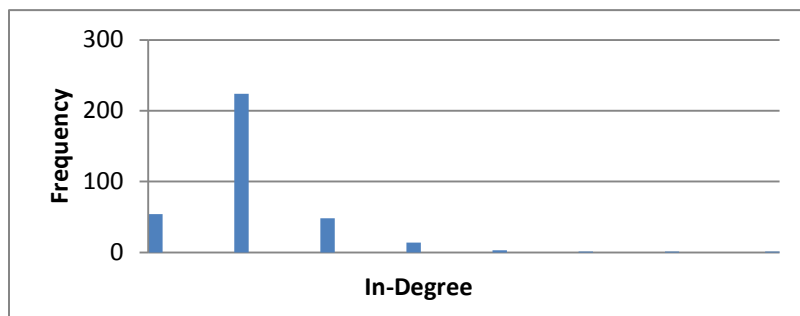


Figure 3.22: The *Heroes* Network

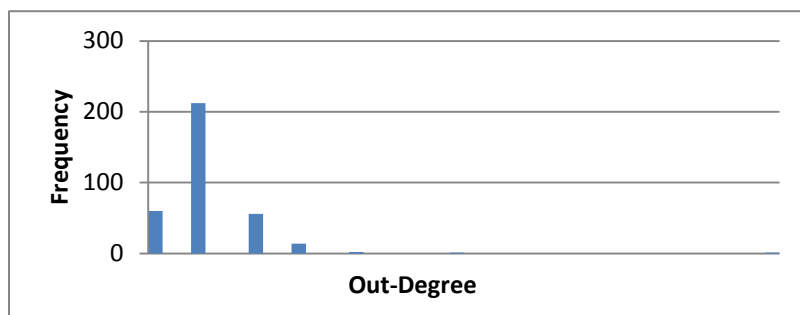
At first glance, the graph of the *Heroes* network is at once both oddly beautiful in its arrangements and wildly intimidating, its tangles of connections and vertices appearing at various points to be too dense to provide any analytic accessibility. But this is the value of visualization—it allows us to see through modes of representation that highlight as well as delimit complexity into coherent, manageable units. While visualization can be an end in itself³³, by visualizing transmedia networks, we can see patterns and behaviors that might have otherwise gone unnoticed.

As a whole the *Heroes* network displays behavior that is unquestionably *scale-free*, that is, the distribution of edges in the network follows a *power law*. This essentially means that if we were to choose several sites from *Heroes* at random, the In- and Out-degrees of these sites would vary, sometimes considerably:

³³ A stunning example of this is Chris Harrison's arc visualization of the numerous cross-references Bible, which exists as much for its aesthetic complexity as it does for the relationships its models (<http://www.chrisharrison.net/projects/bibleviz/>).



Minimum In-Degree	0
Maximum In-Degree	7
Average In-Degree	1.133
Median In-Degree	1.000



Minimum Out-Degree	0
Maximum Out-Degree	12
Average Out-Degree	1.133
Median Out-Degree	1.000

Figure 3.23: Histogram showing Minimum and Maximum In- and Out-degrees for the entire *Heroes* Network

In other words, there is no representative scale to the network's degree, hence the term, *scale-free*. Because of this distribution of edges, scale-free networks are inherently *fault-tolerant*, meaning that if any vertex is randomly removed from the network, the network as a whole

will not collapse. Interestingly, in the formation of scale-free networks, multiple *hubs* often appear that contain much higher degrees of connection than other sites. The trouble with such a network trait is that while these hubs maintain a large degree of connection in scale-free networks, the removal of a hub changes the network's topology considerably, shifting its topology from a large, highly-connected component(s) to several smaller, isolated clusters.

In *Heroes*, these scale-free properties correspond innately with many dynamics of transmedia practice. The ability to engage with several sites and neglect several others while still maintaining narrative coherence and continuity is ultimately a trait related to a similarly scale-free distribution of information that occurs in transmedia creation. In *The Matrix*, for instance, one of the largest critiques leveled at the fiction was that many of the sites, from the films to the graphic novels to the video games, were *too* dependent on each other. Neglecting any one element of the fiction, then, led to narrative collapse and incomprehensibility. This is, in many ways, a problem of connection, of a networking of narrative that places causal-sequential understanding in a transmedia framework that isn't scale-free but rather wholly subject to the collapse at any point. In *The Matrix*, there was no one site that took precedence over any other and consequently, removing any one site, even partially, fundamentally altered the narrative as a whole. So what role, then, do the edges themselves and their subsequent distribution across

the network play in defining the network both locally and globally? In order to answer this question, I will turn to a brief quantitative overview of the edges of *Heroes*.

A Quantitative Overview of Edge Distribution

In analyzing the *Heroes* network from a quantitative perspective, some noteworthy and integral dynamics arise that point to the possibility that, while *Heroes* mainly consists of one giant, highly-connected component (i.e. one cluster of vertices with no edges that don't connect to at least one other vertex in the component), each season of *Heroes* can also be considered its own region, bound to the global dynamics of the component but also exhibiting highly distinctive behaviors and patterns of connection that impact narrative and modal comprehension. First, over the course of its development, *Heroes* utilized all five cue types with the following regularity:

Of the 394 edges listed in the Heroes network....

- **Five (5) are Intermedial Cues**
- **Thirty-four (34) are Direct Cues**
- **Thirty-seven (37) are Intersectional Cues**
- **Three-hundred eighteen (318) are serialized/sequential content**

Here, we can see a rather obvious and wide disparity between the types of edges listed as *migratory cues* and the edges listed as serialized/causal-sequential content. As stated previously, serializations

aren't necessarily so much links as they are *expectations of connection* between sites and their content. These expectations of connection guide us to construct and reconstruct the sequence of events proceeding or preceding the site we are presently interacting with. The process of 'scraping' data from a narrative-oriented transmedia fiction like *Heroes*, then, is actually a process of causally and sequentially ordering a series of sites based on the presence of migratory cues, spatiotemporal continuity (i.e. internally serialization) and external markers such as 'Part 1, Part 2'. Consequently, each of the edges listed as serializations in *Heroes* conform to one or two of the following criteria: 1) they either are marked externally as part of a serialized sequence (i.e. *The Death of Hana Gitelman* 1&2) OR 2) they begin, continue or complete a sequence of events that began in another site and take place at relatively the same time and place with the same character(s) as the events previously encountered. This is not a point to be taken lightly, as this means that some 82% of the *Heroes* network is connected in this manner, and only 18% is connected by migratory cues. Put differently, a large part of the *Heroes* network relies on the audience's ability to piece together, (re)order and construct the causal networks related to these sequences, an act that becomes increasingly complicated as the network grows. While this would seemingly lessen my previous claims that migratory cues function as the basic building blocks of transmedia networks, I hope to show that not only do the 76 migratory cues found in *Heroes* comprise a 'loud'

minority that work in vital ways to bridge, structure and mark paths, but that they also enact content relationships between sites, such as the development of cross-sited narratives, that would be impossible to control with strictly serialized, unidirectional content. Similarly, while the uneven distribution of sites in the network means that TV and graphic novels might have a disproportionate influence over the events of *Heroes*, I argue that the remaining sites also compose some of the most heightened modal engagements of the network, and provide a more dynamic view of the network than TV or graphic novels can provide.

Focusing strictly on the edges themselves for a moment, though, we can see patterns of engagement begin to develop when looking at not only the edge types themselves, but also the *platform-to-platform traversals* that they enact. Table 3.1 below charts this dynamic specifically, listing the number of platform-to-platform traversals present in the network, as well as the edge type that enacts these movements:

Platforms Traversed	# of Edges	% of Total	Direct	Intersectional	Intermedial	Serial/Sequential
TV to TV	80	0.2030	0	0	0	80
TV to GN	38	0.0964	0	10	0	28
TV to iStory	2	0.0051	0	0	0	2
TV to Novel	2	0.0051	0	1	0	0
TV to Phone	1	0.0025	1	0	0	0
TV to Web	1	0.0025	1	0	0	0
TV to Webisode	2	0.0051	0	1	0	1
GN to GN	78	0.1980	0	0	0	78
GN to TV	47	0.1193	0	9	0	38
GN to iStory	6	0.0152	0	5	0	1
GN to Web	13	0.0330	9	2	2	0
GN to Webisode	1	0.0025	0	1	0	0
iStory to iStory	55	0.1396	0	0	0	55
iStory to TV	6	0.0152	0	0	0	6
iStory to GN	4	0.0102	0	1	1	2
iStory to Web	1	0.0025	1	0	0	0
iStory to Webisode	2	0.0051	0	0	0	2
Web to Web	9	0.0228	9	0	0	0
Web to TV	3	0.0076	0	1	2	0
Web to GN	9	0.0228	6	3	0	0
Web to iStory	0	0.0000	0	0	0	0
Web to Webisode	0	0.0000	0	0	0	0
Web to Phone	1	0.0025	1	0	0	0
Webisode to Webisode	21	0.0533	0	0	0	21
Webisode to TV	1	0.0025	0	0	0	1
Webisode to GN	6	0.0152	0	3	0	3
Webisode to iStory	0	0.0000	0	0	0	0
Text/Email to Web	5	0.0127	5	0	0	0
TOTAL:	394	1.0000	34	37	5	318
AVERAGE:	14.07142857	0.0357	2.310344828	2.551724138	0.344827586	21.93103448

Table 3.1: Edge Metrics for *Heroes* Network

Of the 394 total edges in the network, some 243 are comprised of mono-media movements between sites, such as TV-to-TV, GN-to-GN, Webisode-to-Webisode, meaning that the majority of our movements through *Heroes* take place in a mono-media framework. Yet even so, the depth of the *Heroes* network, i.e. the length of the shortest direct path from the beginning of the main component to the end, is at most 80 edges, representing the string of TV episodes bound together serially. Otherwise, the longest path of strictly graphic novels is 8 vertices (and it is an island, disconnected from the central component), the longest path of

iStories is 21 (all related to the same character), the longest Webisode-based path is 10, and the longest Web-to-Web path is a meager 3 steps across the graph. This means, essentially, that while the TV show could be watched in isolation to the other sites and still maintain a coherent narrative, once we venture into the transmedia side of things, it is literally impossible to find a path that takes one from the beginning of the end of the network without significant transmedia interaction.

Additionally, it's equally important to note that of these 243 mono-media traversals, a whopping 234 of them are initiated by serialized/sequential content engagement. In other words, by following a platform's content as a self-created sequence in itself. While this works decently enough with the TV show, which is structured to be self-sustaining, when we splinter off into other media, such as the anachronously ordered graphic novels, the branching iStories or the non-linear interactions that the websites require, we are thrown head-on into transmedia frameworks, as no one platform contains a 'complete' narrative in itself. Outside of the mono-media structure of this network, then, there is almost exactly the same number of migratory cue-based engagements between diverse platforms as there are serialized/sequential engagements. This lends considerable weight to the notion that migratory cues suture transmedia networks in fundamental ways, leading to relationships that serialization fails to sustain.

Yet there is a larger element to consider with *Heroes*, one that bears a possibly direct correlation, I argue, with the decay of the fiction's popularity over time—the presence of drastically different levels of connection occurring in each season. If we segment the *Heroes* graph into the five separate Volumes, a key feature of the graph's topology is made clear: each volume represents not only another chapter in *Heroes*, but it also signifies a different arrangement of material and modal interactions:

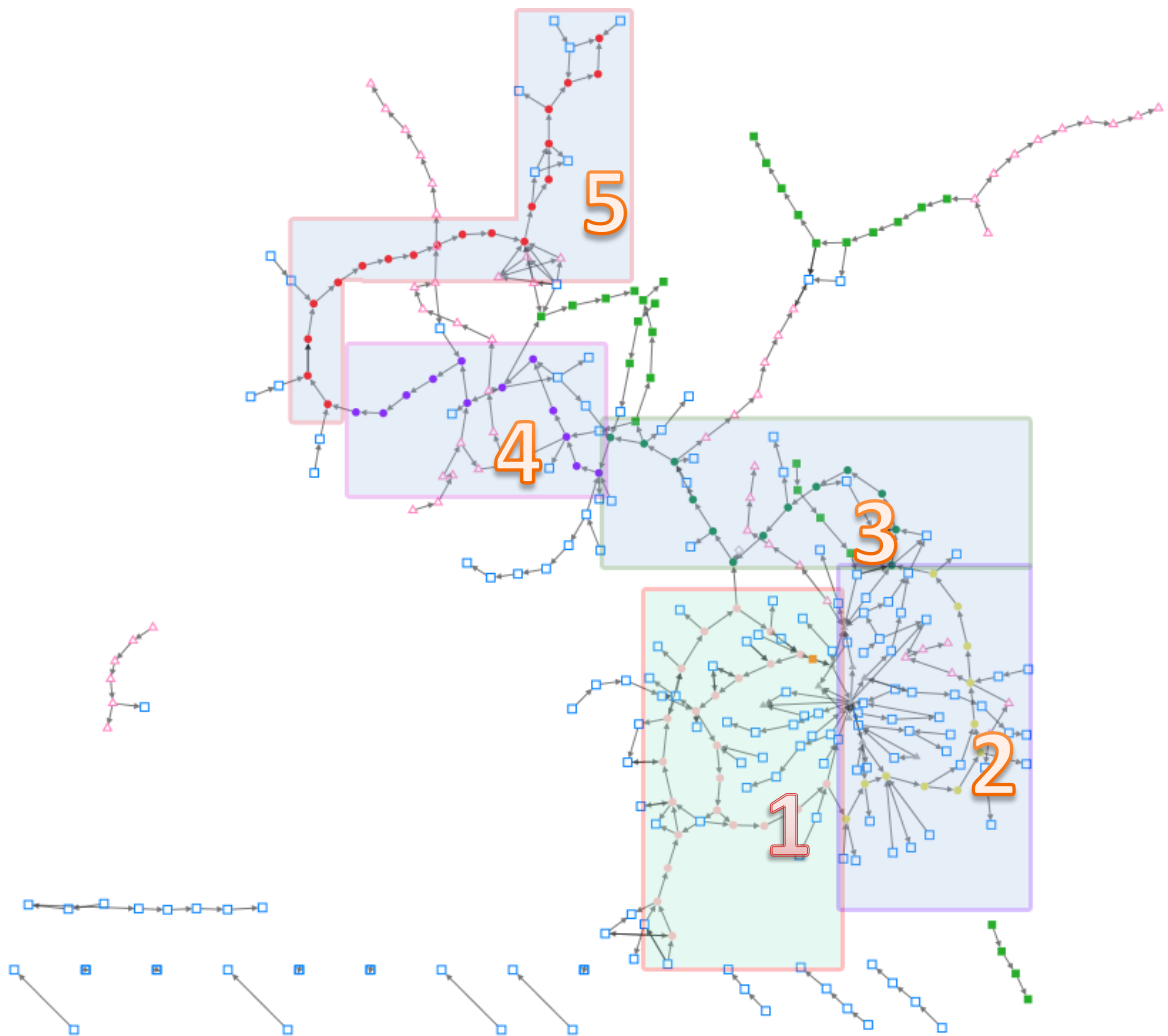


Figure 3.24: *Heroes* graph segmented into Volumes

In Volumes One and Two, there is an obvious and dense confluence of both TV-to-GN and GN-to-TV traversals, as well as a heavy integration of GN-to-Website, TV-to-Website, Website-to-GN and Website-to-TV shifts, the majority of which are guided through a combination of direct cues, intersectional cues and four of the five total intermedial cues. The result of this is a localized system within Volumes One and Two of heavily visually-oriented material, a privileging of static-to-kinetic (and vice-versa) visual engagement with television and graphic novels, and an interactional component related to the websites and the object-orientations cued by intermedial signals (of which the websites play a significant role). Because intersectional and intermedial cues require a remediative transduction between media and modes, this region is rich with sites containing traces of other sites, where a still image is given motion, a website only seen can now be browsed, a video described by in ASCII text can now be watched, and a character once seen in the background is now foregrounded in another platform. Relatedly, the predominance of direct cues in Volumes One and Two (seen below in Figure 3.28) means that while the many intersectional cues present here locate a given site in the knowledge-contingent, highly-specific spatiotemporal parameters of an event (thereby making it a 'weak tie'), there is an equally strong counterbalance of strong ties binding these sites, making it not only highly-navigable, but also highly structured

towards narrative depth. There is also a similar balance between the incoming and outgoing links leading to/from the TV show and various graphic novels. The TV show, then, was highly biased towards enacting connection in itself, a situation that isn't repeated in later Volumes.

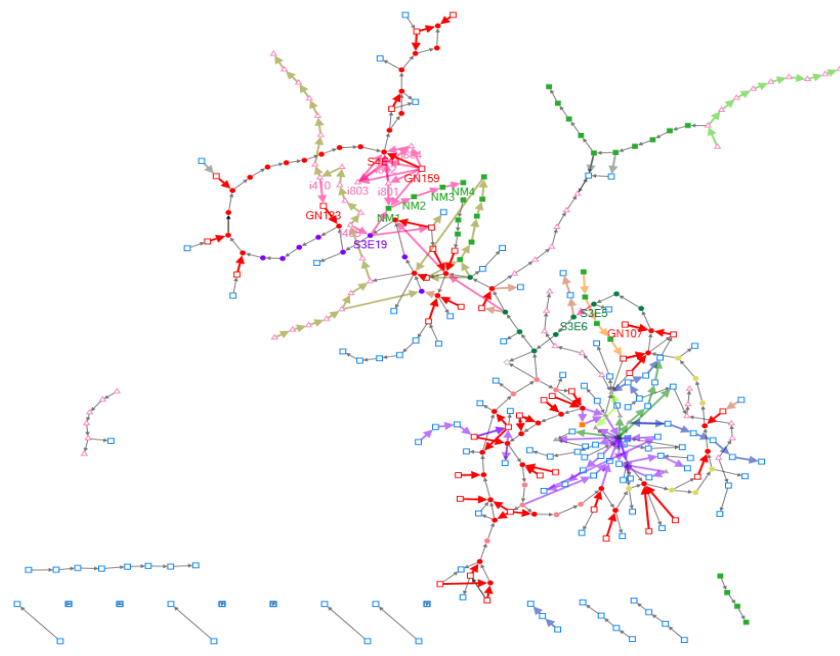


Figure 3.25: GN to TV

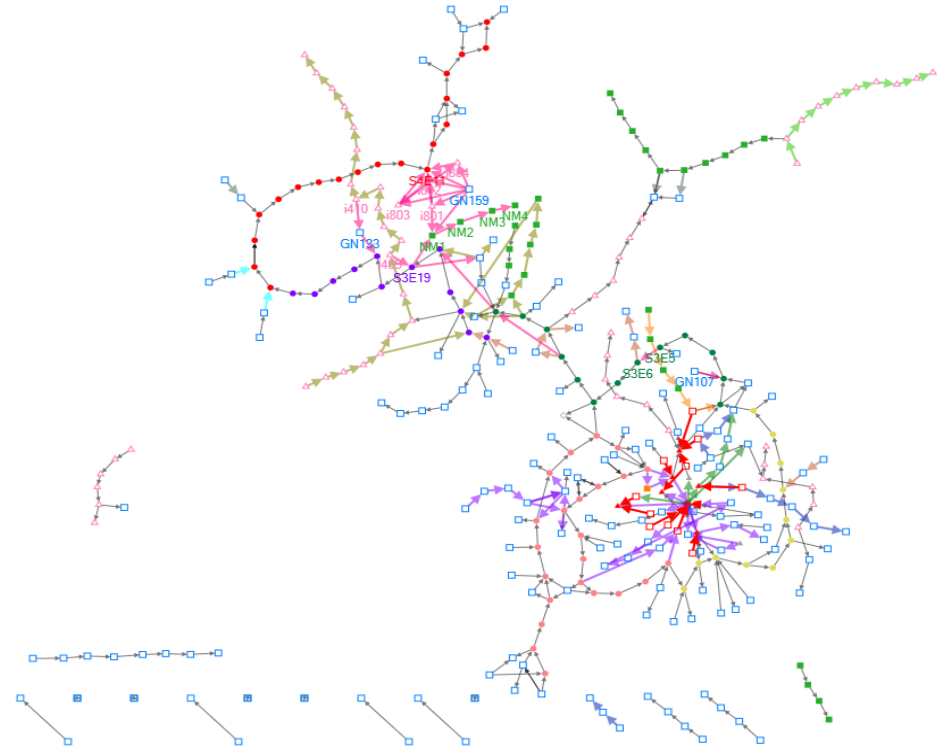


Figure 3.26: GN to Web

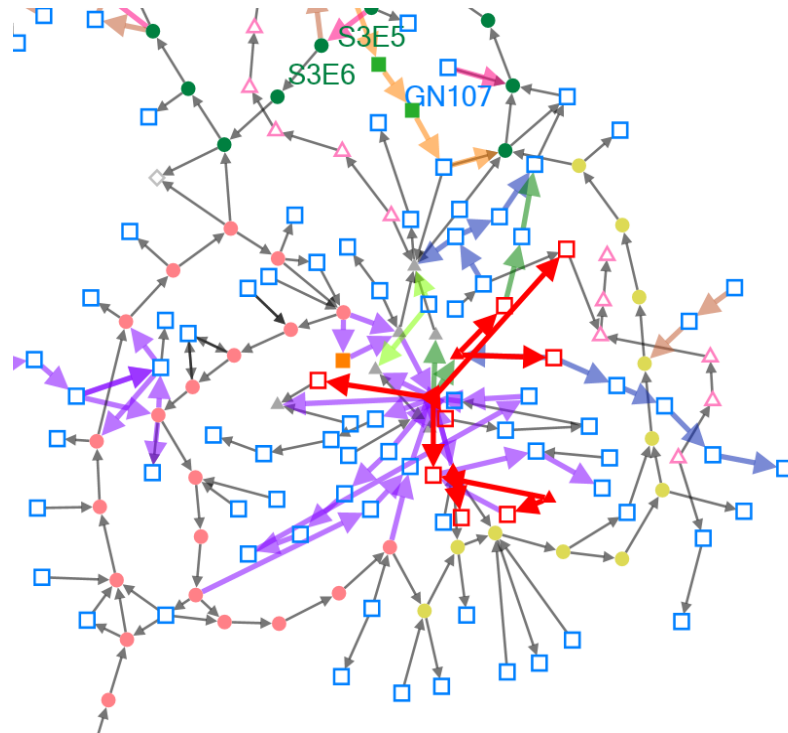


Figure 3.27: Web to GN

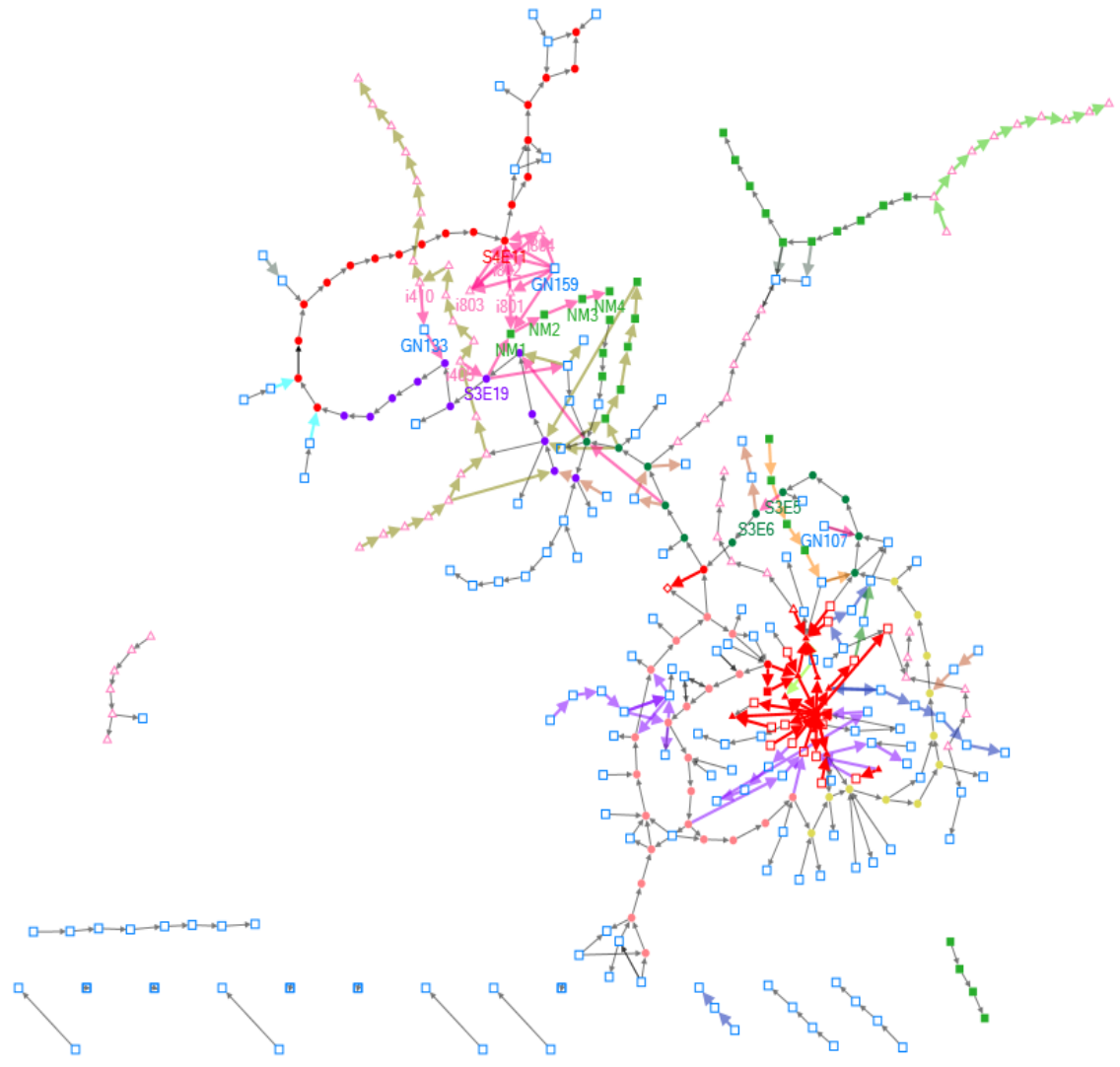


Figure 3.28: Direct Cue Placement in *Heroes* Network

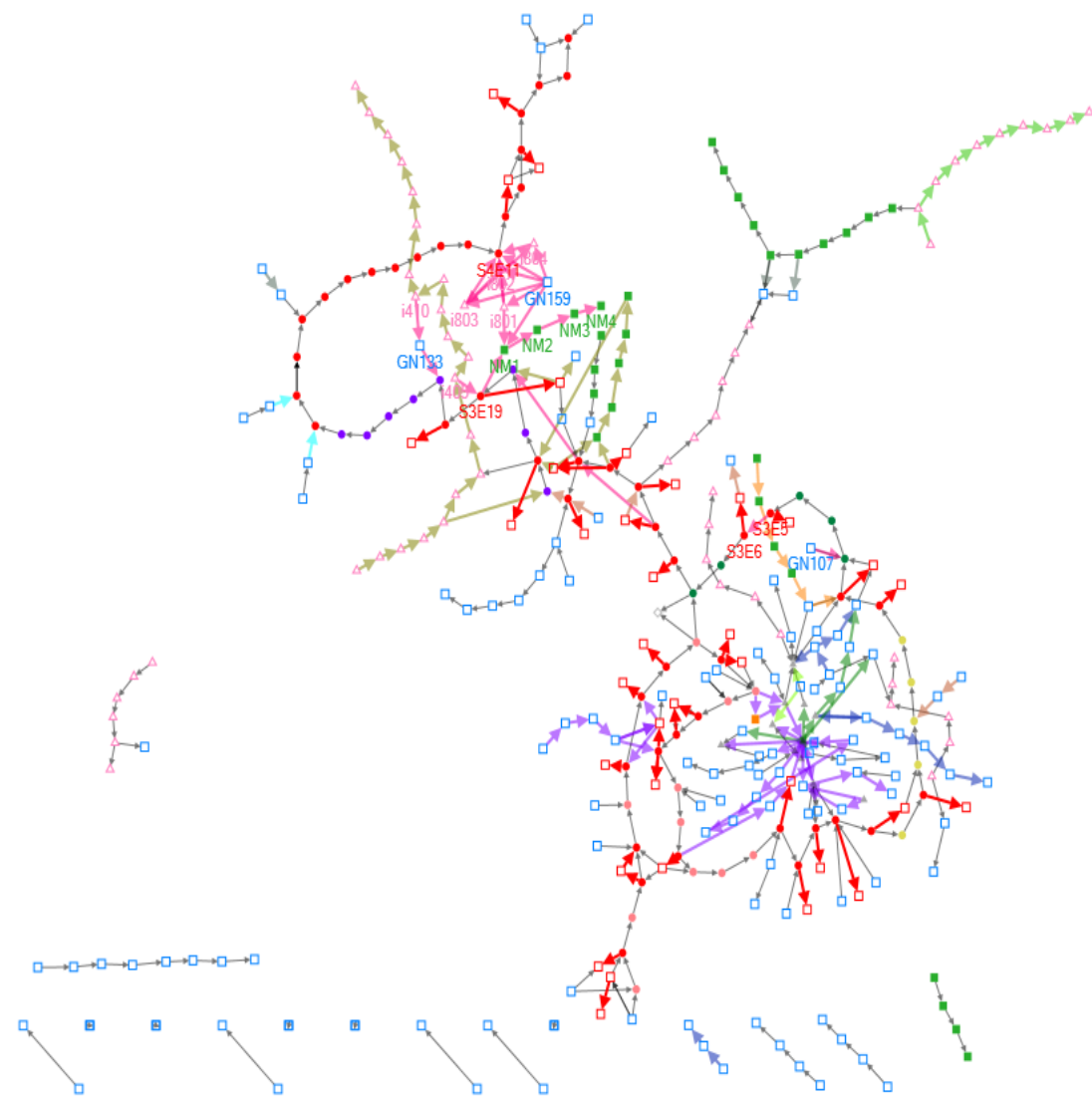


Figure 3.29: TV to GN

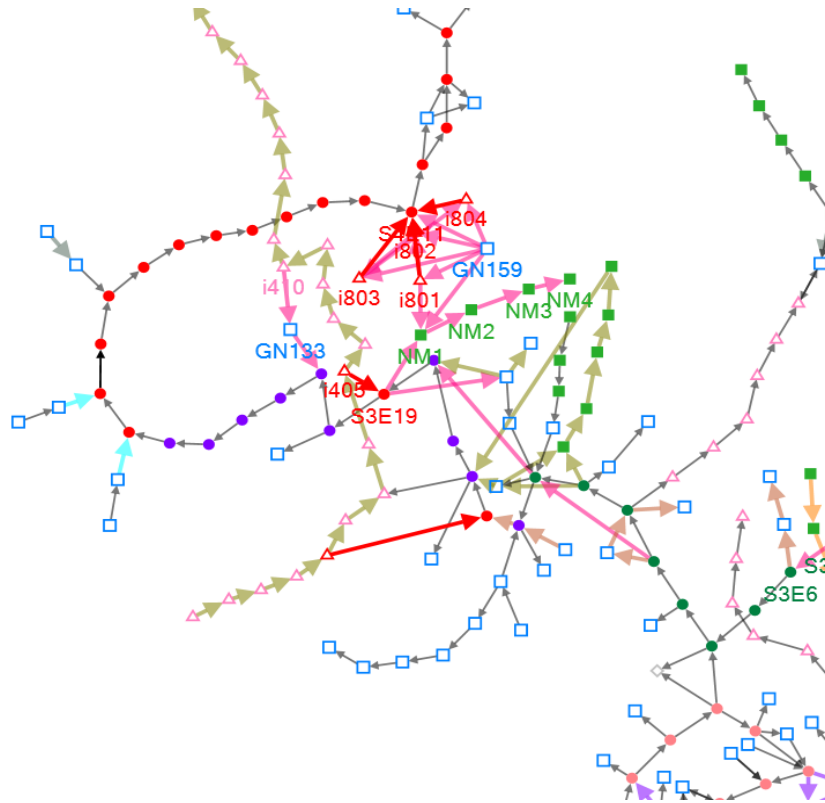


Figure 3.30: iStory to TV

In Volumes Three, Four and Five, there is also an apparent and somewhat sudden shift in the levels and opportunities for transmedia engagement present in the network. Ironically, during this time *Heroes* actually incorporated *more* site types within the network, with Webisodes, iStories and sporadic incorporation of *Heroes Evolutions* ARG added to the TV show, graphic novels and websites of Volumes One and Two. Yet, as the image below illustrates, there are only a handful of sites in these volumes that *aren't* connected by serialization. This does not mean that there isn't a large degree of narrative complexity present there (there is), but that instead we spend a far greater amount of time with each platform in order to access and complete a given sequence of

events. On the other hand, this also means that the paths defined in these Volumes are much more their own than in Volumes One and Two, where there were numerous opportunities to ‘jump’ from path to path than there are here. In network terms, we might say that Volumes One and Two were constructed with a heavy emphasis on shared paths, while Volumes Three, Four and Five were constructed more as *trails*, paths without any shared vertices, consequently producing higher levels of isolated platform interaction, rather than the almost incessant movements that we saw earlier. Furthermore, there is only one GN to Webisode connection in the whole network (in Season Four), only four iStory to GN connections (one each in Season One, Two and Three; one in an island), two iStory to Webisode connections (in Season Four), two TV to iStory connections (Season Three), two TV to Webisode connections (Season Three) and three Web to TV connections (Season Three). In other words, while the whole of the network relies heavily on serialization and sequential event connection, in Volumes Three, Four and Five these connections are almost exclusively mono-media in nature, resulting in regions in the graph of correspondingly limited transmedia engagement and highly platform-exclusive paths and trails:

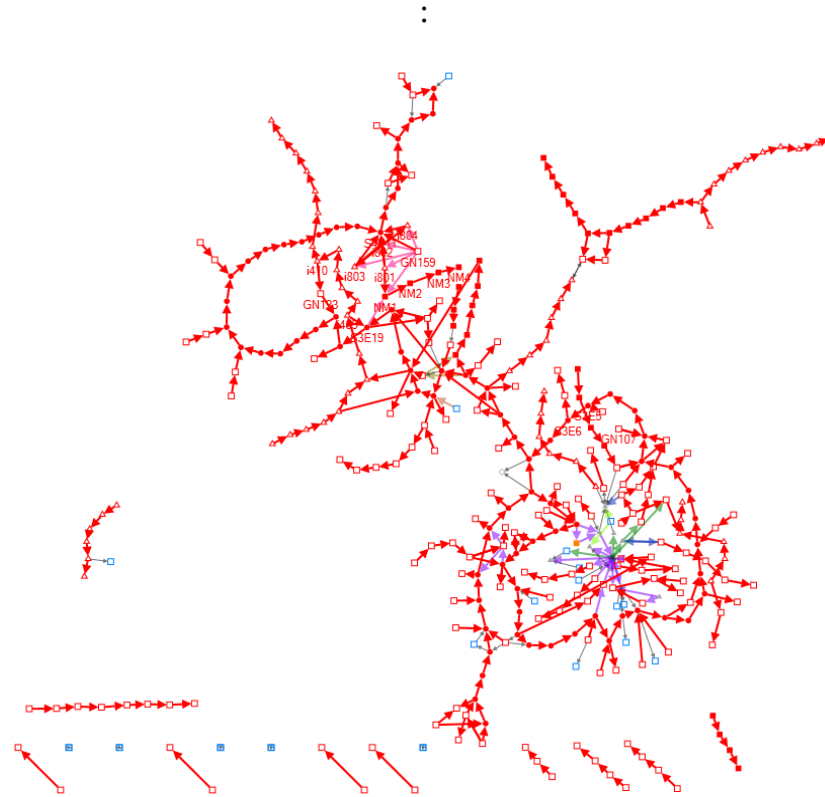


Figure 3.31: *Heroes* Network with Serialization Highlighted

The trouble with such a disparity is that when transmedia connections don't happen, it renders the sites engaged either inconsequential or, oppositely, absolutely essential to the network's function. Here, we can again use centrality measurements to ascertain precisely which sites are crucial or central to the connectivity of the network as a whole. In doing so, the resulting graph produced contains a telling visualization, one that implicates the utter *lack* of transmedia engagement as the point in the graph where disjunction is most possible:

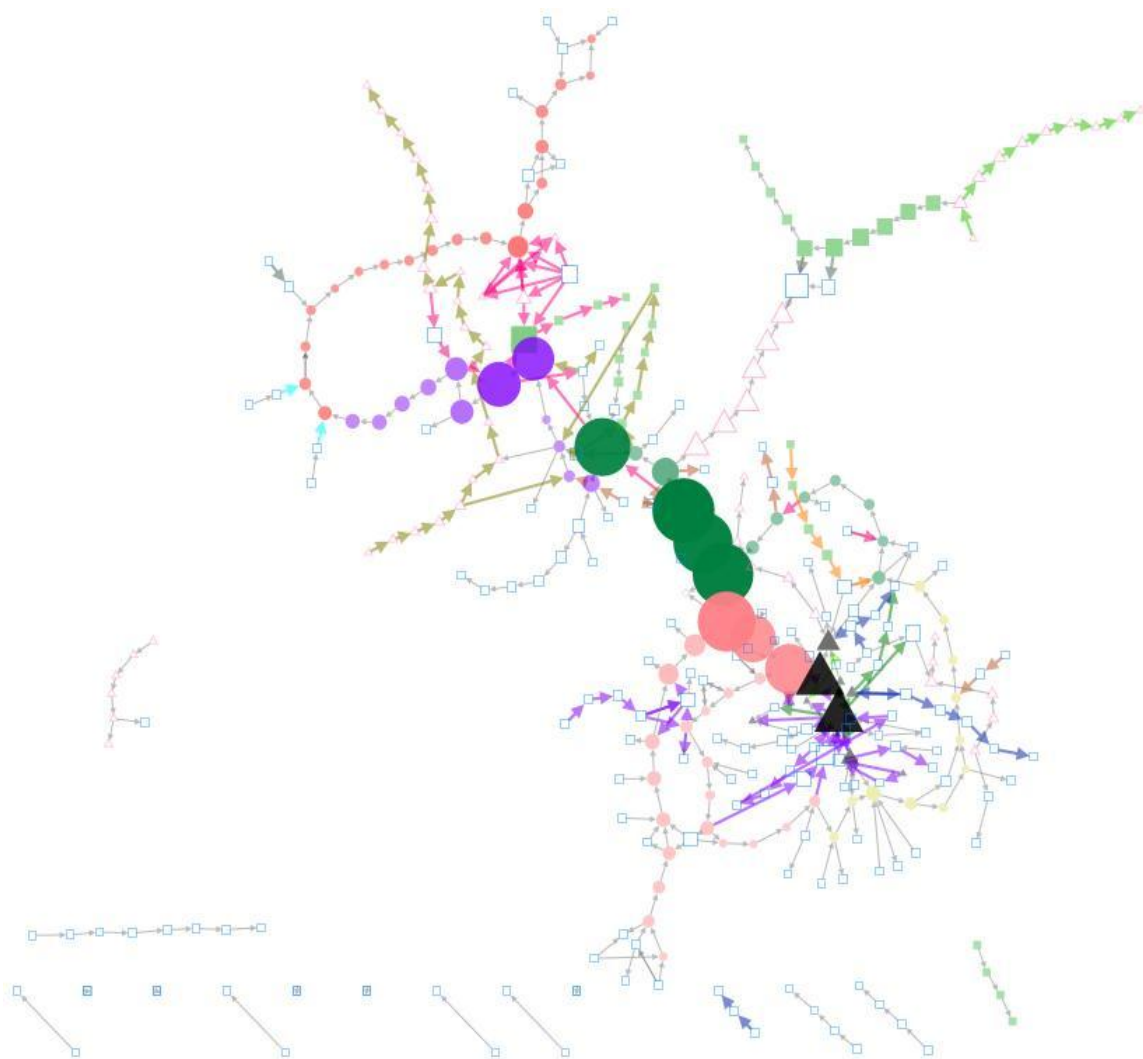


Figure 3.32: *Heroes* Network with Betweenness Centrality Visualized as an Attribute of Size, Color and Opacity

As is evident in the betweenness centrality visualization above, the sites that are ‘central’, i.e. most crucial in maintaining the connectivity of the network as a whole, aren’t those with the highest number of incoming or outgoing links but, instead, a series of isolated, serialized TV episodes, S3E8, S3E9 and S3E10. Importantly, the episodes listed here have almost no sequential or cue-based engagement with any other platforms.

While these sites are central to the Season Three from a narrative perspective in that they deal with an eclipse that has been anticipated since the first episode of the series, there is no other means to engage with this content other than the TV show. But this raises an interesting question: is it possible to have a medium act as a hub, rather than just a single site or series of sites? What might the consequences of removing a platform and all of its subsequent sites from the network? Are some platforms more valuable than others? Are there any underlying structures to the network are determined fundamentally by a particular platform? To answer these questions, I will look at the role of two important platforms in the *Heroes* network: the TV show, the most highly engaged platform, and the graphic novel, the platform with the most sites. By highlighting the TV series and reducing the opacity of the other edges and vertices, we can see not only the unidirectional path that of the serialized episodes that cuts through the entire network, but also notice differences in network topologies as we pass through each of the four volumes of the *Heroes* TV series:

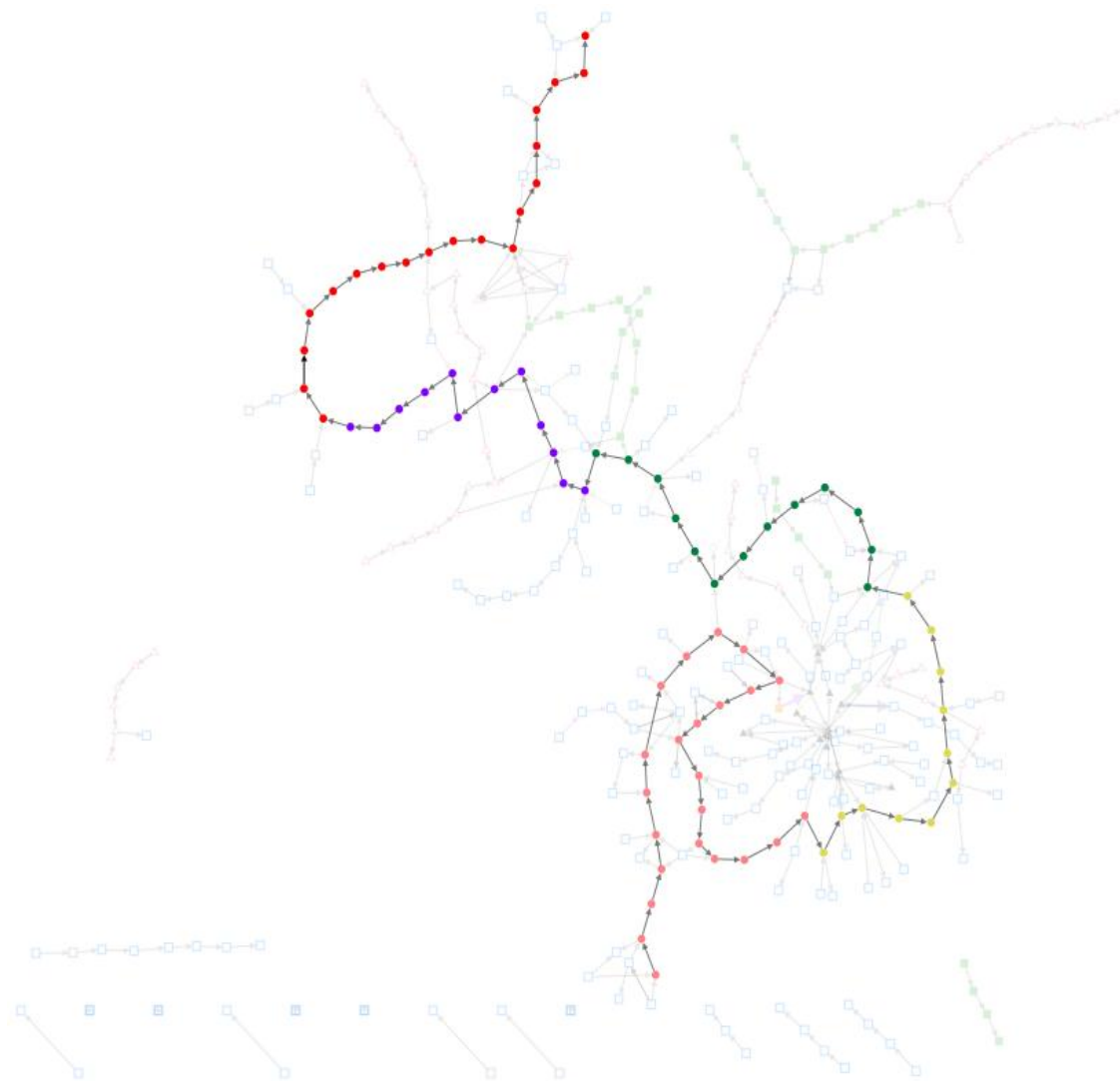


Figure 3.33: *Heroes* network with TV series highlighted

In the visualization above, there is evidence that *Heroes* is structured by what is often referred to in advertising as a ‘driver platform’, one that ‘pushes’ or positions other platforms for engagement. In network terminology, though, the TV series is a trail, a path or walk through the network where each edge is unique. This is not surprising, given that television is perhaps the most highly engaged serialized

platform and, as such, audiences expect that they will be able to follow the episodes from start to end, week-to-week and season-to-season with a large degree of sequentiality, even as the show may resist large-scale closure in order to further engagement over these periods. On the one hand, this means that each episode of *Heroes* was never fully itself, always acted upon or acting upon the sites it was either directly connected to or those that could be found on pathways leading to or from it. On the other hand, the entirety of the series acts as a binder, a spine through which network continuity and coherence is maintained. With the television series intact, the *Heroes* network is relatively singular in composition. Excluding the presence of fifteen islands--small clusters with no connections to larger components--seen at the bottom of the graph, *Heroes* is basically one giant, highly-connected component, a large group of vertices that are all connected to each other either directly (i.e. via adjacent edges and vertices) or indirectly (i.e. via paths through the network). If we remove this spine, however, the network collapses into several smaller components, each still belonging to the same shared universe but lacking any paths to connect them. Indeed, without the TV show intact, rather than one connected component, there are now 22:

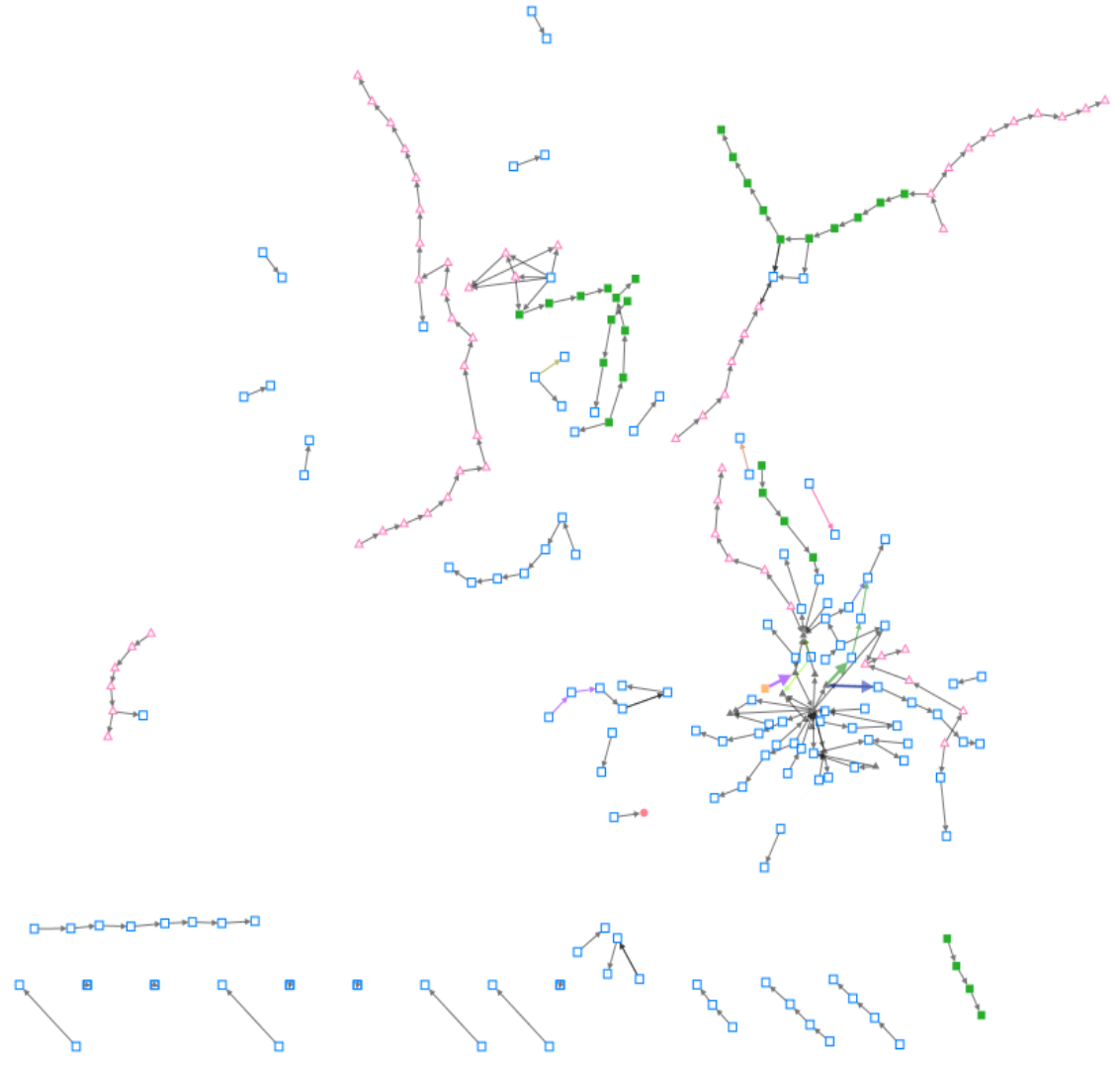


Figure 3.34: *Heroes* Network without TV show

Removing the TV series from the network collapses global connectivity and, with it, network and narrative coherence. The scale-free nature (or lack thereof) of a particular network, then, is an important means of assessing a transmedia fiction's inherent connective biases. This is, ultimately, a question of design and the distribution of narrative as an act of design. In *Personal Effects: Dark Art*, for example, it is easy to

imagine removing several artifacts from the fiction without the network as a whole collapsing, but if we were to remove the novel, it would obviously cease to function as either network or narrative. In this regard, unlike more traditional models of scale-free networks which assume a common material base such as cell biology or social networking, in transmedia networks like *Heroes* the scope of an entire *platform's* integration can be thought of as global hub that determines a network's functionality. While causal-sequential narrative dynamics can and do still exist in *Heroes*, without the TV show these dynamics become isolated, not the braided, interwoven pathways that define transmedia fiction uniquely. This is, in many ways, a result of the primary structure of the television shows themselves—in any one episode, we encounter numerous characters, jumping from location to location and event to event as we do. The multiply situated plot structure allows for an equally multiple number of potential pathways that can extend from the show itself. As we shift from one character to the next, it's highly likely that even if that episode or those subsequent to it don't return us to that character and situation, another site in the network will. In this sense, the TV shows initially act as hubs that the other sites in the network attach themselves to, creating multiple planes of information across the network as they do.

If, however, we contrast this graph with one that visualizes *Heroes* instead without the presence of graphic novels (the platform with the

largest number of sites in the network), this role of the TV show as a network-wide series of hubs becomes even more apparent:

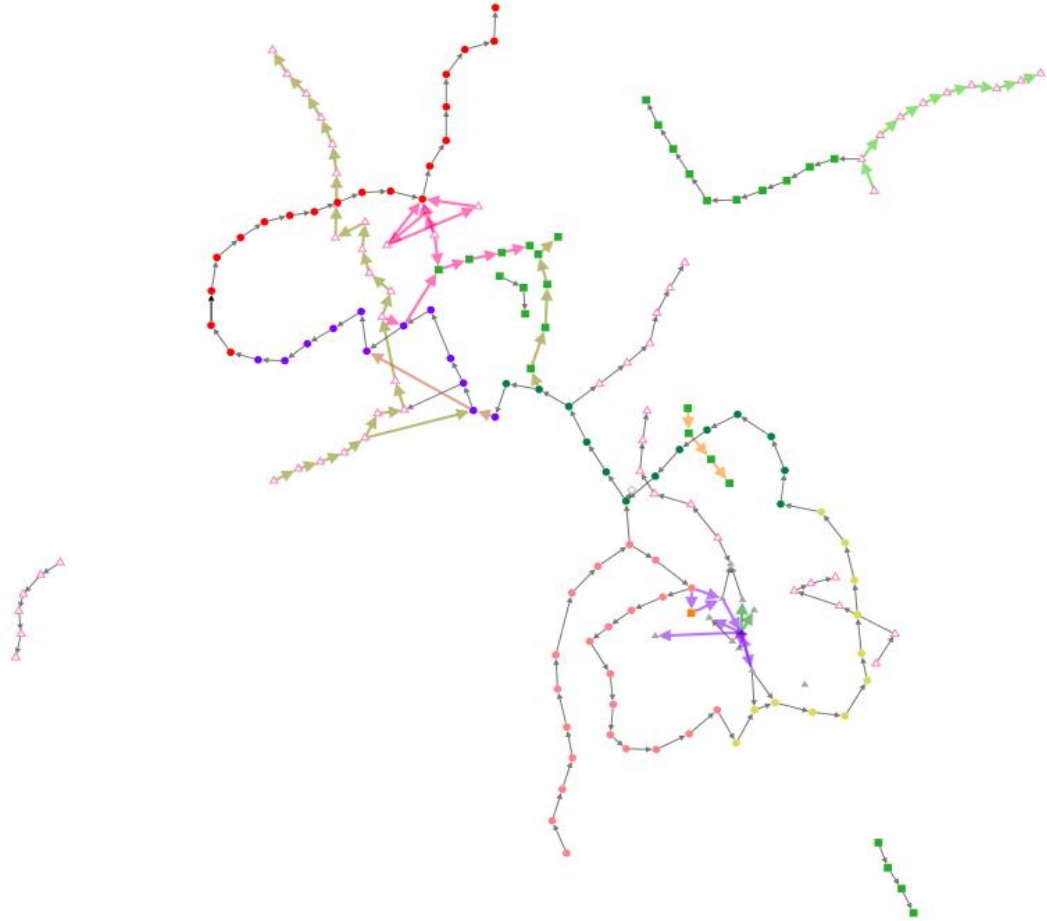


Figure 3.35: The *Heroes* network with Graphic Novels removed

Interestingly, after removing the graphic novels from the network, the general structure of the main component remains relatively the same. However, six additional components were created in the process, components that are composed primarily of the remaining platforms utilized in the *Heroes* network *outside of* the TV show: websites, webisodes and iStories. The graphic novels, then, play an important role

in not only contributing a unique material and modal engagement to the network, but also in binding the majority of the digital platforms into a coherent network. Removing a particular vertex or platform changes the inherent capabilities of that network. Without the TV show, there are only large and sometimes highly connected clusters of activity; without the graphic novels, there remains a general network topology but at the cost of (digital) transmedia engagement. This is not to say, of course, that TV and graphic novels always play these roles. Instead, different platforms often function in ways that contribute not only to the multimodal nature of transmedia fictions, but also to the development of the networks themselves. Unlike random networks, where there is an equal chance of accessing a particular site, directed networks like *Heroes* mean that structure of connections is concomitant with both navigability and access. But in transmedia networks, there are additional variables to consider: the difference between elements *definitized* as storyworld components, and those *un-definitized* and left as universe components.

Understanding Whole-Network Storyworld Construction

As we engage with multiple sites in a transmedia network, these engagements are inevitably structured through multiple spatiotemporal parameters. On the level of discourse, we must negotiate the space of the medium itself and also the time it takes to engage each medium, while on the level of story, we must navigate the often massive worlds and millennia-spanning timelines that compose transmedia universes. This

movement also ultimately exists as a mental image, subject to individual schematization (our own way of making information spatial and temporal). Even so, once a transmedia network or universe is established, the simultaneous existence of multiple sites might seemingly make it difficult to maneuver within such a complex structure, hence the need for networked connection and navigation structures.

One of the key facets of understanding the practice of transmedia fiction is differentiating the causal-sequential/ object-oriented cue structure of transmedia networks, which allows for the embedding of framed *cross-sited narratives*, and the *environmental* and/or *database* structure of transmedia universes, which allows for spatiotemporal relations that extend far beyond the scope of the sites themselves, thereby producing a network-specific language or code through which connective design and cross-sited narratives can be realized through across a series of sites. One of the best examples of this, George Lucas's *Star Wars* universe, spans (as of the time of this writing) some 460 planets, 63 'sectors', or regions, and some *10,000,000,000* years, much of which is only hinted at in the sites themselves. On the one hand, many of those elements are realized uniquely by the sites of the fiction as

storyworld elements³⁴, where locations play host to significant events or have noted traits in their own right. On the other hand, though, many of these elements are left (purposefully) vague as *universe* elements, leaving their definitional significance in the hands of the audience. The question regarding these elements isn't simply one pertaining to the role they play in a specific site, but rather *how* these roles are defined and re-defined in other sites as a function of transmedia meaning-making and, more particularly, of marking the boundaries between storyworld and universe. There are two related strategies for accomplishing this. The first—definitization—consists of operations that imbue certain objects with the capacity for forming storyworlds. The second—undefinitization—resists the impulse towards storyworld interpolation and instead positions the object as an undefined, open-ended *universe* element, a projection with no real target³⁵.

³⁴ According to David Herman, a storyworld in a mono-medium text such as a novel can be defined as 'mental models of who did what to and with whom, when, where, why, and in what fashion in the world to which recipients relocate...as they work to comprehend a narrative' (2002: 5). Importantly, these causal-sequential, locational, motivational and temporal elements are viewed by Herman as analogous to the linguistic concept of a 'discourse model', a 'global mental representation enabling interlocutors to draw inferences about items and occurrences either explicitly or implicitly' (ibid). Such a model of storyworlds functions in both a 'top-down and bottom-up' way, leading readers to assume that objects such as 'jets, cell phones, and plasma guns do not exist in the world of *Madam Bovary*', but also in a manner that is 'subject to being updated, revised, or even abandoned with the accretion of textual cues' (Herman 2002: 5-6), such as when an unreliable narrator is revealed and the storyworld we thought was stable proves to be anything but. Fundamentally, Herman writes, 'narrative comprehension is a process of (re)constructing storyworlds on the basis of textual cues and the inferences that they make possible' (Herman 2002: 6).

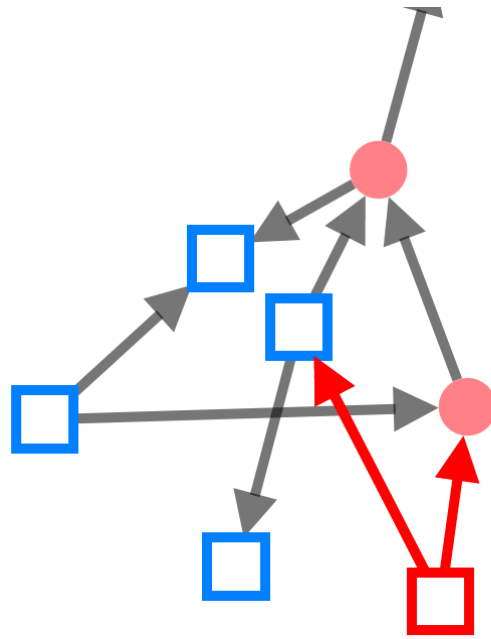
³⁵ To be sure, however, the distinction between storyworld and universe isn't one that many even feel is necessary to make—in both transmedia practice and parlance, each term is nearly indistinguishably used to describe something about the settings or systems in which the events of the narrative occur. While both reflect what Henry Jenkins (2007) sees as one of the primary goals of transmedia expression—world-building, the process of creation 'based not on individual characters or specific plots but rather complex fictional worlds which can sustain multiple interrelated characters and their stories'—even Jenkins use

While there is a delicate balance to be maintained between the *definitization*³⁶ and *undefinitization* of elements in transmedia fiction, this balance is often not reflected in the site-to-site connections of visualized networks simply because a universe element has no ‘form’ to be manipulated, existing instead as a location seen in the distance of a film’s shot, a seemingly throwaway phrase muttered by a character in a novel, or an un-manipulable object resting on a table in a video game. What is unique about transmedia practice, though, and what is important about drawing the distinction between storyworlds and universes, is that definitization does not have to occur in the same site as the one in which the entity originates. In many ways, then, the process of the definitization of universe elements has several similarities to the dynamics of source-target projection that we studied earlier in migratory

both terms freely, referring to *The Matrix* as a ‘universe’ that requires contact with multiple sites to comprehend.

³⁶ In her book *Possible Worlds and Literary Fiction*, Ruth Ronen (1994) introduces the concept of definitization, the process by which elements of a text-based narratives, particularly objects, are given form and made ‘concrete’ entities within the fiction (137). ‘Definitization’, Ronen writes, ‘is that stage or process in which it is textually indicated that a name or a description denotes a single, concrete, well-individuated or distinct object’ and where, further, these same ‘Names and descriptions are used...in a way that implies a history of causal relations between a name/description and a fictional entity’ (1994: 137). Ronen’s point—that objects come into being in fictional narratives via textual signification—at first seems uncontroversial. We would scarcely know what composes a particular fictional storyworld without it first being noted for us and, subsequently, positioned in relation to other elements. But Ronen’s claim here is also a conditional—when we name something in a fiction, we are marking it as actualized rather than possible. In other words, the process of definitization in fiction is really one of disambiguation through actualization, of purposefully choosing and privileging one element over a nearly limitless pool. In this sense, definitization actually reduces the role of the speculative imagination in that it de-limits the ontological possibilities of a particular narrative entity. While the mono-medium bias of Ronen’s assertion is quite evident (names and descriptions belonging primarily to text or language-based forms of expression), it is worth looking past this blindspot in into the exact nature of definitization as it exists in transmedia fiction. If we append Ronen’s criteria for definitization to include *images*, *sounds* and *interactions*, then we might more fully understand *how* it is that definitization might occur in transmedia networks.

cues. When we identify a un- or under-definitized element in a transmedia network, we ‘hold’ that element and wait for its interpolative expansion in another site. When such a completion occurs, the storyworld grows with it. Unlike the primarily text-based operations that Ronen speaks of, though, in transmedia fictions storyworld elements aren’t just named, but they are also shown, heard, and even *felt* in some extreme cases of object-orientation. The result of this difference is a *functional definition* of the role that these elements have in the context of the narrative. While this is partially true when we consider the differences between audio-visual platforms and those which are primarily text-based, in transmedia fictions definitization most often occurs as a result of the cross-sited nature of meaning and interpretation. In other words, what’s un- or under-definitized in one site might become an integrated storyworld element in another site. A straightforward example of this can be seen in Figure 3.36 below, where the elements introduced in S1E1 and S1E2 of the *Heroes* TV series are revised and updated due to the information presented in two graphic novels published over a year after the episodes aired (key sites highlighted in red):



Created with NodeXL (<http://nodexl.codeplex.com>)

Figure 3.36: Storyworld Revision in *Heroes*

The interactions between S1E1 and GN63 and GN64 are relatively simple, but they illustrate the way in which storyworld construction and revision is never a stable construct and is, instead, always ‘subject to being updated, revised, or even abandoned in favour of another depending on the accretion of textual cues’ (Herman 2005: 571), thereby leading to a potential loss of coherence and contradictory meanings. Here, in S1E1, we are first introduced to Claire Bennet as she is filmed, with the assistance of her friend Zach, attempting to gravely injure herself for the sixth time by jumping off of an old metal structure. Since Claire’s powers allow her body to heal itself, though, these attempts are really just a means to document her abilities. Shown initially through the

POV screen of Zach's camera, we notice several things about the location that Claire inhabits—it is a desert-like area, set somewhere out in the mountains, which frame the camera shot but are never seen in close-up. In GN64, however, we learn that somewhere up in these mountains an agent named Elle sits with a pair of binoculars, spying on Claire and Zach, attempting to discern what her powers really are but missing the entirety of the metal structure and Claire's leap. The mono-sited storyworld, then, might exist only with Claire, Zach, the camera, the desert and the structure as our framing points. The cross-sited composition, however, is expanded from Claire and Zach and now includes the tree-laden mountains Elle spies from, the car she sits on and even the binoculars she uses. In short, as with all transmedia meaning, what occurs cross-sitedly is always a compounding of meaning that rewards the movement from site-to-site. Storyworld elements here are always conditionals, then, subject to the redefinitization in another site. These sites are, as noted throughout this study, more often than not also composed of different modes, marking such redefinizations as cross-modal compositions as well.

Because of the material separation of each of the sites, it is possible to layer information like this and compose multiple storyworld conditionals within each site. There is, however, another crucial difference between migratory cues and storyworld definitization to make note of here. While migratory cues promote the movement from site-to-

site that transmedia meaning depends upon, storyworld definitization promotes nothing of the sort. Instead, definitization is an aggregative process that occurs organically within and across the sites of a transmedia fiction/network, a process that can't really be classified as causal or sequential at all. Perhaps ironically, Marie-Laure Ryan's own print-specific use of the term 'universes' points to a methodology for analyzing the network as a producer of storyworld definitizations and universe gaps, as it requires that a 'center' exists for defining the (pre)suppositions necessary to make sense of the text. When attempting to make sense of a narrative, the audience must draw upon a store of real-world materials through which they might better understand those appearing in fictional contexts. This forms the basis of the *principle of minimum departure* where a 'center' dictates our understanding of a cluster of narrative 'universes', many of which contain similarities to our own reality. In other words, interpreting any fiction requires a certain background knowledge through which we make sense of the narrative.

While the calculated metrics of the *Heroes* network revealed certain centrality measurements, these measurements were a function of the individual connections, revealing which vertices functioned centrally in the connections of the network. Importantly, though, these measurements are not a view of the network as a whole, as such totalizing background knowledge suggests we might need. So what does a whole-network analysis of storyworld and universe consist of? In Figure

3.37 below, we once again see the *Heroes* network that dictated a good portion of the analysis present in the last chapter. Here, however, rather than using this visualization to locate and analyze the presence of pathways through the fiction, this graph has been rotated to reveal what is seen as the central organizing feature of *all* large-scale directed networks—their self-organization into the ‘bow-tie’ structure shown previously in this chapter as an exaggerated visualization of the World Wide Web:

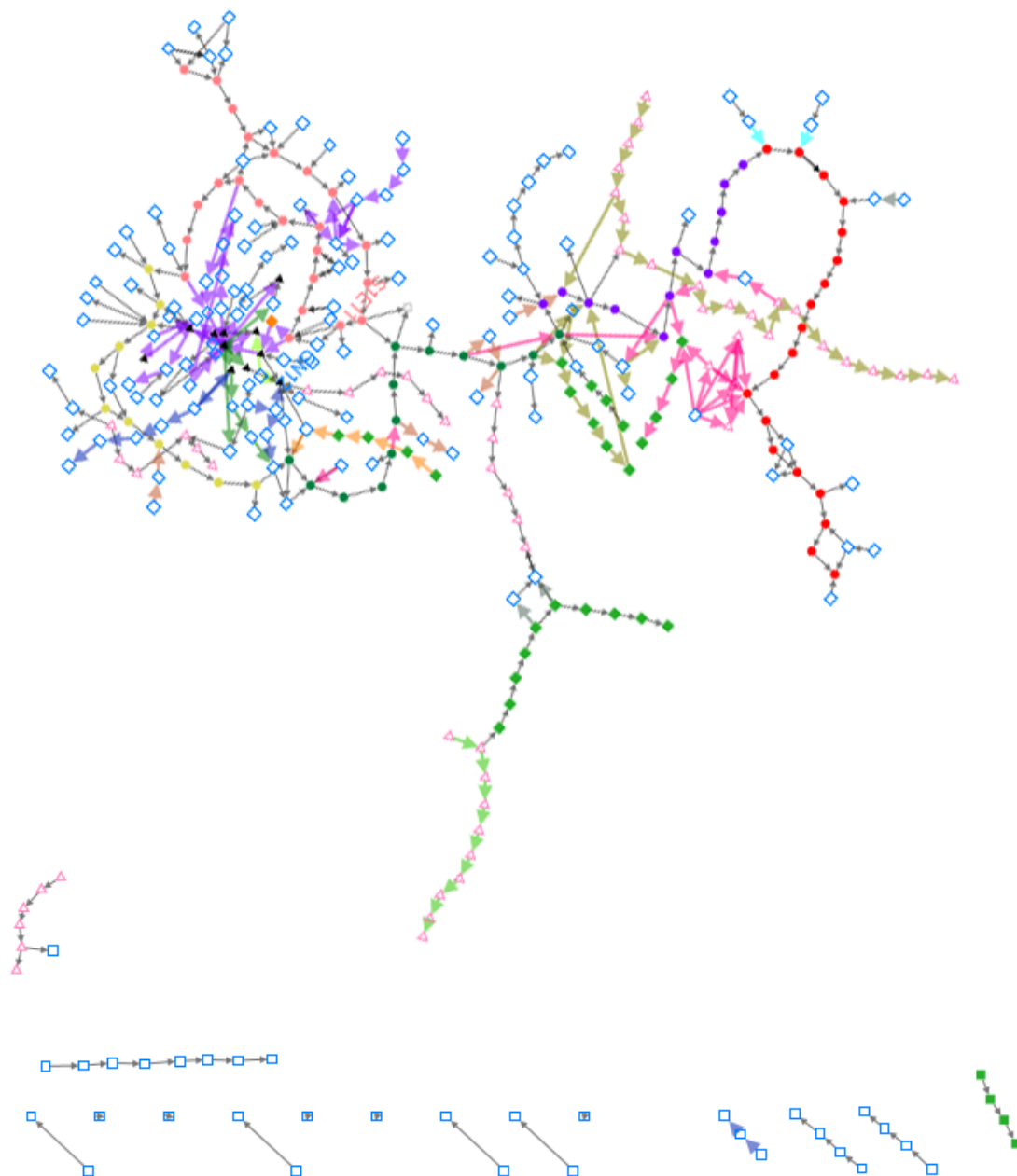


Figure 3.37: The *Heroes* Network as a 'bow-tie' graph

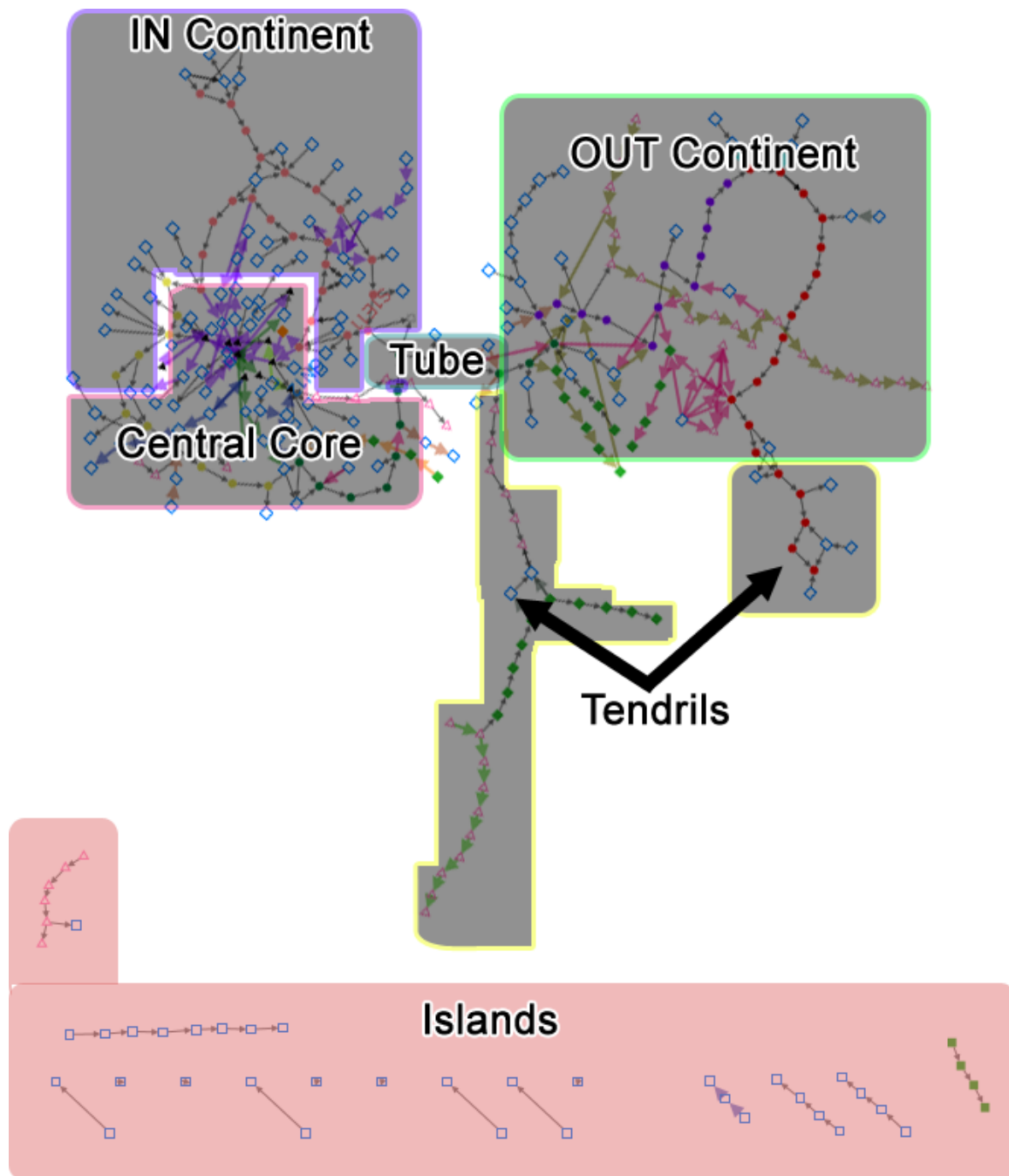


Figure 3.38: The *Heroes* Network with Continents Highlighted

Because each vertex has the potential for both source and target link projection, directed networks naturally segment themselves into six large-scale corresponding components:

1. *The Central Core*, where each vertex can be reached from every other vertex;
2. *The IN Continent*, where each vertex is arranged so that following the edges leads (back) to the central core but, importantly, once it is reached there is no way to return to the core;
3. *The OUT Continent*, where all vertices can be reached from the central core, but also with no way to return to it;
4. *Tubes*, which connect the IN and OUT continents directly, without recourse to the central core;
5. *Tendrils*, paths attached only to the IN and OUT continents;
6. *Islands*, vertices and paths isolated from the rest of the components.

Outside of these components, though, there is an additional aspect of digraph (directed graph) self-organization to consider—the always-potential existence of what is known as a Giant Weakly Connected Component (GWCC), a loosely-linked continent composed of the IN and OUT continents, any tubes connected, and any tendrils extending from them when edge directionality is collapsed and the underlying graph is considered, that is, when we examine the network ignoring the elements defining path and arc direction—the release date of a site, the temporal order of the narrative sequence, link reciprocity, and other such criteria. While this is a partially theoretical position to adapt, it is also a common one to take with regard to digraph analysis, as it illuminates the

functions that directionality might take with regard to the organization (of meaning, as is the case here) of the network and makes the analysis of large chunks of the graph.

The issue here, of course, is what the presence of these components tells us about *Heroes* as both fictional narrative and narrative design. If storyworlds are understood as support frameworks built from sets of definitized narrative elements that situate action and events, then the GWCC might be best understood for our purposes as a coherent (idealized) storyworld, one in which the movement from site-to-site develops an ongoing, persistently realized (yet occasionally revised) ecology through which interpretations are made. Understanding this, we can then begin to ascertain the different ways that each continent of the GWCC functions with regard to storyworld creation as they break down defining according to the directionality of the links composing its space. As noted in the previous chapter, link directionality in transmedia networks often has a profound impact on the information we receive, producing temporally textual meanings, correlations between graph topology, topography and the spatiotemporal frames of the fiction and, of course, the causal-sequential operations crucial to narrative interpretation. Consequently, we might initially view the In- and Out-continents as two sides of the same coin: narrative arcs originate in the In-continent, and continue, if there are pathways which allow for such movements, towards their conclusion or intersection with another

pathway in the Out-continent. And in a general sense, this is exactly what happens: taking the *Heroes* TV show on its own, we can see pathways that cut across the GWCC, beginning and, finally, ending at the furthest borders of the Out-continent. But such a view adds little to the analysis we've already done and, more importantly, it lacks any insight as to *how* these pathways support and (re)form the *Heroes* storyworld. Additionally, such an (over)view overstates the narrative coherence that is present in both the In- and Out-continent. As we have seen, neither contains a 'whole' singular narrative sequence that might be accessed through a single pathway, instead privileging a sometimes inordinately complex interweaving of sequences-as-paths that only transmedia frameworks can support. What they *do* contain, however, is a storyworld sufficient enough to support multiple paths without losing coherence or continuity, one that grows as well as shrinks through the continual process of (re)definitization. So what, then, does In- and Out-directionality signal in transmedia contexts? As it turns out, quite a bit in terms of storyworld construction.

Looking at the IN-continent, we find the whole of Season One of the *Heroes* TV series (S1E1→S1E23), and approximately 28 graphic novels, GN1→GN23, GN47→GN48 and GN63→GN64. While the TV episodes and GN1→GN23 represent single-platform, temporally sequential distribution, GN47→GN48 and GN63→GN64 act through temporally textual means, inserted within sites that already established

certain events, locations, actions and other storyworld information. This is telling in itself, as it reveals that much of what occurs in the IN-continent works predictably towards establishing the storyworld of *Heroes*. Here, characters are introduced, locations are established, and objects roles, such as the rampant use of mobile technology present in *Heroes*³⁷, are solidified. In short, what we encounter in the IN-continent is, as might be expected, the nascent stages of the *Heroes* network. Importantly, the sites of the IN-continent tend to focus on either one of two locations: New York City, home to Peter Petrelli, Nathan Petrelli, Sylar and other major characters, Las Vegas, and Odessa, Texas, home to Noah and Claire Bennett. As seen in the last chapter, the movement from site-to-site present in this portion of the graph corresponds to a movement through the *spatiotemporal* parameters of the narrative itself. Such movements, however, are not exact; that is to say, locations occupy several portions of the graph at once, the result of a need to establish a sequence of events in narrative rather than the occupation of a single location over time (which would most likely produce only loosely related information). This means that it is not inconceivable for the sites of OUT-continent to be supported by some of the same locations as the IN-continent. And indeed, this is exactly what happens, but at a scale greatly diminished in comparison to the IN-continent. While the IN-continent is composed of 50 sites and two platforms, TV and graphic

³⁷ See Ruppel 2012 for more on the presence of mobile technology in *Heroes*.

novel, the OUT-continent is composed of approximately 140 sites and four platforms, TV, graphic novels, webisodes and iStories. Of these 140 sites, only a handful, mainly the TV episodes, take place in the same fictional locations as the IN-continent. The rest move beyond these spaces and into wider vistas: Alaska, New Orleans, Pittsburgh, Afghanistan, the Antarctic, Bhutan, Vietnam, Germany, India, England. In the midst of these shifts, we also encounter a much broader range of characters, many of whom are only accessible via platforms such as the iStories and webisodes.

Islands, however, contain no such connectivity yet they unmistakably belong to the same (expanded) storyworld as the rest of *Heroes*. As disconnected components, rather than sites composing the GWCC or Central Core, islands point to a strange dilemma within transmedia fictions. Since the basis of storyworlds in transmedia fiction is located both locally and at the network-level, and this information is aggregated as we make our way from site to site, the presence of islands in a transmedia network—sites without any real connection to the causal-sequential/ cue-based activities of the main continent—becomes a challenge to the notion that storyworld formation is only a function of connection. Additionally, the majority of the islands of the *Heroes* network are mono-platform in nature, crossing neither modes nor media in the construction of their paths. Islands, then, should be viewed as evidence of extreme homo-modality and, moreover, spatiotemporal

separation, of events taking place at a far distant time and place than those of the main continent. This means that, at least as far as visualizations predicated on migratory cue connection are concerned, the existence of islands is an example of what might be more precisely called narrative information existing within a shared storyworld, but without recourse to what we might now call the cross-sited causal-sequential aspects of that storyworld. In other words, because of the separation between sites that transmedia meaning both promotes and works against, the notion of a storyworld as a framing device must be seen here again as a situating framework but not a causal-sequential one. But even here, the storyworld is well-defined—locations are understood at least partially as framing constructs, characters are given minimal arcs of development, and the macro- aspects of the property (in this case, the existence of superhumans) remain intact. In other words, while there are obvious semiotic coherences between islands and the other components (the obvious and most powerful being the brand markers themselves), there's no violation of the storyworld on either the micro- or macro- levels, but only because of the explicit definitization of what is present in each site. Both micro- and macro- work accordingly in the development of coherent mono- and cross-sited micro-sequences, which subsequently feed seamlessly into the apprehension of the larger network-oriented whole.

The trouble with islands, much like the content of the sites in the OUT-continent and its tendrils, is that by introducing pathways with little causal-sequential or cue-based bearing on the GWCC, the definitization of storyworld elements is also reduced, as is the likelihood that an element is definitized in another site or mode simply because the distance in fictional time and space between the content of the sites makes it more and more improbable that the same element will appear in the 'now' of the GWCC. The consequence of this is a marked shift from the deep storyworld engagements of the central core, where many elements of the IN-continent were definitized, to a far broader and also far thinner engagement with the undefinitized elements of the OUT-continent, the tendrils and whatever islands one encounters. For example, one of the islands in *Heroes*, a single graphic novel (GN71) titled 'History of a Secret', contains events that take place in the beginnings of Egyptian civilization, thousands of years before those of the sites composing the GWCC and central core. Additionally, an Egyptian relic is shown repeatedly in the graphic novel, suggesting some significance that is never expounded upon, just as this time and place are never returned to again in *Heroes*. Islands, then, are also storyworlds but they share only a handful—perhaps only one—similarity with the larger formations (at least, that is, until they are re-connected with the GWCC through either a migratory cue or a causal-sequential alignment). Tendrils also function in much the same way but the

pathways they present originate in the same spatiotemporal parameters as the GWCC even as they move outward towards a completion that has no real connection other than an origination point to any of the continents.

The Central Core

That the IN-continent hovers so closely around a small group of locations while the OUT-continent contains multiple settings is telling, as it reveals a potentially vital dynamic in what made the first two years of *Heroes* so successful: its push towards complexity as a function of storyworld depth rather than universe expansiveness. This is seen no more clearly than by looking at the Central Core of the network, the space where each site is reachable in some manner from any other site in the cluster. Here, paths exist which allow for movements between any sites in the Central Core and those which lead outward towards the OUT-continent. What's fascinating to note about the Central Core of the *Heroes* network is that it contains nearly all of the direct cues of the entire network in the form of intra-fictional URLs, phone numbers and email addresses. Importantly, the sites which these cues direct us to are the most object-oriented of the entire network, allowing the audience to converse with characters via SMS messages on their cellphones, browse websites belonging to fictional corporations and entities, access voicemail systems that contain hidden messages. As noted previously, the function of these sites, as directed by the character Hana Gitelman, is to

act as hubs for the *Heroes* 360° Experience, an Alternate Reality Game set within the fiction. Yet, as composition of the Central Core suggests, the ARG extended beyond what might be considered the ‘primary’ sites of its operation and managed to link several sites not explicitly related to its play. This suggests that *Heroes* is a very peculiar type of network, one where the storyworld formations that took place in the IN-continent fed directly into an inherently object-oriented core, where any undefinitized universe elements (such as top-secret files shown briefly in the TV show) became *highly* definitized components of connection (that is, when these files became manipulable objects online).

In other words, the movement from the IN-continent to the Central Core is, in *Heroes*, actually a movement from static, causal-sequential engagements to highly functional, interactional engagements that are, nonetheless, almost anti-sequential. The sites here connect the audience to multiple platforms but only in a way that allows for once fictional objects to gain certain functionalities. We might also say that the OUT-continent functions similarly, with paths leading from the Central Core restoring the sequentialized nature of the network as they do so. As a point of comparison, consider the *Star Wars* examples this chapter has covered. When objects are introduced in the *Star Wars* universe, the primary means of definitizing them is *outside of* the fiction, where massive encyclopedias contain entries detailing the purpose and scope of these elements. In *Heroes*, though, these definitizations are done almost

entirely within the fiction, a fact which suggests that we are dealing with two different *types* of networks entirely when we compare *Heroes* and something like *Star Wars*. In other words, the presence of a Central Core in a given network, and the nature of the sites which comprise it, provides us with a compelling means through which to understand the strategies of storyworld definitization within that network and, subsequently, begin to differentiate it from other transmedia designs. In *Star Wars*, we might speculate that the Central Core is composed by the original three films, whose influence in establishing the fiction still looms large today. In *Heroes*, however, the Central Core is perhaps best understood as an extreme distillation of the storyworld, one so extreme, in fact, that it becomes a set of highly-connected objects manipulated by characters and audiences.³⁸ In many ways, this demonstrates that when *Heroes* was most successful, it was creating density within the storyworld by definitizing certain aspects of the universe elements only hinted at previously. Additionally, the fact that there weren't *any* such similar dynamics present in the OUT-continent, and instead only isolated paths with little or no means of moving between them³⁹, again reinforces the notion that in designing massive networks such as *Heroes*, the choice

³⁸ In the case of *HEROES*, unlike other large properties like *Star Wars*, there are no intra-fictional encyclopedias or other such devices that might similarly function as a core.

³⁹ It's worth noting here that it's likely that the high-level of turnover in *Heroes* producers, as well as its waning popularity and consequently reduced budgets played a role in the lack of connection present in the OUT-continent. This is, however, a chicken-and-egg situation—did the shift in strategies from continent to continent come about as a result of waning popularity, or did waning popularity come about as a result of the lack of pervasive connection between elements?

between definitization and undefinitization has direct consequences on the makeup of the network as a whole. As a series of dynamic processes, then, the formation of the storyworld of *Heroes* (and any large-scale transmedia property) can be best understood by the degree to which the sites comprising its most connectable clusters either promote or de-mote the functionality of the elements themselves, resulting in either a highly-connected yet unsequenced series of sites or a highly-connected series of sequential sites that do not allow for any fictional orientations of the elements. This is, then, essentially the difference between (intra-fictional) storyworld realization and narrative progression, a difference that has bearing, I argue, on the entirety of transmedia expression.

Analyzing Distribution and Story Time

There is, of course, a clear difference between establishing a spatiotemporal environment of storyworld and universe components—where the goal is the creation of an almost limitless pool of elements to draw from—and establishing causal/sequential relations to spatiotemporal dynamics—where these chosen elements structure the content of a given site. However, the presence of an additional component—*distribution time*—forces us to consider another dimension of transmedia networks: the pronounced differences between the development of a network’s fictionally-internal timeline and the distribution time of the individual sites themselves, where the order of sites’ distribution often determines its relation to the overall chronology

of the network. In creating the network data for *Heroes*, I included several columns in both the edge and vertex worksheet that allowed for more generalized worksheet sorting to take place. These columns included, in the Edges sheet, the characters, locations and time periods involved in the links, the date the links were created, and the type of links that created the connection (i.e. direct, intermedial, serial, etc.). In the vertex sheet, I recorded two different types of time-based information: one, the date that the vertex itself was distributed and two, the internal plot time(s) that the content of each vertex dealt with. In *Heroes*, the overall distribution time ran from 9/25/2006 to 6/9/2010, while the plot time spanned some 5000 years, beginning in approx. 2500BC and continuing to 2008 and beyond in the various alternate futures that took shape as a result of the actions of the characters. Once this data was calculated and the *Heroes* graph was visualized, clicking on the information present in any of the rows highlights both the vertex itself and the edges leading to and from it. Sorting the columns for criteria such as distribution date or internal plot time, then, allows for a step-by-step recreation of the network as a function of these temporal signifiers. The results, seen in the two videos below, point to some noteworthy dynamics within the *Heroes* network:

Figure 3.39: Visualization of *Heroes* as a function of distribution time

<http://youtu.be/yUdLQFepwtQ>

Figure 3.40: Visualization of *Heroes* as a function of plot time

<http://youtu.be/TXewqasFHb8>

While NodeXL contains no features through which we might compare both distribution and plot times on a single graph, it's obvious that the differences between the two in *Heroes* aren't as pronounced as one might think. While this lends itself towards interpreting the *Heroes* network as being distributed relatively chronologically, it's worth noting that the process of creating connection in *Heroes* is one that is analogous to the release of vertices with similar plot times. In other words, sequence is once again privileged here as an organizational mode. Without it, we might expect that the distribution of vertices in the *Heroes* network might take on a less consolidated, more disparate spread. Perhaps more importantly, though, is the fact that the further the date a particular site's plot was from the 'core' of the present day of the story (a period around 2005-2008), the more likely it was to be removed from the network's topology, existing as paths leading outward from the central component, or as clusters removed from any direct connection to the majority of the network. This fact points to an interesting potential dynamic within the *Heroes* network—a topological correlation between plot time and network space, a complex version of what was shown to occur in *Skeleton Creek*. Yet even so, many of the sites that exist in this manner also have another unique characteristic: their plots take place in spaces far removed from New York City, the setting of the majority of

Heroes. In the aforementioned ‘History of a Secret’ for instance, we travel to ancient Egypt in 2560BC to witness the discovery of one of the first superhumans; in another, feudal Japan in 1671; another, California in 1968. While it is worth noting that the majority of the major temporal swings of *Heroes* take place in graphic novels, it’s perhaps more important to consider what might be a fundamental characteristic of transmedia network complexity: a correlation between the network’s topology and the fictional locations that the events of *Heroes* take place.

String Theory: Navigating the Pathways of HEROES

‘It’s an unexpected wish come true to be collaborating with the team at Smoking Gun Interactive, the first developers I’ve encountered who really understand the difference and potential marriage between narrative and game - between storytelling and total immersion...I’m going to get to work closely with them, **writing narrative pathways that carry readers through the universe** of the game world. We’ll all be writing for and stealing from one another, developing plot points, set pieces, and characters that have both stories in the books, and purposes in the games. Players who have read the books will have a richer game experience; readers who play the game will come to understand the stories from the inside.’

—Douglas Rushkoff on *Exoriare*

As we navigate the paths of the *Heroes* graph, we move through the spaces of the storyworld itself, passing through cities, rural houses in the country, underground bunkers hidden in the desert, coastal rendezvous’ where characters hide from harm. An important dynamic can be located by observing such movements—the further we move away from the ‘central core’ of the network, the further removed we become

from both the events of the television show and the locations that the show takes place in. In navigating a transmedia network, then, especially one as developed as *Heroes*, there is a pronounced correlation between the narrative elements that define what we experience—the characters, places, events and objects of the fiction—and the topological and topographical features of the graph itself. Albert, Jeong and Barabási point out that regardless of a graph's size or complexity, its topology inevitably determines its connectivity and, subsequently, the means through which we access information from it (130). In this sense, the connectivity of the *Heroes* network is inordinately derived from the narrative of the fiction itself. The question I asked at the outset of this chapter, though—what is a 'narrative pathway' through a transmedia fiction?—looms large in a claim such as this one, for if connection in a transmedia network is truly based on narrative, then what does a network's visualization tell us about the embedded, framed and intertwining modes through which story connections are made? Because of the size and scope of *Heroes*, its graph provides an invaluable opportunity to study the narrative and network affects of pathmaking and pathbreaking that seemingly ground such a question. What does it mean to 'follow' a path in a transmedia network? Under what conditions are paths formed? What does a path's topography tell us about the narrative and network engagements taking place in its navigation?

Branching Pathways

In network parlance, a path is a sequence of edges. In a directed network, a path always has a trajectory, a flow through which we can ‘walk’ it. These walks are ‘closed’ if the starting vertex is the same as the finishing vertex, and ‘open’ if the starting and ending vertex are different. Closed walks, also known as circuits, have a forceful and developed history within the study of narrative and its network permutations. Marie-Laure Ryan (2004b) calls circuits ‘the formal trademark of a network’ yet while discussing networks later, she also states that the loops that define a circuit (i.e. the path that starts and finishes with one vertex), are a ‘major obstacle to the generation of coherent plots’ (2006: 102). ‘A story’, Ryan continues, ‘is an action that takes place in time, and time is irreversible. Any diagram that allows a return to a previously visited vertex cannot, consequently, be interpreted as the model of a chronological succession of events, because the same event never occurs twice’ (ibid). While Ryan was talking primarily about hypertextual networks like Stuart Moulthrop’s hypertext *Victory Garden* (1992), where a user could control the ‘order of presentation of the events’ (ibid) by clicking on a linked vertex, her points are worth considering here. If narrative implies a causal-sequential movement through time, then how can networks be structured so as to accommodate both a singular temporality and a multiplicity of sited content? The answer, it seems, lies in the directionality of the edges themselves, and the pathways they

create through a particular fictional universe. For Ryan, a network is only a system composed of loops; in actuality, these loops can be controlled (and eliminated entirely) based on the direction of the edges of the graph. We might expect, however, that edges that are structured at least partially by causal-sequential orderings might not experience the same problems of repetition that hypertextual systems became defined by. Yet even so, the network topology through which these elements coalesce suggests that open pathways are not only circuit-agnostic by definition, but that in a transmedia network, they are aided by jumps to other platforms that allow for multiplicity where repetition once dominated. While Ryan is right—‘the same event never occurs twice’ (2006: 102)—paths through transmedia networks show us that there are multiple ways of getting in and around an event, of augmenting or avoiding it through navigation schemes. While, as in life, events do not take place twice in transmedia networks, there are variegated means through which to access them that occur on both large and small scales. The overarching complexity of the *Heroes* network, though, means there is no such thing as a ‘simple’ pathway through its topology, no way to navigate its entirety without reaching a point where transmedia bifurcation takes place. While the graph itself that I have presented here is a whole-network visualization, because of the variant distribution times of each site the process of its creation was one where the establishment of one pathway through the universe was always only

provisional, waiting to give way towards transmedia multiplicity. This is seen in its most simplistic form in the presence of open and closed triads in the graph. Unlike in *Skeleton Creek*, however, here the open triad becomes a space that it later filled in by transmedia augmentation, creating a pathway where once there was only a terminal vertex. In the images below, we can see one such pathway form and re-form through the introduction of new sites into the network:

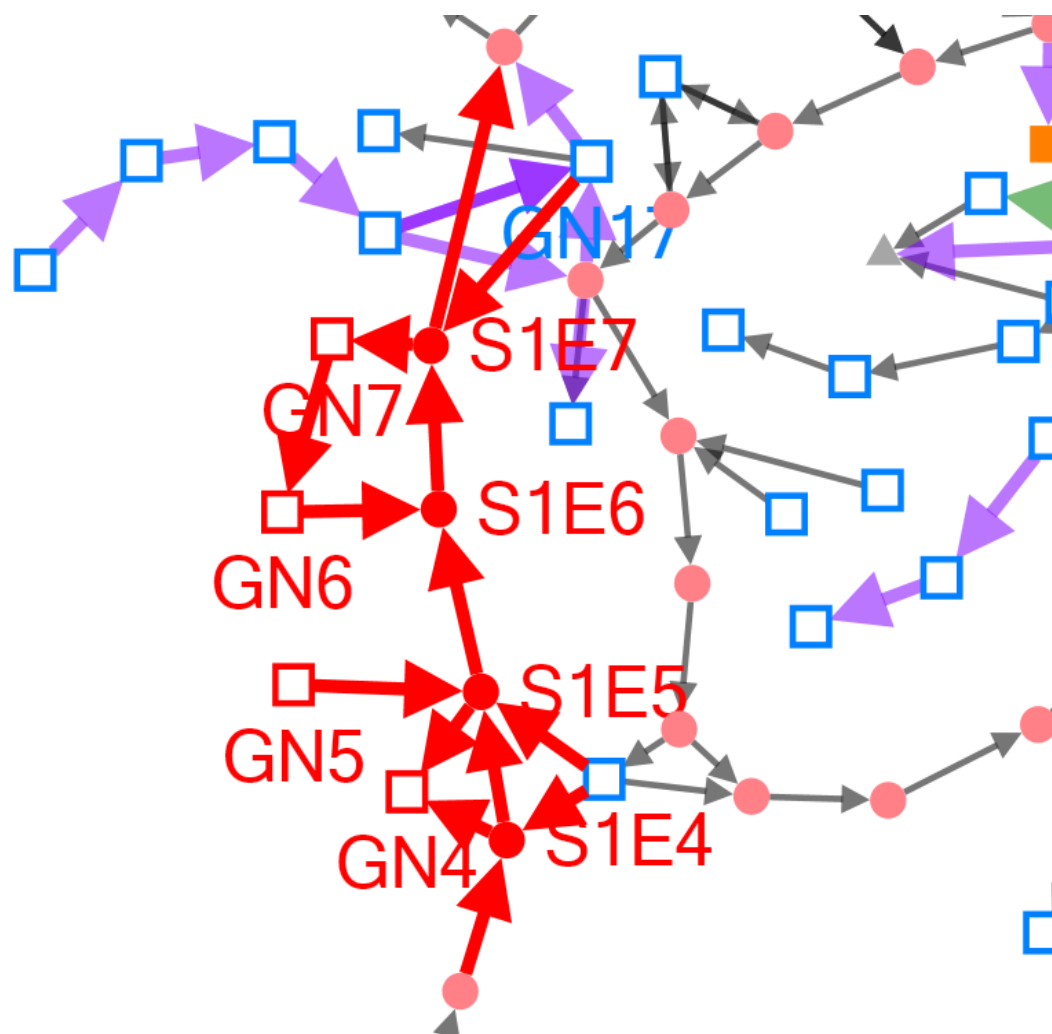


Figure 3.41: Early Pathway formation with paths highlighted

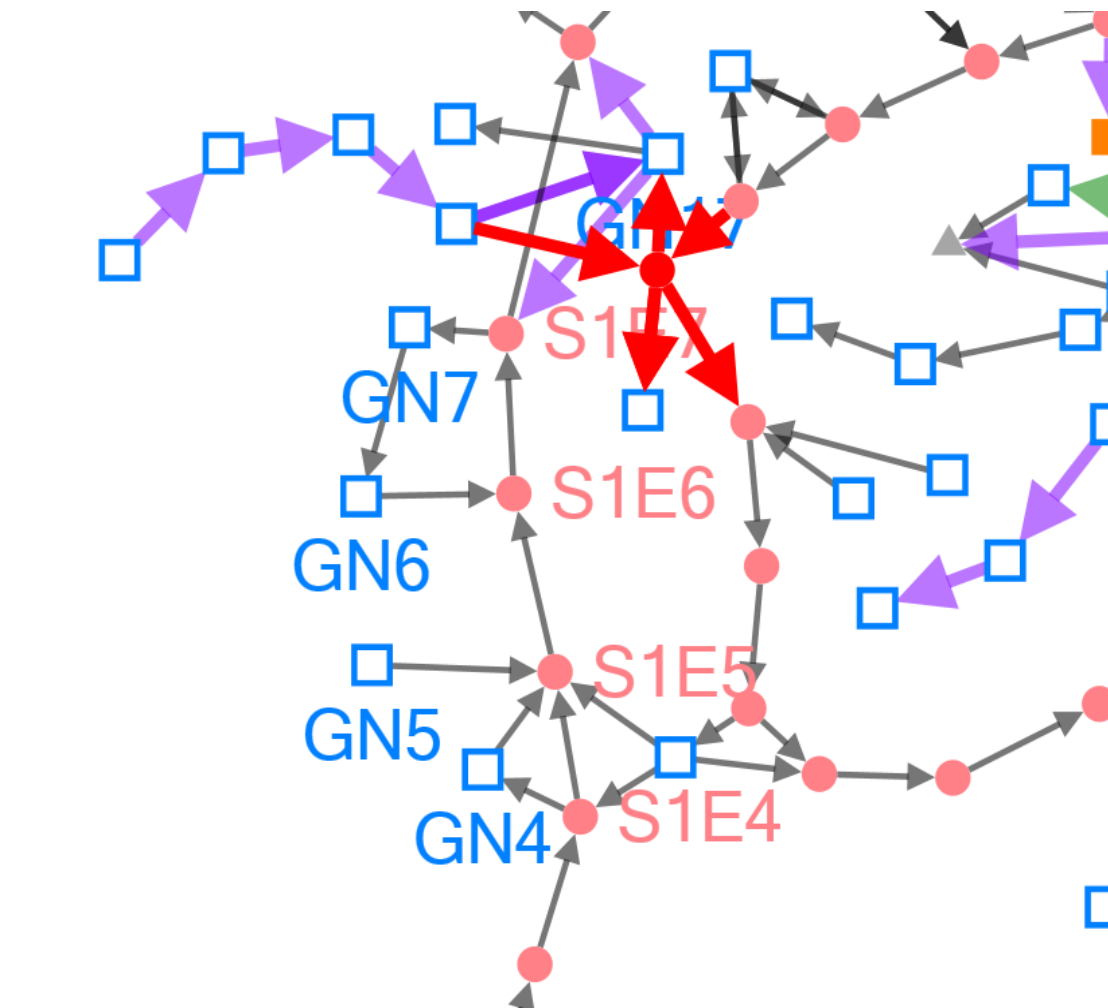


Figure 3.42: Early Pathway Formation

The pathways above represent a sequence of events that correlates to the distribution times of the sites themselves, with the events of the plot occurring in the same order that the sites were released in. In Season One Episode 4 of the TV show (S1E4) ‘Collision’, we encounter Claire, the high school cheerleader with the ability to heal herself from injury, becoming increasingly concerned with the behavior of a classmate, Brody, who forced himself on her one night. After hearing about another

incident similar to hers, Claire decides to take action against Brody by convincing him to let her drive his car, and then demolishing it with both of them inside, crashing into a wall at high speed. The episode then jumps to another character, never showing us what became of Claire. In S1E5, 'Hiros', we are reunited with Claire and Brody while they are being rushed into the emergency room. While she is soaked in blood, Claire is obviously OK. Brody, on the other hand, is not. Claire's father, the enigmatic Noah Bennett, arrives and, after hearing what Brody attempted to do to her, confronts him. Brody, however, somehow knows about Claire's powers, a revelation that prompts Bennett to threaten his life. Instead, he simply wipes his memory clean with the help of The Haitian, an associate with the ability to manipulate thoughts. Our final contact with Brody sees him not only unable to remember what happened with Claire, but also unable to even remember his name. This presumably, ends this sequence of events and, with it, Brody's arc.

But the extraordinary flexibility of the network itself allows for another possibility. Released immediately after S1E4 was a graphic novel (GN4) titled 'Aftermath' that illustrated the events that took place immediately after the car crash but before Claire and Brody were taken to the emergency room. In it, we learn that Claire's powers were not only revealed to Brody, but that she could have let him die in the car, which

exploded soon after they crashed.⁴⁰ Culled from three sites were two related but distinct pathways through *Heroes*, each distinct because of the triadic structure of the vertices and edges. Marked and located by intersectional cues, this pathway interceded in what were seemingly the (shown) sequential events of the TV show, providing additional causal information as to how Brody knew about Claire's abilities. Without the second intersectional cue, however, the sequence would have remained an open triad, much like those in *Skeleton Creek*, requiring a degree of allusion to the events of the graphic novel that S1E5 did not provide. This would have led to a terminal pathway in the network, one where narrative comprehension depended wholly on audience integration. Once the source-target relationship was completed in S1E5, the pathway was made both complete and, importantly, repeatable through the cues that structured it.

This branching constitutes the minimal conditions necessary for what I call a *cross-sited narrative*, a narrative where casual-sequential continuity and completion is located in a pathway that must be accessed via the transmedia navigation of a network's topology. In this sense, cross-sited narratives are always *embedded* within the network structure itself, marked as a series of edges that allow for two (or more) sequential orderings of plot to take place. Cross-sited narratives represent a

⁴⁰ Importantly, the movement from TV to GN produces a shift in perspective as well, with Claire narrating a first-person account of the crash and its aftermath in the graphic novel. These shifts will be dealt with extensively in the next chapter, Parallax.

fundamentally new ontology for understanding a narrative, for structuring plot as a sometimes branching, sometimes perspectively planar, sometimes object-oriented and interweaving embeddedness that layers meaning as a function of network directedness and course. While Ryan argues that the networked repetition of an event results in an incoherent narrative (i.e. one where a character can die in one vertex and can be alive in the next), cross-sited narrative pathways reveal the (minimally) dual means through which a single event can be filtered in a transmedia network. While we might easily imagine that, say, a flashback in the TV show recounts the events that took place in the graphic novel, this is not the case here, meaning that audiences who followed the singular, mono-media path of the TV show reconstructed the sequence of events leading to the car crash differently than those who followed the cross-sited path. While this dynamic may be the result of fundamentally different audience types and their subsequent predilections, or what Christy Dena (2008) refers to as 'tiers' and the 'tiering' of content, the existence of cross-sited pathways, even simple ones like this, raise an important question with regard to the study of narrative in transmedia frameworks: when presented with such bifurcations, what constitutes the 'correct' close-reading? Furthermore, what constitutes character, location or event analysis in such a context?

Of Circuits and Bridges

As Volume One of *Heroes* progresses, it becomes increasingly clear that many of the characters of the fiction share the same destiny: the anticipated eradication of New York City by a character possessing the ability to wield nuclear energy. Interestingly, as the events of the story transpire and the characters are drawn closer and closer together, the topology of the graph shifts as well and begins turning back on itself, forming a pathway that begins to retreat towards the graph's originating vertices:

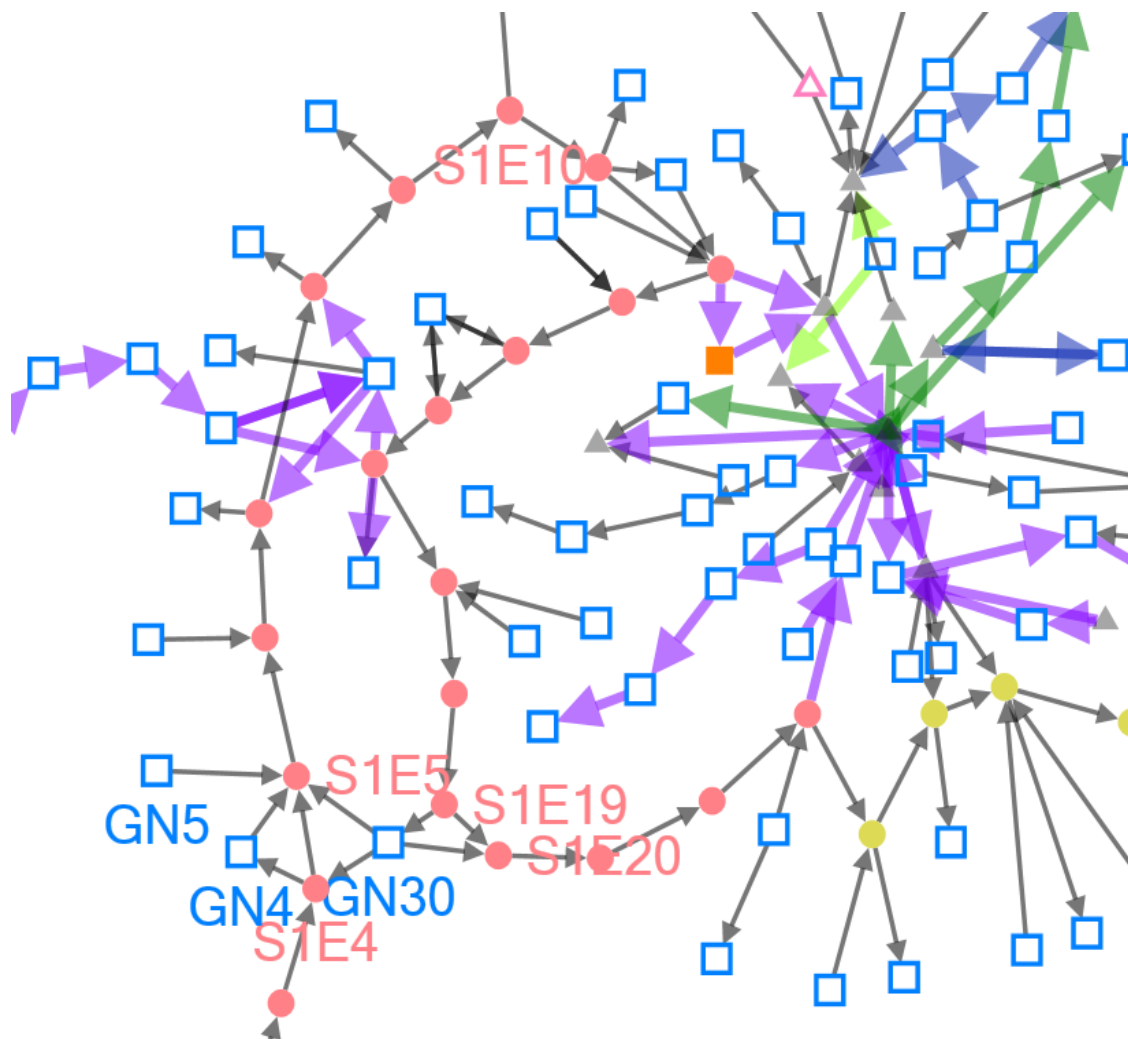


Figure 3.43: Volume One Circuit

By following the serialized path created by Volume One of the TV show, we can see that this doubling-back begins to occur at S1E10, an episode titled ‘Six Months Ago’. Fascinatingly, the graph once again models the narrative elements that structure the fiction as a whole. In ‘Six Months Ago’, we flashback to the lives of the heroes prior to the eclipse that both activates their powers and sets their lives on a collision course. The impetus of this flashback is a character named Hiro who

possesses the ability to travel through time, an ability he uses here to attempt to save the life of a woman he loves. This flashback is forcefully modeled in the graph's topology by an abrupt, yet wholly appropriate, reversal of course, one that continues 'downward'⁴¹ until it reaches a crucial bifurcation point in GN30. (Prior to that, it's worth noticing that the multiplicity of potential cross-sited pathways embedded within the graph, pathways that lead to and from the graphic novels that dominate Volume One's primary transmedia engagements. Indeed, we can even locate one pathway that originates in S1E16 and moves through GN17, *back* to S1E8 and terminates at GN8.)

It is important to remember here that sequence of events surrounding Claire and Brody's car crash were not the subject of the 'whole' site in themselves but, instead, partially embedded within the S1E4 and S1E5. GN4 bridged the narrative gaps between these episodes and, in doing so, created a new pathway in the process. Yet this dynamic can also occur in reverse, with the creation of a cross-sited pathway that *opens up* meanings in a series of sites rather than fills them in. If we follow the path marked strictly by the Volume One episodes, an interesting dynamic reveals itself: the pathway forms a circuit, doubling back on itself at precisely the moment when the timeline shifts. While I stated previously that transmedia networks generally resist the formation

⁴¹ It's important to note that in graphs such as this, there really is no 'up' or 'down', only the inward/outward direction of the links themselves. Even so, vertices that come to be linked in the network can affect the topology of the graph so that it mimics the trajectories of the pathways created by the links.

of circuits, this is not always the case, especially in networks that play with temporality the way that *Heroes* does with Hiro. Instead, cross-sited pathways are occasionally structured so that walks through them produce a significant feedback loop between the newly introduced sites and those that were already established and engaged. Network visualization shows that a dynamic such as this is often the result of the insertion of a bridge vertex that unites several disparate paths, activating (previously engaged) content by providing character motivations and planar event significance. In Figure 3.44 below, GN30 acts as such a bridge, one that creates the largest circuit found in the entire *Heroes* network:

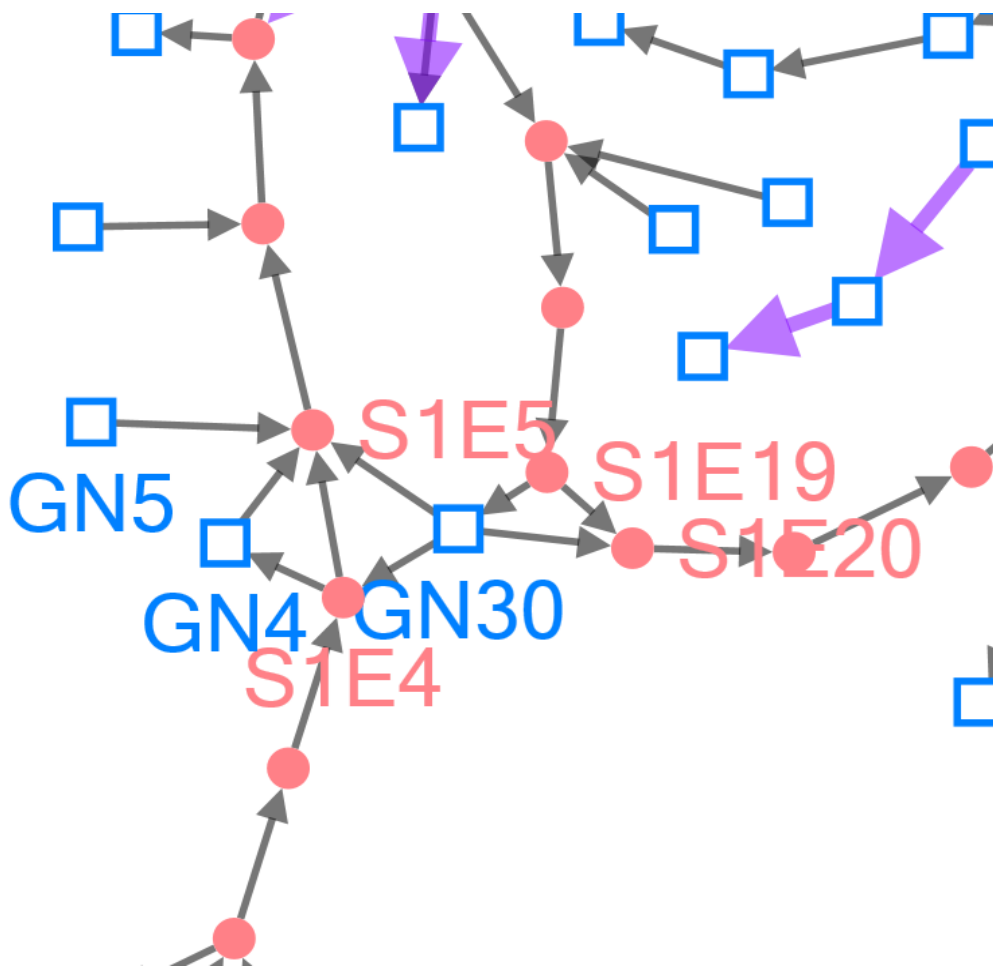


Figure 3.44: Cross-sited pathway as bridge

As we continue on the downward trajectory initiated by the flashback in ‘Six Months Ago’, an interesting dynamic begins to develop: a future incarnation of Hiro, one who lives to see what happens if the explosion is allowed to happen, begins to insert himself into the ‘present’ of the story, attempting to compel certain characters to act against the catastrophe. This culminates in GN30, ‘String Theory’, which shows what happens before and after Hiro travels back in time to persuade Peter Petrelli, a character with the ability to absorb other’s powers, to save Claire from

murder and, in doing so, save the city and the world. This conversation, however, already began in 'Collisions'. Here, however, we glean Future Hiro's motivations, his 'string theory' as he calls it, which revolves around a telling axiom he lives by:

Time was not a line of a fabric, but the product of lives, interweaved.

Remarkably, 'String Theory' also represents the point in the *Heroes* graph where the greatest interweaving of characters, events and sites takes place. 'String Theory's' insertion into the network acts as a bridge that completes a circuit beginning in 'Collisions', a circuit that gives new meaning to the episode's name. Now, instead of just referring the car crash, the graph's topology alludes to greater collisions taking place there between the various sites leading up to GN30. In the midst of this, a fascinating temporal movement has taken place, one that forms a loop between past, present and future all hinging on a single decision: either Petrelli saves the cheerleader and saves the world, or Future Hiro will be forced to continuously retrace this path, forever hoping to alter the course of events, caught in a loop between his own inability to affect causal change and the sequence of events that result from this ineffectuality. The bridge created by GN30, then, not only connects a network pathway with itself, but it is also a narrative pathway with itself, fusing multiple temporal events that culminate in Petrelli's single decision to save Claire. The circuit that is formed here can then either be traversed again with the new knowledge and contexts gleaned from its

initial walk or, as is much more likely, chiasmically integrated into an existing version of the *Heroes* storyworld that can now be updated and re-configured. It's equally fascinating to note that the only outgoing link from 'String Theory's that doesn't create a circuit is directed towards S1E20, 'Five Years Gone', an episode which, as the title suggests, represents the first flash-forward of the TV series, one that nonetheless aids in moving the present day events forward. This movement is again reflected in the graph, which stabilizes after its downward trajectory and begins its movement towards the central core where, importantly, audience engagement is structured via *The Heroes 360° Experience*, an ARG that began as a path leading away from this circuit and took place in the time between the distribution of Volumes One and Two.

Ignoring the many other edges that can be found on the paths between S1E4 and S1E20, there are no less than four cross-sited pathways that can be routed through 'String Theory' alone, one of which represents a significant causal-sequential and temporal shift in the timeline(s). This is, in many ways, a reflection of the power of a transmedia network—we might imagine a similar narrative arc occurring in a novel or a film, but in either case, the bridge would have to be manifest, present in some way in the narrative that signifies the connections it brings. But in transmedia networks, these elements can also be nested in the topological and topographical elements of vertex and edge connectivity, present if located, invisible if not. Moreover, the

resulting cross-sited pathways formed from edges and bridges such as these remain, in my view, a wholly unique and irreproducible component of transmedia network design, one where the paths marked by cue definition structure content so that it is always multiply producing. An event in a transmedia network is always a plural conditional, one tenuously hinged between the paths produced by more conventional serialization and embedded cross-sitings. As has been hinted here, though, events are often only products of a narrative agent's causal actions. So what might a visualization of the *Heroes* network tell us about the characters themselves?

Character Pathways

Much as events in a transmedia networks are often doubly, triply, quadruply realized through multiple paths, characters can also be tracked and analyzed by locating and following the paths they create and travel on through the universe. Unlike the sequential paths listed above, though, the cross-sited existence of a character is often realized at *multiple* regions of the graph rather than in consecutive vertices that can be walked. This occurs not in spite of the network, but *because* of its relation to the spatiotemporal topology of its vertices and connections. In many ways, characters exist in transmedia networks not simply as catalysts of particular events, but also as avatars through which we explore and experience a diverse array of universe elements, actualizing them into experiential storyworld elements. In other words, transmedia

fictions often function as *open-worlds*, spaces that promote exploration and detailed engagement. Unlike open-world video games like the *Grand Theft Auto* series or *Fallout 3*, however, the open-world dynamics of transmedia fictions require that we *follow* instead of *guide* a certain character through a fictional world. One way that we can do this and at the same time analyze characters roles, causal interventions, and movements through a fiction more clearly is to track their movements on a graph. This also, importantly, can be applied to design strategies as well—by understanding a character not as a fictional construct but rather as a guide through a particular universe, the graphing of that character’s path serves to highlight their engagement with other characters, various locations, and involvement in certain events.

Tracking character paths can be facilitated with NodeXL through the creation of an edge column where character names can be recorded and then later sorted. As I mentioned earlier, there are several perspectival shifts that occur in each transmedia migration, shifts that are engendered by the capabilities of each site. In *Heroes*, as we move further outward from the TV episodes, there is a general constriction of the scope of each site. Rather than deal with multiple characters, the extra-TV sites of *Heroes* tend to favor a more individualized take on the universe, one that positions a singular character’s narratives over those that involve multiple major characters simultaneously. In other words, as we move from site-to-site in *Heroes*, our view of the *Heroes* universe

becomes more acute but, conversely, the storyworlds that are maintained gain heightened detail and object-orientation from this acuity.

Characters, then, are located by the sequences of events in which they play significant, indispensable roles. As we will see, though, these roles vary greatly, ranging from assisting other characters and setting events into motion, accessing certain objects that otherwise might have remained hidden, or in a particularly unique instance of network topological correlation, chasing (or being chased) and tracking other character's paths through the network, much like we do in attempting to piece together the multiple narratives of the *Heroes* universe. Since edge definition and connection creates paths in a network, characters were listed if the sequence invoked by the connection of two sites involved, at least partially, a character's own sequence of events.⁴² This means that multiple character pathways can and often are embedded and marked within a single site that directs and redirects narrative information to different points on the graph. Interestingly, these intersections often come at crucial moments in a character's narrative arc, moments that impact the course of their narrative irrevocably. Finally, once the edges were sorted for characters, they were additionally sorted by the date of the site's distribution, meaning that tracking a character's path in the graph is also a 'real-time' depiction of the course it charts through the

⁴² This also explains why there are several *islands* that exist at the bottom portion of the *Heroes* network, as the sequences of events that are detailed in these clusters have no relation to the other sequences of the network, aligning themselves more as *universe* or mythological elements than pathways through the world as a whole.

network. In what follows, I will illustrate the process of tracking and analyzing character paths in *Heroes* by following three characters that I feel represent a good cross-section of the dynamics occurring in *Heroes*: Hana Gitelman, aka ‘Wireless’, who can hear and intercept as digital communications such as emails and cellphone calls, while also manipulating and accessing the devices that send these messages; Doyle, a ‘puppetmaster’ with the ability to control others actions; and Rachel Mills, a government agent with her own secret abilities assigned to hunt many of the superhumans. In each case, the network’s topological and topographical features play a vital role in not only structuring the paths of the characters, but also simulating the spatiotemporal movements they make within the universe.

From Wired to Wireless: Tracking Hana Gitelman

As the primary protagonist and ‘guide’ of the *Heroes 360° Experience* (and ARG set within the *Heroes* universe) Hana Gitelman, aka Wireless, is unique in that she was introduced and developed entirely as a cross-sited character, one whose exploits are charted across the Web, SMS messages, email and graphic novels, occasionally appearing in the television show as well. As noted in previously, Gitelman quite literally works in the background of many of the sites of *Heroes* as an operative who eventually teams up with Noah Bennet in order to take down The Company, a force responsible for the hunting, killing and exploitation of many those possessing special abilities. Wireless, as her name implies,

possesses the ability to intercept and access all digital communications, and she can additionally hack into cellphones and servers to manipulate the messages they transmit. Eventually, though, Wireless dies selflessly trying to bring down a Company satellite that tracks the superhumans. Or, so we think. After some time passes, Wireless reappears only now, she is pure data herself, a conscious stream of binary code that drifts from computer to computer, searching for those responsible for her death and vowing to shut down their capabilities to further exploit those with abilities.

The relative straightforwardness of this plot summary, though, belies the complexity of its execution. In many ways, Wireless represents the first truly cross-sited character, whose presence in one site is always only a temporary intercession of several pathways that span the entire range of platforms that *Heroes* uses to construct its fiction. Wireless is only ever partially realized at any one instance, always moving inward and outward from a particular site towards another, moving incessantly towards her goal across some 36 unique sites and 37 edges (many of which are migratory cues and not simply serialized continuations). Wireless is also, crucially, developed intermittently over the course of almost 18 months of distribution time, appearing in various sites for a while and then disappearing just as quickly. She is, then, as fragmented as the data stream she becomes, spread across the network as a series of small paths rather than one continuous sequence. The video below,

which highlights the multiple paths occupied by Wireless, illustrates this dynamic. Pay particular attention to the paths that move in and out from the central core, a space where, as I mentioned previously, the *Heroes 360° Experience* ARG is centered and managed by Wireless herself:

Figure 3.45: Hana Gitelman's Pathways

<http://youtu.be/HYA-6INqGMQ>

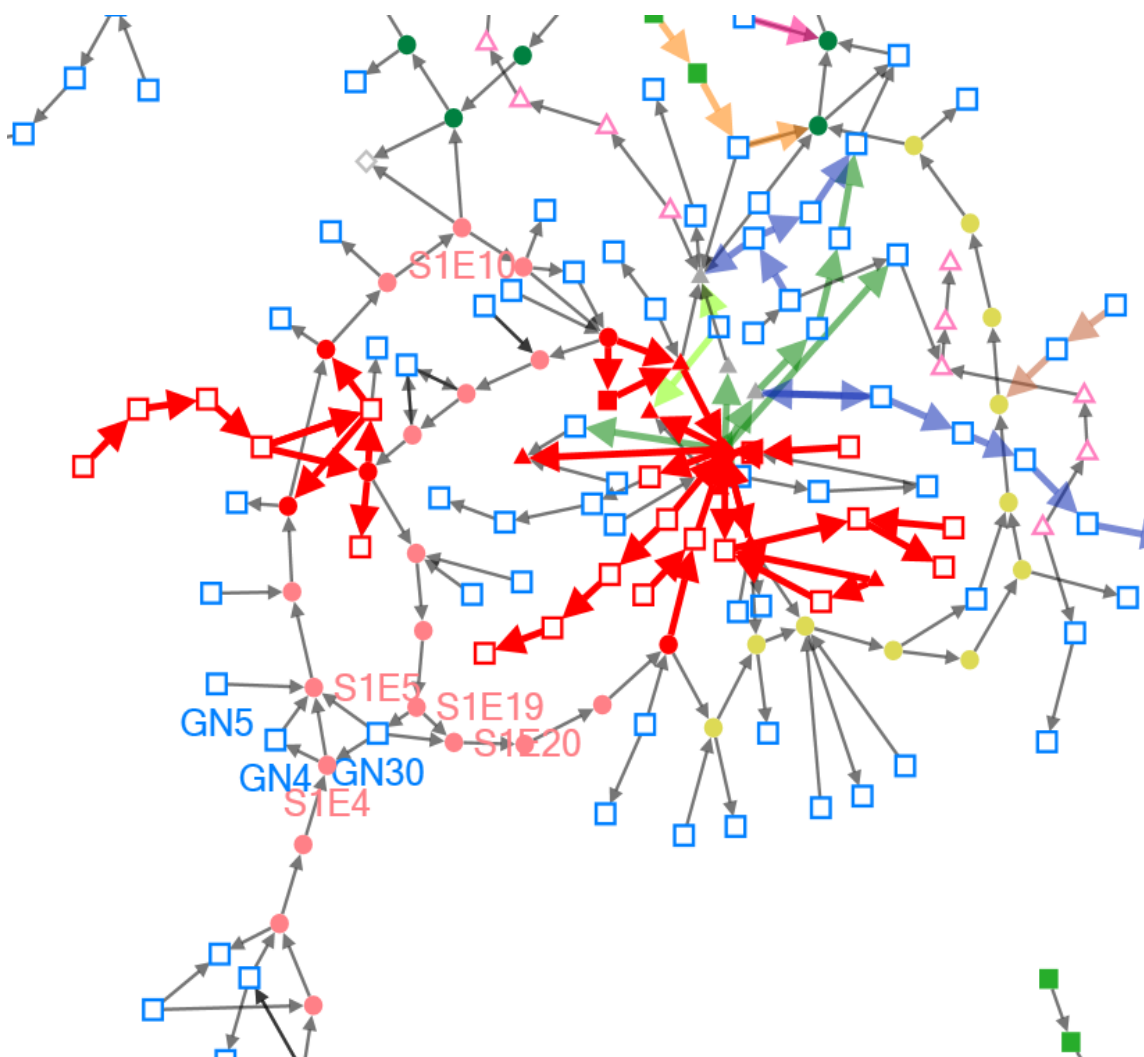


Figure 3.46: Hana Gitelman's Pathways (Highlighted in Red)

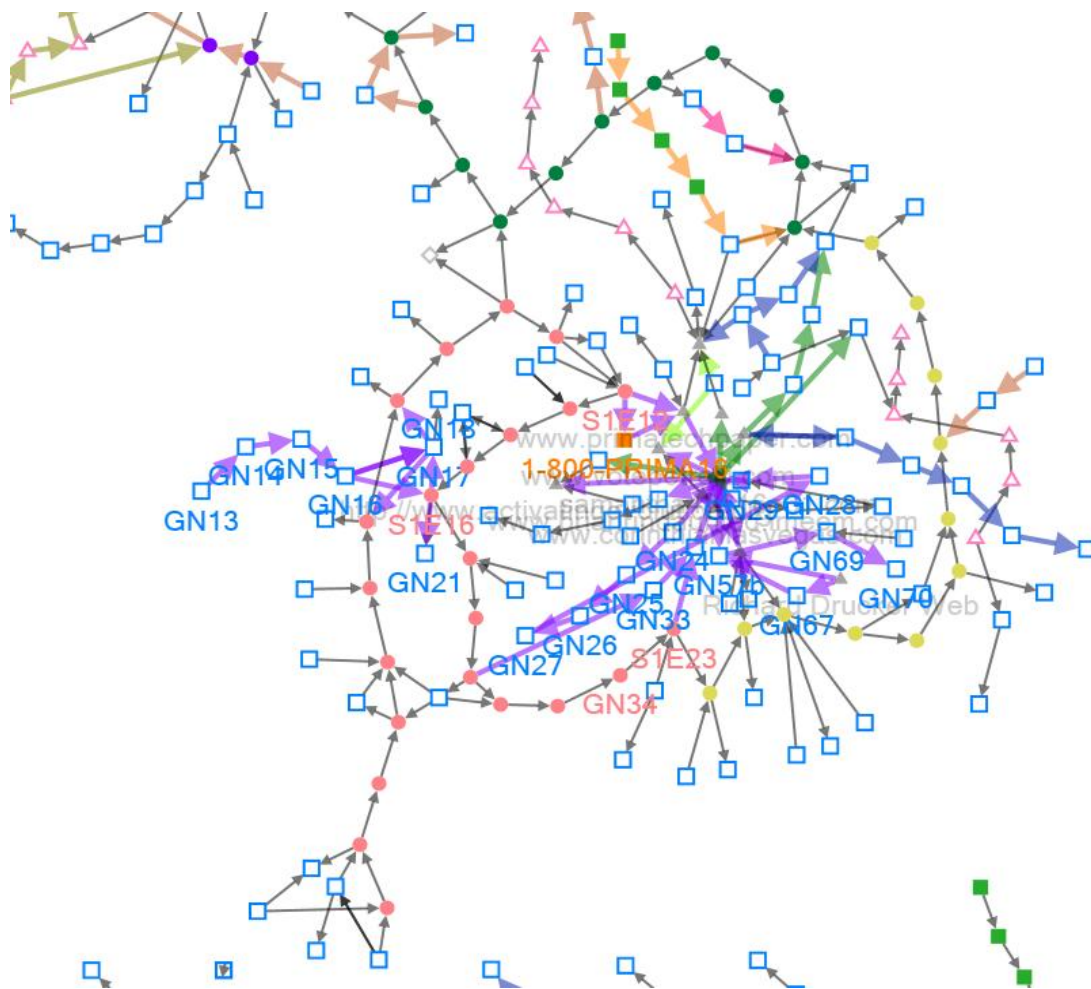


Figure 3.47: Hana Gitelman's Pathways (Hana's paths are marked with PURPLE edges)

Wireless's narrative(s) begins somewhat innocuously in a series of graphic novels titled 'Wireless Parts 1-4' (GN13→GN16; left region of the graph) that charts the origins of the character from her time growing up in the Israeli army, to her recruitment by The Company and eventual betrayal at their hands, to the nascent stages of her campaign against them. As we move through the graphic novels, we move through some 17 years of Wireless's life, travelling from Tel Aviv to Tanzania to, finally,

Montana, where she can sense wireless transmissions more freely and, importantly, plot her revenge against The Company. She is, in other words, gradually working herself into the framework of *Heroes*, and the movement of this micro-sequence into the main component confirms this, splitting immediately after GN16 into either a direct cue movement towards GN17 or S1E16, two sites containing an event plane intersection that further connects them.

This begins Wireless's subtle movements in and out of several sites, where she aids two characters, Matt Parkman and Ted Sprague, who are similarly concerned with exposing and bringing down The Company. (Importantly, Sprague is also the human bomb whose powers Hiro warned about in the earlier events I touched upon here.) Crucially, these movements amount to a cycle of disappearance and reappearance. For example, Wireless appears at Sprague's hideout in GN17, 'How Do You Stop an Exploding Man?, Part 1', but disappears towards its end when she overhears police chatter with her abilities. Telling Ted to 'send an email...to anyone' and she will pinpoint his location, Wireless slips away unseen. Ted's pathway, however, continues in GN18, 'How Do You Stop an Exploding Man?, Part 2' where, without Wireless, he attempts to escape The Company and causes quite a bit of destruction in the process. Returning to S1E16, however, we learn that following this destructive tear, Ted contacted Wireless again and they agree to meet in a cemetery to discuss plans. Fittingly, in the middle of the episode,

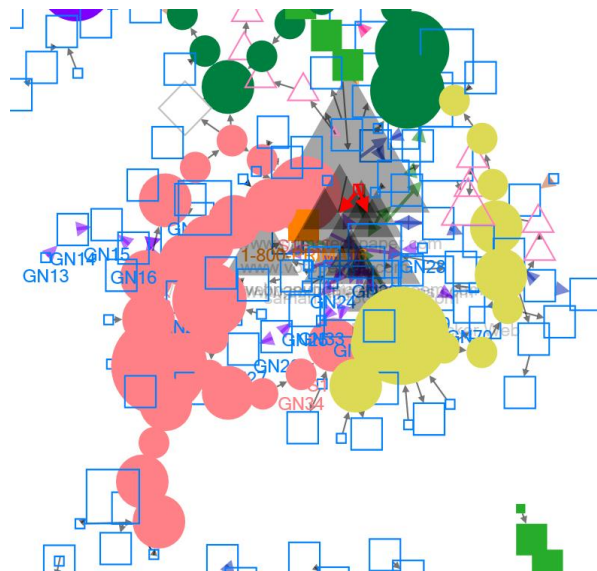
Wireless appears from out of the darkness of the background and inserts herself in between Matt and Ted, telling them that she has tracked The Company to a business called Primatech Paper. Instructing them to investigate further, Wireless once again disappears into the background, and she isn't seen or heard from on the TV show again. Her path, however, continues in GN21, evocatively titled 'The Path of the Righteous', where an event plane intersection cue places Wireless in the cemetery with Matt and Ted just before she leaves them. Wireless, seemingly aware of the pathmaking and pathbreaking occurring at the time within the *Heroes* network, remarks that unlike Matt and Ted, who are headed to Primatech Paper, 'I'm on a different path', a path that she hopes will take her to the top of The Company's hierarchy.

She begins this path by locating a trail of email communications seemingly linked to Primatech Paper and whoever controls it, and starts her journey to Las Vegas. Prior to arriving, though, Wireless loses this trail and, by the book's close, states that 'I tried to find the encrypted path again...but it was gone, and I had no path to follow' (Coleite and Johnson 2007: 7). This statement, it seems, has network ramifications too, as it marks a terminal point on Wireless's path, the end of the first of her cross-sited pathway, a sequence that was embedded in a micro-serialized set of four graphic novels, the first part of a two part graphic novel serial, a three-minute intercession in a television show and, finally, a graphic novel that overlaps with the TV show and then moves outward

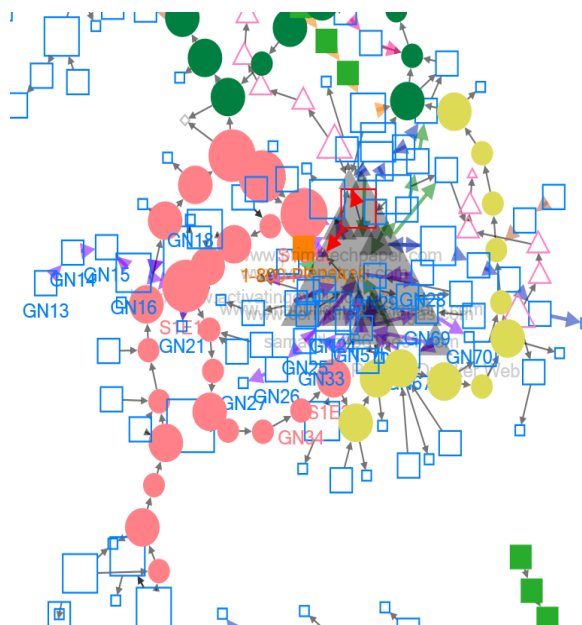
towards its own vistas. The movements created a path that first moved in and then moved outward from the central component of the *Heroes* graph, marking Wireless's equivalent movement in and out of various plotlines.

This is not, of course, the last we see of Wireless. In the course of her interactions with Matt and Ted, Wireless also sustained the bulk of the *Heroes 360° Experience*, an ARG with paths that were cued directly by phone numbers or website URLs in various TV episodes, graphic novels and websites, all leading to a one site: samantha48616e61.com, the closest manifestation of a singular hub in the entire *Heroes* network, a central core through which numerous paths converge and begin again. This is partially because of the ease with which websites can be updated, revised and restructured to accommodate transmedia content and connections, but also because Wireless's narrative begins again from this site, incorporating audience interaction in a quest to stop the election of a politician who will assist in bringing about the destruction of New York City. Much like Rachel Blake's actions in *The LOST Experience*, we can witness a high degree of incoming and outgoing links leading to and from samantha48616e61.com (Figure 3.48 below; the large triangle at the center of each image is samantha48616e61.com). Yet even so, in this capacity Wireless is less a character moving through the *Heroes* universe as she is a facilitator of the causal interactions that take place in the ARG. As such, while she inevitably influences the events of *Heroes* by

enabling the audience to solve puzzles, her own narrative is arrested at this point, bound to her role in the ARG and a website that acts as a central distributor for several other narratives:



In-Degree



Out-Degree

Figure 3.48: In- and Out-degrees in *Heroes* shown as a function of the vertex's size

But such an account is only partial, as beginning in GN24-29, ‘War Buddies Parts 1-6’⁴³ Wireless takes on the role of information courier, cuing audiences directly to the existence of The Lonestar File, a series of documents she discovered in a Pentagon hack that detail the histories of two of the more nefarious characters in *Heroes*. The final panel of the GN29 shows Wireless, file in hand, extending it outward towards the reader, almost as if she is attempting to pass it. And, in many ways, she is, as The Lonestar File begins to pop up at other locations in the graph following this action, handed from character to character, smuggled from location to location.⁴⁴

It isn’t until GN33, ‘The Death of Hana Gitelman, Part 1’, that we once again locate Wireless and her continued operation to take down The Company. Continuing a scene from S1E19, ‘.07%’, GN33 shows the details of a meeting with Matt, Ted and Noah Bennet, who has now joined their cause (although the story of *why* this happens occurs cross-sitedly in other paths). Bennet instructs Hana that if she wishes to succeed against the company, the only way to do it is to bring down their tracking satellite, which locates and tags every human with special abilities in the world. Hana agrees and in GN34, ‘The Death of Hana Gitelman, Part 2’, we witness her launch into space, her attempted

⁴³ It’s important to note, too, that over the course of these six graphic novels, there were also six different story writers, strongly suggesting the presence of a larger, pre-determined narrative trajectory constructed to maintain continuity.

⁴⁴ It is possible to track objects here much like characters, sorting the columns of NodeXL to highlight the object’s trajectory through the graph.

decryption of the satellite's security, and her infection by a virus located within these security protocols. Dying, she flings herself at the satellite, knocking it out of orbit and sending it burning through the atmosphere, herself attached to its fiery hull but inserting herself into the mainframe of the satellite before she is vaporized. The final page of the graphic novel shows another character, Micah, in an instant message conversation with an unknown contact who, in the closing panel, reveals herself to be samantha48616e61.com, Hana Gitelman reborn in the data stream. This resurrection has a topological effect as well, with a direct cue leading us back once again to samantha48616e61.com, a website that is located through the digital network that gives her a voice, while another path, one that concerns Micah, begins from here as well.

From this point on, Wireless literally pops up across the network, announcing her presence at websites like www.activatingevolution.com to the Assignment Tracker 2.0 (an online database containing universe-oriented information about the characters of *Heroes*). At no point, however, do the sites connect with each other but, rather, only samantha48616e61.com, the closest thing she will ever get to regaining her material body. Soon after this, via Richard Drucker Web, Wireless learns she is not alone, and Richard Drucker, a character with similar powers, is also floating wirelessly online, hoping like to also tear down The Company for good. They team up in GN69 and GN70 to do just that, but both are destroyed in the process. Death for Wireless meant the

eradication of the server network that sustained her bodiless form; death within the *Heroes* network means the eradication of her path, with no links to connect her back to other sites. From this point on, Wireless simply ceased to be.

Chasing Down Doyle

While the sequences involving Wireless represented a pronounced isomorphism between the actions of her character and the topological placement of the cross-sited sequences that defined her, they were mainly isolated from other character paths of the network, bound to themselves and their own causal frameworks. This is not, however, the case with Eric Doyle, a nebulously intentioned ‘puppetmaster’ with the ability to control people, and Rachel Mills, an agent of The Company tasked with tracking down Doyle and those like him. With Wireless, the network reflected her constant background presence, prodding other characters to action and jumping around the graph as she did so. As we will see, though, the paths that Doyle and Mills negotiate within the *Heroes* universe are often times significantly braided and cross-sited in orientation, a dynamic that reflects the cat-and-mouse narrative through which they are bound:

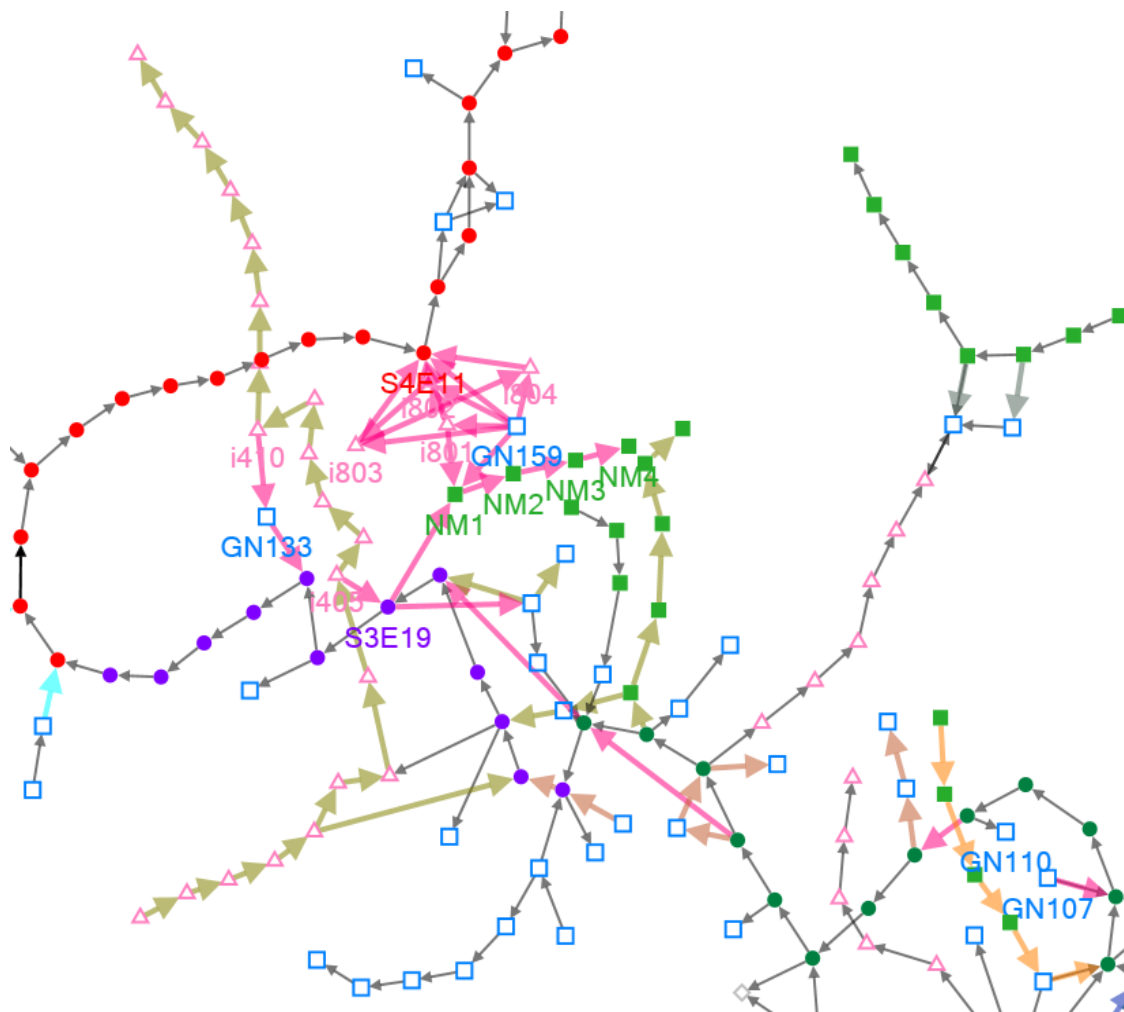


Figure 3.49: Eric Doyle and Rachel Mills' paths through *Heroes*

(NOTE: Doyle's paths are marked by PINK edges; Mills' paths are marked by OLIVE edges)

Over the course of some fourteen months, the character of Eric Doyle is cast as a villain, a prisoner, a mailman, a carnival attendant, and, in the end, a possible hero. During this time, Doyle's odd plotlines, realized in a combination of TV, graphic novels, iStories and webisodes, become increasingly personalized as we move through the network with him, culminating in a first-person video-blog of sorts during the fourth

and final season of the *Heroes* TV show.⁴⁵ Yet, as we begin, Doyle is enmeshed in the same TV-to-GN traversals that typified many of *Heroes* early transmedia connections. Even so, his location on the graph is telling as he, much like Wireless, at first pops in and out of different sites, influencing events and then disappearing, only to reappear again in a completely different region of the graph in a different platform.

Appearing first on September 22, 2008 in S3E2, 'The Butterfly Effect', Doyle is initially incarcerated in Level 5 detainment, a maximum security holding cell built five stories beneath Primatech Paper, the same company that Wireless, Matt and Ted were attempting to infiltrate. After a freak accident involving another character with devastating electrical abilities, all of the prisoners on Level 5 are released from their cells, and the last we see of Doyle in this episode is a fleeting glimpse of him as he escapes out of the door.

Some two weeks later, however, the story of *how* Doyle came to be imprisoned at Level 5, as well as his subsequent escape, is anachronously sequenced with S3E2 via an intersectional cue found in GN107, 'Doyle', which places the site within the time frame of Level 5 break. Yet after Doyle escapes, he also disappears from the graph, hiding from The Company who is determined to find him, until he reveals himself in S3E5, 'Angels and Monsters', where he kidnaps Claire's

⁴⁵ This points to a larger pattern within *Heroes*: as we move from site-to-site and platform-to-platform in the network, our movements away from the 'spine' of the TV shows results in increasingly pronounced shifts to individual rather than collective narrativization, with an equally corresponding shift in perspectives.

mother and, using his powers, forces her to be his slave. Importantly, this episode was released simultaneously with GN107 on October 13, 2008. In this context, it's impossible to regard Doyle's disappearance and subsequent reappearance on the graph as a function of the gap between the distribution times of the sites since both S3E5 and GN107 were released at the same time. Instead, this dynamic once again points to an isomorphic correlation between the events of the *Heroes* universe and their location on the graph. Instead of a strict representation of sequential space or time, though, the visualized *Heroes* network seems to reflect a directed ordering of sequential *events*, so much so that character paths, when they do cross, almost certainly imply shared spatiotemporal parameters or, more simply, contact between them. This is, admittedly, a statement with paradoxical overtones, as narrative events are *always* a reflection of a specific place and time. Because of the multiplicity of sites through which it is composed, though, the transmedia network of *Heroes* allows for the simultaneous existence of *multiple* event planes, each composed with variant platforms, each a unique marker through which navigations are made.

For example, after Claire manages to subdue Doyle and Bennet once again takes custody of him, Doyle once again disappears from the graph, imprisoned again at Level 5. While other paths in the *Heroes* universe deal with those in Level 5 at the same time that Doyle is imprisoned there, these paths do not intersect with Doyle's explicitly,

rather only hovering around them, drawn together by a shared space and time. Looking at the graph again, however, it's apparent that Doyle's path begins to jump widely soon after he is imprisoned. He appears in S3E10 briefly as a background character in his cell, and then doesn't reappear until S3E13, when he is released from his cell by Bennet to aid in apprehending an even greater threat, the powerful Sylar, who has infiltrated the building. Offering Doyle freedom if he does so, he accepts but fails in his mission. The episode ends with the building in flames and Doyle presumably dead.

Rachel Mills' path through *Heroes* is far less typical than Doyle's. Beginning as a background character training as to be an agent in S3E12, Mills' path immediately diverges, branching off into a series of cross-sited paths leading sequentially from the first of five webisodes titled 'The Recruit', which show Mills' training, to GN116 to S3E16 via an intersectional cue, or leading to the remaining sequence of webisodes which show the events leading up to Mills appearing in S3E16, albeit now with an acceptance of her powers. There are, importantly, three paths here that we could follow with Mills, each of which define her in a different way. In the first, we simply move sequentially from TV episode to TV episode, unaware that Mills has any special abilities. In the second, we move from TV to Webisode to GN, learning briefly that Mills has the ability to teleport, and that she used this ability to save a fellow recruit from an explosion in Building 26, the training facility. In the third, we

learn the aftermath of the explosion, Mills' discovery of a formula that amplifies one's abilities, and her subsequent apprehension and interrogation at the hands of Angela Petrelli, a figure who plays a significant role in the lives of many of the *Heroes* characters.

Significantly, as essentially short-form TV episodes, the webisodes contain many of the same actors, sets and other production values as the television show, thereby forming a more seamless semiotic transition than a jump to other platforms might. Much like the plurality of events I highlighted earlier, then, transmedia networks also always instantiate a plurality of characterizations, too, as a product of the numerous cross-sited pathways that often define them.

By the time that Doyle's and Mills' paths cross for the first time in S3E18, 'Exposed' (yet another title that belies the actions of a cross-sited character), there multiple versions of each character that might be brought to bear on the narrative. In an intriguing twist on the normative network logic of shared event planes, however, the path crossing that occurs here exists as a near-miss only, one that locates the characters in the same space but mere hours apart. Stationed outside of Claire's house, Rachel, now a fully-trained agent, is on a stakeout for a superhuman named Alex, whom The Company wants to recruit for their own purposes. Tipped off that agents were about to storm the house, Alex leaves and Rachel searches the house, only to find it empty. Later than night, though, Claire returns to the house and finds Doyle, whom

we last saw in the Primatech fire, alive and well, holding a cellphone with a message from someone named Rebel stating 'Claire will help you'. This pattern continues for some time, with intersections between Doyle and Mills occurring at shared vertices i405, i410 and GN133, with Mills helping Doyle escape capture or execution at each juncture. Rather than his path ending, the intercession of Mills' path into Doyle's acts instead as a bridge, connecting Doyle to other narrative possibilities and constructing a new cross-sited trail in the process. Doyle's final disappearance and reappearance after his last encounter with Mills places him in his final path. Having joined a demonic circus carnival, Doyle eventually realizes the error of his ways and, with Claire's assistance, he starts a new life, one where he powers will be used for good. This ends Doyle's story and, with it, his path terminates in the graph.

So what can we take away from this brief qualitative analysis of these characters' paths? Is there a logic to these movements outside of the multiple event planes that informs a character's movements across the graph? Wireless disappears right after sending Ted and Matt off on a mission of their own, only to reappear later in a different part of the graph on a different mission herself, a changed woman with a larger goal in mind. Doyle torments and almost kills Claire only to have her defeat him, after which he disappears and then reappears in the upper part of the network, a changed man who regrets his violent past. . In other

words, when charting a character's cross-sited pathway through a transmedia network, one should expect that as pathways begin, progress and then end, a character's reappearance in a different place in the network corresponds almost directly to a change in both the character herself and the positional ontology of the sequence of events they once occupied. Because cross-sited pathways are *always* embedded within other sites, the storyworlds cued by these pathways are also always embedded within those sites, existing as a multiply complex, but always singular production, where updates and revisions are made to an existing script and not in the creation of a new storyworld (Herman, 2005: 108). In this sense, while I've spoken of characters in terms of the 'disappearance' and 'reappearance' of the multiply cross-sited paths present in *Heroes*, we might do better to discuss a character's path in terms of a thread that extends under the narrative fabric of the universe, surfacing from time to time, weaving together other threads and binding them in place. Characters may not construct multiple paths through the network, but, instead, one unbroken path that penetrates the universe from time to time, allowing us to follow it throughout the network or to occasionally pick at its edges when it reveals them.

Conclusions: Designing through Visualization

This chapter has shown that the visualization of transmedia networks is not only a possibility, but a highly-viable means of studying the dynamics of transmedia fictions from both a macro and micro level.

As is also evident, though, there are varying degrees of subjectivity inherent to defining edges and even, at times, vertices within these networks. This should not, however, discourage further use of this system as this subjectivity can be thought of more precisely as an act of *close reading the network*. Consequently, the development of transmedia visualizations, from the creation of the data sets to the analysis of the graph itself, is also a way of ‘visualizing’ the audience’s interactions with a particular fiction. Each column’s population in NodeXL, then, should be seen as an act of interpretation, with insights ranging from minor (the recognition of a *direct cue*) to significant (the construction of a pathway through the network). In this regard, NodeXL and the corresponding transmedia template has potential value to transmedia designers who are working with a large number of sites, as it provides a visual means of understanding the connections and disconnections that potentially populate their fictions.⁴⁶ Indeed, such models are already partially being used by transmedia producers, albeit in a much more limited way:

⁴⁶ It is also possible to imagine including audience metrics—TV ratings, website hits, time spent on a particular site—being included in a NodeXL visualization as data that might weight the edges/ vertices in a certain way, allowing for an even *more* nuanced view of network coherency and navigability.

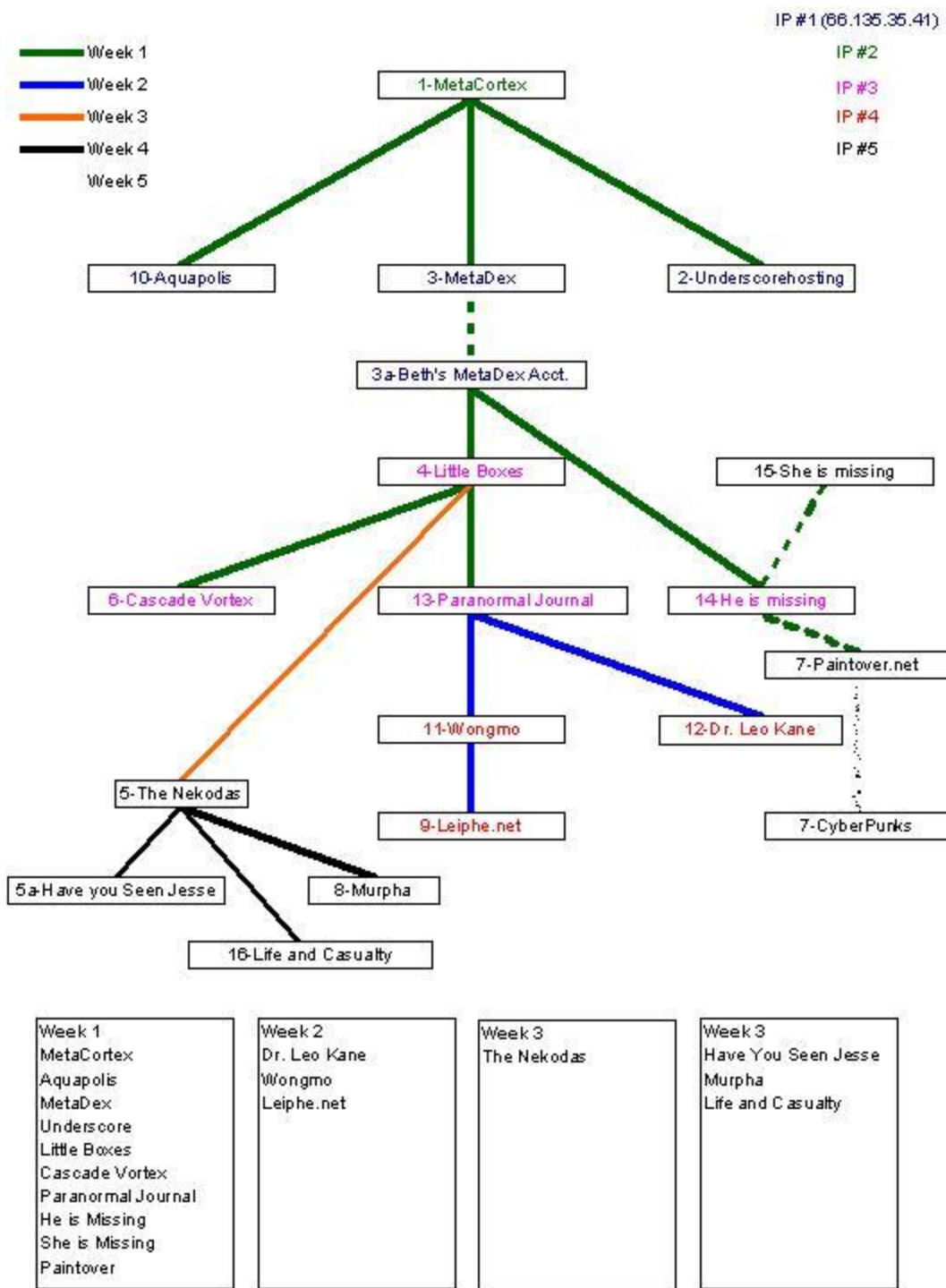


Figure 3.50: Production Document for the Site Distribution of *Metacortechs* (2003), a fan-made ARG set within *The Matrix* Universe

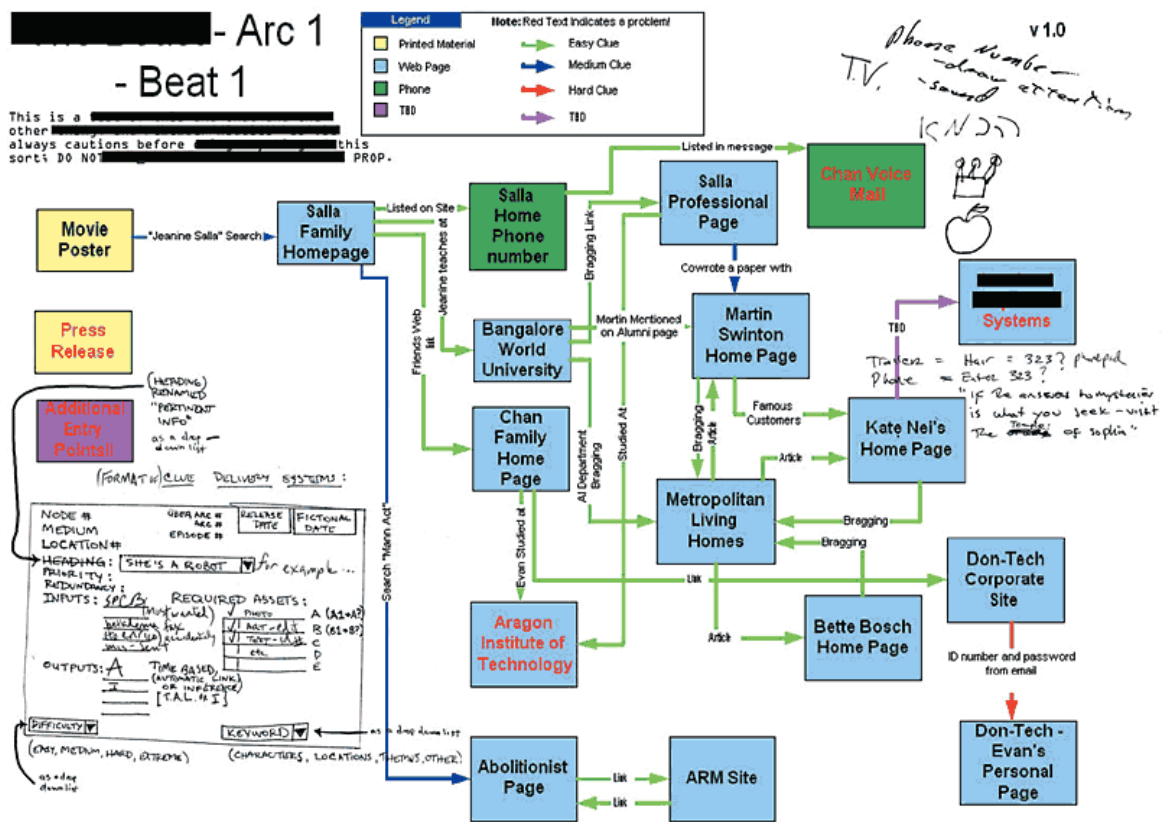


Figure 3.51: Producer Document for the Site Distribution of *The Beast*, a pioneering ARG set within the universe of the film *A.I.: Artificial Intelligence* (2001)

Figures 3.50 and 3.51 above are standard examples of the types of design documents typically utilized in the creation of a transmedia fiction (or, more specifically in this case, an ARG). Each document not only contains all of the sites that will be utilized in the rollout of a particular fiction, but also the order that they are distributed and the types of connections between each site. In *The Beast*, for instance, connections are structured as a series of 'clues' that range from easy to hard, and take the form of direct cues revealed through puzzles or intermedial cues found in other sites. While it's immediately apparent that such documents are at least cursorily constructed as networks by including,

in the case of *The Beast* document, the directedness of an audience's movement from one site to the next (which are even referred to as 'vertices' in the document), such a consideration might be vastly improved by the employment of some of the methods I prescribed in this chapter. Here, transmedia network visualization becomes a pre-view of the whole-network navigations that will later occur. By graphing these networks from the beginning and deploying metric-based analyses of them, it is possible to see where gaps exist, construct bridges that unite them, ascertain where allusion matters and where it doesn't, and create pathways that cut across time, space and character actions. In both *Metacortechs* and *The Beast*, for example, audiences had a difficult time ascertaining the function of certain sites. As a result, their movement toward other sites, and their progress in the game as a whole, was stunted to the point where the producers had to break the fictional circle of the game and direct players towards the proper locations. This is a situation that could easily have been ameliorated, for example, by deploying centrality or degree-based measurements of each fiction, allowing the producers to see which sites were most vulnerable to disconnection and which were utterly vital to connection as a whole.

But even within the validity and value of this type of transmedia network visualization, what I presented here was somewhat of a stacked deck; that is, all of the sites in the projects I studied here, from *Heroes* to *Skeleton Creek*, were released prior to my graphing of them, allowing for

a global conception of the fiction from the start. In practice, however, the opposite is usually true, and audiences rarely have the ability to see the big picture before leaping into a transmedia network's sites. Ryan states that such a 'system of choice', a 'network structure' (2006: 99) will only ever produce narrative incoherence. But as we have seen, the remarkable flexibility built into networks allows for both Ryan's requirement of the 'top-down planning of a storyteller' and a 'bottom-up input from the user' (ibid), at least to the degree that following paths and circuits within a network is a choice. Characters, events and locations are always plural constructs in transmedia networks, but this plurality isn't related to coherence but, instead, the construction of narrative and network depth. A path's length might be some ten sites, but even in accessing only two or three of them, we still maintain continuity.⁴⁷ Ryan further states that 'It will consequently take a seamless (and some will say miraculous) convergence of bottom-up input and top-down design to produce well-formed narrative patterns' (ibid). Or, more simply, it might take a re-orientation of the hallmark features of narrative as interpolated features of network connection, one where story and design are synonymous. As transmedia practice evolves, we should expect to see an increased emphasis placed on cross-siting as a means of engendering complexity.

⁴⁷ Additionally, transmedia networks are also inherently resistant to the sometimes difficult task of separating fan contributions to a fiction from the intended contributions of the producers (assuming, of course, fan contributions aren't encouraged from the outset). Here, the visualized network will reveal the fan creation as either a potentially *unconnected* site, or a site displaying a connection that is never reciprocated in any capacity.

Indeed, the cross-sited pathway (and the consequent cross-sited narrative it produces) is perhaps the most unique feature that transmedia networks produce, for it is here, in the crisscrossing of embedded links and distributed vertices, where transmedia integration most forcefully takes place, and modes, materials and stories are blended into a coherent, if multiply-realized, whole.

Chapter Four:

PERIPHERIES

‘At first a knot seems elaborate, impenetrable. But if you can find someone who knows how to untie the knot, reveal the secrets of its hold, then a new understanding can emerge. And you discover that the knot was never really the clusterfuck it seemed to be but a tiny model of connectivity. Another damn lesson on the intertwining of all things.’

—Sea Green, *Greendale* Graphic Novel (Dysart, Chiang and Stewart 2010)

On 22 April 2003, artist and musician Neil Young took the stage at the Cirkus, an arena in Stockholm, Sweden that holds around 1700 people. As he sat down on the stage alone and grabbed his guitar, Young began strumming the chords of a song that was unfamiliar to everyone in attendance: *Greendale*’s ‘falling from above’, the first song off his soon-to-be-released record and our introduction to the town of Greendale and its inhabitants, the Green family. Wedged between harmonica solos and acoustic guitar picking, the audience listened as Young sang about Grandpa Green sitting on the front porch of his home, the Double E rancho, eyesight failing, pretending to read the newspaper and railing against the differences between his generation and the young. ‘When I was young people wore what they had on’, Grandpa notes, in Young’s voice. ‘A little love and affection in everything you do will make the world a better place with or without you’, Grandpa further pleases to Jed, his lost and lonely grandson. Towards the end of the song, Young sings of a

‘young girl of Edith and Earl’ who hands Grandpa his glasses, but he stares blankly outward all the same. The song ends suggestively, with Young singing ‘hear the rooster crowing, down on the double e...’, signaling a new day that, nonetheless, will most likely be like the one that came before it. No sooner than the final chord is strummed does the applause rise from the audience. Young thanks them, and notes that he is going to do some new songs that night.

But that’s literally not the whole story, not even close. By the time the European tour concluded and *Greendale* was released on CD, vinyl, and mp3, the story had changed in important but almost imperceptible ways, and the lives of those residing in the town had grown beyond what was etched in vinyl, written on polycarbonate and transcoded into binary. *Greendale*, it turns out, was designed from the outset to include improvisations tailor-made to be recorded, collated and debated through the Web. Soon after the album’s released, the story of the Greens was further staged live in a tour that incorporated over thirty-five actors, five stage sets and a Stage Bill containing, paradoxically, photographs of film stock. Additionally, *Greendale* was released as a film, an art book and even a website, each of which superficially seemed to be mere adaptations with similar, if not identical, content. The town, it seems, was bustling long before—and long after—many came to visit it through the medium of recorded sound, and it was built to bustle long after the protective silicone coating of its CDs and DVDs began to disintegrate,

leaving behind a compositional framework that points toward a more experimental mode of transmedia expression.

Visualizing Greendale

In the previous chapter, I explored the ways that network visualization and analysis can provide an at times profound lens through which to examine even the simple operations of transmedia practices. With migratory cues acting as network links, both small-scale and large-scale transmedia fictions could be engaged with micro- and macro-network analytics, revealing graphs where story often mimicked topography, and where the temporal and spatial parameters of each project were rendered as both predictable and wholly revealing properties. Yet this view of transmedia fiction is only partial. While such actions inevitably constitute important and in some instances crucial elements of transmedia interaction, the network visualizations presented to this point assume from the outset an at least honest attempt at network exhaustivity; that is, they presented as ‘full’ (but not, as we will see, ‘complete’) of a network as possible at the time of the analysis. Such engagements are not the norm, though. To repeat an earlier point, any work done with visualizing transmedia networks using the methods prescribed here are always partially subjective, prone to the whims of the researcher and, at minimum, their ability to construct a meaningful set of consistently applicable conditions for connectivity. Network visualizations like those seen here, then, are at best an idealized

construct of the *majority* of the network might look like to an ‘ideal’ audience (i.e. one seeking to consume any and every site in existence⁴⁸) and, at worst, a distortion of the true nature of transmedia engagement on a large scale, where audiences jump in-and-out of sites often without any regularity.⁴⁹ Furthermore, as I noted in the introduction, network visualization of transmedia fictions only truly works with a particular, specialized subset of productions: those whose sites are not only available for data, but also those that encourage a more staggered means of engagement, an intercompositional stitching that requires audiences make connections over time and media space. By contrast, visualizing simultaneous transmedia engagements such as those in Fourth Wall Studios *Eagle Eye: Freefall* (2008) and *Home: A Ghost Story* (2011), where audiences are required to utilize both a computer and a cellphone at the same time, would reveal next to nothing, as the interplay between both sites is nearly constant.

So while the viability of transmedia network visualization hinges, to a large degree, on the distribution time between the sites in the network, transmedia network visualization is also always only partial because many aspects of these fictions make it close to impossible to

⁴⁸ As noted previously Christy Dena (2008) convincingly argues that such an audience is unlikely to truly exist as a majority. Instead, the ‘tiered’ engagements of most audiences means that only a small subset will be involved in this capacity, while far greater numbers only partially involve themselves in all aspects of the project, preferring instead to either drop in-and-out of the production or simply lurk in the background, reading the findings of others on forums and message boards.

⁴⁹ This does not mean, however, that visualization isn’t a valid process for understanding transmedia meanings. In fact, I argue that by graphing a transmedia network from the outset, producers might have a better understanding of how and where to structure entry points in the fiction, as it allows them to see where cross-sited pathways have or could be developed with respect to the rest of the sites.

imagine a methodology through which to construct a coherent graph. This sense of the periphery exists in projects that are wholly unwieldy and resistant to definitive meanings, even as they traffic through seeming simplicity: these are peripheries of transmedia practice simply because they do not *look* (or sound or feel) like they are transmedia projects at all, existing instead as a series of seemingly adaptational sites whose narrative content is strikingly similar. In such a context, where a single narrative is cast across multiple sites without being segmented into site-specific units, transmedia design is a practice that is oppositely rooted in the widespread *contraction* of strictly narrative meaning, where what we learn about a given fiction across sites isn't necessarily as important as *how* and *what platform* we learn it by. By studying such productions, however, a new sense of transmedia is revealed, one which positions meaning in transmedia practices as potentially more reliant on platforms themselves than this study has so far made clear. In some cases, these practices are not only enabled by but also encouraged by the projects themselves, with *redundant* meaning becoming a paradoxically functional and content-correlative component of the expansive impulses of transmedia designs.

As we begin to push towards the furthest reaches of transmedia practices, the experimental spaces where site-by-site expansion is replaced by site-to-site similarity, the network fundamentals that governed the majority of this study refuse to hold. Instead, they give way

to connections so rampant that their presence cannot be isolated at all—connections that are *everywhere* in *every site*, all at once. In such a context, the loci of peripheral transmedia fiction is found in what I call the *transremediative* mode of practice, where expansion becomes a materially situational, a controlled design strategy wholly related to the ability of each platform to perform given its capacities for expression. This chapter, then, is as much about exploring the limits of my previous claims as it is exploring the hazy vistas of transmedia practices themselves. While the chapter will primarily examine *Greendale* as an example *par excellence* of this mode of transmedia production, the qualities that will become associated with this project—its use of redundancy features, its medial awareness, its cross-modal blends and its processural meanings—can also be seen in several other works, albeit not as profoundly. And, in the instances where *Greendale* produces meanings and methods wholly unique to itself, we can find an expansion of the possibilities of transmedia expression, one that equally rewards site-to-site traversals but in a manner that exhibits a far more subtle and vital understanding of the media that compose it. This small but pronounced subset of transmedia practice positions the framework of transmedia expression—its spread across distinct sites—as a call for openness in the creation of the work, a means through which to explore the inherent subjectivity of all media and, moreover, the subjectivity of the artists, writers, directors and coders whose work is (intentionally)

bound within the specific materialities of these media. Here, rather than an urge to create massive storyworlds and universes, juggling the content and capabilities of sometimes thousands of sites in the process, we see instead a much smaller goal, at least from a narrative standpoint: to repeat and revise a ‘core’ set of content in multiplicity and, in doing so, produce meanings that occur as a result of our familiarity with the story. In such a mode, we traffic in synaesthetic impulses, mediation and remediation instead of migratory cues, allusion and causal-sequential ordering. This shift forces us to consider something other than the network model of transmedia practice, and move instead into a model where successive co-constructed creations across platforms and modes forms the compositional basis of meaning.

Building Greendale

‘It started off just by kind of clearing the slate and trying to do something real simply and we didn't even know what the music was going to be about, so when I started writing the story and the songs with the characters in them and everything, we saw it unfolding and we kept following the story as we were recording it - until finally it was finished. And then - and only then - did we really understand what we had accomplished and what we'd created.’

—Neil Young (quoted in Kingsmill 2003)

Far removed from the spectacular narratives covered so far in this study, *Greendale* exists on a much smaller, more personal level, as do the effects and rewards of its design. In interpreting a project like *Greendale*, what we encounter isn't the sort of expansive, sequential

narrative progression that exists in projects like *Heroes* but, instead, a variance that is located acutely at the level of the platforms themselves, where what was once only written in words is now seen, heard, felt and even smelled in other media. Focusing primarily on several generations of the fictional Green family, *Greendale* looks at first to be nothing more than a cycle of adaptations. Each site—audio recordings (two CDs, a set of vinyl LPs), print story notes, a film, a website, art book, graphic novel, and two different types of live performance (solo acoustic and staged theatrical)—contains what appears to be nearly identical content: a series of songs with lyrics that detail the struggles of the Green family as they attempt to reconcile their relative isolation in the town of Greendale with the rapidly impeding reach of the media. In the purely audio recordings of these songs, we can hear the primary narrative of *Greendale* as it is sung by Young, moving through, among other things, Grandpa Arius Green's attempts to impart wisdom to a lost grandson; Arius's son Earl Green's lonely life on the road trying to sell his paintings; and young Sun Green's struggle for meaning and movement against the war and environmental destruction she is bombarded with on TV, books, newspapers and the Web. In non-aural media such as the art book, these songs exist only as lyrics printed on the page, while in the website, we can hear the songs while we read the lyrics. By contrast, in the film, the songs themselves become both soundtrack and dialogue, with characters speaking the lyrics as if they were their own words (and , at times, they

are), while in the graphic novel, both lyrics and song titles are placed as dialogue that characters use in exchanges with each other. As transmedia producer Jeff Gomez observes, such an arrangement goes against our tendencies in engaging transmedia content, where audiences tend to ‘look for story worlds that extend beyond the borders of the screen, with rich pasts, layered presents and futures with myriad possibilities’ (Gomez 2010). But, as Gomez likewise notes, ‘we’ve also seen some quite artful transmedia involving the inner life of a single character or artist. For example...rock artist Neil Young’s *Greendale* - which is a narrative about a California family subtly recounted in live performances, recorded music, print, film and the Internet – can certainly be considered transmedia storytelling’ (ibid). If we aren’t looking for extension, though, how exactly do we engage a project like *Greendale*?

In the previous chapter, transmedia network visualization served as a means of understanding the complex interrelations between narrative content, medium and connection. When we apply the same criteria to visualizing *Greendale* as we did the other networks shown here, an interesting thing happens: we end up with a complete graph, a hyper-connected network where each vertex is connected to every other vertex, even with directedness taken into consideration. This occurs primarily because *Greendale* makes no attempts to disguise its redundancy and, instead, foregrounds it as a key thematic element of the

work. Whereas the previous transmedia networks we studied here are defined by the direction and selective depth of connections that link specific elements in causal-sequential and object-oriented relation, projects like *Greendale* suffer no lack for connection because it traffics in redundancy features so prevalent that they render the recognition (and placement) of migratory cues nearly moot. Intersectional cues, for example, are not only selectively present, but they are everywhere, allowing us, if we choose, to jump from one site to the next without seemingly losing anything with regards to plot, characters and events. Since there is little to no developed object-orientation in the project, there are also no direct or intermedial cues that might further assist in connecting and situating different sites within the fictional universe. Consequently, if we were to visualize the sites of *Greendale* based on their intersectional cues alone, this is what it would look like:

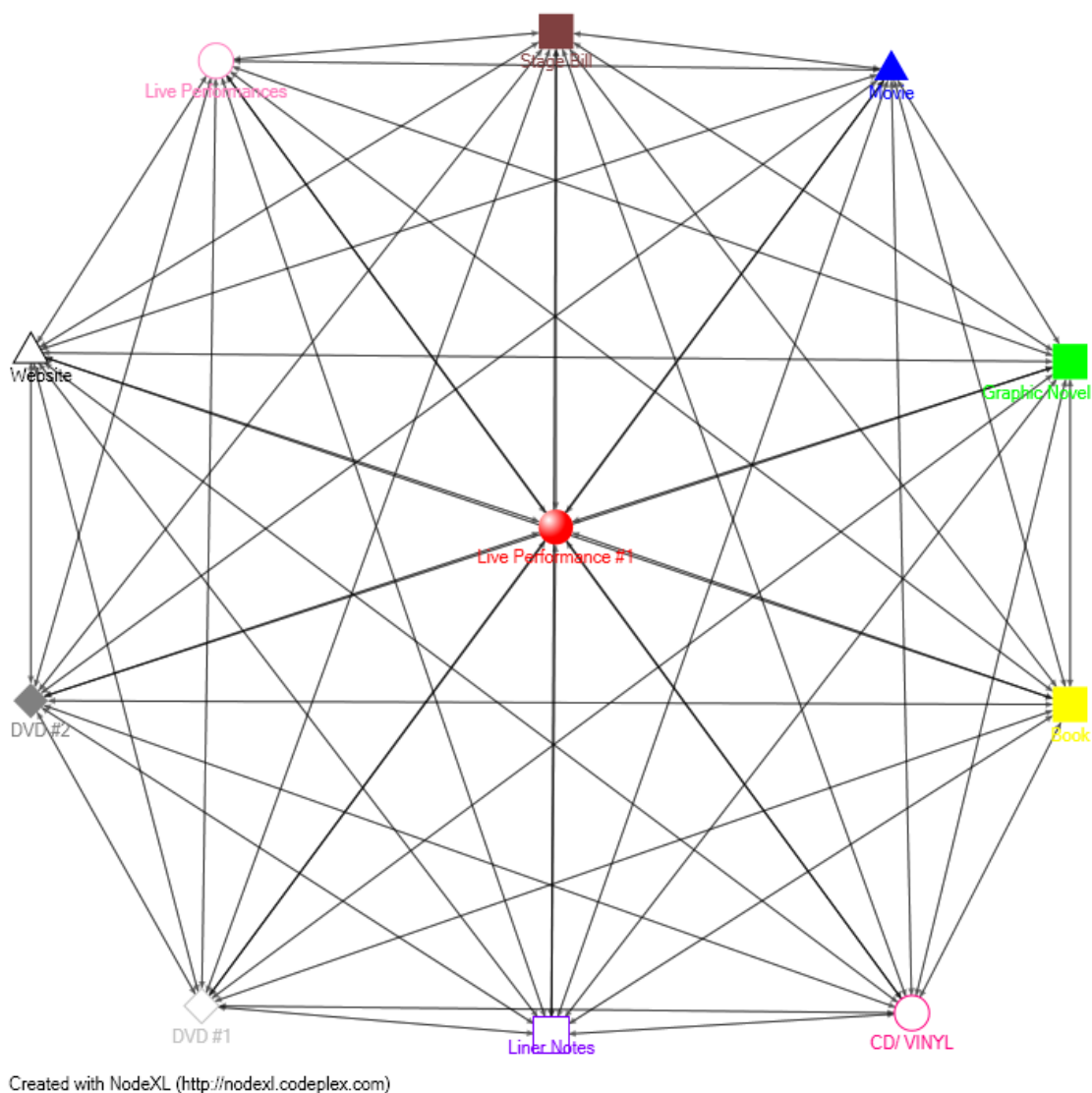


Figure 4.1: *Greendale* Visualized as a Complete Graph

In a complete graph, every site can be reached from every other site in the network. Since each site seemingly contains the same content, and none of the sites exist intra-fictionally (in other words, none are treated as objects or other storyworld elements within the fiction, allowing for direct or intermedial cues), what we are left with is a

project whose sites produce, on the surface at least, equally identical narrative meanings. There is, in other words, no real value to visualizing *Greendale* as a narrative network as its story is apparent in every site. This does not, however, mean that *Greendale* exhibits no strategies through which connection is enacted but that, rather, the techniques laid out in this study so far have a natural limit with regard to redundancy. While we might be able to use graphs to track, say, the visual influence of one site on another (some of the sites in *Greendale*, for instance, are drawn to be photorealistic, while other are drawn cartoonishly), such an understanding of influence does little to help us understand how *Greendale* intentionally constructs meaning by exploiting an audience's awareness of narrative similarity and repetitions of content.

Adaptation and Repetition

In order to identify a suitable approach for analyzing *Greendale*, then, it's necessary to examine the theoretical contexts that situate meaning and its repetition across media, a process referred to broadly as *adaptation*. Indeed, in the midst of these discussions of narrative elements being carried wholesale across sites, the obvious question that must be asked at this point is why *Greendale* shouldn't be classified as an adaptation and why it *should* be classified as transmedia. But the dilemma of how we might begin to separate the aesthetic and creative impulses related to adaptation from the use of seemingly adaptive

transmedia expressions at first seems to be an inordinately subjective knot, bound tightly by the relationship between content and the contexts for framing its translation into a new platform. For example, in Linda Hutcheon's *A Theory of Adaptation* (2006), one of the most lucid and theoretically rich takes on the subject, Hutcheon defines adaptation as 'repetition with variation' (116) or, variously, 'repetition without replication' (7). In adaptive works, Hutcheon states, we might hope to transfer or, more precisely, transcode the content present in one medium in another, such as when a popular film is made into a video game. Adaptation is a pursuit in which intellectual and aesthetic pleasure is gained from 'understanding the interplay between works, of opening up a text's possible meanings to intertextual echoing' (117), but also from repetition as a pleasure in its own right, which she sees as bringing 'comfort, a fuller understanding [of the work], and the confidence that comes with the sense of knowing what is about to happen next' (ibid).

While Hutcheon alludes to the 'childlike' nature of pleasures such as these, such an understanding only occurs, she argues, when 'the adaptation and the adapted work merge in the audiences' understanding of their complex interrelations' (ibid). But what is the role of this 'adapted work'? Moreover, does its existence imply some sort of progenitorial superiority? In other words, is there room for talking about *beginnings* in adaptation as a creative-aesthetic, rather than a temporal, trait? In Hutcheon's view, the answer to this is clearly a no, even though

we might be able to point to examples in which the adaptation is inferior to the adapted work (and vice-versa). 'Despite being temporally second', Hutcheon argues, the adaptation 'is both an interpretive and a creative act; it is storytelling as both rereading and rerepresenting' (111). The 'adaptive faculty', steeped in such acts, 'is the ability to repeat without copying, to embed difference in similarity' (174). These differences can be manifest in any number of ways. In their most widespread form, they are simply the differences between media, such as when a book is adapted to film, but this difference also is a reflection of intent and culture, such as when a play like *Hamlet* is adapted within the Japanese culture and emphasizes different issues pertaining to patriarchy.

According to Kamilla Elliott (2004), the rampant practice of adaptation debunks what she deems a 'century-long heresy' within the field of literary studies: the idea that form is, after all, separable from content. Instead, Elliott claims that something *of the medium* always passes from the adapted to the adaptation (239) and that, in certain instances, what passes back can be read bi-directionally, such as when a film adaptation highlights the shortcomings of the work it was adapted from, or when a graphic novel adaptation exaggerates the interactions of the video game it was adapted from. Yet this conflation occurs equally at the level of theoretics as well. Hutcheon herself notes that 'If the internet postings are to be believed', audiences 'enjoy [film] novelizations because they provide insights into the characters' thought processes and more

details about their background' and that, further, even though 'Web site narratives (e.g. Max Payne) or even films (e.g., *Final Fantasy*) about videogames...offer the same kind of information in a different format', they all work towards 'increasing audience knowledge about and there engagement in the 'back story' of the adaptation', thereby generating anticipation and helping to 'foster audience/reader identification' (118). She also notes that 'sagas' like *Star Wars* and *Star Trek* that span several media 'both retell and extend popular stories' but because 'each adaptation also must stand on its own...It is not a copy in any mode of reproduction...It is repetition but without replication', involving both 'memory and change, persistence and variation' (173).

In this sense, Hutcheon's observations about adaptation are similar to Robert Stam's (2005: 3-4) assertion that every text changes automatically by virtue of its transposition to a new medium, regardless of whether this text was consciously adapted or not. This idea is most clearly illuminated by Jay David Bolter and Richard Grusin's concept of *remediation*, the cultural process where, during a time of media transition, 'old' media refashion 'new' media (and vice-versa) resulting in an oscillation between them that attempts to model one medium in another for either heightened transparency and immediacy of experience

or hypermediation (Bolter and Grusin 1999: 19)⁵⁰, where a rampant mediation of information is present. This dual-logic of remediation, as Bolter and Grusin refer to it, alludes to a much more complicit relationship between old and new media, one that illustrates both a need for an ‘old’ (non-digital) medium to mimic what’s new as well as a corresponding need for what’s new to cement itself via vestiges of the old (see Figure 4.2 below):

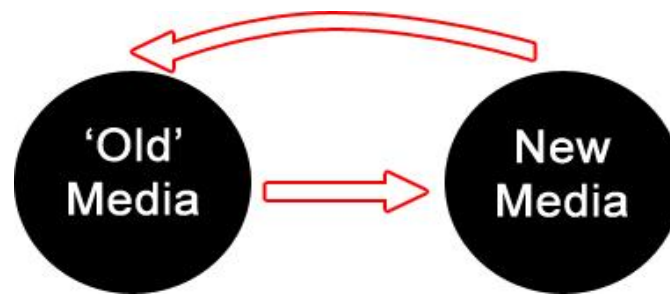


Figure 4.2: Remediation

The equivalences between transmedia practice, adaptation and remediation are most readily seen in the cross-media exchanges that each necessitate. In transmedia practice, these exchanges are guided in part by the fictional storyworlds and universes of the projects.

Remediation also always occurs across media, but what’s exchanged here are often certain media functionalities, such as when a computer

⁵⁰ For example, the rendering of the Sistine chapel as a computer program allows us to not only see the interior of the chapel itself, but also zoom in on its ceiling, admiring even the minutest cracks in the paintings there. Conversely, hypermediated television news broadcasts during the nascent boom of the Web often contained multiple threads of information from news tickers to weather reports and sports scores that crowded out what was once considered the entirety of the screen: a shot of the anchor reading the news.

graphically renders a book but requires the user to manually turn its pages using a mouse.⁵¹

Bolter and Grusin's accounts of remediation, however, are somewhat overly culturally deterministic in this regard. Hitchcock's *Vertigo*, for example, is referred to repeatedly as 'the film' and not 'Hitchcock's film'; the videogame *Myst* 'turns out to be an allegory about the remediation of the book in the age of digital graphics' (95) but, according to Bolter and Grusin, 'almost certainly without the conscious intent of the authors' (94). In fact, the *lack* of a conscious, organizing presence—what is commonly referred to as the presence of *design*—is reflected in almost all aspects of remediation, rendering it an overtly cultural process that happens, but seemingly without any mechanisms for control. Bolter and Grusin comment on remediation and what might be deemed transmedia production, calling for an understanding of 'honorific remediations' ...hypermediated environment[s] in which repurposed content is available to all the senses at once, [as] a kind of mock *Gesamkuntswerk*' (68). In such an environment, 'the goal is to have the child watching a Batman video while wearing a Batman cape, eating a fast-food meal with a Batman promotional wrapper, and playing with a Batman toy. The goal is to literally engage all of the child's senses' (ibid.).

⁵¹ While digital technologies spurned a direct recognition of the tenants of remediation, these technologies only serve to *highlight* the double-logic of immediacy (media with transparent materialities) and hypermediacy (repeated, pervasive contact with the medium) that remediation functions through. Moreover, this double-logic has an extended 'history as a representational practice and cultural logic' (31), dating as far back as the Renaissance with the invention of perspective painting.

There is, however, little thought given to the role that a producer might play in structuring these engagements for increased engagement.

This intentionality (or a lack of it) becomes central to understanding the relationship between adaptative meaning and transmedia meaning. Those working in the production and design of transmedia fiction often lament the conflation between adaptive and transmedia practices, arguing that a video game adaptation of a film often contains no additive content other than the ability to control a character instead of watching them (Elkington 2009). Geoffrey Long, for example, states that ‘Retelling a story in a different media type is *adaptation*, while using multiple media to tell a single story is *transmediation* (2007: 22). Likewise, Elizabeth Evans claims that ‘Transmedia elements do not involve the telling of the same events on different platforms; they involve the telling of *new* events from the *same* storyworld’ (2011: 27). Moreover, Evans asserts that ‘transmedia storytelling’ does *not* involve the straight adaptation of content in one format (a book) into another format (a film)’ (2011: 29), nor does it involve the seeing old content in newer, more interactive forms. Perhaps most strongly, the Producer’s Guild of America’s recently instituted guidelines for receiving Transmedia Producer credits includes overseeing ‘three (or more) narrative storylines existing within the same fictional universe’ but only if these ‘*narrative extensions are NOT the same as repurposing material from one platform to be cut or repurposed to different platforms*’

(http://www.producersguild.org/?page=coc_nm#transmedia, emphasis added).

Such a strong distinction falls into line with Henry Jenkins's take on the unique nature of transmedia practice, where he notes that transmedia storytelling is premised on 'each new text making a distinctive and valuable contribution to the whole' (Jenkins 2006: 95). Like Hutcheon, Jenkins argues that adaptations without 'variation' offer little incentive for audiences to engage with them. Unlike an adapted or licensed work, transmedia engagements seek to create a 'new level of insight and experience' (ibid) within their fictional storyworld and universe. Such insights and experiences, Jenkins argues, are completely antithetical to what he deems *redundant* information, information that offers 'no new character background or plot development' (ibid) whatsoever, lacking what Long terms 'distinction' from other elements (or sites) in the fiction (Long 2007). This is a critical point for Jenkins's theory as he states declaratively that 'Redundancy burns up fan interest and causes franchises to fail' (2006: 96), as in the case of a graphic novel adaptation of a film that does nothing more than still the images into panels. While it's evident even in this context just how accustomed we are with experiencing the *platform* when we engage with any degree of redundancy (in the previous example, it's difficult not to imagine a reader who is familiar with the film filling in motion as they read the graphic novel), it's important to note that in Jenkins's formulation, redundancy

occurs primarily as a function of narrative content: to not add *something* story-wise to a particular narrative is to render it redundant, even if the platform itself shifts and opens up at least a potentially novel mode of engagement or point-of-entry. As Long (2007) notes, this is a problematic formulation, as it does little to enunciate what type of information qualifies as additive, and how it might be received.

Much to her credit, Dena presents a more nuanced view, challenging the idea ‘that adaptations are automatically redundant’ (2009: 148) and reframing them as a particular subset of transmedia practice. She argues that certain adaptations are composed with a ‘transmedia attitude’ (2009: 148) where ‘each medium is an equal expression of a possible single essential but intangible element’ (2009: 158) that is neither redundant nor expansive. Here, ‘the essence of a single story, game or event...is expressed and accessed through different media, through different artforms’ (ibid). This sentiment closely echoes Brian McFarlane’s contention that two media working adaptively ‘can share the same story, the same ‘raw materials’, but are distinguished by means of different plot strategies which alter sequence, highlight different emphases, which—in a word—defamiliarize the story’ (McFarlane 1996: 26). For Dena, however, adaptive frameworks in transmedia practice are also a means of creating multiple points of entry that can target ‘different audiences with different artform and media preferences’ (Dena 2009: 162), rather than creating multiple sites of

expansive content for the *same* audience. In such a view, these intangible elements should not be seen as being ‘married to one medium, but as an abstract entity that exists beyond its articulation(s)’ (Dena 2009: 159). Additionally, Dena states that ‘the intention of adaptation can result in a change in the modal character of the writing, as the writer often utilizes the conventions of the next (or target) artform’ (2009: 157). This means that, for example, ‘a novel may be written with screenwriting techniques’ (ibid) so that it may then be adapted more easily. In Dena’s transmedia consideration of adaptation, then, meaning is never the same from site-to-site but is instead situated by the affordances, design issues and overall experiential capabilities of each platform, thereby allowing for either targeted audience engagement or targeted ‘ideal’ realizations. Within such an understanding, adaptation becomes endemic of the larger transmedia notion that there is no such thing as a ‘single expression of an idea’ (2009: 159) and is, therefore, something to be considered as both an aesthetic and practiced conceit, ‘a shift from a hierarchy where stories or games are created once and then copied or transformed along a linear chain, to a perspective that views each articulation as an equal yet diverse expression of the same intangible element’ (2009: 162). Transmedia practices, like adaptation, also involve ‘designing specifically for the medium, using protocols that are specific to the device, developing relationships with gatekeepers and understanding the discourses and processes that are specific to that media industry’

(Dena 2009: 68). The difference, importantly, is that by increasing the points-of-entry to a given production, each medium becomes an 'equal expression of a possible single essential but intangible element' (Dena 2009: 158), a heterarchy of platforms replacing what was once preferential singularity.

The notion of adaptation as a creative conceit to be exploited using transmedia sensibilities, however, is also ever only partial in Dena's view. New platforms may offer new modalities of engagement, but they do so under the premise that different audiences *require* different means of engaging with a site. What's lacking here, then, is any real sense of how we might begin to conceive of these 'essences' as actual, rather than elusive entities, those that can be deployed as model for a more fluid sense of creative design than the networked ontologies of the more prevalent transmedia practices. Even though certain sites may be constructed with high-level adaptive goals in mind, 'medium awareness', the practitioners' abilities to 'become aware of' the semiotic potential of a given medium (Dena 2009: 63), is only ever considered by Dena as a by-product of a larger practices related to a shift away from traditional mono-medium paradigms:

There is a difference, in other words, between a practitioner designing parts of a fictional world specifically for the affordances and experience of a distinct media, and a practitioner who intentionally invokes the medium and/or environment as part of the meaning-making process.

(Dena
2009: 58)

There is a fundamental difference, though, between possessing an awareness of the strengths of a given medium and utilizing the inevitable trade-offs between media as an expressive aesthetic in its own right. In utilizing distinct sites in order to construct meaning, transmedia practices are naturally inclined towards doing just this: by constructing site-based relationships via a compositional attentiveness towards the gaps in media-material features produced by *redundant* narrative content, the language of transmedia finds a new dialect. Here, rather than an awareness of the *potentials* of a given medium being a key facet of transmedia design, it is the awareness of how media work in relation to each other that becomes the central model of engagement. In this highly specialized mode of transmedia practice, the dominant presence of these *redundancy features*—elements of a narrative that are carried across platforms in a manner that attempts to wholly maintain their integrity—ensure an almost seamless transcoding of content from one medium to the next. The concern here isn't fidelity as it is traditionally understood as a principle of departure from some original narrative; instead, this mode of transmedia practice pushes instead for the fidelity of the platform, for filling in the spaces of the story in a manner only possible with a pronounced material awareness of the sites in use.

While such a formulation risks being classified as 'metafiction' (Alter 1975; Scholes 1979; Hutcheon 1980; Barth 1984)—fiction

concerned with the dynamics of its own making—the juxtaposition of multiple media that transmedia practices traffic in makes possible a new model of expression. Here, transmedia meaning is founded not only on the incorporation of one medium’s working materialities *positioned as* another medium’s signifieds, but also on the level of the connections that these media have *in relationship to the other platforms they are meant to engage with in their network*. In this context, it is possible to consider structuring an audience’s movement across seemingly adaptational sites as evidence of *medial-continuity* birthed by a narrative whose redundancy makes continuity moot. This distinction, then, is undoubtedly a question of intention, of activating the redundancy features of a project in a manner where each composition can be seen as an ‘intended...part of the meaning-making process’ (Dena 2009: 109). If, as Friedrich Kittler (1990: 267) argues, ‘the transposition of media is always a manipulation and must leave gaps between one embodiment and another’, then what happens when those gaps produced and exploited as *aesthetic* instruments of expression intended to be *the* meaning of a transmedia production? Art that is remediated is one thing; art created through transmedia practices that view remediation as a tool is another completely. While Dena argues that one of the keys to understanding adaptations role in transmedia practices is that adaptations can choose to explore ‘other possibilities of the greater fictional world’⁵² (2009: 116),

⁵² Such a process is referred to by Richard Saint-Gelais (2005), following Gerard Genette (1997), as

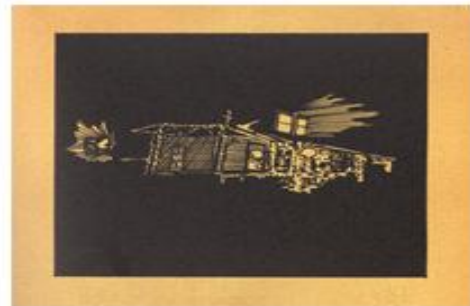
as we will see, many of the products generated in redundancy exist because they explore the possibilities of the *other media* that are part of the network.

Redundancy and Variation

‘He heard the sound of the future on a scratchy old 78.’

—Neil Young, ‘leave the driving’

In Figure 4.3 below, we see how such redundancy manifests itself in *Greendale* as a visual marker, with the film presenting nearly carbon-copy shots of the panels of the book, and vice-versa:



transfictionality, the use of a ‘source text’s setting and/or inhabitants as if they existed independently’ (Saint-Gelais 2005: 609). An example of transfictionality is Jean Rhys’s *Wide Sargasso Sea* (1966), a novel written as a prequel of sorts to Charlotte Brontë’s *Jane Eyre* (1847). Rhys’s novel shares the same setting and characters as Brontë’s but nonetheless differs wildly from its source text in that it is told from the perspective of Mr. Rochester’s first wife, who goes insane and is locked in an attic, giving reason to her madness when none was given in Brontë’s work.



Figure 4.3: The *Greendale* Film and Art Book

Similarly, as noted earlier, each site contains in some form the foundational songs that comprise *Greendale*, working in many cases with other modes in order to make these redundancy features more and more pronounced: in the website, we can stream the songs as audio and read the lyrics; in the art book, the song lyrics are present on each page in verso-recto concert with hand-drawn images ; in the film, much like the theatrical live performances, the songs are both sung by the characters as dialogue and act as a narrative soundtrack, with the beginning and end of each song marking the beginning and end of a scene. Unlike Dena's assertion of the 'intangibility' of certain essential elements in transmedia adaptations, in *Greendale* these essential elements are foregrounded as a core of meaning that remains entirely stable, if not identical, in each site. The songs appear not only on the CDs, but also as a soundtrack for the film, with characters speaking the lyrics as if they were their own words; in the print art book (which obviously cannot accommodate sound), the songs are transcoded as written lyrics; in the

website, we can listen to the songs as well as read the lyrics simultaneously; in the graphic novel, both song title and lyrics are presented as character dialogue and narrator insight.

The songs of *Greendale*, then, provide the thrust for the narrative, linking events sequentially and identifying possible causal mechanisms within the town through character encounters extended serially across the songs (see Appendix A for the lyrics to the songs). For example, the first song on *Greendale*, 'Falling from Above', details a talk between Grandpa Green and Jed, his lost, drug-addicted grandson, about the changing nature of the world. Expressing concern about Jed's future, Grandpa tells him how maintaining a 'little love and affection in everything you do makes the world a better place with or without you'. Later on, in a song called 'Leave the Driving', Jed is pulled over while smuggling drugs from *Greendale* to another part of California and, seemingly in the midst of a cocaine-induced panic, shoots a policeman named Carmichael and kills him. Landing in jail, Jed remarks to Grandpa that 'it makes you think about living and what life has to tell', while the town simmers outside of the jail in disbelief. 'The more time you spend on earth', Grandpa remarks, 'the more you see unfold'. In another song named 'Carmichael', though, we shift from Jed and Grandpa to Carmichael's widow as she prepares for the funeral of her husband, learning of the distance that had grown between them. Soon after that we return to Grandpa, in a song named 'Grandpa's Interview'

that features descriptions of squealing walkie-talkies and circling helicopters, as he is accosted by the local media about the shooting. Towards the end of the song, he collapses, dying, on his front porch, his head laid on a newspaper with Carmichael's face on the front page.

It's important to note here that Young seldom makes any attempt in the songs to alter his voice in order to portray the characters differently; indeed, the only markers we have of difference is when a character is mentioned by name. The 'flattening' of voice in each of these songs works, then, much in the way same way that unadorned text might in a print novel: characters are mentioned directly as saying or doing something, forcing us to fill in the modal gaps with traits culled from our own imagination. The songs of *Greendale* operate throughout the project in this manner, joining characters in the midst of conversations of events and jumping from place-to-place in the town, in the process encountering a series of events that eventually touches everyone but varies little from site-to-site, a fact that has led many to contend that the project is a mere adaptational cash-in.

Redundancy Features as Platform

Another interesting thing to note about *Greendale's* redundancy features is that they work by not only attempting to obfuscate variance from site-to-site, but by essentially positioning *one site's content as the content of another site*. In such an arrangement, visual elements remain inordinately similar from site-to-site and the recorded versions of the

songs found on the CD appear unchanged in both the film and the website. While in theory this sounds like a tenant of dry and unimaginative adaptation, in practice with *Greendale* it becomes amplified through the media themselves: not only is there an almost exact correlation in *Greendale* between the actions, events and agents of the songs from site-to-site, but there is also a similar correlation between the presence of one site (and the platform that supports it) in the *content* of another site. This means that each site is never wholly itself but, rather, a transcoded version of *another* site (or series of sites) filtered through the channels of that particular platform.

The narrative content of the songs, for example, exists solely as sound in sites with only an audio channel (CD), as soundless text and image in those sites that support only visual channels (the art book, liner notes and graphic novel), as sound and image in those that privilege audio-visual material (film, live performance), and as image, sound *and* text online. But while we might expect such transcodings to occur with regard to the 'core' content of *Greendale*, this inter-platform appropriation continues on a much more literal and important level: each site not only contains transcoded content, but it also includes material vestiges of other sites whose material capabilities are far different than its own. In other words, *Greendale* is littered with *overt* and *covert* intermedial remainders, always gesturing outwards towards some other medium, some other site. Yet in Wolf's conception, as well as

those of other theorists (McFarlane 1996; Wagner 1996; Hedling and Laggeroth 2002), intermediality only even occurs as an abstraction, with *another medium interceding with or contributing to a foregrounded medium's content*. In certain peripheries of current transmedia practices, though, an audience's engagement with a series of sites is structured *precisely at the level of content* and its form in another site.

The highly-specific integration of redundancy features combines with the larger transmedia impulse to create meaning across distinct sites to yield expressions that fall outside of intermedial formulations, even as they seemingly are supported by them. In the *Greendale* film, for example, as one song (or scene) ends and another begins, the shot fades to the hand-drawn imagery of the art book, complete with page turns and chapter titles. On the website, an animation of the *Greendale* compact disc spins on the screen while each song streams as an mp3 file. In the art book, words are juxtaposed with hand drawn images identical to the frames of the film, but these images also occasionally appear in the 'picture-in-picture' style of a television set, violating the segmented space allotted to the text and transcoding of the multiple visual threads of the film which similarly force us to choose which one to follow.

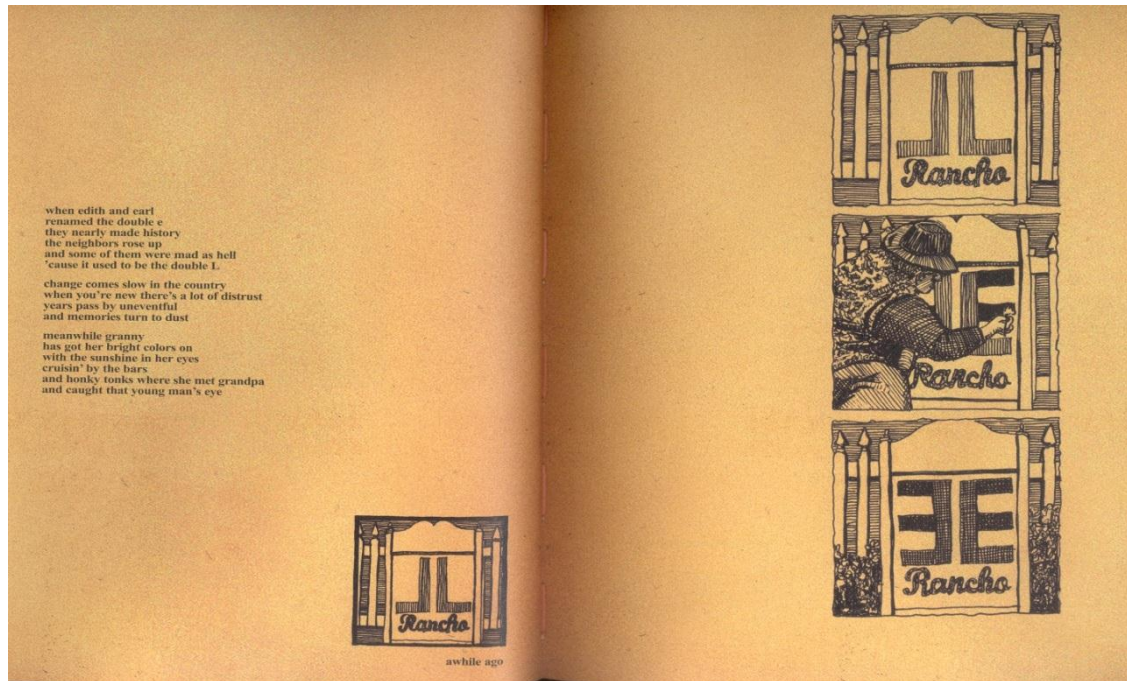


Figure 4.4: The Art Book with Lyrics

Each site, then, contains local instantiations of another medium, coerced to fit within its own unique capabilities. Here, somewhat paradoxically, rather than focusing on the continuity of the *story* elements carried across platforms, we instead must focus first on the essential *form* that such elements are supported by. This isn't the same as saying, as Dena does, that certain fictions are designed towards facilitating adaptation but that, conversely, certain peripheral transmedia practices are designed from the outset by an organizing logic of the most essential characteristics of a medium, especially as it exists in relations to other modes of expression: text as unformed images; words spoken as mutable improvisation; images as suggestive and guiding forms; sound as

evocation. Here, the process of ‘adapting’ a work from site-to-site is informed by the logics and lineages of its creation. Transmedia practice in such a context is a method of realizing and sustaining a *process* of creation, then, not simply a product.

Transremediation

Productions structured centrally via redundancy features are evidence of a strong *transremediative* practice enacted through and by a framework of disparate platforms working connectedly through design. Understood as the process of creating multiformity, where ‘no single version holds a privileged position over the others as an ‘original’ or ‘authentic’ version’ (Alexander 2009: 14), transremediative practice seeks to intentionally reveal the material bases (and biases) of a given set of media and the processes through which its meaning is made. By positioning one medium’s instantiation of a ‘core’ of content as the content of another medium, the devices through which each medium functions are highlighted and foregrounded as content in their own right.

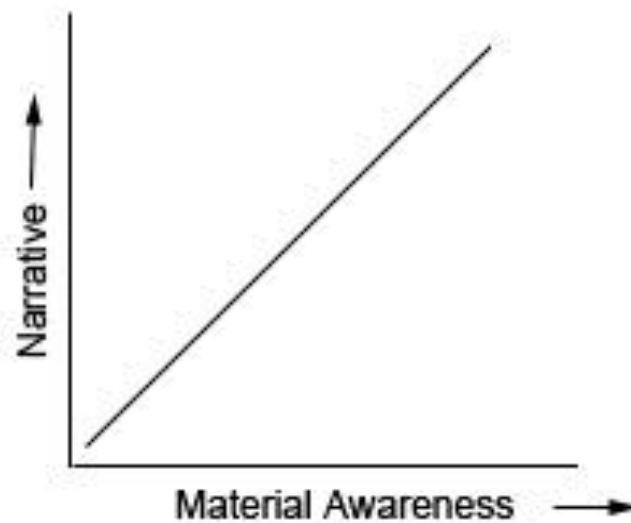
Transremediation, then, is the purposeful enactment of *instrumental remediation* as an effect of the *redundancy features* of a given project. The conscious implementation of transremediative design forms a compositional framework that allows for the creation of meanings poised delicately between content and process. Instead of existing as adaptations, however, where content producers exist in relative creative isolation from each other, transremediative practice is

often initiated by one producer and then followed by other producers in a manner that exposes the mechanisms involved in the creation of the fiction. The logic behind this claim is deeply rooted in the sites themselves: because each platform has specific material capabilities, transcoding one medium in another explodes both the strengths and shortcomings that particular site, and allows for a networked use of media capabilities as they play off each other.

As stated previously, though, much like the location and projection of a migratory cue, instrumental remediation only works if the content being remediated is familiar to the audience. Otherwise, redundancy is trumped by narrative novelty in an arrangement that enacts *tmetic modes* of engagement. The term ‘tmesis’, coined by Roland Barthes, refers to the uncontrolled (and often unconscious) skipping of words, sentences and passages in a text (1975: 10). It is a natural phenomenon, internalized as we are conditioned to making global meanings from a work made up of discrete units. Although Ryan argues that this process distracts ‘readers from the poetic qualities of the individual lexias’ (2003: 265) of a given work, it nonetheless does not stop them from making meaning from the text. In extending these principles to transmedia practices, tmetic engagements generally either *promote* or *demote* media-material awareness depending on the degree of redundancy they maintain with a previously engaged site. The more familiar we become with a certain story, the more apt we are to notice the differences

between the platforms that figure into this familiarity. This is why the redundancy features of projects like *Greendale* are a boon—not an inhibitor—of their power: our previous knowledge of the narrative allows us to more readily ascertain the points of departure brought on by a certain platform’s unique capabilities, no matter how subtle they might be. Conversely, in exploring sites with new content, our comprehension of new points of *story* development supersedes what contact we might have with the platform itself or, at the very least, it renders the shift to another platform concomitant with the discovery of new material.

Tmetic Narrativity
Central narrative remediated through different formats



Tmetic Materiality
Expansive narratives mediated through different formats

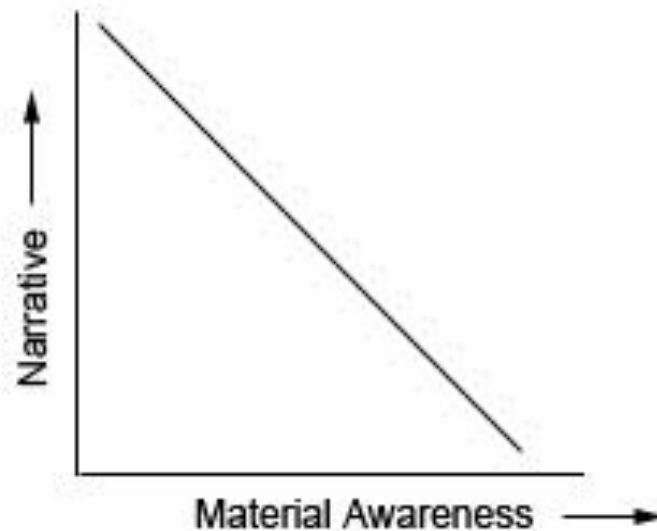


Figure 4.5: Tmetic Narrativity and Materiality

As it relates to tmetic meaning, the base structure of transremediation isn't digital, and it isn't analog: it's found in the strategic placement of redundancy features which allow us to position the *process* of interpretation *through* the material features of a site as a meaning in its own right. In this regard, *Greendale* should be seen as an explicit acknowledgment of the capacity for transmedia frameworks to enact—and control—the remediative modalities all media are capable of.

The symmetry through which this functions lends *Greendale* an air of synaesthetic pleasure: we can hear the songs or encounter their lyrics in any site but we do so from the experiential perspective of the various modes of each site, which in themselves may be approximations of another medium. But in the midst of such experiences are subtle, yet at

times jarring markers of a larger body of meaning obscured by this simplicity. Here, we might notice that characters in the film are played by the same actor; lyrics we assumed to be about a certain character in one site turn out to be about another character when repeated in another; paragraphs taken from the short vignettes of the liner notes and art book stumble into incoherence and shift between first, second and third-person narration; and clicking on certain links in the *Greendale* website yields different content each time we do so. In other words, while we can point to a core content that is undoubtedly the same from site-to-site, the materialities of each site reveal and obscure different aspects of this content to such a degree that it stops being a side-effect of the use of multiple platforms and becomes something larger: a mode of design through which transmedia expressions can be enacted. The use of redundancy features, then, is a means of producing *gaps* rather than maintaining continuity across sites in *Greendale*.

So how might we begin to theorize and analyze a mode of practice whose basis is transremediative redundancy? As noted previously in this chapter, any attempts at visualizing projects like *Greendale* as networks inevitably fails. Instead, I argue that transremediative productions need instead to be examined from the very foundations through which they were constructed: their beginning(s), their media and the processes of their creation. That such foundations can be accessed through the sites of a production reflects both the exigency of studying transremediative

meanings as well as, counter to Dena's assertion, the possibilities of ascertaining any modes of practice through a contact with end-product artifacts. Using *Greendale* as the preeminent example of transremediative meaning, the remainder of this chapter will highlight the means through which redundancy features create meaning rather than hinder it, proposing in the process a methodology for its own interpretive consumption. While there is always a risk in extrapolating high-level concepts from singular examples, the strategies revealed as fundamental in developing *Greendale's* complexities not only point towards the potential for a more nuanced model of transmedia creation predicated on *media* continuity across sites, but one that also has its roots in an older mode of communication that is rarely mentioned in accounts of transmedia practices, namely, orality. While the previous chapters illustrated the methods and models related to understanding causal-sequential narrative networks in a manner that illustrated the complexities (intended or not) of transmedia practices, what follows here is also intended to be a model, but of a different sort. Here, in tracing the lineage of *Greendale's* content, I am hopeful that the beginnings of another field of inquiry is at least cursorily initiated: a transmedia criticism, premised on close and distant reading media-as-content.

(Re)constructing the Core: The Story Notes

Alongside the song lyrics, there is another facet of redundancy to consider in *Greendale*: the print story notes. Included as the liner notes

of the audio recordings (two CDs and the vinyl LPs), the art book and the website, the print notes contain what is described as the ‘stories behind the songs’, a somewhat innocuous claim until we begin to examine exactly *how* these stories were constructed. Constructed on a paper stock whose background is a photographic image of the textured pages of the art book, the prints notes pair each song with partial background information of various characters, their relationships, the histories of specific locations and objects (such as Earl’s paintings), as well as short summations of what took place before and after the events portrayed by the lyrics of the songs. As such, they are seemingly an unobtrusive contribution to the overall narrative of *Greendale*, a contextual support for the lyrics that functions like the musical notes and chords structuring the songs:

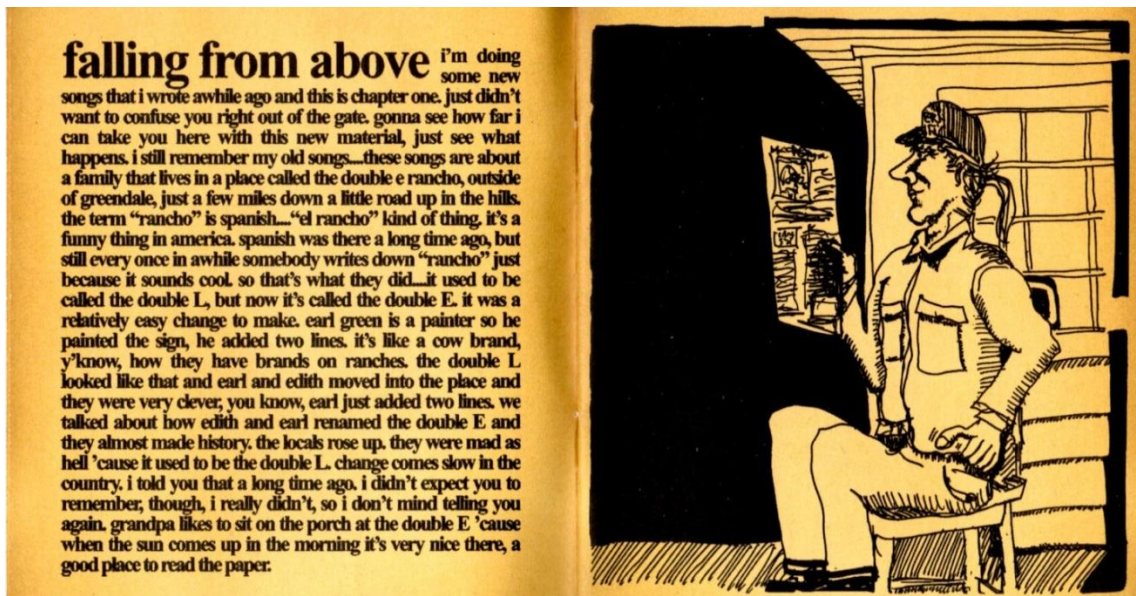


Figure 4.6: Print Notes from *Greendale* CD/DVD (2003)

In a formal sense, the print notes function as both definitized and definitizing storyworld elements which exist complementarily to the songs. While the song lyrics provide the necessary propulsive movement through the events of *Greendale*, the print notes provide a deeper sense of the contextual information tied to these events, information that does much to allow us to construct additive meanings in their (re)combination. For example, the lyrics to ‘double e’ make mention of the young daughter of Edith and Earl Green and who dances with wild abandon when her parents go out that night, but the print notes provide a more complete picture of her: name = Sun Green, age 18 or 19, a would-be performance artist working on a book report called ‘how to use the media’, an essay on the Alaskan wilderness, and strange, unknown ‘something’ out in the field that ‘she wants a lot of people to see one day’ (Print Story Notes, ‘double e’). Similarly, the lyrics to the song ‘devil’s sidewalk’ detail a conversation that a boat captain is having with his crew, a parable about avoiding the corrupting nature of the land—the devil’s sidewalk— after spending so much time at sea. Hearing this tale, the first mate and the helmsman each assume it to be about a woman, and the heartbreak she caused the captain. Reading the print notes, however, we discover that the captain is, in fact, John Green, brother of Grandpa and a lifelong resident of Greendale who, nonetheless, won’t step foot on land. Living on a boat moored to the West Coast’s last great old wooden pier, a pier that is, much like John Green himself, ‘falling

down...[and] gonna be condemned and torn down' (Story Notes, 'devil's sidewalk'), we learn that the captain's crew is actually only 19 yrs. old and, as such, his wisdom is casually tossed aside. But prior to this, the Story Notes to 'devil's sidewalk' also contain information about how Satan is living in Greendale, hiding in the jail but leaving occasionally to roam the streets in plain sight. Coupling this information with the lyrics of the song, we get a fuller picture of the captain's advice to his crew, one that is steeped in the knowledge of the supernatural permeating Greendale.

Complimentary exchanges such as this are rampant throughout *Greendale*, with the lyrics and the print notes forming a doubled core of narrative meaning that is carried through to each site, creating a (re)combinatory relationship that lends the town of Greendale with a depth not possible through just song: here, police cars noted in only a word or two of a song are described in the print notes as hiding behind Chamber of Commerce billboards on the edge of town; a band called The Imitators, who are never mentioned in the songs, is revealed to play regularly at the local bar, John Lee's; in the print notes, the motel a character occupies has Wi-Fi internet access, and the art gallery pushes postmodern installations over more traditional paintings. Yet even in the midst of all of this information, it's almost immediately apparent that there's more to the print notes than just storyworld definitization. In reading through them and gathering these bits of story, we are forced to

reconcile the regular intrusion of less easily explained elements: references are made to guitars and wordless instrumentals; chapter numbers are introduced only to be questioned later on; strange, seemingly incoherent passages and digressions are found in the midst of character descriptions; and the narrator's voice shifts from third person to first person to second person throughout the notes, sometimes in the same sentence.

While such content is undoubtedly playful and lends the story notes a unique, almost stream of consciousness voice, it is questionable what role this sort of narrative discord might play in *Greendale* as a whole. Yet, as we will see, not only do these odd portions of the print notes actually contain an ornately constructed sense of edited meaning, but they also point to a larger conceptual framework running throughout *Greendale* as a whole: the implementation of transremediative practice as a method of acutely realizing the project's improvisational creation and subsequent transcoding and multiform fluidity. To understand the role of the print notes in *Greendale*, then, we must go back to the beginning, but not in the sense of the first page of the story notes, or the first notes of the songs. Rather, I mean the beginning of the project as we know it, the moment it became *realized* in practice itself: the first live *Greendale* performance.

Performing Practice

In a strange remark after the first song of the performance on that night in Stockholm, Sweden, Young tells the audience ‘That one [referring to ‘falling from above’] was chapter three in a story I wrote a while ago, and this is chapter one’ (Young 2003). From there, Young continues into the next song, ‘double e’, a five minute performance which is appropriately balanced with nearly five minutes of Young sitting onstage, quietly talking about the town of Greendale. This spoken word segment is transcribed in full below:

So, these songs are about a place called Greendale. It’s a green dale. There’s a family that lives in a place called the double e rancho, outside of Greendale, but just a few miles down a little road up into the hills. And those two songs are kind of about that, the people there. There’s a nice girl there about 18 or 19 named Sun Green, and she lives with her Mom and Dad, Earl and Edith Green, and her cousin Jed. And sometimes her Grandpa and Grandma come and hang out. Because it’s close, they live in Greendale, so it’s not far. Now, it seems to be a pretty mellow place, really, and in town there’s about 25000 people, it’s not very big but it’s big enough, there’s a jail, and Satan lives in the jail. He lives in jail. He’s in every town, I think, but in this town he’s in jail. But he doesn’t have to stay there, he can just leave whenever he wants, he walks right through the wall. But he likes it in there. I think that it’s the people who were there before him or something that make him feel good. Anyway. This song here is chapter six, I believe. It’s chapter six. And if I’m wrong about that I can be corrected on the internet or something [laughter from audience]. [Young speaks into megaphone] Thank you, thank you very much. [Song begins then stops.] So, um, down at the dock, there’s a little harbor in Greendale and there’s a dock, and, uh, there’s an old place, and it’s an old wooden pier, falling down. They don’t use it anymore but it’s still there. It’s gonna be condemned and torn down, but it’s the last dock like it on the whole west coast. It’s just a mess but it’s still there. And there’s a fishing house on the end where they used to clean the fish and

process them. And, uh, sometimes, uh, a lot of things happen there in that little house, but I don't want to get into that right now. I want to tell you about captain john green, the brother of grandpa. He never goes into Greendale. The closest he gets is the dock. He won't come in. but he came in one day, and he stood on the dock talking to his crew, who are a bunch of young kids, 19-year-olds, the helmsman and the mate....he only had two guys on his crew, but he was talking to them, giving them some advice....

Present in this monologue is not only another confusing chapter marker (the third song of the performance is called chapter six which follows chapters one and three), but also an odd, almost oppositional comment about the internet and several lines I referenced earlier as being part of the story notes explaining Captain John Green. Strangely enough, a large portion of this monologue seems to have been transcribed as the print notes. By comparing the print notes to the live monologue, we can see just how closely this transcription took place. Seen below in Table 4. is a side-by-side comparison of the *Greendale* 'devil's sidewalk' monologue from Stockholm and the story notes for the same song, with differences and similarities highlighted:

Table 4.1: Comparison of 'devil's sidewalk' live in Stockholm and print notes

<i>Greendale 'devil's sidewalk' monologue (Live in Stockholm 22 April 2003)</i>	<i>Greendale 'devil's sidewalk' story notes (released 12 August 2003)</i>
<p>So, these songs are about a place called Greendale. It's a green dale. There's a family that lives in a place called the double e rancho, outside of Greendale, but just a few miles down a little road up into the hills. And those two songs are kind of about that, the people there. There's a nice girl there about 18 or 19 named Sun Green, and she lives with her Mom and Dad, Earl and Edith Green, and her cousin Jed. And sometimes her Grandpa and Grandma come and hang out. Because it's close, they live in Greendale, so it's not far. Now, it seems to be a pretty mellow place, really, and in town there's about 25000 people, it's not very big but it's big enough, and there's a jail, and Satan lives in the jail. He lives in jail. He's in every town, I think, but in this town he's in jail. But he doesn't have to stay there, he can just leave whenever he wants, he walks right through the wall. But he likes it in there. I think that it's the people who were there before him or something that make him feel good. Anyway. This song here is chapter 6, I believe. It's chapter six. And if I'm wrong about that I can be corrected on the internet or something [laughter from audience]. [Young speaks into megaphone] Thank you, thank you very much. [Song begins then stops.] So, um, down at the</p>	<p>Greendale seems to be a pretty mellow place. Really, not very big but it's big enough. And there's a jail and satan lives in the jail. he's in every town, I think, but in this town he's in jail....but he doesn't have to stay there. He can just leave when he wants. He just walks through the wall. But he likes it in there....i think it's the people who were there before him or something. Make him feel good. This song here is chapter 6, I think. And if I'm wrong about that, I can be corrected on the internet. But one thing is...and I hope I don't step on any religious feet here...but the devil lives in Greendale. I don't think he's restricted to just Greendale, either. He lives in the jail in Greendale that was built in 1911. It's a little box. It's very funky, just a small little box with bars. But he walks through walls and things, so it doesn't matter. He just likes it there. So, down at the dock, there's a little harbor in Greendale and there's a dock, and there's an old place, and it's an old wooden pier, falling down. They don't use it anymore but it's still there. it's gonna be condemned and torn down, but it's the last dock like it on the whole west coast. It's just a mess but it's still there. And there's</p>

dock, there's a little harbor in Greendale and there's a dock, and, uh, there's an old place, and it's an old wooden pier, falling down. They don't use it anymore but it's still there. It's gonna be condemned and torn down, but it's the last dock like it on the whole west coast. It's just a mess but it's still there. And there's a fishing house on the end where they used to clean the fish and process them. And, uh, sometimes, uh, a lot of things happen there in that little house, but I don't want to get into that right now. I want to tell you about captain john green, the brother of grandpa. He never goes into Greendale. The closest he gets is the dock. He won't come in. but he came in one day, and he stood on the dock talking to his crew, who are a bunch of young kids, 19-year-olds, the helmsman and the mate....he only had two guys on his crew, but he was talking to them, giving them some advice.... (276/425)

a fishing house on the end where they used to clean the fish and process them. a lot of things happen there in that little house, but I don't want to get into that right now. I want to tell you about captain john green, the brother of grandpa. He never goes into Greendale. The closest he gets is the dock. He won't come in. but he came in one day, and he stood on the dock talking to his crew, who are a bunch of young kids, 19-year-olds, the helmsman and the mate....he only had two guys on his crew, but he was talking to them, giving them some advice, I guess you could say, passing on information (276/355)

As Table 4.1 illustrates, more than 75% of the print notes for ‘devil’s sidewalk’ was culled from the live monologue (referred to from this point on as the ‘live notes’) Young did in Stockholm prior to performing the song. Transcribed in the print notes is inordinately storyworld-oriented information about the nature of Greendale, its jail, docks and the men like Captain Green who roam them. Here, places and people only mentioned in the songs (or not mentioned at all) are imbued with histories, ideologies, *stories* that allow an audience to interpret the songs themselves differently.

But in the midst of these situating elements, also transcribed is a somewhat jarring mention that ‘This song here is chapter 6, I think. And if I’m wrong about that, I can be corrected on the internet’ (Live Notes from Stockholm/ Print Notes). While the abrupt switch from third person to first person is in itself worth mentioning, the sentiment behind the perspectival shift is even stranger still: not only is the second song in the set tentatively placed as the sixth chapter in the story but, even if it isn’t, the ‘Internet’, cast here as a singular entity, will provide the correct chapter at some later point. Based on the reaction of the audience, this quip is taken as a small jab at new media by Young, an artist who has, to this point, mainly trafficked in ‘old’ media such as analog recordings and, under the pseudonym Bernard Shakey, celluloid filmmaking. But an interview with Young conducted shortly after the conclusion of the European tour complicates such an easy (and dismissive) reading, and in

doing so reveals a fundamental aspect of *Greendale*: rather than existing solely within a *content-oriented* transmedia framework (as might be said of the networked leanings of *Heroes* and similarly connectively expansive projects), understanding *Greendale* and its transremediative operations is ultimately tied to understanding the processes through which it is (continually) (re)created.

Speaking to *Wired* magazine in an article titled ‘The Reinvention of Neil Young, Part 6’ (Greenwald 2003), Young remarks that with the absence of a mainstream radio channel to play his songs, he is forced to operate under different assumptions about his audience and their capacity for accessing a particular work. ‘To tell the stories I want to tell’, Young notes, ‘I have to use everything that's available and use it all at once’ (Greenwald 2004). When pressed about this comment, as well as the line about being ‘corrected on the Internet’ I mentioned above, Young explains that ‘When I play a new song in concert, it's immediately uploaded. Everyone has heard it before I put the record out. For a while, that was a negative thing for me. But with *Greendale*, I started using it deliberately’ (ibid). Taking this logic to its extreme, Young notes that:

During the acoustic tour in Europe...I was aware that everything I said would be recorded, transcribed, and circulated. So every night I dumped in different information about different parts of *Greendale*. If you say something in one town, and the next night you add a little more, the

Internet brings together these separate occasions. It makes you look at things as not being separate.

For a veteran musician like Young, such a remark is at first seemingly a declaration of surrender. After forty years of creativity, Young's legacy is marked as much by the volumes and volumes of material taken from bootlegged audience recordings of his live shows as it is the 'official' releases themselves, and resisting such forces is futile. While Young has remained famously mum on issues pertaining to bootlegging his shows (he's neither explicitly condoned it or forbidden it at his shows), his comments here reveal that he is aware of what takes place when he plays a new song, shifts the arrangements of guitar solo, or adds lyrics to an already known track: each change, no matter how nuanced, is now noted and debated amongst fans, an operation that used to take place in fan magazines and organized meet-ups but now takes place publically on web forums and message boards). In another sense, Young's invitation to correct him on the Web acts as a valuable call-to-action for his audience, a means through which to ascertain the proper skills necessary to engage with the work.⁵³ Indeed, there were some who acted prominently on this invitation, creating a table which cross-references the live notes to each song played on the European tour (seen in Table 4.2 below):

⁵³ Bonsignore, Hansen, Kraus and Ruppel (2012) describe how operations such as this often serve as a vital tool for engaging audiences in the nuances of a particular fiction, especially with regard to privileging certain behaviors that might lead to positive strategies for approaching the project.

Table 4.2: Table Cross-Referencing the *Greendale* European Tour Live Notes

	Double E	Devil's Sidewalk	Leave The Driving	Carmichael	Bandit	Grandpa's Interview	Bring'in Down Dinner	Sun Green	Be The Rain
Amsterdam	n/a	Click here	n/a	Click here	n/a	Click here	n/a	n/a	n/a
Antwerp	n/a	n/a	n/a	n/a	Click here	n/a	n/a	n/a	n/a
Bergen	Click here	Click here	Click here	Click here	Click here	Click here	Click here	Click here	Click here
Berlin	n/a	n/a	n/a	n/a	Click here	Click here	n/a	n/a	Click here
Copenhagen	n/a	Click here	n/a	Click here	Click here	Click here	n/a	n/a	n/a
Dublin (1)	Click here	n/a	n/a	Click here	n/a	n/a	n/a	n/a	n/a
Dublin (2)	Click here	n/a	n/a	n/a	n/a	Click here	Click here	Click here	Click here
Dublin (3)	Click here	Click here	Click here	n/a	n/a	n/a	Click here	Click here	n/a
Frankfurt	n/a	n/a	n/a	n/a	n/a	n/a	Click here	n/a	n/a
Hamburg	n/a	Click here	n/a	n/a	n/a	Click here	n/a	n/a	Click here
Hannover	Click here	n/a	n/a	n/a	Click here	n/a	Click here	n/a	n/a
Linz	n/a	n/a	n/a	Click here	Click here	Click here	n/a	n/a	n/a
London (1)	n/a	n/a	Click here	n/a	Click here	Click here	Click here	n/a	Click here
London (2)	n/a	Click here	Click here	Click here	Click here	Click here	Click here	n/a	n/a
London (3)	n/a	Click here	Click here	Click here	n/a	Click here	Click here	n/a	Click here
Manchester	n/a	Click here	n/a	n/a	n/a	n/a	n/a	Click here	Click here
Milan	n/a	n/a	n/a	n/a	n/a	Click here	n/a	n/a	Click here
Munich	n/a	n/a	n/a	n/a	Click here	Click here	Click here	n/a	Click here
Oslo	Click here	Click here	Click here	Click here	n/a	Click here	Click here	n/a	Click here
Paris	Click here	Click here	Click here	n/a	n/a	Click here	n/a	n/a	n/a
Stockholm	n/a	n/a	Click here	Click here	Click here	Click here	Click here	Click here	Click here
Stuttgart	Click here	Click here	Click here	n/a	Click here	Click here	Click here	Click here	n/a

(taken from:

http://web.archive.org/web/20060303154155/http://www.butterweck.de/stuff/songi ntros_crossref.htm)

Clicking on each of the links in the cross-reference table directs the browser to a transcription of the particular live note as well as auto-play audio of Young's performance of it. Running down a single column of the table allows the user to compare and contrast the numerous

introductory live notes as both written and spoken performances, with varying degrees of similarity and difference present in each performance. The sum total of the live notes to 'grandpa's interview', for example, contain as a whole approximately 6000 words of dialogue, and no performances are entirely identical from the others. Instead, each performance contains a tangible framework that builds upon the information communicated prior to that show.

Orality and Multiformity

The presence of such an improvisational backbone is a wholly typical aspect of the oral transmission of stories, where performance isn't marked by the strict reproduction of a given story but, instead, finds 'coherence and continuity in structural frameworks rather than linear sequences' (Alexander 2009: 6). These frameworks sustain and even encourage variation by nesting it within the formula (re: plot) of a given narrative, thereby allowing for 'riffs' that promote knowledge tailored to a certain audience, location or prior performance. For instance, depending upon the reaction he received to certain quips and jokes within the live notes, Young would later append different information in order to play to these reactions, and sections of the live notes were either shortened or lengthened depending on response. Additionally, at certain shows like Oslo, Young greatly expanded some sections of the live notes, forcing him to condense other segments accordingly. The live notes to 'bringin' down dinner' in Oslo, for example, are only one line, the shortest of the tour:

‘So, Grandma, she's in the car. She's on her way. She'll be here any minute’ (Live Notes, Oslo, 23 April 2003). That such a compression occurs on only the second night of the tour also suggests that perhaps Young was testing out the degrees to which he could add information to each show while maintaining coherency and continuity. Relatedly, the live notes for the second night of the London performance of ‘Grandpa’s Interview’ contain a reference to the 104 year-old, chain smoking, Scotch drinking Great Grandma Green, a recluse who lives in the mountains outside of town. On the third night of the London performances, however, Young again mentions the age of Great Grandma but appends this reference by noting that, by contrast, Grandma was ‘actually pretty young, she was Grandpa's second wife. She was about 59’ (Live Notes, London, 19 May 2003).

Here, the coupling of live speech with Young’s scaffolded use of information revealed at previous shows lends the multiple beginnings of *Greendale* a wholly ephemeral air: while the performances themselves are somewhat cumulative, their content is equally adapted to each situation, elaborated when the audience cackles at a particular line, glossed over when silence should have been applause. In noting this unique aspect of oral performance, Walter Ong observes that ‘Narrative originality lodges not in making up new stories but in managing a particular interaction with this audience at this time—at every telling a story has to be introduced uniquely into a unique situation, for in oral cultures an

audience must be brought to respond, often vigorously. But *narrators also introduce new elements into old stories*. In oral tradition, there will be as many minor variants of a myth as there are repetitions of it, and the number of repetitions can be increased indefinitely' (1982: 43-44). In *Greendale*, however, the 'old' stories are self-created and self-performed by Young, a fact that gives him more control over the narrative itself, allowing for a much more situational adaptation of content.

If we consider transremediation by using what Elizabeth Shanks Alexander (following Albert Lord and Milman Perry) refers to as an 'oral conceptual lens' (2009: 9), a method of examining an expression from the perspective of oral production, some telling characteristics are revealed which encourage a reconsideration of the nature of certain modes of transmedia practice. Here, the rooted notion of the 'inherent multiformity' of oral traditions, where 'no single version [holds] a privileged position over the others as an 'original' or 'authentic' version', a corollary to transremediative multiformity can be seen, one with a particular emphasis on *how* practitioners conceive of their work as an output absolutely inseparable from the process which creates it.

For lack of a better term, I consider such engagements to be the product of a pronounced oral process within certain transremediative practices, even while we can readily acknowledge the different natures of oral and contemporary cultures. In this mode, cross-modal, cross-media engagements are given primary consideration as a meaning in their own

right. The fluidity of oral meaning and the corresponding need in oral situations to re-cast information from audience-to-audience is reconsidered as an affectual discourse model that is rooted in the differences between media (platforms). In the fluidity of meaning within which orality functions, notions such as a 'stable' text (that is, a repeatable text) do not exist as they might in networked relationships. Instead, such notions give way to the mutability of story as a situational tool for meaning: oral stories exist once and once only, guided by a loose set of structures that allow for certain elements to hold, but also realized almost entirely as a part-improvisational, part audience-aware

Understanding this, it is possible to locate a pronounced situational (oral) logic throughout the beginning of *Greendale*, one that largely dictates what we come to see in the print notes. Here, the static text of the printed page is imbued with the latent bubbling of the fluid, shifting, and situational nature of orality, as well as a corresponding fluidity of processural composition that acts as the fundamental structure of the work (a notion I will develop further later on in the chapter). In other words, a functional embeddedness to *Greendale's* orality can be seen long past its initially (functional) oral performances. As is evident in the content of the cross-reference table above, the print notes themselves are a composite formed from *every* show of the European tour, a transcribed-and-cut-and-pasted bricolage that is nested within the medium of the printed page as a seemingly seamless and singular

construction. In Table 4.3 below, I've highlighted the textual genealogy of the print notes, where each paragraph, each line and, in some cases, even some individual words are representative of a unique performance, transcribed and set within the thick, textured paper of the album's liner notes and the print book's pages:

Table 4.3: Annotated Genealogy of *Greendale* Print Notes with Color Key

<u>falling from above</u>
<p>I'm doing some new songs that I wrote a while ago and this is chapter one. Just didn't want to confuse you right out of the gate. Gonna see how far I can take you here with this new material, just see what happens. I still remember my old songs. These songs are about a family that lives in a place called the double e rancho, outside of Greendale, just a few miles down a little road up in the hills. The term "rancho" is Spanish, "el rancho" kind of a thing. It's a funny thing in America: Spanish was there a long time ago, but still every once in a while somebody writes down "rancho" just because it sounds cool. So that's what they did. It used to be called the Rancho Double L, but now it's called the Rancho Double E. It was a relatively easy change to make. Earl and Edith - it used to be the Double L. Now Earl's a painter, so he painted the sign, he added two lines. It's like a cow brand, y'know? How they have brands on ranches. The Double L looked like that. So Earl and Edith, when they moved in, they were very clever, actually. There was a sign that said "Double E Rancho," and they painted it. And I don't know if you remember, but in Chapter 1 - which was second this evening - we talked about how Earl and Edith renamed the Double E and almost made history. The locals rose up. They were mad as hell because it used to be the Double L. Change comes slow in the country. I told you that a long time ago. I didn't expect you to remember, though, I really didn't, so I don't mind telling you again. Grandpa likes to sit on the porch at the Double E 'cause when the sun comes up in the morning it's very nice there, a good place to read the paper.</p>
<u>double e</u>
<p>Ciela Green was the grandmother of Sun. She had two daughters by two different brothers. One of their names was Sea - S-E-A - and the other</p>

one was Sky Green.

Tonight Earl and Edith are headed out to a party at the bar, because Edith loves to dance. And Sun loves to dance too, the good daughter. She's working on her homework, though, working on a book report on a book called "How to Use the Media." She's also doing an essay on saving the wilderness. Her favorite wilderness area is Alaska, so she's focusing on the state of Alaska in her essay. Sun wants to be an artist, maybe a performance artist. She's working on something out in the field she wants a lot of people to see someday. She's working in hay. She carries bales of hay on the back of a flatbed truck out into the middle of the field on a green hillside, and that's her canvas.

devil's sidewalk

Greendale seems to be a pretty mellow place. Really, not very big but it's big enough. And there's a jail and Satan lives in the jail. He's in every town, I think, but in this town he's in jail....but he doesn't have to stay there. He can just leave when he wants. He just walks through the wall. But he likes it in there....I think it's the people who were there before him or something. Make him feel good. This song here is chapter 6, I think. And if I'm wrong about that, I can be corrected on the internet. But one thing is...and I hope I don't step on any religious feet here...but the devil lives in Greendale. I don't think he's restricted to just Greendale, either. He lives in the jail in Greendale that was built in 1911. It's a little box. It's very funky, just a small little box with bars. But he walks through walls and things, so it doesn't matter. He just likes it there. So, um, down at the dock, there's a little harbor in Greendale and there's a dock, and, uh, there's an old place, and it's an old wooden pier, falling down. They don't use it anymore but it's still there. It's gonna be condemned and torn down, but it's the last dock like it on the whole west coast. It's just a mess but it's still there. And there's a fishing house on the end where they used to clean the fish and process them. And, uh, sometimes, uh, a lot of things happen there in that little house, but I don't want to get into that right now. I want to tell you about Captain John Green, the brother of grandpa. He never goes into Greendale. The closest he gets is the dock. He won't come in. but he came in one day, and he stood on the dock talking to his crew, who are a bunch of young kids, 19-year-olds, the helmsman and the mate....he only had two guys on his crew, but he was talking to them, giving them some advice, I guess you could say, passing on information

leave the driving

This is a story of how one stupid move can change your whole life. This song happens on the highway, on the way out of Greendale. As a matter of fact, it happens right at the "Leaving Greendale" sign, where the map of Greendale ends. There is no more Greendale after that. The highway ends, everything ends at that point. The map - there is nothing else, just the map. Cars driving down the road get to the "Leaving Greendale" sign and then they're off the map. That's where it happens. There's a map of Greendale, too, a beautiful map that's drawn by some old Greendale person, I suppose. You know those maps where everything's flattened out, it's like you see it but it's on a big piece of paper. You see City Hall and a little drawing of City Hall. A very nice map. Right at the end of the map, Highway 1, Coast Highway, right there on the edge is where this happens. Cousin Jed is driving his beautiful funky car down Highway. You know, when I was writing this, I had no idea what I was doing, so I was just as surprised as you are. Jed went to jail, and I guess he's still there. And you know who else is there. But remarkably, Jed and the devil actually look very similar. But they say there's a little bit of the devil in everybody. But this resemblance is a little striking for me. It kind of reminds me of myself, actually. But from everything that happens in life - I've learned this, and I'm at least 10 - is that there's a lot of wreckage from some things, and this cop, Office Carmichael, he had a life.

Carmichael

On the very edge of Greendale, there's a sign that says "Leaving Greendale." It's on the edge of the highway. About a hundred yards from that sign there's a big billboard put up by the Greendale Chamber of Commerce. That's where Officer Carmichael likes to park his police cruiser. So Jed went to jail. He's in jail. He screwed up. He's had it. I don't think they're gonna get him. I took note of that comment over there. This is a test. I don't know if I'm gonna pass it or not. But I already passed that Cortez test. I'd like to take it again someday - maybe today. But for a minute I'd just like to stay in Greendale because Jed's in jail (thank you). Jed is in jail. Go back in your homes and close your doors. Okay. What about the wreckage of murder? It's terrible. Jed killed a cop. And that's a bummer right there, because Carmichael - Officer Carmichael - had a family, he had friends. He had a beautiful wife. He didn't have any kids, but he did have a nice group of friends, all the other officers who worked with him. He had a story to tell, but he's not around anymore, so I'll tell you a little bit about him and that's it. It's not worth it to spend too much time on him, since he doesn't have a future. He had a beautiful wife, who apparently had a terrible argument with him just that morning as he was leaving to go to work. So that was kind

of too bad, 'cause she never saw him again. So it makes you think about, always try to be nice to the one you love because you never know what's gonna happen. So I learned that from this song. I don't care if you learn it, I learned it.

Bandit

So he's traveling around. He's got money problems, and he likes to go in his camper - he's got a Winnebago, like a camper you live in and drive around - and he drives around to different galleries with all his paintings in his Winnebago, goes in to people and tries to get something happening. One night he stopped in a motel. And he had a few personal moments with the computer and the television set. When that instrumental was happening there at the end, while I was playing harmonica, the devil went to Earl's studio. Earl's a painter. He went down to his studio and materialized there, and cleaned Earl's glasses. He cleaned his glasses. His spectacles. Earl was a painter and he was a Vietnam vet. There's a lot of those. He specialized in psychedelic paintings. He painted a lot. Sun used to love to watch him. He was not a very successful painter, and he never did sell anything, but he always tried. He took them to the Gallery L on Main Street. Lenore was the owner of the gallery. He was always getting turned down. Then he laid them back down there, by the easel, and then he left. Then Earl came in the next day and put on his glasses and started painting stuff he'd never painted before. Suddenly he was painting this picture of this guy in a red suit with red shoes and kind of a Panama hat with a red band on it, with a sign that said "Alaska" on it. Like he was hitchhiking. And he's going, "I've never painted anything like this before," so he took it to the gallery to see what would happen. she loved it. She loved this painting. She hung it in the most prominent place in the gallery and told Earl to bring in anything that he painted, and that she would love to have it. It was just the most fantastic thing that ever happened to Earl. And he couldn't figure it out, but what the heck, huh? Got a painting in there now. I'll just tell you this because you can't tell by listening to the songs, you have to listen to the instrumentals to get this. Anyway, so when you see somebody like Eric Clapton up there playing guitar close his eyes, it could be anything. It could be anything.

grandpa's interview

Earl, what a guy, huh? Now, the media is really out of control, I think we all know that. It's nice to have them with us, but not always. They're a little pushy. So they came to Grandma and Grandpa's house trying to interview Grandpa about Jed. Because Jed killed a cop - of course they wanna do a special on that: Let's find out what the Green family thinks.

[Wow - that's the wrong guitar, I can't do that.] I'm trying to remember what key this is in. I put them down, it's got big numbers and letters so I can see them - not that I'm like Grandpa. **But. Go back into your homes and close your doors. We are here to liberate you.** Who cares what chapter this is. Only people on the Internet. You people will have to get tapes of other shows - well, I don't have to talk to you directly; you're not here. I'm trying to adapt to technology. 2K3, here we are. When I was writing these songs and recording them, we had no idea what was going on. Grandpa was my favorite, and when he died - I mean he had a, whatever happened, a heart attack or something - that really blew my mind. I was not ready for that. It was unfortunate. And among the guys at the studio, when I went by there that morning and we recorded this song, everybody was depressed. But we liked him. He always had something funny to say. Everything he said was funny. But he was so serious that you couldn't tell how funny it was until later. So that was a sad, sad thing. It was a surprise. You can't think, "I'm gonna write a song about Grandpa and he's gonna die." You have to just let it come out. So as a writer, when I was doing these songs I had no idea what was going on. Just started and kept on going, recorded the first one and then I wrote the second one. That's when I realized the same characters were in the second song as were in the first song. It was a big surprise. We were all keeping track of it. It was kind of like watching a soap opera or something. Every day I'd come in with a new song. I usually wrote it on the way over there. I'd stop my car and write a little bit. Then when it stopped coming I'd move my car about 500 yards and stop again. There was a whole bunch more material there. So I wrote that down too. Anyway, it's too bad. 'Cause I liked Grandpa.

bringin' down dinner

So when Grandpa died, it was a surprise to everybody. I'm sorry, I wish it had been a happier story up to this point. But we still have youth. We still have youth on our side. Living in that house is that beautiful little girl, ready to break out. And right now Grandma's driving around - they've got this car, it's a huge white Eldorado, a '78 Eldorado. It's very big and very wide. So we came in and put down that track, and it was a long one. And when we got to the end of it, my friend Ralph walked over and looked at the lyric sheet and said, "Grandpa's dead!" And everybody was kind of realizing that at once, and he was our favorite character. It was kind of too bad, because he was the only one that was really funny. So we were kind of depressed. I came by the next day and everybody's standing around, and I didn't have a song. I usually write songs on the way over, but this time I didn't have one, even though I stopped at all the right places in the car and opened the door and took out my piece of paper and pen. I couldn't write, nothing happened. It reminded me of

when I was about 3 years old and I went up in the attic to see my daddy, who's a writer. He's written many books. He had an old Underwood typewriter. I walked up there - and it took a lot of nerve to go up there, because you weren't supposed to go up there 'cause he was writing. So I walked over and I looked up at him and I said, "What're you doing, Daddy?" And he said, "Well, I'm writing." And I looked up at him and said, "What're you writing?" He said, "I don't know." He said, "I just come up here every day and start writing. Sometimes I don't write anything. Sometimes I write all day. I don't know what I'm writing." I said "Well" to myself, "There must be something to learn there." My 3-year-old brain was churning on overtime. So I went back downstairs. A couple more days passed and still no new songs. One morning I woke up - it was the third day, after I'd told the guys, "We must be done, we might as well go home because I don't know what's gonna happen now." And then I thought, "What about Grandma? What happened to Grandma?"

sun green

Well, they had a wake for Grandpa. They put him in a chair in the living room. All his friends came by and started talking to him. Everybody said what they wanted to say. As per Grandpa's instructions, the funeral home used all their oldest cars. Brought them in front of the Double E and they were all there: old '50s American cars, whitewalls, black cars. The next day Sun Green got up and packed her bags and left home. You know how it is when you're a kid - you're trying to say something but you can't get it out. Somebody you're trying to talk to, some older person, maybe your parents, they keep talking to you, they don't stop. You want to say something but you just can't. What a situation.... Well, an airplane was flying by. Out in the field, Sun looked up and saw it. She'd just finished her project. She was hoping that people could look out the window of the airplane and see what she'd made. She had made a huge circle in straw about 200 feet across. The line creating the circle was about three feet wide, so it was a lot of straw she had to put down to create this huge circle. In the middle of circle in straw on the beautiful green grass, the wheat-colored straw spelled out "WAR." And then a huge line went diagonally through it in straw, crossing it out. She was looking at it from her pickup truck, very happy with herself for making a statement. For an 18-year-old to make a statement like that is a great feeling. And she was proud of herself. She decided to go into Greendale and see Jed in jail, see how he was doin', talk to him, take him something. What a good feeling. I don't think there can be a better feeling than youth making a difference.

be the rain

So Sun met Earth Brown in John Lee's bar. Earth was fascinated and captivated by her beauty, the symmetry of her moves. He couldn't take his eyes off her. While he was watching her, the devil came up behind him. He saw that Earth was drinking some Alaska water, from the glaciers. The devil put some devil dust in Earth's bottle of water, just dropped a little in there. The water started glowing, shining, turning red, and then it turned silver. Earth was still watching Sun dance. Shadows were all over the place. It was the most amazing thing he'd ever seen. There seemed to be a heat coming off of the floor. He reached over and took a large drink of Alaska water. From that moment on, Earth was thirsty. He never quenched his thirst. He started thinking too much, second-guessing. Nothing happened that he didn't question and then question again. His thirst was overwhelming. He and Sun were in the Alaskan camper, headed north on Highway 1 to Alaska. Earth stopped at a convenience store and bought several cartons of water. He kept about a dozen bottles in the front seat and put the rest of it in the back. There was a strange red glow in the back. He noticed it, but he forgot about it so fast. He thought he heard a noise in the engine, though. The engine was making funny sounds. The windshield wipers weren't working right. They were flying up Highway 1. Earth was sweating. Sun was peacefully asleep, with her head resting on his shoulder, not a care in the world. She was dreaming. She was dreaming about a high school play. She was onstage. There was a big cardboard house on the stage, looked just like the Double E. There was a light coming out of the window where Sun's window was. There was a yellow light coming out, and it shone down on her on the stage. Grandpa was sitting on the porch in his rocking chair. On the other side of the stage there was a cardboard jail. Jed was sitting there talking to Officer Carmichael. Sun's cat walked across the stage. Then the cheerleaders all came out, but they looked different. They had camouflage outfits on - raggy, dirty camouflage. They had bandanas in camouflage and war paint on their faces. They were waving a big camouflage flag with a black monkey wrench on it. Sun looked at herself: she was dressed in camouflage too. She had a little Army hat on and a bandana around her forehead, war paint on her cheeks. The Imitators started playing, and Sun picked up her megaphone.

Color Key	Location	Date
	Stockholm, Sweden	22 April 2003
	Oslo, Norway	23 April 2003

Bergen, Norway	25 April 2003
Berlin, Germany	30 April 2003
Frankfurt, Germany	1 May 2003
Dublin, Ireland	11 May 2003
Dublin, Ireland	12 May 2003
Dublin, Ireland	13 May 2003
London, England	17 May 2003
London, England	18 May 2003
London, England	19 May 2003
Manchester, England	21 May 2003
Paris, France	22 May 2003

When marked by color, the segmented nature of the print notes becomes clear. (Note, too, the difference between the order of the notes' genealogy and the order of the performances [listed chronologically in the Color Key]). Here, rather than being composed of a single transcription taken from a single performance, each song's notes is instead what we might call, following Mikael Bahktin, explicitly (*orally*) *heteroglossaic*, that is, composed from multiple sources, goals, perspectives and situations. As Alexander further argues about orally-derived textualities (i.e. texts that have been culled and fixed into writing from several oral performances), such a multiply-located foundation inevitably reflects a

‘compositional process’ (2009: 10) as much as any content. According to Lord, this process must be understood in terms of ‘*serial events of renewed composition*’ built from ‘compositional building blocks’ (Alexander 2009: 13)—(transmedial) formulas/ structures (such as the epic poem) through which variation can occur—rather than the presence of some ‘fixed’ artifact. Extending these theories to *Greendale*, it becomes apparent that rather than being an exclusive example of the capacities of printed page to sustain certain meanings, the print notes exist first not only as transcriptions of content but also of compositional *context*. In other words, they are literally arranged to reflect the oral process even though they exist as a transcoded and transcribed site based in print.

Stepping back, for a moment, it’s worth taking stock of just how far we’ve come in this study with regard to transmedia analysis. While we began with the notion of transmedia fictions as networks of meaning that thrive through the selective connection of narrative elements, our strategies on the periphery have, because of the presence of redundancy features, necessarily shifted from a discussion of links, paths, arcs and walks (in complete graphs, such features are everywhere) towards the modes of transmission themselves. This is significant not simply because we can locate here the limits of transmedia network visualization, but also because, like the presence of migratory cues, our awareness of these modes of transmission are evidence of a strategy of design constructed to

make us take notice of them. By loosely understanding *Greendale* through what Alexander calls an *oral conceptual lens*, the ‘reproduction of the text from one performance to the next [becomes] an engaging, rather than passive, process’ (2009: 13). Here, however, rather than limiting ourselves to an analysis of strictly oral performances and their transcription, I argue that such an understanding might be extended to encompass a process of transremediative practice instead.

Taken in this context, the live notes of the European tour and their subsequently selected presence in the print notes are markers of an even more profound undercurrent to *Greendale*, one which subverts or, at least, obfuscates the ‘seeming’ intentions of a statement like Young’s about the Internet’s capacities for collating and correcting his remarks: while the Internet and its vast body of users is certainly capable of this type of act, the transcription of oral performance into written or typed text (as it surely would exist as online) carries with it profound consequences. In the print notes, for example, the multiply sourced, orally-generated content that situates each song is never fully itself; gone are the stuttering, stammering, throat-clearing markers of oral speech, the ‘uh”s and the ‘umm”s that peppered the live notes; gone, too, are the purely aural expressions such as Young’s bellowing like a cow in certain performances when he describes the Double E rancho’s branding irons. In their place, is the cleanly edited, regularly-spaced dictates of the typeset print page. As Ong notes, transcriptions such as this are always

transcodings at their most profound level. Print, according to Ong, not only externalizes memory and gives material form to oral communication, but it also orders it in a manner that deeply impacts its meaning. In projects like *Greendale* with a ‘heavy oral residue’, Ong evocatively (and appropriately) notes that even (textual) ‘genealogies’ like the one I conducted earlier should not be seen as ‘lists’ of data but rather ‘memory of songs sung’ (1982: 99). But even so, the fact that we can dwell on certain lines and ‘backscan’ through them means that the reconstruction of the genealogies of the print notes is always rooted *in print* even as it is undoubtedly dripping with oral significance. Consequently, these types of engagements are always poised *between* media. Following Olson (1977), Ong argues that ‘orality relegates meaning largely to context whereas writing concentrates meaning in language itself’ (1982: 106). The consequence of this for *Greendale* is that even as the print notes are populated by the content of multiple oral performances, their meaning comes from the tension between the lost material context of the original site(s) and the newfound material context of the transcoding site, which may or may not be able to fully support the prior mode.

Take, for instance, the print notes to ‘falling from above’, the first song from *Greendale*. Here, we learn about the Green family, the Double E Rancho where they live, and the history behind its name. But, as mentioned earlier, we also encounter strange shifts in the narrator’s voice, beginning with the first lines of the notes which read: ‘I’m doing

some new songs that I wrote a while ago and this is chapter one. Just didn't want to confuse you right out of the gate. Gonna see how far I can take you here with this new material, just see what happens. I still remember my old songs' (Print Notes, 'falling from above'). Taken from the first show of the tour, Stockholm, in print these lines serve as a proper, if a bit odd, introduction to the narrative, reading like a folktale with a first person narrator whose tales are well-worn. But what's missing here is the exchanges between Young and the audience that gave rise to these initial lines, exchanges that illustrate just how profoundly the situation of an expression can impact its meaning.

Dealing with an animated and perhaps overeager Stockholm crowd, in the midst of explaining how these songs were indeed new and no one had heard them before, an audience member shouted out a couple of requests for older songs, to which Young responded 'I still remember my old songs but...' as the applause rose up and he segued into the next track, 'double e'. In a similar incident later in the print notes, we read: 'I took note of that comment over there. This is a test. I don't know if I'm gonna pass it or not. But I already passed that Cortez test. I'd like to take it again someday - maybe today. But for a minute I'd just like to stay in Greendale because Jed's in jail' (Print Notes, 'carmichael'). But, again, what is found in the print notes is the result of a 'flattening' of the textures of live performance. As the *Greendale* set in Stockholm wore on, that same member of the audience who shouted out

earlier once again screamed out another request, this time ‘Cortez the Killer’, one of Young’s most popular songs. While Young agrees to possibly play the song later, he denies the request and moves on. Yet, even though he stops his monologue short to address this man, it’s never noted in the print notes. Instead, all we are left with is Young’s response in the lines quoted above, marked no differently than any of the others preceding or following it, giving no sense as to the nature or significance of this strange aside.

I mention these two incidents at length because they point to a foundational aesthetic of *Greendale* and, more largely, transremediation: the inability for one medium to fully capture or mimic the breadth of experience present in another medium, even as each site increasingly becomes littered with affects from other media. These are the ‘gaps’ that Kittler speaks of, coerced towards expressive ends. In the free-form, improvisational setting of live performance, exchanges between audience and performer and the fleeting, inordinately temporal moments of expression—the most pronounced materialities of oral culture—often have a significant impact on the content that is performed. In print, we likewise see how material features shape content form, but in a manner that is much more pronounced. The ordering of the print notes isn’t dictated by *when* a certain aspect of the live notes was communicated but, rather, through the order that makes most sense to maintaining a *coherent sequence of events* within the equally sequential ordering of the

lines of the page. The print notes for 'sun green', for example, contain elements culled not only from multiple shows, but from multiple points within that show, that is, from the live notes to *other songs*. Here, the content of the London and Paris notes for 'grandpa's interview' fit better as notes for 'sun green', as Young dropped in information that had significance not to the proceeding song, but to events dealt with earlier. Perhaps he just forgot to include it at that point, or perhaps he wasn't concerned with when this information got in. But this sometimes occurs on such a level of acuity that even single sentences themselves are hybrids of performance and note placement, such as the last line of the 'devil's sidewalk' print notes, formed by information taken from two performances that better reflected the coherency of the story.

Print, then, provides order and direction in a way orality doesn't; what it does not handle as well as orality, though, at least without resorting to tricks of font or pagination, is suggesting shifts in speaker, situation, diction, emphasis and contextual reference. Consequently, what remains of the live performances in the print notes is itself a fractured attempt at reconstructing an already reconstructed and transcribed history. There are no violations of the integrity of print, even as the oral residue colors and sometimes obscures its meaning. Young performed the songs live, but he also recorded, transcoded and transcribed them in a manner akin to what he anticipated the Internet would do. Then they were further cut, pasted, ordered and edited for a

narrative effect akin to that of the selective memory of an audience's experience of a performance. Yet by allowing certain markers of the live shows to remain in the text untouched and unmarked, *Greendale* shows its hand and reveals a strategy for understanding transremediative fictions as practices of process, rather than processes of practice. Much like the presence of the oral in the print, *Greendale's* other sites—the print book, the film, the live theatrical performance and its accompanying stage bill, the website and, perhaps most integrally, the graphic novel—are also each composites of content positioned through not fully-compatible platforms. In this sense, they are never fully themselves or fully something else but, instead, mechanisms of medial approximation, sites through which transmedia meanings are located predominantly in the functions of the platform itself.

The Language of Transmediation: Every Trace Leaves a Contact

'I think to have seen Neil at least 8 times, but I don't remember this guy so nervous. Maybe it was the matter of language - we Italians don't understand English. It was really hard to try to follow so long speeches and Neil (a really sensitive and frail man) was perfectly understanding this feeling.'

—Reaction from an audience member of the Milan *Greendale* show

Interpreting *Greendale*, especially as an example of transremediative practices, means that we must look for the spaces where one medium attempts to model another, the spaces where the echo of the live voice in some distant concert hall give way to the turn of

a page or the click of a mouse. The recursive engagements between live (oral) performance and printed page that litter the story notes tell us much about how we might approach the other sites in the fiction. Again, rather than using network visualization strategies such as looking for pathways or object-orientations within *Greendale*, we must instead view connection as the presence of one platform in another, and the mechanisms shared (or not) between them. In other words, what's transcoded is what connects here, a notion that seems to have been implicit in *Greendale* since the beginning. To reiterate an important dynamic, consider for a moment the degrees of transcoding necessary to even bring the print story notes to fruition:

- Live performances recorded via analog or digital means;
- Recordings were then (potentially) transcoded into mp3 or other digital format for the Web;
- Digital or analog recordings were then transcribed into writing;
- Writing was edited (re-ordered, oral markers omitted, etc.) and set within the constraints of the size of the liner note page

Additionally, Young's choice to launch *Greendale*—a story written, spoken and sung in English—in Europe must also be considered as a transcoding, as even the language used to transmit the project initially had 'format' issues (in that it represented a specific way of

communicating) that would then need to be similarly transcoded into the audience's native language, either on the spot or at a later date.

The circularity of these dynamics means that the more one looks at the nature of the 'beginning' of *Greendale* the more it becomes virtually impossible to consider the project *without* recourse to some degree of transmediated meaning. In other words, right from the start *Greendale* was always transcoded in fundamental ways, and from that point on it continually re-makes itself through transpositional gaps. Just as it is impossible to consider orality as *ever* existing purely in another medium, so too does our contact with the sites comprising *Greendale* never exist as solely solitary engagements, predicated exclusively on local content. This is an important distinction to make with regard to larger design practices, as Dena notes that the 'notion of separation, or more appropriately *retention of separation*, is actually a key trait of transmedia projects' (2009: 111). But as we will see, it is the *erasure* of this separation that comes to define this particular mode of transmediative practice, one where each medium's capabilities are highlighted through the capacities of the other sites of the project. Just as the print notes contain vestiges of their oral foundations, the live notes also somewhat curiously make gestures towards the Internet, other live performances and, as we will see, even the film itself.

The Textures of the Town: The Film

Opening quietly with a shot of a hand-drawn map of the town, the *Greendale* film is superficially nothing more than an extended music video, a collection of shots assembled to visually accompany the words and music of the songs. Indeed, this is so much the case that Young himself even remarked that rather than working from a more traditional film script composed of paper and text, he instead ‘filmed [each] song as if it were a script’ (Zellman 2003), letting the actions and events contained in the lyrics guide its composition much like a painter uses guidelines in order to segment the canvas. Yet even so, much like the print notes, there’s something immediately jarring about the way the film constructs its meaning: songs flow into each other but are marked by discontinuous chapter titles identical to those Young noted in the live performances; still sketches of characters and locations fade into live shots of nearly identical actors and places; dialogue between characters is nothing more than lip-synched mouthing’s of the words to the songs and, even then, no one’s voice is anything other than Young’s; multiple visual and audio tracks of information occur simultaneously, where a song’s lyrics might be describing one incident, but the visuals of the film are of something else entirely; characters slip in and out of the fiction, sometimes addressing each other, and sometimes addressing the camera and the narrator directly through the lyrics of the songs. While many of these techniques have been used before—many film adaptations of

novels, for instance, begin with shots of the book's pages—the transremediative transfer of multiformity between sites in *Greendale* yields a composited space of filmic meaning understood fully only by engaging with the other sites that compose it. Additionally, there is a visible, almost tangible texture to the film itself, the result of Young's decision to shoot with an underwater Super 8 camera and then blow it up to 35mm to increase the hazy granularity of the shots. The consequent texture of the film resembles a family's home movies even as the shots themselves are literally framed with twigs, brush and fur that hangs from the camera lens. Even more markedly, since Super 8 film does not record audio, Young had to literally dub the songs over the film—syncing them up to the actor's moving lips—a move that retains the integrity of the medial definitization in the whole project. The songs, then, are still materially 'separate' from the film even as they are foundational to it, a modality and capability imposed upon the Super 8 stock from the outside.

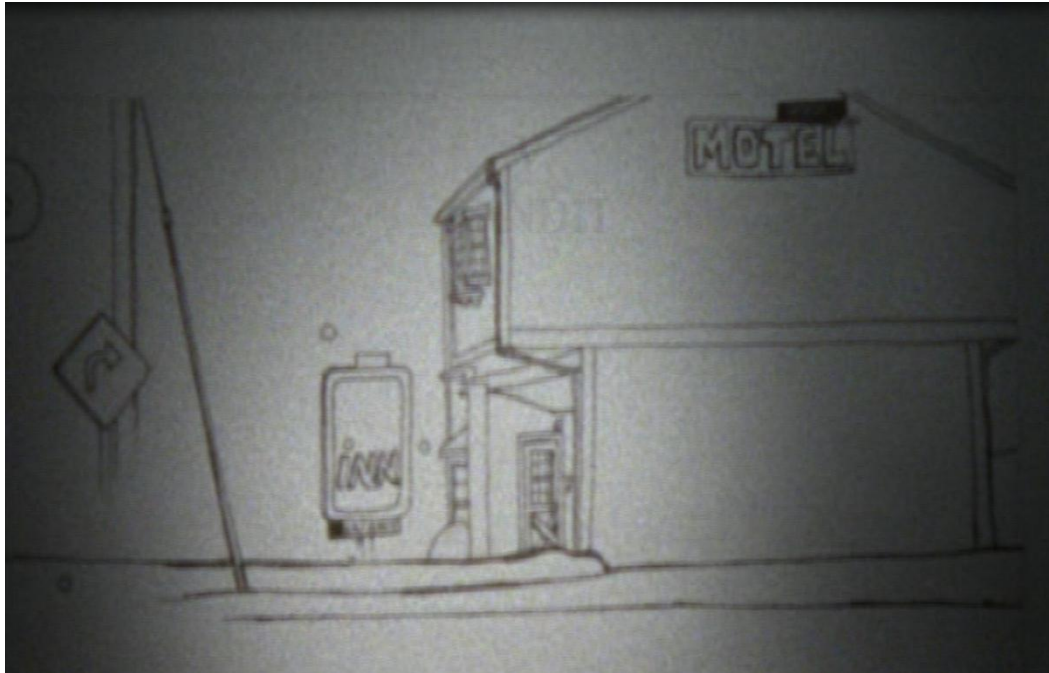


Figure 4.7: The Textures of the *Greendale* Film

The sum of these design choices yields a site that, like everything else we've seen of *Greendale* so far, is never fully itself, pulsing as it is with signs of its own physical composition and connection to the other media of the project. Conversely, the preoccupation which *Greendale* exhibits towards this sort of medial exposition—a hallmark trait of transremediation—means that the film's composition in itself also becomes an integrated component of the *other* sites that will follow, particularly the art book. As I argued earlier, this produces some of the most pronounced redundancy features present in *Greendale*, where static hand-drawn images and photographic film frames are nearly identical in relative form, a tmetic feature that only serves to highlight elements such as the rough-hewn lines of shading in a character's sketched features. But even in the midst of these sorts of exchanges, the film is perhaps even more jarring in what it *doesn't* contain: any of the spoken or written text from the live or print story notes. This does not mean, however, that they are not present in the film, only that their presence is adapted to the medium itself. This is a different sort of medial flattening than what occurred with the transition from orality→print, as it positions the story notes as a product of *imagery* rather than *text*. While we can easily imagine reading the print notes while we listen to the songs, it's not as easy to imagine listening to the songs *and* listening to the story notes *and* watching moving imagery, as might happen within an audiovisual platform.

This is partially the result of what is known in cognitive sciences as the *split-attention effect* (Talsma, et al. 2006: 541–549). According to the principles of the split-attention effect, ‘attending to an [...] auditory stream does not affect the processing capacity of the visual stimuli as much as attending to another visual source would and, more generally, any two modes that rely on the same senses (two audio sources, for instance) are similarly difficult to reconcile. As such, at least as far as clarity goes, we might not expect a film director to attempt to position multiple threads of imagery simultaneously, at least not if she wants to draw our attention to a single narrative⁵⁴. Yet the *Greendale* film still manages to account for the story notes and, perhaps more profoundly, it even attempts to address the oral shifts found within these notes, where references to prior speech and prompts for imaginary projection are treated as content for filmic expression rather than markers of another platform. The result of this is a shrewd dismantling of both the shortcomings of orality and print (as they exist in the notes), and also a similar treatment of film as both a uniquely expressive and uniquely limited mode of communication.

As mentioned previously, the story notes are peppered from the beginning with odd references to modalities that neither the spoken word

⁵⁴ Notable exceptions to this do exist, of course. Michel Gondry’s *The Green Hornet* (2010) used stereoscopic 3-D to maintain multiple narrative threads, where rather than breaking the frame up into sections, it was broken into different levels of foreground and background depth, with each level maintaining an individual storyline to startling effect.

performances nor the print notes could seemingly account for. More specifically, the frequent mention of musical *instrumentals* in both sites—spaces in the songs where there was only sound, not words—as, nonetheless, spaces where things still *happened* in the story is perhaps one of the more articulated aspects of the medial awareness in *Greendale*. Importantly, however, in a particularly transmedia gesture, this story happens in (an)other site(s). In one example of this dynamic taken from the ‘bandit’ notes, we read (or hear) a description of how the story continues in music even without words to support it, a concession to both the inadequacy of music alone to convey narrative as well as a simultaneous gesture to the openness, the limitless possibilities for imagination within it. Below are the notes to ‘bandit’, highlighted for significant passages:

So he's traveling around. He's got money problems, and he likes to go in his camper - he's got a Winnebago, like a camper you live in and drive around - and he drives around to different galleries with all his paintings in his Winnebago, goes in to people and tries to get something happening. One night he stopped in a motel. And he had a few personal moments with the computer and the television set. ***When that instrumental was happening there at the end, while I was playing harmonica, the devil went to Earl's studio. Earl's a painter. He went down to his studio and materialized there, and cleaned Earl's glasses.*** He cleaned his glasses. His spectacles. Earl was a painter and he was a Vietnam vet. There's a lot of those. He specialized in psychedelic paintings. He painted a lot. Sun used to love to watch him. He was not a very successful painter, and he never did sell anything, but he always tried. He took them to the Gallery L on Main Street. Lenore was the owner of the gallery. He was always getting turned down. . Then he laid them back down there, by the easel, and then he left. Then

Earl came in the next day and put on his glasses and started painting stuff he'd never painted before. Suddenly he was painting this picture of this guy in a red suit with red shoes and kind of a Panama hat with a red band on it, with a sign that said "Alaska" on it. Like he was hitchhiking. And he's going, "I've never painted anything like this before," so he took it to the gallery to see what would happen. she loved it. ***She loved this painting. She hung it in the most prominent place in the gallery and told Earl to bring in anything that he painted, and that she would love to have it. It was just the most fantastic thing that ever happened to Earl. And he couldn't figure it out, but what the heck, huh? Got a painting in there now I'll just tell you this because you can't tell by listening to the songs, you have to listen to the instrumentals to get this. Anyway, so when you see somebody like Eric Clapton up there playing guitar close his eyes, it could be anything. It could be anything.***

Figure 4.8: Highlighted 'bandit' notes

As seen in the highlighted passages above, the notes to 'bandit' are a playful, suggestive mix of exposition and self-reference. The equation between wordless, musical space and the implication that there's still story *there* is at once both absurd and perceptive: while it is suggested that within the space of pure music narrative imagination '...could be anything', it's also evident that this is a somewhat tongue-in-cheek comment, as the narrator tells us what's happening in these wordless (non-oral, even) interludes but only *through* words and only initially in a performance containing only an acoustic guitar and Young himself. But there's more to these passages than just a jesting (if evocative) poke at the nature of live performance, as it becomes evident that the film uses these passages as a means of structuring the events that take place

there. Consider, for example, the following clip from the *Greendale* film posted below, each of which take the idea that *story happens even without words* as a literal, processural, aesthetic provocation to structure its sequences:

Figure 4.9: Instrumental clip from ‘carmichael’ and ‘bandit’
<http://youtu.be/kLeDLaBaN10> (Taken from Young [dir.] 2003)

Figure 4.10: Instrumental clip from ‘grandpa’s interview’
<http://youtu.be/ZJZdPHduTi4> (Taken from Young [dir.] 2003)

As is evident in these clips, not only does the film use the instrumental breaks of the songs as moments to realize the events noted in the story notes as occurring *during* these wordless passages , but it does so at a level of precision so acute that the second the song segues from lyrics to instrumental, the film cuts instantly and accordingly from shots of the events contained in the songs to shots of events contained in the notes (see Figure 4.10: GRANDPAS.avi, at approx. 3min. 10sec. for an example of this). The notes, then, are equally a shooting script for *Greendale*, albeit one that contains no dialogue or music other than that which the instrumentals already provide. Even so, they are still used as *structural* frameworks that impact the placement of content in another medium, in this case down to the second. Furthermore, the notes to ‘bandit’ read: ‘When that instrumental was happening there at the end, while I was playing harmonica, the devil went to Earl’s studio. Earl’s a painter. He went down to his studio and materialized there, and cleaned Earl’s glasses’ (‘bandit’ print notes). But the reality of the performance (the lines

come from the 30 April 2003 concert in Berlin) is always present here: while the instrumental of the recorded song contains no harmonica, ‘carmichael’ is nonetheless the preceding song to these notes. This is why the reference to ‘the end’ of the song is apt in for both the live and film sites. The instrumental occurred at the end of the previous song, just as the film *shows* the devil descending on Earl’s studio during the equivalent instrumental in the film.

Perhaps more interestingly, though, the film also uses these instrumentals as a means of revealing information both explicitly and implicitly present in the notes—live *and* print. In Figure 4.9 (Carmichael.avi), as the film fades from ‘carmichael’ to ‘bandit’ (note the transitional drawing, too), we maintain our focus on Earl Green but we do so from a perspective not seemingly tethered fully to either the songs or the prints notes. As seen here, Earl checks into a motel, despondent about his life as a failed painter and, according to the information present in the print notes, ‘he has a few personal moments with the computer and television set’ (‘bandit’ print notes). At around the 20 second mark of the clip, Earl grabs the TV remote and, in a shot meant to suggest his need for a life change, points it towards the mirror and presses the button. It’s quickly revealed, though, that he was merely changing the channel on the TV, eventually settling on a nature documentary. While Earl’s choice of a TV programming has some metaphorical resonance within the film, there’s actually something

deeper occurring within this sequence, namely, its deep ties to the Antwerp performance of *Greendale* on 23 May 2003. On this night, one of the final of the European tour, Young off-handedly made the following remarks during the notes to ‘bandit’:

He got out his laptop and he was in this motel in Greendale. **Got out his laptop and tried to get on eBay, see if he could sell his paintings on eBay.** It had worked for other people, and maybe it'd work for him. He'd never known anybody who had actually sold anything on eBay, but he'd heard a lot of people had. **He was watching the Nature Channel on TV.** He couldn't really figure out how to get through to eBay, so he lay back on the bed and started thinking about his life.

(‘bandit’ live notes, Antwerp, 23 May 2003; emphasis added)

The audience in Antwerp chuckled a bit at these references, quickly quieted down, and the show went on. Yet, as the reach of even an apparently off-the-cuff passage like this shows, *nothing* that is present in any of the *Greendale* sites is ever there without some prior precedence. Even a small, seemingly meaningless detail like what Earl was watching on TV is definitized by the film. In the process, we are once again forced to reconcile the oral transmission of *Greendale* with its realization in other platforms. Perhaps most profoundly, the simplest connection between form and meaning present in this portion of *Greendale* is also its most apparent: while the story notes to ‘bandit’ deal with the ability to ‘see’ the events of the narrative where even words aren’t found, the chorus to the song hints and all but guarantees that this is possible:

‘Someday’, Young sings, ‘you’ll find everything you’re looking for’ (‘bandit’ audio recordings). And, as the film demonstrates by giving form to the wordless passages of the song’s instrumentals and music to the music-less passages of the words (in the live and print notes), we have indeed found what we were told to look for: much like Earl’s own vision, fogged by the devil’s breath on the lens of his glasses, it was there all along, obscured in and by another sight/site.

The Textures of the Town: The Art Book

Even as significant as some of the engagements of the film with the story notes are, we might expect that the audio-visual capabilities of film could provide a perhaps more ‘realized’ vision of *Greendale* than any other site. As I mentioned previously, the images of the film seem to form the basis of much of the visual information placed throughout the other sites of *Greendale*. As illustrated earlier, the similarity of this imagery, particularly as it relates to the *Greendale* art book, produces redundancy features that are then exploited within the project. Overseen by Young with art direction and design executed by Gary Burden and Janice Heo, the art book, like every other site in *Greendale*, at first seems to be superficially shallow and extra-fictionally oriented: a collection of drawings identical to shots in the film paired with lyrics to the songs, a re-printing of the story notes identical to those found in the liner of the CD and vinyl recordings, a compendium of paintings from James

Mazzeo, who did the illustrations for the book and notes, a two page spread showing the Green family tree, a map of the town and listing of characters with short biographical blurbs. All the same, much like the print notes and the film, the art book, too, possesses features too rich and odd to dismiss: illustrations veer from lifelike sketches of individual frames of the film to drawings of the cartoonish renderings of the live performances; song lyrics are typeset centrally but sparingly on the page while small boxes of imagery occupy the corner of the page near the fold; color images pop up intermittently and the print notes found in the liners of the recordings are segmented and brushed color and, at one point, reversed as if looking at them through the backside of a mirror; Mazzeo's own paintings append the book in a seemingly extra-fictional intrusion; and chapter numbers, fixtures in most print books, are conspicuously absent.

There is, then, something altogether playful about the art book that cannot immediately be accounted for by reference to the live performances or even the story notes themselves. With one notable exception, the print notes from the art book exist identically to those in other print sites. The central question surrounding the art book, then, is this: if, unlike the other sites we've discussed so far, it doesn't in some way transcode the live and/or story notes, then what does it draw from? The answer to this question is, evocatively, right at our literal fingertips.

Just like the film used a manipulated underwater Super 8 camera in

order to highlight the material textures of its composition, so too does the book revel in texture, albeit much more directly. Printed on thick, rough, recycled paper using only soy ink, the art book is immediately the most *tactile* of the sites in *Greendale*, its smooth grain a wholly physical translation of the hazy granularity of the Super 8 film stock. The pages themselves even *look* like the washed out frames of the film, dyed and yellowed, aged and faded, gritty, flecked and speckled with the recycled fibers of the paper that floats like dust on a film frame (see Figure 4.11,

below):

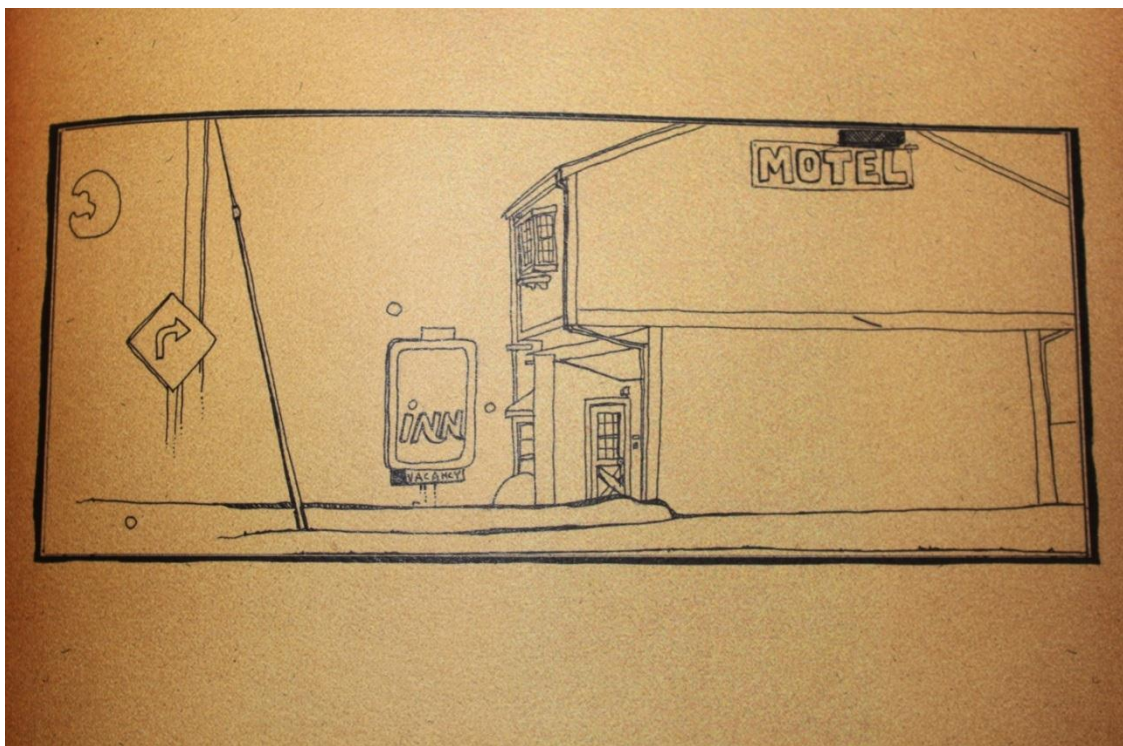




Figure 4.11: The Textures of the Art Book

Furthermore, the art book has an unmistakable, pleasantly ‘earthy’ pungency to it, revealing an additional olfactory tangibility as we move from its beginning to end. On the most material levels possible, then, the art book is a functional attempt at transcoding the language of film into paper, of stilling moving imagery and sound without losing meaning, while simultaneously adding facets of material meaning that aren’t possible with film stock. As with the other sites in *Greendale*, however, such a pursuit inevitable produces gaps of meaning which impact the content of the art book. Here, though, they do just as much to highlight the ways that a print book can suggest meaning using many of the same techniques as a film language. Moreover, this process also manages to

call attention to those aspects of the art book that sustain meaning more efficiently than the film, positioning it, like every site in *Greendale*, somewhere in-between media.

Rather than simply repeating (and enlarging) the content of the liner notes, the art book is immediately a space of doubled meaning and sometimes tripled (and quadrupled) meaning. Much like the textures of the pages themselves, this aspect has a literal material meaning, as many pages of this book contain two, three and even four ‘threads’ through which meaning is made in both isolation and conjunction. Many of these images, set in the corner of the verso pages, also violate the seeming integrity of page’s arrangements, intruding on the lyrics and the book as a whole like a picture-in-picture TV screen. Seen below, these features of the art book structure the lyrics and illustrations as segmented, yet wholly relational meanings. In some cases, the illustrations and the lyrics serve complimentary roles, with the lyrics highlighting the story behind the images, and vice-versa. In others, the juxtaposition of lyrics paired with the succession of several images can be considered a narrative in its own right, a means of imbuing a series of stilled, transcoded images from the film with an equally sequential (if radically simplified) functionality.

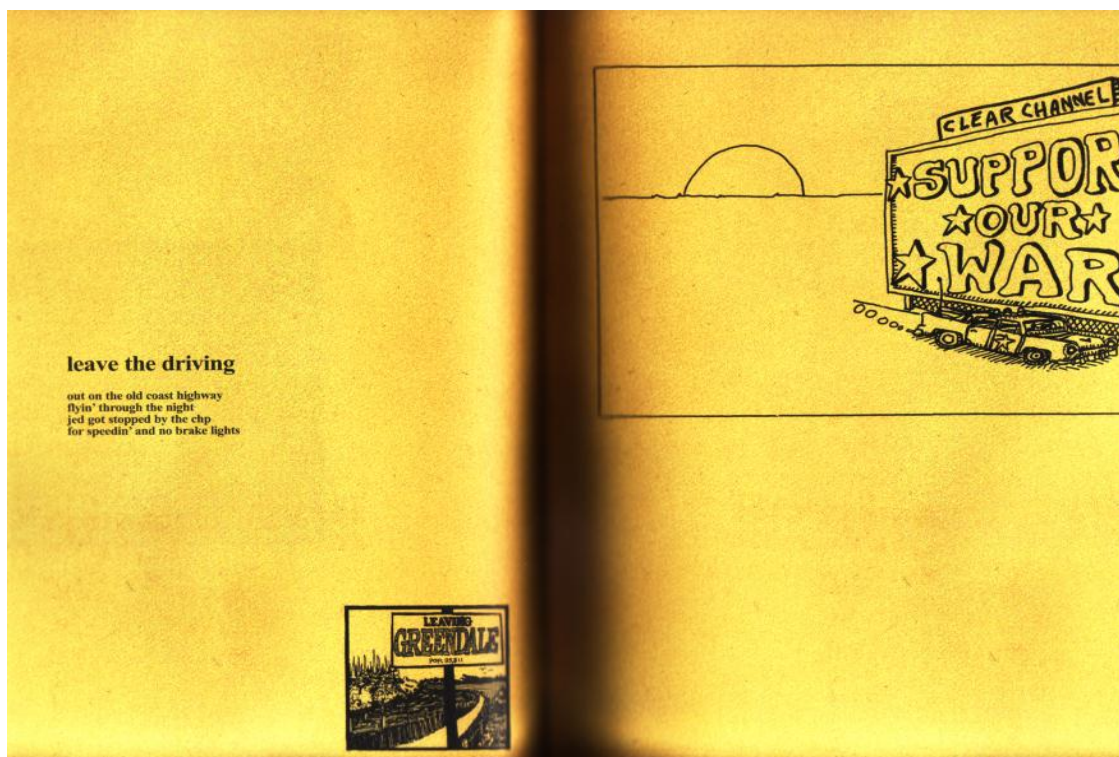
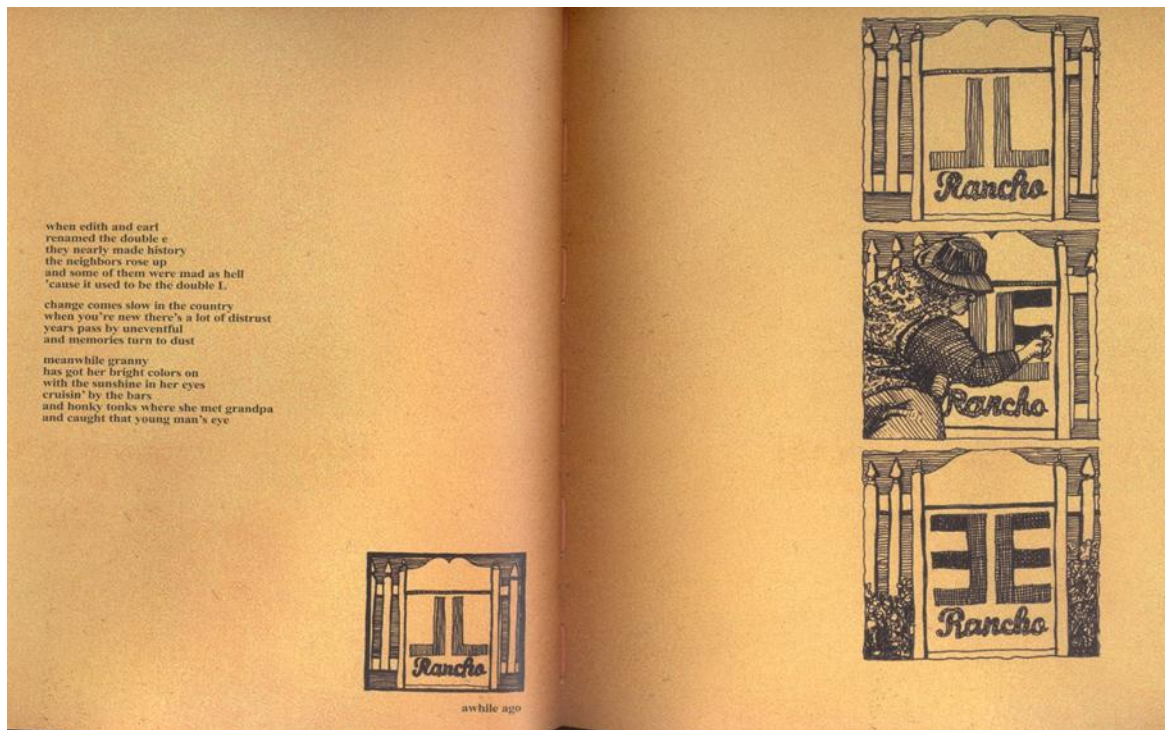


Figure 4.12: Multiple Reading Paths of the Art Book

A handful of pages, though, go even further, positioning the inset image of the verso page with the large image of the recto page in a manner that suggests simultaneity of meaning or, in other instances, a change of setting, rather than word-image relations or sequential content. In one example taken from 'leave the driving', the inset image is of Jed in jail after he kills Carmichael, while the opposite image is of Carmichael passing through the stars in his police cruiser, ascending to the afterlife, free in a way that Jed isn't. Relatedly, in the song 'grandpa's interview', there's a particularly confusing stretch in which we shift from Grandpa Green sitting inside the Double E Rancho to Sun Green visiting Jed down at the jail without any real distinction. Taken on its own as a purely audio recording, it's easy to miss this shift in settings. While the film handles the transition with relative ease, fading from Grandpa's face to a shot of the jail, the book uses the inset image to suggest a similar change of setting. Here, a jail cell is crudely drawn in the corner of the verso page, while a drawing of Sun seen from the perspective of Jed from his cell is positioned on the opposite page. In this regard, the book actually forces the eyes of its readers to wander the page in a manner that works against the seeming linearity of the medium. Meaning might be partially made from going left-to-right over a series of words, but we might then look across the page at the corresponding image, only to notice the inset image while doing so. In other words, the ability for the art book to represent multiple levels of

meaning (simultaneously) is, unlike the incessant temporal progression of a film, a means of *arranging content within the novel conception of the reading paths of the page*, not positioning it solely as something that is revealed across time.

Even so, the art book still manages to mimic filmic temporality in a rather interesting way: by suggesting the presence of ‘montage’ (the film technique in which images shown in succession are meant to be viewed in relation to each other) through the strategic placement of recto images. In the ‘bandit’ chapter of the film we learn via image and an instrumental interlude that Earl Green’s desolate retreat to a Greendale motel finds him on the receiving end of a phone call from Lenore, the owner of the local art gallery that has rejected Earl many times over. We watch as Lenore, cellphone in hand, mouths the words to the chorus ‘someday you’ll find everything you’re looking for’, as the shots cut between her and Earl in the motel. It’s important to note that this is a moment revealed exclusively by the film; this call isn’t noted in any of the live or print notes, or even suggested by the lyrics. Consequently, we might not expect it to be in the art book, either, but as is evident in the clips in Figure 4.13, it is:

Figure 4.13: Turning the Pages of the Art Book
<http://youtu.be/jCO0QB7IVBM>

Just as the film’s editing results in swiped fade from Lenore to Earl, so too does turning the pages of the art book result in an transcoded, yet

conceptually identical suggestion of relation, with the page slowly peeling back and distorting the drawing of Earl facing slightly to the right, revealing Lenore, who is facing left, back towards Earl on the previous recto page. In attempting to mimic one of the more foundational aspects of film's ability to construct meaning, then, the art book reveals one of the most foundational and simple aspects of the codex book as a technology in its own right: the ability to turn the pages.

In a brilliant stroke, however, and one shows the conscious presence of meticulous design in *Greendale* from its very beginning, this isn't just an implied revelation about the nature of the book and its materiality. Rather, this perspective was there all along, hidden in plain sight in the lyrics to the song 'bandit', whose opening lines read:

turnin' the pages
in this old book
seems familiar
might be worth a second look

While the sentiment of these lyrics has a meaning that is doubled in its own right—they apply to Earl's worn out life, too—there is a remarkable symmetry between process and content present here, a relationship developed across the entire book as an interpretive context, on the one hand, and as literal directions for engaging with the content of the 'bandit' chapter, on the other. Importantly, in a move that seems aimed

at combating the notion that the project is ‘just’ a series of adaptations, the redundancy features of *Greendale* are also explicitly acknowledged here, but it is hinted that there is much more to them than meets the eye (or ear or hand or even nose). Again, it’s worth noting that these characteristics of the art book are only revealed because it attempts to function as something it isn’t. In other words, it is positioned as a component of a transremediative framework where, in the process of becoming something else, it becomes wholly itself. The reality of these modes of engagement challenges yet another fundamental assumption about transmedia practices: the notion that ‘distinct media remain distinct, in that the end-point experience involves the traversal or use of media that are often haptically distinguished’ (Dena 2009: 88), or distinguished by virtue of the way we interact with them. While Dena is correct in pointing out that ‘media cannot physically be compressed into one object’ (ibid.)—we couldn’t, for instance, easily imagine a book that had full-motion video on one of its pages—what we see in the art book is instead a melding of the tangible haptics of the printed page with the less tangible materialities of filmic meaning. In this sense, perhaps it’s better to consider the montage sequences in the art book not as examples of a static print object mimicking a kinetic platform like film, but rather as a means of imbuing the often intangible haptic engagements of film with a pronounced physicality in the printed page. In reversing this distinction, we can see that not only is the traversal of sites in *Greendale* a technique

for enacting cross-modal interactions, but also for putting audiences in touch—quite literally at times—with these same platforms in wholly unique ways.

The Textures of the Town: The Website

Stepping back for a moment, there are several other components of the art book that are worth noting for their wholly ‘bookish’ nature: the double page spread of the Green family tree, the map of Greendale which stretches from the front cover to the spine to the back cover of the book, the intrusion of the color red as a means of suggesting the devil’s presence in the narrative in even simple text. Yet it is perhaps the character biographies towards the end of the book that represent the most significant contribution that any site in *Greendale* makes towards expanding the fiction in a manner most similar to the networked operations examined earlier. In this section, each character present in the narrative of *Greendale* and, importantly, several that are either only implied or entirely absent altogether, are fleshed out and given depth. Here, we learn about the upbringing of Grandpa Green, the sad childhood of Jed Green (who, in an ironic stroke, was raised by Lenore, the woman having an affair with Carmichael), and the first night Edith met Earl. In addition to this, however, we also learn about characters like Mahlia Green, Grandpa’s 104 year old mother living in the mountains outside of town, Luna Green, Sun’s sister who died as an infant from an

unknown disease of the heart that also killed a herd of buffalo that same year, Sea Green, who was lost in the Alaskan wilderness and never seen again and, perhaps most bizarrely, Ciela Bleu Oaks, Grandpa's first wife, who gave him a daughter named Sky who is never mentioned again in the book.

While the inclusion of these biographies allow us to reconstruct certain contexts surrounding the primary narrative thread of the fiction, their presence in the art book is entirely appropriate from a formal standpoint, too, as it's difficult to imagine exactly how these might have fit into other sites. The liner notes to the recordings are too small to host the biographies and the film too kinetic to pause for exposition of this sort (and doing so would also violate the integrity of the songs-as-script). While these biographies are also accessible through the *Greendale* website (a move which, as we will see, is predictably not without consequences for the content), their presence in the art book is appropriate because it also suggests that books in themselves have different ways of *genre-oriented* ways of organizing information: as both fiction *and* encyclopedic reference guide. (As we have seen, though, such distinctions are often collapsed in the process of storyworld and universe definitization, a fact that plays a vital role in defining what comes in the graphic novel.)

Such a view of books, however, seems slightly outdated given the seemingly inherent ‘encyclopedic completeness’ (Murray and Jenkins) of information online, a reality that transmedia expressions—with their push towards object-orientation, universe population, and storyworld realization—seem especially apt representations of. Interestingly, such a capacity is often reflected realized as a purely *extra-fictional* mode of engaging the audience with content. After the release of *The Matrix: Revolutions*, for example, Warner Bros. recognized the lack of connections at-large audiences were making between the film and the other sites in the fiction (graphic novels, video games, animated shorts, websites, etc.) and, subsequently, they redesigned *The Matrix* website (which no longer exists in *any* form) to act as a hub for *all* of the sites in the project. Included in this endeavor were digital versions of the graphic novels, summaries of the films and shorts and a comprehensive timeline that placed each site’s content into a chronological, cause-and-effect relationship with each other. Oppositely, as is evident in several examples already covered in this study, the intra-fictional use of websites is often object-oriented, that is, existing as an object in the storyworld rather than a narrative site of its own within the fiction.

Fittingly for a project so materially aware, the project’s website, www.nygreendale.com, treads the line between the archival and the fictional, presenting itself as both a repository for elements culled from *every* site in *Greendale* as well as a fictional space to explore and engage

with certain aspects of the storyworld itself in greater interactive detail. As with every other site here, Young claims he was ‘completely’ involved with the making of the website, providing ‘directions about what ought to be there, where it shows up, how it's introduced, how hard it is to find, how it unfolds’ (Greenwald 2004). But rather than just providing links to access the other sites in *Greendale*, the website is immediately something more, acting as a pronounced *location* from the outset. As a replacement for the typical ‘Page Loading’ screen, we are greeted instead with a message that says ‘Getting Oriented’. The interface to the page is a map of the town, which when rolled over with a mouse pointer, zooms in and out of the spaces where the story events took place. The website links to recordings of some of the spoken word improvisations of the live tour, explores in 3-D an art gallery that was seen in the film, and allows one to listen to songs off the album while an image of the *Greendale* compact disc spins in the background. Everything on the website, then, is not just simply ‘preserved’ but rather transposed into a digital form while maintaining a semblance of the platform from which it originated. In short, just as the art book attempted to mimic film, and the film took its structural cues from the live and print notes (which were in themselves multiform sites), the website also exists in multiplicity, but here it’s a multiplicity rendered through the language of every site rather than just the lineage of one—print, film, orality, theatricality. In other words, the capacity of the Internet to support multiple modes of engagement—text,

video, audio, interaction—is situated as a mode in itself through which we might again assess and re-assess the languages through which disparate platforms operate.

Yet there is another way of looking at the *Greendale* website that complicates this angle. Unlike every other platform utilized in its realization, the website for *Greendale* is perhaps the most implicitly representational, composed as it is not from transcriptions of content but from several levels of code in its own right: the HTML of the webpages, the .mp3 transcodings of the various audio clips, the ASCII text and binary code of the base operations. While other platforms possess similar compositional strata—the DVD is similarly digital—none are as markedly *mediated* as the digital content of the computer, forcing engagements that are more metaphorical than literal, much like the metaphor of the desktop has become a dominant interface in computing. ‘Drilling down’ with digital platforms, exposing their core, so to speak, is a process of peeling away multiple levels of mediation until all that remains is ones and zeroes etched the magnetic platters of hard drives, the ‘stuff’ of digital materiality. While *Greendale* doesn’t go so far as exposing this level of material function in its website, it does work towards exposing the limitations of even this most multimedia/modal of platforms and, perhaps more importantly, the process of transremediation in its own right. This is realized nowhere more profoundly than once we access the

Lyrics sections of the website, where we're confronted with a simple, yet profound, message:

Click on a song title to see the lyrics

Then use your browser's Print command to make your own copy

Not only are we invited to take part in the process of transremediation through the act of printing electronic text, but the lyrics themselves – hand-coded Courier New HTML text on a white background (even the name of the font itself suggests much about the lyrics being the carrier of meanings in *Greendale*) – sit in stark dissimilarity to the full-color, manipulable content of the other pages of the site, as well as the textured nature of the film, the art book, and the live notes. If the song lyrics are the basis of the sites in *Greendale*, then it would appear that in many ways, these pages represent the core of *Greendale*, the binary basis through which it operates. Even so, the website works towards other ends, and through its attempts to transcode the other sites of *Greendale*, to account for completeness in doing so, it further exposes both its own limitations as well as those of several other platforms.

Clicking on the link to a section called 'telling the story', for example, leads to a page showing a crudely drawn, animated and personified microphone that is attempting to step up to a stage microphone that keeps shifting positions (See Figure 4.14, below). Above

this is a listing of all of the songs from *Greendale*, each with its own small microphone that when clicked on, produces a body of story notes in the space that reads ‘Story text will appear here’:

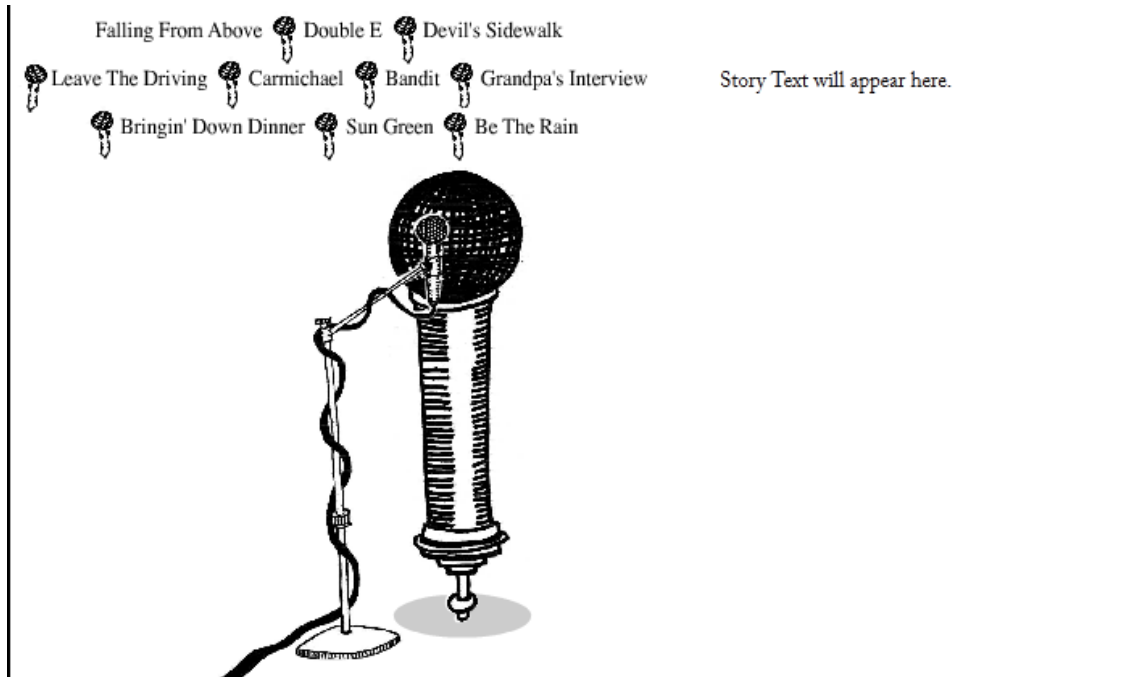


Figure 4.14: Telling the Story

When we do so, however, rather than just reading a transcription of the print notes as they appear in the book and liner, we instead hear a recording of Young’s voice as he performs the live notes, themselves transcribed in the ‘Story Text’ box. And here’s where things once again take a turn towards the profound presence of transremediative design: while our instinct is to click only once on each microphone, a behavior learned from nearly every hyperlink encountered online, clicking on it again, and again, and *again* (taking a ‘second look’) doesn’t produce the

same content but, instead, *different* versions of the live notes taken from *different performances*, each spoken by Young. In other words, the notes themselves shift with each engagement, and with each click a digital transposition of the most pronounced trait of orality, its fluidity, is realized. Moreover, there seems to be a logic present in the order that these notes are revealed that builds progressively on what came before it. The shiftiness implied by the animations of the microphone on the page, and the fact that Young himself seemingly fulfilled the role he initially designated to the Internet (i.e. that of collator of content), is at once both a manifestation of the ever-present fluidity and multiformity of the oral basis of *Greendale*, as well as a comment on the inability of even the Internet to fully account for its transitory nature. All we can do, it seems, is mediate, remediate and transremediate the content and processural materiality of the form.

Such an observation, however, applies to more than just the oral transcodings of the *Greendale* website. Take, for instance, the section labeled simply 'DVD Chapters'. Here, instead of the usual page loading message, we read instead 'cuing up', a phrase which suggests a vinyl record rather than a DVD. Once the page loads, we are shown a series of tiled images captured from the film of the chapter headings that segment it like the tracks of the audio recordings. Each of these screen captures are also transremediatively composed of a film shot of the hand-drawn title cards of each chapter, which in themselves are now transcoded even

further into digital images. Clicking on each tile brings up an interface which allows us to choose between two options for each chapter: to listen to the story of Greendale, or to access 'Images'. Clicking on the 'Telling the Story' link calls up the same iterative live notes that were present in the other section, complete with a superimposition of the text of the notes over the frame captures of the film.

Perhaps more profoundly, though, clicking on the first chapter of this page, 'double e', presents us with no opportunity to listen to the story notes. In their place is the shooting script for that particular sequence of the film (see Appendix 4.2), itself a transcription of the song structured to enable its transcoding to film. Accessing the Images link (an image of a man holding a large movie camera) yields an even more oblique digression of transremediated content through what seems to be at first nothing more than another series of frame captures from the film. It's difficult not to notice, however, the devil's red shoes positioned in place of what normally would be navigation arrows (see Figure 4.15). Clicking on the shoes becomes a transparent metaphor for 'walking' the story, as it advances a series of images for each chapter that are in themselves frame captures from the film identical to the transcoded drawings of the art book. Put differently, while the art book took frames from the film and transcoded them into hand-drawn illustrations ordered sequentially, the website takes the frames from the film (seen nowhere else in this way) that these drawings were based on and orders them

identically to those found in the book. The further we delve into the website, then, the deeper the (transre)mediations of content become, to the point that it's difficult to discern anything truly 'authentic' about the representations there.



Figure 4.15: Website 'DVD Chapters'

The constant, recursive fixation that the *Greendale* website presents with re-presentation is in many ways a culmination of the engagements of the other sites of the project. Given the popular conception of the Web as a networked 'black box', a technology capable of sustaining all other communicative modes, this is in many ways appropriate. But, like the film and art book before it, there is also a preoccupation on the website with its *own* representational capabilities,

its *own* capacity for *textured* meaning. Here, however, these textures are as multifaceted as the transremediations composing the rest of the site. Interestingly enough, the majority of this textural play is present not on the main *Greendale* website but rather a sub-site linked from it to Lenore's L Gallery, the art gallery of Greendale, a move which in itself acts as a comment on the nature of the *other* physical-material factors that situate expression: the galleries, book stores, cinemas and concert theaters whose environments position content as a doubly-mediated event. The L-Gallery website (<http://www.l-gallery.com/>), its kitschy design reminiscent of webpages of the early days of the Internet, makes it nearly impossible to avoid noticing its attempts at producing texture. Much like the porous surface of the pages of the art book, the L-Gallery site also positions a certain tangible consistency to the page via a background image that very closely resembles the other material textures foreground in the fiction. Seen below in Figure 4.16, this textural background becomes the literal foundation through which the content of the site is supported:

Lenore's
L GALLERY *"Everything You're Looking For"*

Now Open: Our New Redwood Wing,
featuring the work of Earl Green.
Click [Here](#) to Enter.



The "L" Gallery Story

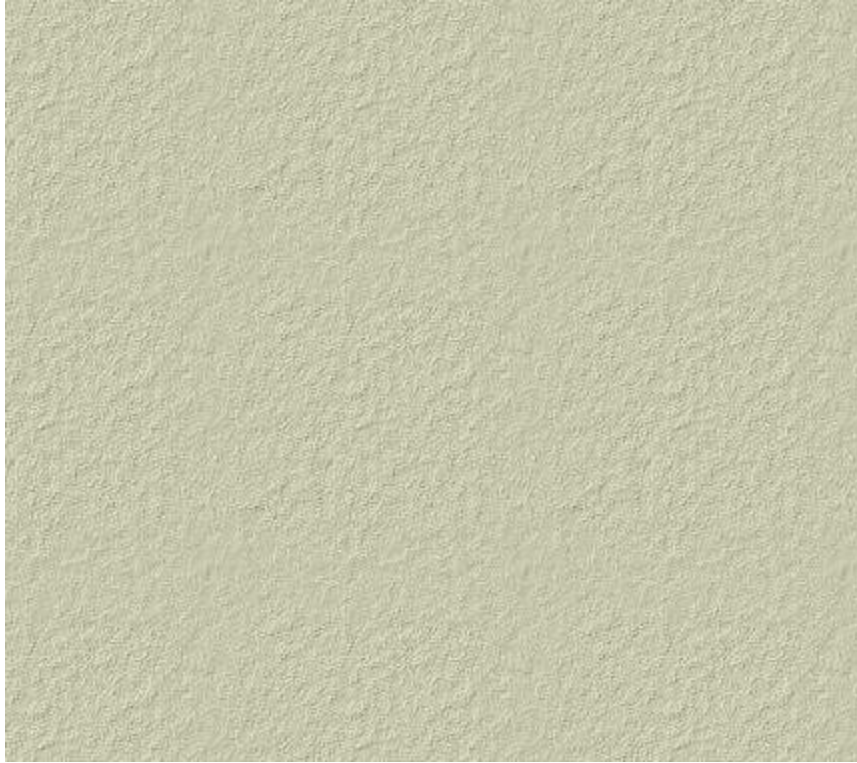


Figure 4.16: The Textures of the L-Gallery Website

Of course, there's no way to run our fingers over the webpage like we might do with a book, a reality which immediately highlights the shortcomings of the Web as an expressively tactile medium, supported as it is by a flat monitor screen incapable of anything else. Nevertheless, the L-Gallery site does explore a different sort of digital tactility in our ability to interact directly with objects and locations in digital spaces, manipulating them and moving through an equally flat yet three-dimensionally rendered approximation of the gallery itself. Rather than being photorealistic, though, the 3D gallery is also hand-drawn in shaky

black-and-white lines, a feature which highlights the bold colors and patterns of the Earl Green paintings now featured there:



Figure 4.17: The L-Gallery

The primary function of the L-Gallery is to allow its audience to engage with Earl's paintings in a manner that isn't possible in any other medium. Clicking on a painting zooms in on it and we can grab and drag the painting within the window. More importantly, in a moment equivalent to the invitation to print the song lyrics present in the other section of the website, we are invited to participate in the transcoded, transremediative process ourselves by printing a 'postcard' of any of the paintings in the gallery as a souvenir. Interestingly, when we attempt to leave the gallery, the 'flatness' of the webpage is immediately evident, as

is the recursivity of *Greendale's* design. Rather than showing a door or some other element, leaving the L-Gallery means exiting towards a stretched screen capture of the splash page we used to enter this space in the first place. Moreover, this page is positioned in a manner where the photographic image of the gallery from the splash page is what we are exiting towards, a move which juxtaposes the flatness of the webpage with the depth of aesthetic perspective.

As we move deeper into the gallery, though, it becomes clear that the space plays host to more than just Earl's artwork and includes instead drawings of characters and locations taken from the art book, the cartoonish renderings of the theatrical performance, frame captures of the film's (hand-drawn) chapter breaks and other, more object-oriented oddities, including a hand-written note that Earl wrote Edith while he was waiting to meet her on their first date (an incident mentioned in several of the live notes, but present in none of the print notes):

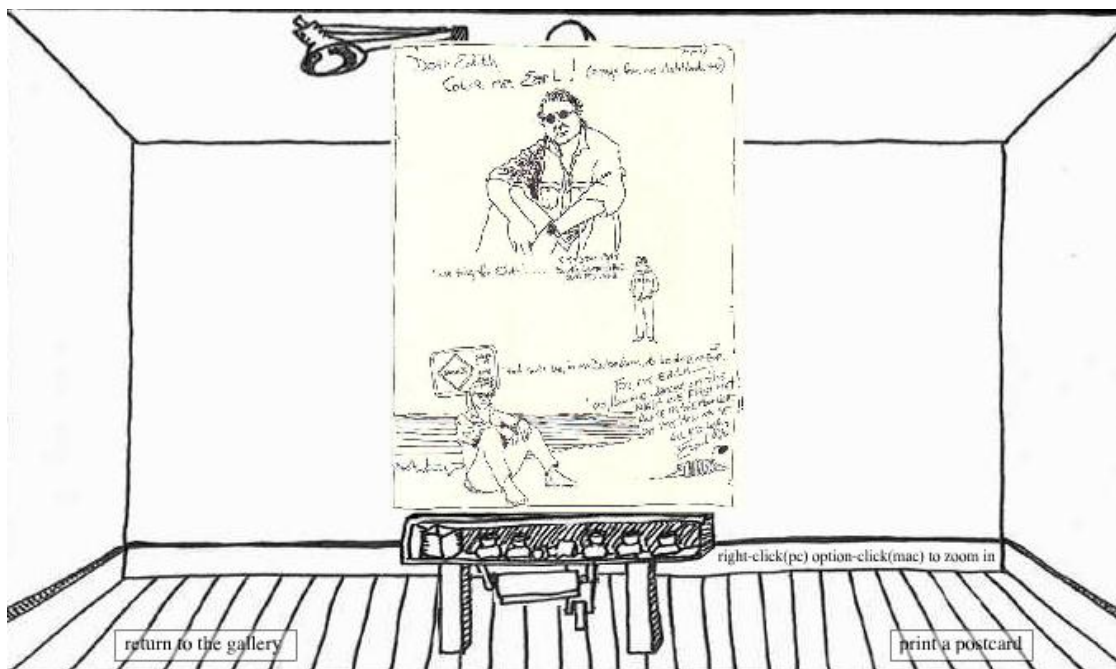
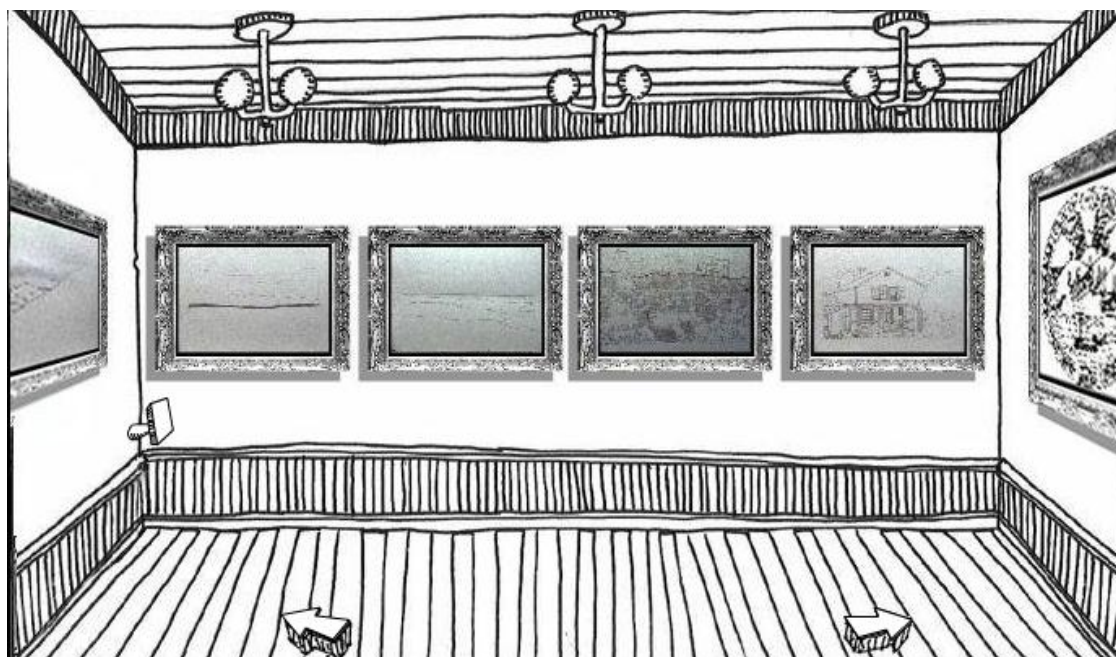


Figure 4.18: Artwork in the L-Gallery

Reaching the end of one hallway, we also find a room named 'The Point Bonita', a reference to a famous lighthouse on the West Coast of the

United States. Here, we encounter a peculiar series of artworks, each in some way a depiction of a space which stretches outward or segments perspective between interior and exterior positions, moving past the wall and towards some distant horizon much like the light from a lighthouse marks a threshold between land and sea. In this sense, even the space of the gallery itself is in some way transmediated by the artwork present there, a notion complicated even further by one piece's recursive placement of Earl's paintings (also found in the gallery) on the wall of the living room of a drawing:

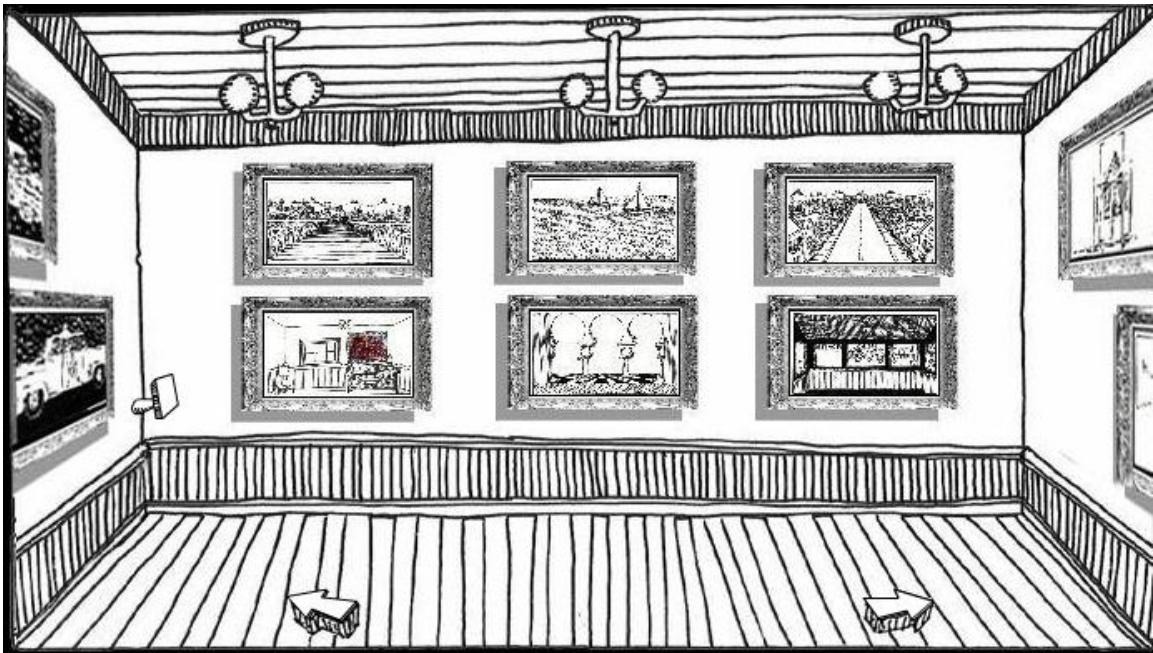




Figure 4.19: The Point Bonita Room of the L-Gallery

Perhaps the most relevant feature of the gallery to this discussion, though, comes in the form of the digital makeup/markup of the artworks themselves. Existing as Flash movies rather than .jpeg, .png, .tif or any of the more common image formats, the works presented by the L-Gallery are consequently scalable to the point where it's possible to zoom in so closely that we can view the image on a pixel-by-pixel level:

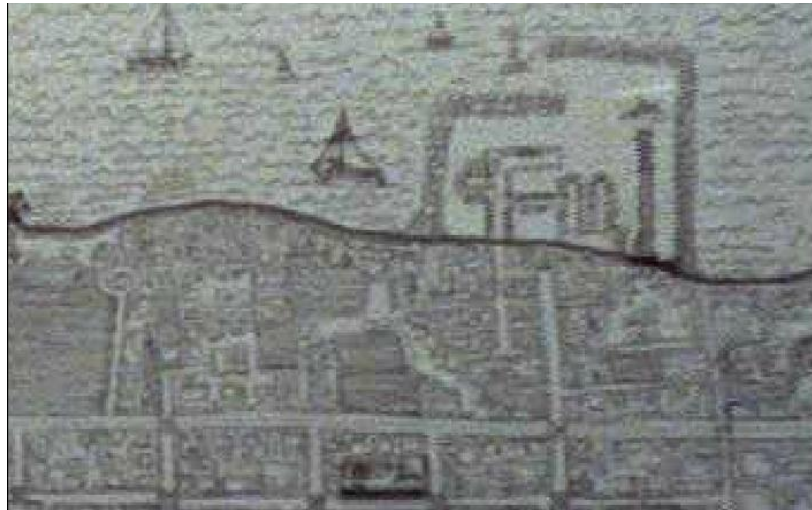
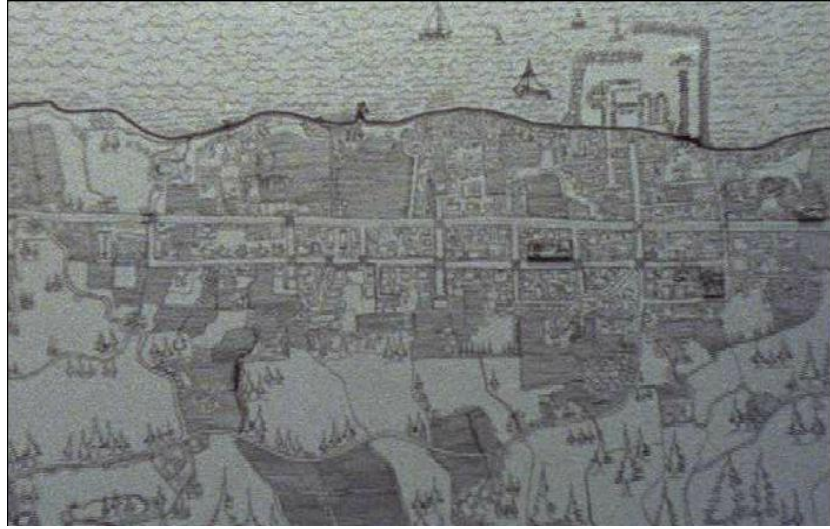




Figure 4.20: Image Zoom in the L-Gallery

By using Flash movies in the L-Gallery, and enticing visitors there to Zoom in on the image, there is a strong suggestion that in doing so we are simultaneously ‘drilling down’, to use the parlance of the oil companies strewn throughout *Greendale*, to the material strata of the paintings, drawings and photographic images present there,

encountering their essential textures as we do so. Similarly, the end results of such a move are also visually similar to the washed-out noise saturating the film's images. To recap the multiple levels of transremediation once more:

- *Greendale's* songs are written and then performed and recorded
- the live (oral) performances lead to the story notes, transcribed in print and bundled with the recorded audio
- The songs and story notes are used as the basis for the theatrical performances and the film
- The theatrical performances and film influence and are in turn transcoded by the art book and stage bill
- All of these sites are then digitized and made accessible in some manner on the website, which allows for zoomable views of these transcodings down to the individual pixels that compose them

In short, rather than constructing a pathway of narrative causation and sequence as we might do in visualizing and analyzing network transmedia fiction, we are instead compelled here to construct a genealogy of transremediative influence, tracing the functional-material basis of one site as an affectual influence on the content (and functions) of another site.

A Town Made of Many Textures: The Graphic Novel

‘Some stories are so personal and important that we cannot let them go. Time passes, details are embellished, and the narrative shifts to accommodate a new audience. But the heart of the story, what is most private and profound about it, remains unchanged.’

–Joshua Dysart (2010, Writer, *Neil Young’s Greendale*)

My, my, hey, hey, Neil Young’s *Greendale* is here to stay.

–Tom Sellar, *The New York Times*, 20 July 2008

The recursive nature of representation in digital environments, where what’s mediated once in an analog medium is mediated again in its digital transposition, is plainly positioned by the *Greendale* website nearly the second we arrive there. Playing incessantly in the background of the site is a looping, wordless instrumental audio clip taken partially from the beginning of the film. Here, however, it’s structured so that once it loads, it becomes difficult to tell where the beginning and ending of the piece is. This is an apt processural metaphor not only for the *Greendale* website but for the project as a whole, where our progressive contact with each site forms increasingly concentric circles of transremediative influence, equating word with image, image with sound, sound with process, process with texture and tangibility. Even so, there is one site in *Greendale* that isn’t entirely tied to this cycle. Released in 2010, *Neil Young’s Greendale* presents the (now) familiar tale in the graphic novel format and, like the other sites in the fiction, it was received with both

critical an audience acclaim. My approach to the graphic novel here, though, breaks with the sort of analysis that has been found in this chapter and focuses instead on the creator's perspectives involved in adding a site to an already well-established project like *Greendale*. In doing so, we can begin to trace a faint but binding thread between the medial-material meanings of *Greendale* and the creative process of producing those meanings, a notion that will eventually lead us away from the Green family and into a potentially undefined genre of transmedia fiction.

Written by Joshua Dysart with art by Cliff Chiang and coloring by Dave Stewart, the graphic novel is the first site not to be credited (almost) exclusively to Young, but it nevertheless takes elements from the songs, print notes and the character biographies present in the art book and the website and incorporates them into a single, coherent narrative. Focusing primarily on Sun Green and her struggles to find purpose and place, *Neil Young's Greendale* also possesses several gestures towards the materiality of the form. The graphic novel, for instance, is bound to look like a vintage book or journal, and its pages are printed on fiber stock similar to that of the art book, dyed to show aging, wear and stains; the inside cover contains pictures of the characters arranged in a family tree, much like someone would do in a photo scrapbook; and Stewart's coloring is muted in a way that makes the book seem older than it is. All of this conforms to Chiang's aim of making the book 'warm and

weathered' rather than 'glossy and slick' (Arrant 2010), an idea enabled largely by the control Dysart, Stewart and he had over the materials they used, right 'down to the cloth used in the paper' (ibid). The basis of such a goal, however, was rooted in an aesthetic directly influenced by Young himself. Chiang explains: 'Some of Neil's earlier albums would play with texture, with tissue paper and other stuff as a part of it that would deliberately fall apart eventually' (ibid). This idea of texture—one we've seen play out on a large and small scale throughout *Greendale*—results in a graphic novel that displays a palpable material awareness, something that feels old much in the same way that Dysart argues *Greendale* is fundamentally an old story, a folk tale or 'American fable with strong supernatural elements' (Gustines 2010).

But unlike the art book (and the other sites), there is nothing inherent to the narrative of the graphic novel that compels the reader to examine these textural features in more detail, their execution a marker only of the larger fiction the site belongs to. In other words, *Neil Young's Greendale* contains content that is more narratively expansive than it is redundant, featuring characters, locations and events that are absent in any other site. In this sense, the graphic novel is also the only site that could be reasonably charted for migratory cues. Certain shots from the film, such as Carmichael's widow standing alone by her husband's grave, are retained in the graphic novel as intersectional cues which then veer off towards other narrative paths. Other elements included as nods to

those familiar with the other sites are Sun's black cat, killed in the song 'sun green' by the FBI but shown early on in the graphic novel lying on her bed; a cheerleader who approaches Sun about why she quit the squad (the film, art book and theatrical performances show her still a part of it); and the opening of the Earl Green wing of the L-Gallery that we can peruse on the website.

Stepping back for a moment, there's an interesting if fleeting sequence in the *Greendale* film where Earl Green is shown painting the outlines of a new piece in rough, black strokes on a stark white canvas. The camera pauses for a second or two on his work, and cuts just as quickly to another shot. Within the walls of the L-Gallery website, though, we find the now completed painting, swirling with color and complexity yet composed all the same of pixels instead of paint. The painting, in other words, began as a concept in one medium and was realized as transformed matter in another. In the same sense, I argue that there remains a functional similarity between the graphic novel and the other sites of *Greendale*, but this similarity occurs exclusively at the level of the genre-as-multiformity rather than platform-as-multiformity. What I mean by this distinction is that what remains in the graphic novel of *Greendale*'s core—the songs, the story notes and the character biographies—is placed there because it was constructed with narratively broad strokes, sequences of actions and events that, though realized in multiformity, nonetheless contain an openness which allows for a means

of integrating *other* creators. Put differently, while the primary events of the songs take place over only a couple of weeks, the larger histories hinted at in the story notes and the character biographies stretch across nearly five generations of the Green family. To phrase this in terms related to this study, there are large, undefinitized pockets of universe elements lurking behind the simplistic façade of *Greendale's* primary narrative, elements whose simplicity becomes a boon to collaboration.

As the quote above alludes, there is also a strange mysticism suggested by some of the character biographies, an almost supernatural air given to the women of the Green family that doesn't really manifest itself in any of the original sites of *Greendale* but nonetheless becomes central to the graphic novel. This is partially because Dysart, who, in his own words, has 'always been interested in the history of magic in America' (Lorah 2010), immediately latched onto these elements and made them central to the graphic novel. Oppositely, Young's original vision for this site was itself wholly in line with the generic expectations of the form. Rather than simply re-tell the story in a new platform, Young instead hoped that the book would, according to Dysart, examine 'an environmental super hero fighting these evil oil corporations' (Mahadeo 2010), a position which Dysart argued was 'too on the nose' (Mahadeo 2010) of an idea about the form to really fit within the context of the other sites. Chiang also notes that 'the characters had always been intended to have powers of nature and things like that. They just weren't

very explicit on the album. They're there, but the level to which he had conceived of them in his [Young's] head was a lot stronger and more, I guess for lack of a better term, comic-booky' (Adler 2010). Furthermore, Chiang recalls that:

There were a couple of parts that were maybe a little too quiet, and you have to go in and add a little bit more visual flair to it, just knowing that you're playing within the conventions of comics, and people were probably expecting a little bit more otherworldliness to it. And knowing that this was all part of Neil's vision from the get-go also made it a lot easier. We didn't want to be just kind of tarting up his story to make it feel more palatable to a comics audience. And he actually wanted to push things even further than what we had in the story. (Adler 2010)

Consequently, Dysart and Karen Berger, the head of Vertigo Comics (a company with a strong tradition of using magic as a narrative device), relied heavily on the character biographies of the art book to 'flesh out' (Lorah 2010) some of the undefinitized and unnarrativized aspects of the fiction, and prepare them for translation into the graphic novel format. Importantly, Dysart argues *against* redundancy as a means of communicating these elements more clearly, saying:

Let's not just trudge over this same material. Let's find a new angle and do something new. There was some stuff in that back material that's really interesting. There's a lot of mysticism, a lot of magic in the Green female line that hadn't really made itself known on the album... The challenge was if we could do that and still be true to what, to me, Neil Young has always written songs about, which is real people. If we can find a way to tell a magic story about real people, we'd really have something. (Lorah 2010)

Dysart's point here is in-line with Chiang's experience of the collaborative process of the project, where he says that rather than working in isolation from each other (as is often the norm in the comics business), 'It was like doing a cover version' (Cavna 2010). 'As much as I wanted it to be influenced by Neil's work', Chiang says, 'I also wanted it to be the work of Josh and myself as well. In the end, I think you can see a bit of all three of us in the book – Neil, Josh and I' (Arrant 2010).

Yet what seemed to appeal to them most wasn't necessarily the opportunities for collaboration, but instead a chance to use a 'silent medium'—the graphic novel—in a project where so much is based in sound. According to Dysart:

I've always been very interested in the way that comics approach motion and sound because they are the two things

our medium is, obviously, most deficient in. Comics have created this entire language to imply motion and sound, which is cool. But that is the problem I'm wrestling with now... All I can do is find a sense of voice that is equivalent to his music and his themes and try to put that on the page...It's such an easy thing to do with music – a low tuned rattling E evokes an emotion – it just does. To capture that with words and images is going to be a very complex process.

(McLean 2010)

The process Dysart speaks of is, of course, tied to the essential properties of *Greendale* in an entirely direct way. Rather than using the languages of the other sites to highlight the differences in the graphic novel as a platform for expression (and vice-versa), however, here the process of creation becomes one of integration, of finding commonalities between wordless evocation and word/image expressions. Importantly, this is also a process that, in and of itself, is nearly identical to what happens with live notes and instrumentals in the other sites of the fiction only now, it's the *creators of the fiction* themselves who are being asked to see *story* in the wordless provocations of the music and, in doing so, they confront the assumptions of working within the constraints of their own, native media. The symmetry between the creative, transremediative process of *Greendale* and those who create it is perhaps even better understood when we consider the methods through which Chiang illustrates his

work. While Chiang notes that the majority of the time he finds himself using both classical (analog) tools and digital tools such as Photoshop to refine his colors, on *Neil Young's Greendale* everything was done by hand because, according to him, 'there's a certain immediacy to having tools and paper' in that they produce a whole unique 'texture and organic quality' (Cavna 2010) within the art.

Practice as Process as Provenance (The Symphonic Approach)

'They may begin to picture a lasting artwork not as a stony relic – for stone is brittle – but as a succession of linked events that, like a stream of water, endures by remaining variable.'

–Jon Ippolito, 2003

In many ways, the experiences of those like Dysart and Chiang, working within a fiction that they didn't create (itself a common feature of transmedia practices), illuminates a secondary or potentially even parallel relationship between transremediation as it occurs as a function of medial-material juxtapositions, and transremediation as it is supported by certain processural frameworks embedded within the content. This is a profound pronouncement, I feel, of the pull of the multiform work, which stresses the 'importance of the performer in bringing [a] text to life' where 'coherence and continuity are found in structural frameworks rather than in linear sequences of words' (Alexander 2006: 6). To repeat an earlier point, as it is understood outside of this study, multiformity is primarily a function of oral

storytelling. Much like contemporary transmedia collaborations, in oral modes 'Traditional elements (or formulas) function as compositional building blocks; these are in turn worked into traditional thematic units to narrate traditional narrative structures' (Lord 2000). Relatedly, Mary Carruthers (1998) views these building blocks as most effective not when they are created from scratch, but instead when they have already been amalgamated by *someone else*. To Carruthers, a skilled performer is someone who can 'effortlessly work predetermined elements into meaningful [new] configurations, rather than the one who recites a fixed exemplar by rote memorization' (Carruthers 1998; paraphrase quoted from Alexander 2009: 13). As Alexander argues:

[T]he oral performer does not need original insight to compose anew. Instead, his success depends on his *fluidity* in the repertoire of tradition. Reproduction of the text from one performance to the next is an engaging, rather than passive, process; it requires the performer's active understanding and mastery of his subject matter. (Alexander 2009: 13)

The most relevant aspect of these claims—that oral storytelling stems from a tradition of situated *performances* of a story and not strictly improvisational modes—is how much they reflect the present practice of certain modes of transmedia production. While the mastery of subject

matter makes sense in an oral culture, where the lack of external technologies to transcribe, record or otherwise preserve a performance means that it is inherently transient, we might just as easily say that instead of mastery of subject matter alone, transmedia fictions are performed by a mastery of *material matter*, where each site is an interpretive performance of the fiction cast in a unique platform. The foundational elements of (networked) transmedia fiction—its sequence and causation, storyworlds and universes, actions and events, characters, locations and objects—are in their own manner also building blocks that are subsequently mastered by those practicing within a specific fiction. In this sense, transmedia practice at-large has as much (or more) in common with orality as it does, say, novel writing, filmmaking, video gaming or virtual world design.

More closely, though, the process that transremediative projects work through, a process where a fiction is first *initiated* by a single creator (or body of creators) and then engaged on medially-interpretive level by a succession of subsequent creators, is perhaps even closer to orality than any other modes of transmedia practice. As Dena argues, one of the primary ways that intention and continuity are maintained in transmedia practices is through the act of a lead producer ‘personally selecting other distinct practitioners’ (Dena 2009: 127). This suggests that the fluidity of compositional practice present in orality is perhaps best reflected by the creation and re-creation of reflected in

transremediative productions. While my examination of *Greendale* here certainly positions the project as perhaps the richest and most important transmedia/transremediated expression of its kind, this does not mean that there aren't other precedents that we might look towards to understand such a process. Indeed, much like the scalar degrees of connection and platform diversity that networked fictions traffic in, transremediative fictions are also similarly scaled with regard to the cross-compositional presence of one platform in another and the ways in which redundancy is treated as an aesthetic tool for tmetic meanings.

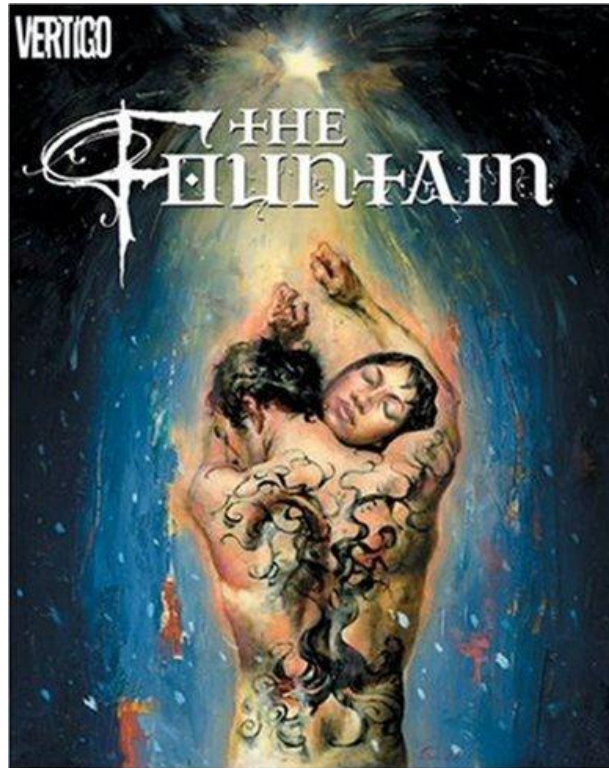
The larger presence of multiformity in transmedia practices, though, is more often than not reflected in not only in the processural means through which the work is created, but also the thematic concerns of the narratives themselves. In other words, in the most 'orally' fluid of transmedia projects we can locate the most 'medial' or material preoccupations within its content. One particularly rich example, Darren Aronofsky's *The Fountain*, a project composed of a film, a graphic novel, an art book, a website, a series of commissioned paintings and a script, is wholly concerned with the effects of writing, inscription and permanence. While the film (Aronofsky 2005) itself deftly weaves together three complex and related storylines—one of a 16th C. Spanish conquistador searching for the biblical Tree of Life, one from present day America dealing with a scientist poised to cure cancer, and one from some unspecified future in a distant cosmos, where a man in a floating,

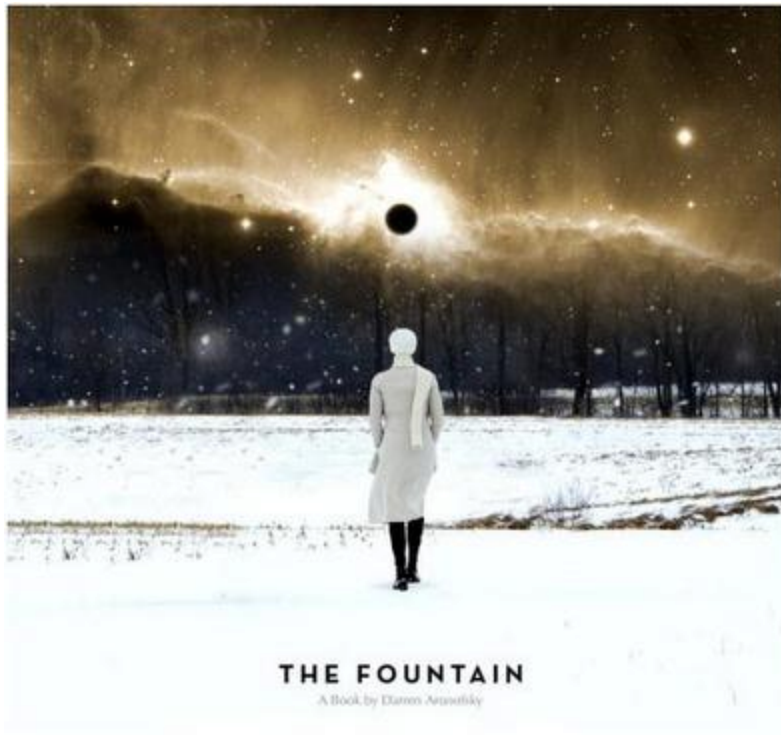
bubble-like spacecraft searches for heaven—the core of *The Fountain* is glaringly simple: writing and storytelling are a means of extending our lives in both a physical-material and metaphysical sense.

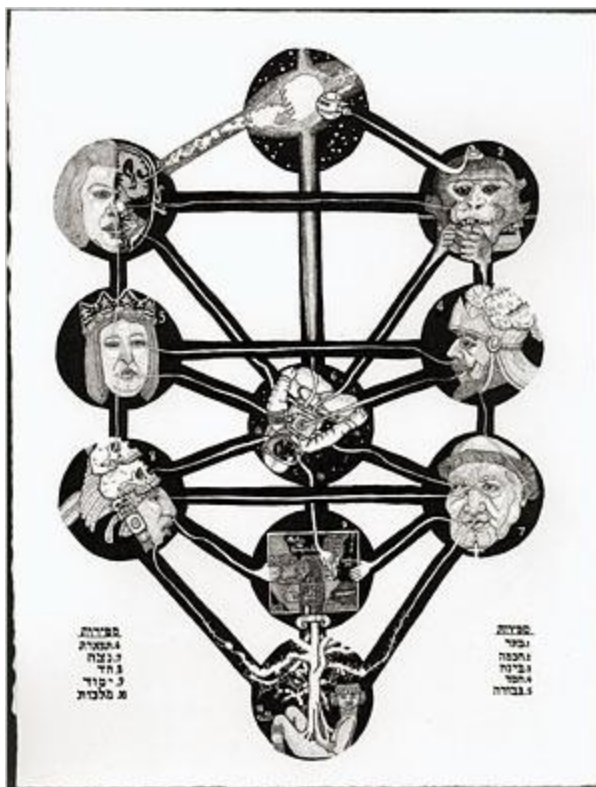
This thought is made literal in the story in the form of a narrative journal written by the wife of the scientist, self-referentially dealing with the conquests and the cosmos of the other threads. While the film itself doesn't fully reveal whether the conquistador and space sequences are realities or whether they are simply fictions recorded by the wife to make her husband see his hubris, it does make several attempts to position the journal and, moreover, the act of inscription itself as a thematic and processural anchor. Early on in the film, we watch as the spaceman repeatedly tattoos his fingers, hands and arms with concentric rings much like those of a tree to mark the years passed on his journey, the cold blacks of the fresh ink an immediate contrast to the faded, worn circles of those already there. In the present day scenes, we hear the wife, in dialogue and in voiceover, uttering the same, repeated phrase: 'Finish it', beckoning her husband to complete the story she left purposefully unfinished before her death. And, in what is perhaps the most blatant example of its preoccupation with writing and permanence, the wife collapses and descends into a coma while visiting a museum exhibit for the Mayan codices, the only known books to survive the Spanish conquests.

At the end of the film, the scientist finally acquiesces to his wife's wishes and, dipping a fountain pen in a jar of ink, he composes the ending of her book, an act that externalizes her memory in writing while simultaneously compelling him into collaborative interpretation of their life. While it's tempting to say that this aspect of the film guided the content of the other sites, which offer predominantly redundant features, I'd like to suggest that the opposite is more than likely true, where the *process* that Aronofsky initiated is ultimately reflected by the content. A wholly collaborative endeavor, prior to the completion of the film (where budget and casting troubles almost ensured that it never was made and lead instead to the graphic novel), Aronofsky passed the film's script among several graphic novel artists and web designers, each of which interpreted what they saw within their own medium. As Aronofsky himself observes, 'It would be interesting to even have fans out there mash it up and try different ways to combine it because the story does fit together in many different ways' (Aronofsky 2006). The result of this circulation includes an immersive, interactive website that allowed the user to intertwine each of the three storylines with clips from the film rendered as three-dimensional space, a graphic novel based on an early version of the script, an art book from Rizzoli Press that incorporates stills from the film and meshes them with paintings, drawings and material manipulation, and a series of artworks incorporating a wide array of influences, ranging from Phil Hale's minimalist approach to

Martin Wilner's tree-of-life to Kostas Seremetis' black and white pencilling to Dave Gibbon's Eastern-tinged simplicity to Barron Storey's use of mayan and Native American imagery (see Figure 4.21 and 4.22 for examples of all of these sites). Importantly for this discussion, *The Fountain* also included a project that allowed the audiences themselves to take part in the process of creating *The Fountain* by interpretively remixing the film themselves, with contributions from regions as disparate as Mexico City and Taiwan.









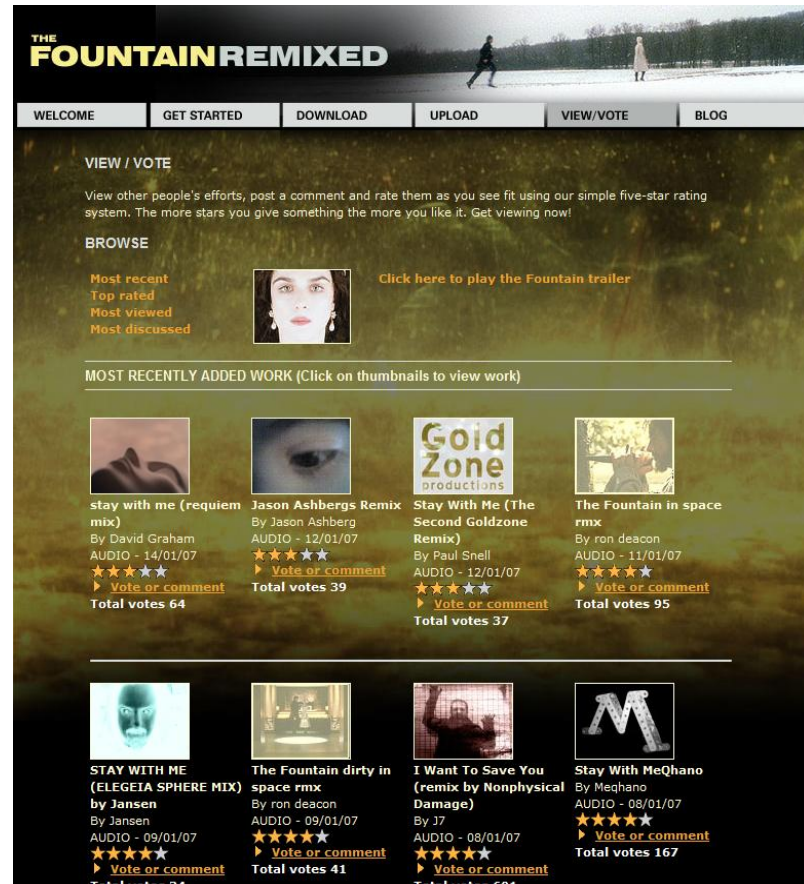


Figure 4.21: Multiformity in *The Fountain*

Figure 4.22: *The Fountain* Web Experience
<http://youtu.be/noQXnrYsEyI>

Throughout each of *The Fountain*'s sites, there are subtle yet insightful reflections on the nature of meaning, permanence and the material form. The art book, in particular, makes the act of writing, of composing meaning through material, a literal facet of its structure, placing words only at the beginning and the end of the book as lacerations that cut through the page, revealing hidden meanings below (see Figure 4.23) and bookending the image-exclusive interpretation of

the narrative that follows. In a recent interview I had with Kent Williams, the illustrator responsible for *The Fountain* graphic novel, Williams remarked that rather than see his work and the work of others in *The Fountain* as ‘director’s cuts’ of the film as the back cover of the graphic novel instructs us to, all of the sites should instead be seen as the ‘intended form...created independent of each other though generated from the same seed’ (Ruppel 2008). Aronofsky has also made similar statements about the process of creating *The Fountain*, stating that ‘there is always great excitement in surrendering one’s materials to artists who you know will do their own interpretation in their own medium’ (Aronofsky 2006b: 93). Unlike Dena’s assertion that a work like *The Fountain* is formed by the ‘privileging of an overarching concept, a parent seed, that exists beyond its expression’ (Dena 2009: 159), it’s apparent that the ‘seed’ of this project is very much materially realized in the form of the script. Even so, it is the intended multiformity of the project that renders what was once a treatment for shooting a film as a document for iterative creation in other media. In such an arrangement, every site has ‘the same parent, the story, yet the siblings are completely unique’ (Aronofsky and Williams 2005: 168), working together ‘like an orchestra producing a single symphony’ (Aronofsky 2006b: 93). As if to underscore this point, the art book also acts as a literal nesting container for the script, which sits in a recessed pocket in the back cover. Printed on white paper with red font, the script in itself is a bold visual contrast to the

formed and formless images of the remainder of the book, a marked and tangible reminder of the 'seeds' of its transremediatively multiform composition. Yet, at the same time, it is also seamlessly set within the white cardboard stock of the art book itself, so much so that it is easy to miss.

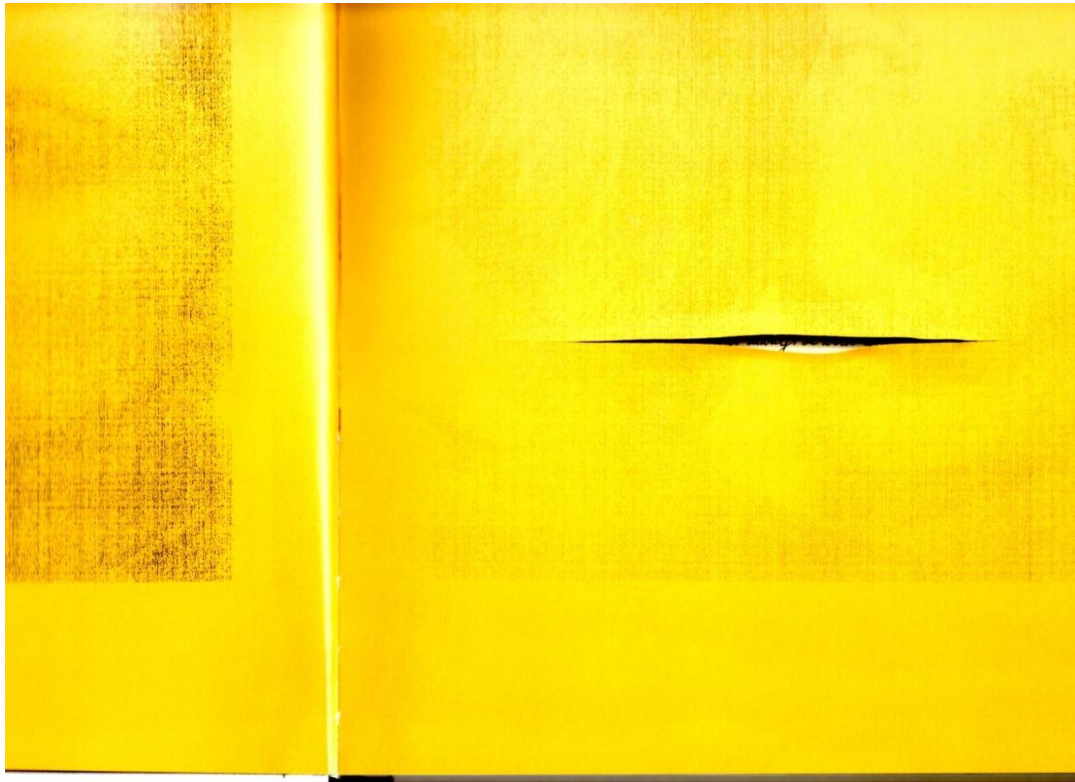


Figure 4.23: *The Fountain* Art Book

The sum total of these engagements of process result in *The Fountain* having a resonance which, like *Greendale's*, is reflected in both its content and creation. The act of 'finishing' a particular work, of adding the crucial interpretive closure to it, occurs on the level of both thematics and creative practice, an equivalency that provides both a

narrative depth and structural design to the project that is boldly realized in multiformity. Similarly, Steven Hall's *Raw Shark Texts*, a single-producer project that nonetheless exhibits unique multiform tendencies, is utterly fixated on how the multiple functions of language and text (i.e. letters, words, writing and print)—both in their production and interpretive realization—impact our view of reality. As a surrealistic, postmodern novel, *The Raw Shark Texts* (Hall 2007) deals with a character named Eric Sanderson and his attempts to maintain the memory of his lost girlfriend in the form of a 'conceptual creature' existing only in his mind. In doing so, Eric unknowingly conjure the Ludovician, a shark-like animal composed of letters and words that preys on memories and devours those who hold on to them too tightly. Eric's only hope for survival is to surround himself with mediated forms of language—books, magazines, computers, software—and attempt to slay the creature in a boat built from discarded PCs, monitors, paper and wood. While the narrative of the novel is playfully absurd, the transmedia spread of the project once again shows distinct parallels between its content and the process used to create/expand it. The notion that knowledge is never fully gained without substantial mediation (from language, the media that support it, and the mechanisms through which we engage these media) is a constant pull of *The Raw Shark Texts*, so much so that the project literally makes it virtually impossible for any anyone to complete the narrative on her own. Originally composed in

English, each of the multiple translations of *The Raw Shark Texts* novel contains content unique to that particular edition. Specifically, each chapter has, in Hall's words, an 'un-chapter, a negative' which, he says, 'are not deleted scenes' but 'are very much a part of the novel but they are all splintered from it in some way'. This splintering is on one level a splintering across media, organized under the guise of the ARG-like *Lost Envelope* campaign: some of the negatives have been found online in websites, hidden in social media profiles of the characters of the book, and uploaded as videos on YouTube by 'TheRealEricSanderson' during the course of an ARG-like experience called *The Lost Envelope* .

But this is, quite literally, only part of the story, as the negatives are also splintered across cultural, geographical and linguistic space, a move that foregrounds the preoccupations the fiction has with language and reality. Negative #8, for example, was only found in the Brazilian edition, written in Portuguese. Additionally, the Brazilian *Raw Shark Texts* website (<http://cabecatubarao.com.br/>) is also vastly different from other websites for the book, allowing for a poetic, manipulative engagement with the fiction that recalls early electronic literature. Each site, then, is integral to understanding the novel as a whole. The transremediation of *The Raw Shark Texts* makes any meaning partially *local* in operation, unique not only to the platform being used but also to an individual culture, place and time. Indeed, multiple translations of these negatives now exist online, each carefully edited and submitted by

the *readers* of the text themselves while, simultaneously, attempts are being made to collate a 'whole book' version of the each of the sites.

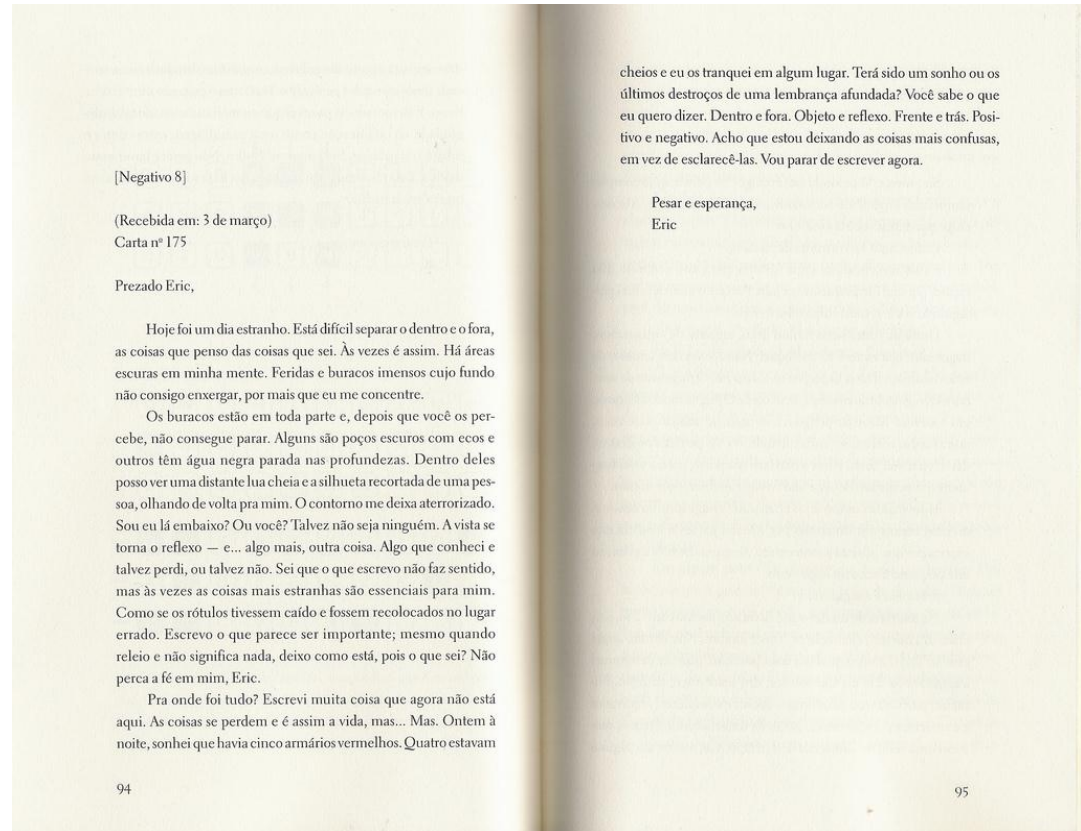


Figure 4.25: *The Raw Shark Texts* Uindex Video
<http://youtu.be/hWOOKkskm78>

As evident in the examples above, the fluidity of multiform expressions is realized in process as well as content, even if the methodologies proposed for transremediative meanings are as diverse as the platforms composing them. Mark Danielewski's *House of Leaves*, for example, is utterly focused on exploring the value and simultaneous disintegration of traditional, 'old media' knowledge in a culture of new media transition. While the narrative of the novel deals with these ideas in exceedingly intricate and materially significant ways, the relationships enacted between the various sites of *House of Leaves* occurs primarily through the meanings gained by the physical separation of sites more than platform diversity. Even though audio recordings exist that give sound to the creakings of the titular haunted house, *House of Leaves* exists primarily as a succession of editions, each of which contains small, almost microscopic changes (certain words appear in different font colors, for instance). Additionally, sections of the novel were broken off and published on their own as *The Whalstoe Letters*, a self-contained epistolary novel that does not need reference to *House of Leaves* to gain its meaning. Danielewski, in other words, exploits the process of transremediation for a much more singular purpose—to highlight the strengths and weaknesses of a *single* medium.

While one might immediately reject the claim that these are in any way orally situated texts (indeed, both *House of Leaves* and *Raw Shark Texts* are some of the most prominent examples of post-print novels that function in a way only text-based corpora could), the networks of redundancy that these projects maintain and circulate are something far removed from a typographic, filmographic, ludographic (related to games) or any other media-centric bias. Indeed, in order for these particular properties to *gain anything* from transmedia connection, they must first work towards establishing redundancy, and furthermore exploit this redundancy as a multiply situated access point or interface for a more nuanced examination of the media that comprise the networks.

Transremediation again functions as a structural tool, then, this time for a different type of transmedia expansion. From the standpoint of design practices, this is an important distinction to make, even in projects that traffic primarily in networked meanings. For example, in Jay Faerber, Ed Lee and Andrew Robinson's *Armor Testing* (2007), a graphic novel set within the *Halo* universe, a prototype of the armor that Master Chief (the protagonist for the Halo video games) wears becomes the focus of an entire site. The object here—the armor—is in its own right a world-building construct but here, its visual similarity to the armor of the video game (and other sites) works as a mimetic element influencing the audience's engagement. As Faerber himself comments: 'At the beginning of this project, we had a meeting where we brainstormed about stuff we

wanted to see...We wanted something that linked directly to the game' (2007: 56). In this case, the link is an object used in multiple sites, one whose presence is noted not for its novelty, but rather for the way that the platform itself interprets its functions. In the video game, the armor becomes a crucial gameplay mechanism, a strategic aspect of play that must shields the player from attacks and must be repaired when damaged. In the graphic novel, the armor functions as a causal agent in its own right, spurning the actions and events that follow. The repetition of an object—its place in multiple sites—is potentially bound to both a working, definitional familiarity (nascent, ongoing or established) and unfamiliarity with the platform that presents it. In this context, it is unavoidable that we come into contact with the material capacities of the medium itself. In the context of interpretive practices, however, I'd argue that such affects are equally as crucial, as they form the basis through which transmedia differentiation becomes a matter of sorting redundant (read: medially significant) from expansive (read: narratively prominent) information.

Conclusions: The New Creative Commons

The examples I've used to this point illustrate the varying degrees to which transremediation utilizes the materialities of the media platforms they deploy in order to interrogate their form as a function of content. In the book *Writing Machines*, N. Katherine Hayles (2002: 25)

proposes that ‘When a literary work interrogates the inscription technology that produces it, it mobilizes reflexive loops between its imaginative world and the material apparatus embodying that creation as a physical science’. These works, which she calls *technotexts*, are however, only ‘verbal constructions’ (Hayles 2002: 26), of which Hayles deems Mark Danielewski’s *House of Leaves* novel a prime example. As we have seen, though, *House of Leaves*, like *Greendale* and several other projects, enacts a sort of networked technotextuality that functions through transremediation, where form is interrogated not simply by a site in isolation, but also by a site’s relation to the others it is bound to by narrative. In other words, not only is the ontological status of transremediation rooted in these relations, but each site also reflects a reinterpretation of the content of the network. But can these sorts of creations be thought of as a sort of cultural preservation mechanism in their own right?

Echoing Richard Rinehart (2002), Eileen Maitland and Cordelia Hall (2006: 334) note the distinction between preserving an artifact and ‘keeping it alive’, with the latter view ‘preoccupied with recreating or restaging a work from scratch’ (2006: 334). Within this position, they argue, preservation becomes far more collaborative in nature: ‘Responsibility for a work’s ‘artistic integrity’ is shared increasingly between the individual who is the imaginary force behind it, and others who are responsible for executing his/her instructions’ (2006: 334). The

process that is being referenced here – the ‘reinterpretation’ of a work of art – is one of the foundations of the Guggenheim Museum’s Variable Media Initiative, which espouses ‘permanence through change’ (Depocas, Ippolito and Jones, 2003) by presenting multimedia and digital artists with a questionnaire that considers ‘how their work should evolve over time’(Ippolito 2003: 47). In this context, reinterpretation refers to the process of recreating a work’s content in new technological environments (Ippolito 2003: 41) when the original hardware, software, location, etc. are no longer available for use.’

In many ways, this sentiment reflects the ongoing attempt to create what is literally now referred to in licensing as a 'creative commons', a ground-zero which allows for artistic initiation, re-creation and (re)iteration. Recently, Jon Cates (2008) has pointed out the similarities between the idea of Creative Commons licenses and the work of media artist Phil Morton, who, in the early 1970s, attempted to push a 'copy-it-right' ethos whereby structures like an image parser for a computer might be copied and reproduced by others. While it's debatable where Morton's art lies – in the 'copy-it-right' manifesto itself or in the documentation containing instructions for the reproduction of an object (which Morton called the 'Distribution Religion') – the idea of copying-as-aesthetics here is an important precursor for this discussion, as it foregrounds a distribution model which preferences (transremediatively) redundant constructions as a continued means of renewing an

expression. But whereas Morton argues that in copying we should refrain from making improvements – asserting that 'you'll make it only worse if you modify what already is best, even if it doesn't appear to be the 'best' to your mind's eye' – in projects like *Greendale*, *The Fountain* or even in the message boards of *House of Leaves*, it's only *through* variation, a variation that is encouraged by an initiation of content which downplays the primacy of one artifact over another, that these projects gain their saliency.

Here, we can see that whereas Eco (1979) argues that all artwork is inherently open, poised as it is on the subjectivity of those engaging with it, there is another sense in the term, an incompleteness, which works towards completion through both collaborative creation and audience intervention, a completion which I've argued is often now an act of production. But unlike most preservation projects that attempt to document and account for change in a work and, in doing so, stabilize it, transremediative practices *embrace* these re-interpretive openings, incorporating them as elements of a meta-medial ecology that provides new perspectives through which to view the content of a given site. Instead of thinking of the stability of an artifact as a closed system that allows for future distribution, we might instead regard that for transremediative fictions, it is the *openness* –of time, of interpretation, of medial instantiation – that provides a base structure which initiates further content production. Like a leaf which decays but sustains the

ground it fell to, so too should we look at the analysis of transremediative fictions with an eye towards the initiating frameworks and the processural hermeneutics they spurn. That is, of course, if we can ever just get them to stay still—or even stay themselves—long enough to get a good look.

Chapter Five:

CONCLUSIONS

'New literacies demand attention to how learners integrate across texts.'

—Peggy Van Meter and Carla Firetto (2008:

1090)

In *Literacy in the Age of New Media* (2003), Gunther Kress discusses the shifts that took place when the computer screen began to influence the design and orientations of information at-large. As part of the 'vaster social forms of organization' (2003: 162), Kress points out that the (omni)presence of the screen as our primary means of interacting with a text has catalyzed a subsequent shift in the organization of information in other media, in particular, print-based platforms such as the novel, a magazine or even a textbook. In discussing what he calls the 'new page' (2003:162), Kress argues that whereas previously literacy was determined by the sequential principles of the written page, with its ordered, predictable layouts or, as he calls them, 'reading paths' (for example, left-to-right in most English language texts), now we must consider an alternative openness as the criteria defining literacy, one where instead of a single path with have a 'range of possible reading paths, perhaps infinitely many' (2003:162). 'The task of the reader in the first case', Kress notes, 'is to observe and follow a given order, and within that order to engage in interpretation' (2003: 162). When we encounter

the 'new page', however, our task changes, and becomes a more fluid, more subjective type of activity, one where the goal is to 'establish the order through principles of relevance of the reader's making, and to construct meaning from that' (2003: 162). The order established here is naturally multimodal in nature, and can be preferential to images, font choice (i.e. size, color, emphases, etc.), paragraph placement, and other such elements of design, usually combined and recombined non-linearly in order to create a unique meaning.

While Kress doesn't address the ways that the new page can control these elements in order to subsequently control meaning (i.e. highlighting some text while diminishing others, juxtaposing image and text, using colors as a modal link, etc.), his point—that the principles guiding a certain type of interaction or interface often result in the diffusion of these principles as design modes—is fundamental to this study's understanding of transmedia practice, bound as it is to the idea that the principles guiding the organization of information are marked with a history in their own right, a genealogy that can be traced and mapped for concurrencies and variation. The 'language of the page', so to speak, has become a language of design, one that marks 'old' technologies with the aura of the new (see Figure 5.1 for an example of a page with multiple reading paths). As Niklas Luhmann points out, 'The higher complexity of a new level of development makes it possible to reinvest the old (in this case, print) with a new meaning, as far as it lets

itself be integrated. New technological achievements do not necessarily mean the forceful negation of older media, but rather their recombination' (Luhmann, quoted by Tabbi and Wutz 1997).



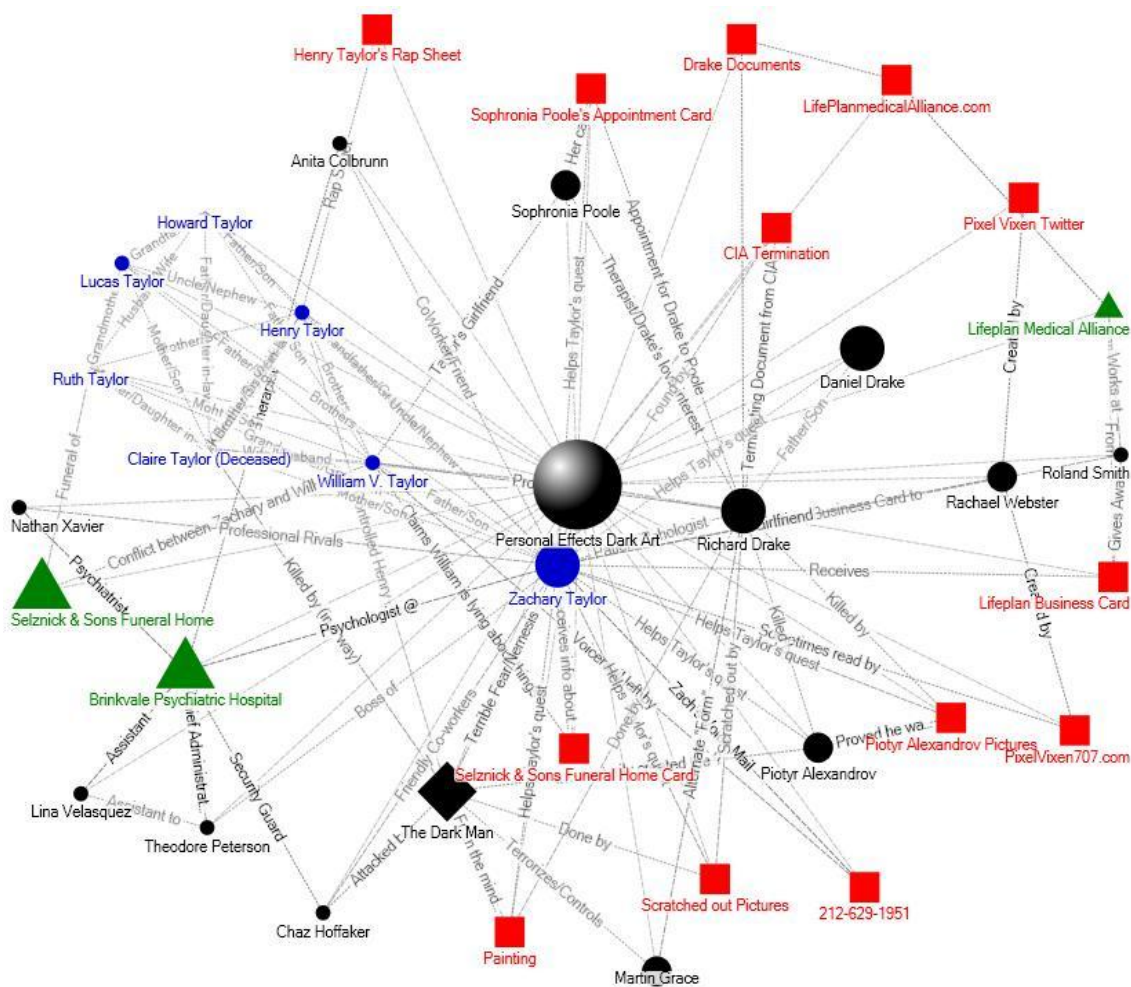
Figure 5.1: The Multiple Reading Paths of the New Page

As we've seen, the paths which form in transmedia networks—paths that constitute a much more *cross-sited* consideration of narrative—are in their own way a reflection of the shifts in literacy brought on by transmedia practices. Here, a close reading of a transmedia fiction can be performed by looking for the features that support and are produced by network connection: migratory cues, causal-sequential ordering, vertex clusters, cross-sited pathways,

component-oriented meanings. Echoing this thought, literacy theorist Margaret Mackey also notes that the nature of transmedia practices isn't simply about a process *supplying* information, but also a recognition on the part of audiences that such information even *exists*: 'As well as registering the surface world of a single story,' Mackey notes, 'we now take it for granted that there will often be a kind of fictional hinterland of other texts in other media, all bearing on the same fictional domain' (2003: 605). In this regard, closure (or, as I argued in Chapter Four, *openness*) isn't an essential element of narratives structured through transmedia frameworks as 'narrative is an additive thing that can go on and on without closure. Closure is something a narrative has to work for' (Perez 1998: 72-73). Yet as we have seen, closure is something that is also structured innately by both a transmedia fiction's capacity to *enact* connections in what was once assumed to be a 'closed' site, and transmedia practice's constructing of certain projects are inherently mutable and multiformed. But Kress also concedes a valuable point about the nature of contemporary expressions. 'In the new forms of reading, knowledge is not necessarily set out in such an ordered, sequential manner, but is frequently shaped by the reader in the act of determining/ constructing/ imposing such order by the new reader' (Kress 2003: 172). Kress claims that, as an 'old' reader, one who grew up without the omnipresence of digital technologies, he is oriented to 'to notions of the 'completed text'' while those who are more adapted to the

new page are oriented to notions of 'information as its supplied' (Kress 2003: 163). So how can we begin to visualize such a re-orientation when its processes are so open-ended? The answer, it seems, is by treating transmedia network visualization as a model for understanding an audience's ability and awareness of these pathways.

In a recent class, I asked my students to engage in visualizing a transmedia network constructed around the artifacts for *Personal Effects: Dark Art*, which we had just 'finished' reading. After a brief lesson in using NodeXL and some pointers regarding methodology (e.g. how to define a site/edge in the context of the fiction), I turned them loose with one condition: that whatever relationship they chose to visualize had to be premised on the notion of it representing a *connection* between two sites. The results were striking, not simply because they display an innate understanding of *PE:DA*, but also because they show the incredibly *different* ways that it can engaged as an audience:



Created with NodeXL (<http://nodexl.codeplex.com>)

Figure 5.3: Student Graph #2

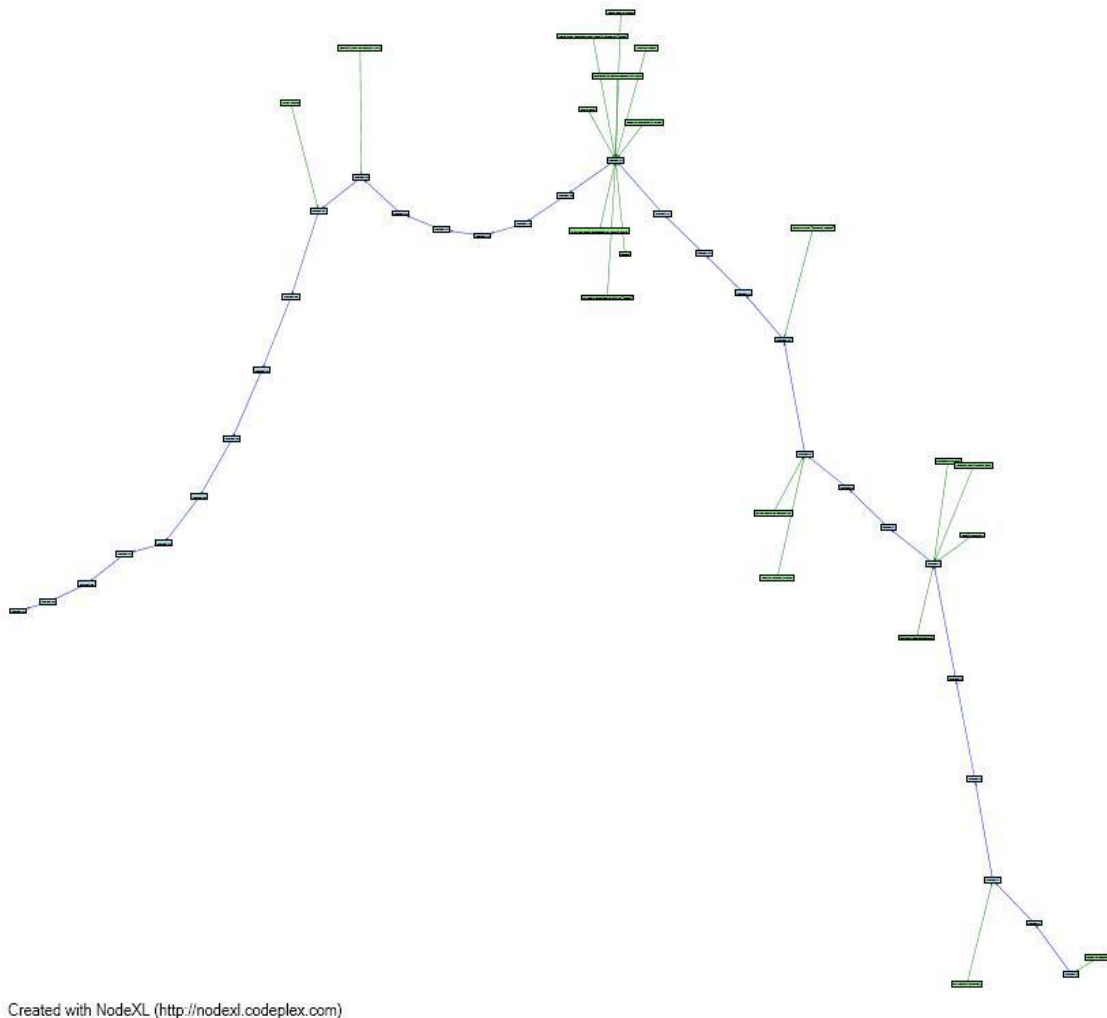


Figure 5.4: Student Graph #3

While the three examples shown above *look* different due to each student's utilization of different layout schemes, what's remarkable to note here is that they represent variant understandings of the transmedia functions of the book. As a class, we didn't spend much time going over migratory cues and, as such, I expected that there would be some variance. What I didn't expect, though, was that this variance would manifest itself in wholly different interpretations of the *PE: DA's* meanings. In Figures 5.2 and 5.4, for example, the student's choice to

layout each chapter as unique vertices potentially containing links to the artifacts sat in stark contrast to the graph in Figure 5.3, where the student used *characters* as the primary sites where connections with the artifacts were made. While Figures 5.2 and 5.4 contain graphs where progress is structured by the sequential layout novel (i.e. progressing through chapters lead to a certain sense of closure), Figure 5.3 displays a graph where *causality* structures what elements are linked together. Looking closely at Figure 5.3, it's possible to notice that the edges themselves are marked and notated. Characters are linked by their relationships to one another (i.e. father, son, girlfriend, colleague, etc.), but the pathways between these relationships are also entirely structured by the artifacts that resulted in these relationships, or bore some role in structuring them. For example, Zach Taylor, the protagonist of the fiction, becomes linked to two characters not through any events in the text of the novel, but instead through a series of negotiations of different artifacts, ranging from an appointment card from a psychiatrist to a CIA discharge letter written under a character's pseudonym.

In following up with these students after they turned in their assignments, I asked them how they thought their visualizations reflected their experiences with the fiction. Not surprisingly, the students responsible for Figures 5.2 and 5.4 each noted that, over the course of their contact with the novel, when they would see an artifact of some sort mentioned they would look for it in the bundle that came packaged with

the book. If it wasn't there, or if the text didn't mention again, they'd move on and continue with their reading. By contrast, the student responsible for Figure 5.3 noted that she tackled the book in anything but a linear fashion: familiarizing herself with the artifacts first, the student then used the book as a map of sorts to structure her engagements with them. When she would read about a particular artifact in the text of the novel, she would then follow it to its logical conclusion, even if that meant jumping back and forth between chapters repeatedly. In this way, she was less concerned with the plot as it was developed in a sequential manner and more concerned with how the artifacts came to structure relations between the characters. 'The artifacts had to belong to someone', she said, 'I figured that if I figured out who that was, I'd understand the book better' (Ruppel 2011, personal email).

I mention these incidents not because I think any one approach is better than another (indeed, each of the students mentioned here wound up with a fairly good grasp of the fiction's intricacies), but because the diversity of responses to this project illustrates a fundamental underpinning of transmedia meanings: the potential for enormously varied strategies of engagement with any fiction. This not only constitutes a new way of conceiving of a points-of-entry in transmedia fictions as *methodologies* for engaging with multiple sites, but it also suggests the formation of a reading path premised on the assumption of *networked meanings* and not any medium by itself. While such a

formulation runs the risk of being self-determining (i.e. I asked my students to visualize a network so they naturally were looking for network elements), I argue that the networked capacities of transmedia fictions are directly related to the designs of the fictions themselves. As I discussed in the conclusion to Chapter Three, such designs are readily positioned as networks from the outset as documents that blueprint the connections between sites to follow.

As transremediation becomes a more widely utilized tool for transmedia producers, and as it becomes increasingly interpolated into intracompositional practices, the shifting nature of transmedia reading paths will only become more pronounced. Here, however, rather than sifting through an exclusively *diverse* body of sites related to a fiction, audiences will also be engaging with a multiforms of a given site, accessing additional information in a manner *wholly* related to the platforms themselves. While I previously advocated for the use of transmedia network visualization as a method for structuring and strategizing where and how the connections of a fiction happens, the student visualizations shown here are also strategies, but of a different variety. Here, instead of marking the places where meaning might be distributed, student visualizations such as these are inherently close readings in their own right, but of a different sort: rather than being examples of 'good' and 'bad' readings, it's instead possible to consider them as reflections of different relationships to networked meanings.

Rather than there being an *order* to transmedia reading paths (as Kress argues was the case for new readers), it's now the case that we can only understand contemporary transmedia literacies through the loose model of the network itself, where connections *happen* in order for meanings to circulate.

As Douglas Thomas and John Seely Brown observe, 'Conventional wisdom holds that different people learn in different ways' (2011: 79). But in contemporary knowledge economies, they continue, this formulation needs updating: 'Different people, when presented with exactly the same information in exactly the same way, will learn different things' (ibid.). In current educational models, Thomas and Seely Brown stress, there is no tolerance for this kind of thinking. In order to counter this, they suggest a reversal of the order of things. Rather than searching for answers, they ask, might we better served in prompting *questions*? And, likewise, rather than searching for a single reading of a contemporary (transmedia) expression, might we not be better served in prompting an understanding of the *designs* that allow these expressions to function (across media)? It is in this sentiment, I think, where the truest foundations of transmedia studies may lie. Here, every site we engage with, every connection we make, every platform we see reflected in another platform, serves as a starting point, 'not an end point' (Thomas and Seely Brown 2011: 82) of our inquiries. Indeed, such an understanding means that the process of understanding transmedia

practices, perhaps more so than any other artform in history, must be a continual one. Methods such as those proposed here are not intended as solutions, then. They are only temporary answers that invite us 'to ask more and better questions' (ibid.), hoping to keep up with a form whose primary feature is its capacity *connection*, across media, across modes, across minds.

Appendices

Appendix 1.1: A Comparison of Some of the Approaches to Transmedia Fictions and Practice

Approach	Concerns	Emphasis on Narrative?	Fictional boundaries?	Blindspots?	Object of study?
Intertextual Approach	'Allusions' to particular texts lend a unity to the project as a whole; includes: same as franchise	Low	None—all aspects are implicated by the intertexts	No sequential considerations; no causal considerations; 'everything' becomes an intertext	Systemic
Paratextual Approach	The 'spaces' between texts; includes: same as transmedia with non-narrative elements such as production podcasts, vertical/horizontal integrations, fan sites	Mixed—boundaries between platforms in use increasingly sparse; impacts narrative construction	None—fictional artifacts treated equally with non-fictional	No sequential considerations; no causal considerations; views everything as paratext, with no distinction given to the effects/affects of different elements	Brand markers, logos, etc.
Narratological Approach	Apply narrative theory to stories across media	Exclusive—only narrative elements considered	High	Medium-specific approaches to narrative require separate toolboxes of theory; transmedial approaches ignore the	Individuated/Transmedial

				modal impact of each medium/ result in a typology of difference	
Commodity Approach	All artifacts related to a particular franchise/ property; includes books, film, TV, video games but also t-shirts and toys; related to intertextuality and paratextuality	Low	None—fictional, non-fictional and narrative/non-narrative objects all considered	Unable to piece together how story works across platforms; no differentiation given for narrativity of objects; ‘end-product’ phenomena	Systemic; expressions as ‘PR’ for a brand
The Principles of Operation Approach	Story-based platforms; includes film, TV, books, video games	High	Pronounced	One type of story variant in several; does not account for sequence or connection as specific elements	Seven different principles of transmedia engagement
Medium-Centric Approach	Positions one medium as the central platform and others as ancillaries support it (INCLUDES	Mixed—can deal with both narrative and non-narrative sites (i.e.	Mixed—treats some sites as privileged narrative zones (i.e. TV); others as supporting	Ignores the possibility of other platforms functioning in equal standing;	‘Driver’ platforms such as film or video games

	hyperseriality-- Murray)	Wikis, etc.)	narrative/non- narrative zones (i.e. the Web)	creates a set of satellite texts rather than a differentiated affectational set	
Practice Approach	Examines the processes that go into making transmedia fiction	High; but narrative is also discussed in conjunction with other modes, such as games	Concerned with only inter-fictional elements (those existing within or contributing to the development of a fictional world)		The way that the processes of design have distinctive influences on expression
Network Approach	How sequentiality and universe construction occurs within the paths of a directed network; includes: same as transmedia narrative; how modes and narrative elements are integrated	Exclusive— on causal/ sequential, connective and depth- oriented platforms, modes and objects are considered	Only those that feed into either casual/ sequential narrative aspects, connective network aspects, or universe building aspects; no paratexts	No consideration of toys, t- shirts, etc.; first-person' approach, rather than social/ cultural approach; network development is not always a given	Connections and Network Topography/topology

Appendix 2.1: Migratory Cue Typologies and Properties

Edge Type	External	Internal	Potential Directionality	Causal?	Sequential?	Previous Knowledge?	Strong or Weak tie?
Franchise Level	✓		Bi-	No	No	None	N/A
Direct External	✓		Bi-	No	Highly	None	N/A
Epitextual	✓		Uni-	No	No	None	N/A
Intersectional cue		✓	Bi-	Yes	Highly	Very high	Strong
Direct Internal cue		✓	Uni-	Sometimes	Occasionally	Low	Weak
Intermedial cue		✓	Bi-	Sometimes	No	Moderate	Weak
Causal-Sequential		✓	Uni-	Yes	Highly	High	Strong

Appendix 4.1: The *Greendale* Song Lyrics (original font from website preserved)

"falling from above" by neil young

grandpa said to cousin jed
sittin' on the porch,
"i won't retire
but i might retread

seems like that guy singin' this song
been doin' it for a long time
is there anything he knows
that he ain't said?

sing a song for freedom
sing a song for love
sing a song for depressed angels
falling from above"

grandpa held the paper
pretendin' he could see
but he couldn't read without his glasses on

"how can all these people
afford so many things?
when i was young
people wore what they had on...and mama said

'a little love and affection
in everything you do
will make the world a better place
with or without you'"

a little love and affection
in everything you do

slammin' down a late night shot
the hero and the artist compared
goals and visions and afterthoughts
for the 21st century

but mostly came up with nothin'
so the truth was never learned
and the human race just kept rollin' on

rollin' through the fighting
rollin' through the religious wars
rollin' down the temple walls
and the church's exposed sores

rollin' through the fighting
the religious wars
mostly came up with nothin'

"grandpa here's your glasses
you'll see much better now,"

said that young girl of edith and earl's
but grandpa just kept starin'
he was lost in some distant thought
then he turned and said
to that young girl

"a little love and affection
in everything you do
will make the world a better place
with or without you"

with or without you
a better place
with or without you
with or without you

hear that rooster crowin'
down on the double e
it's a new morning
dawning on the green

bouncing off the towers
and the sun's heading down for the streets
the business meeting
window shades are drawn

another morning edition
headed for the porch
because grandma puts down the paper
before grandpa raises his fork

a little love and affection
in everything you do
with or without you

hear the rooster crowing
down on the double e

"double e" by neil young

back in the country
livin' on the double e
in the sunshine of her life
there's a ready young filly
and mom and daddy
won't let her leave
mom and papa won't let her go

but when they go out dancin'
she breaks out on her own
she's hot enough to
burn the house down
and mom and daddy don't know

when edith and earl
 renamed the double e
 they nearly made history
 the neighbors rose up
 and some of them were mad as hell
 'cause it used to be the double L

change comes slow in the country
 when you're new
 there's a lot of distrust
 years pass by uneventful,
 and memories turn to dust

meanwhile granny
 has got her bright colors on
 the sunshine in her eyes
 cruisin' by the bars
 and honky tonks where she met grandpa
 and caught that young man's eye

dusty white eldorado
 cruisin' through the trees
 slippin' through the shadows
 of what used to be

back in the day
 livin' in the summer of love
 livin' in the summer of love

grandma's ok
 but not the same since grandpa's gone
 she's livin' in the summer of love

back in the day
 livin' in the summer of love
 livin' in the summer of love

livin' in the summer of love

livin' in the summer of love

livin' in the summer of love

"devil's sidewalk" by neil young

"when the red light shines
 on the streets of hate
 where the devil dines
 who knows what he ate

it's a simple thing
 trying to stay afloat,"
 the captain said
 without his boat

"some things are getting better
 other things a little worse
 it's a situation
 much like a curse

it's the devil's sidewalk greendale
 it's the devil's door greendale
 i try to avoid it," greendale
 said the captain of the shore greendale

"there's a garden growing greendale
 and a million weeds greendale
 with no way of knowing greendale
 who has done which deed" greendale

"that's an honest tale,"
 said the helmsman to the mate,
 "about a woman delicious
 and a matter of fate"

big wheel's still rolling
 down on me
 one thing i can tell you
 is you got to be free

john lennon said that
 and i believe in love
 i believe in action
 when push comes to shove

"who cares what you believe,"
 said the captain amazed,
 "if you stood in my shoes
 your eyes would be glazed"

so my fair damsel greendale
 won't you take your leave greendale
 are you headed for the country greendale
 where you wear the green sleeve greendale

and the children laugh greendale
 and the old folks sing greendale
 and the church bells toll greendale
 for a miraculous thing greendale

where the big red furnace greendale
 just glows and glows greendale
 where the big heart beats greendale
 where the big wheel rolls greendale

"leave the driving" by neil young

out on the old coast highway
flyin' through the night
jed got stopped by the CHP
for speedin' and no brake lights

rolled down the drivers window
slipped his gun down under the seat
glove box full of cocaine
trunk was full of weed

"driver's license and registration,"
said the officer with his flashlight
searchin' around the floor of the car
smellin' like somethin' ain't right

jed's life flashed before him
like a black and white super 8
he heard the sound of the future
on a scratchy old 78

nothin' was still, all was movin'
when the flashlight found the gun
then jed pulled the trigger
in a split second tragic blunder

"makes you think about livin'
and what life has to tell,"
said jed to grandpa
from inside his cell

camouflage hung in his closet
guns all over the wall
plans for buildings and engineers
and a book with no numbers at all

the whole town was stunned
they closed the coast highway for 12 hours
no one could believe it
jed was one of ours

meanwhile across the ocean
living in the internet
is the cause of an explosion
no one has heard yet

but there's no need to worry
there's no reason to fuss
just go on about your work now
and leave the driving to us

and we'll be watching you
no matter what you do
and you can do your part
by watching others too

grandpa put down the paper
staring in disbelief
jed had always been good to him
and never gave him any grief

"the moral of this story
is try not to get too old
the more time you spend on earth
the more you see unfold

and as an afterthought
this must to be told
some people have taken pure bullshit
and turned it into gold"

"carmichael" by neil young

silk scarf and a napkin
hidden in a drawer
two hundred bucks in an envelope
labeled lenore

"maybe she shouldn't see this
she should never know,"
said the widow's best friend anne,
"i'll just take it and go

i'll give her the money later
say it was in his shoe
that way she'll never find out...
that'll do"

"carmichael was a credit to the force
in everything he did
it's like we got a big hole in our side
where he fit

if any of you officers
would like to say a word
now would be the time
to be heard"

"thank you chief, i sure would
he was a partner of mine
he was always very careful
and played it straight down the line"

one by one the officers spoke
and the service drew to a close
he had no living relatives
but his wife who never showed

she just couldn't face the men
they all understood

they got in their cars and drove home
as directly as they could

"carmichael you asshole,"
the new widow sobbed beneath her veil,
"shot down in the line of duty
is this how justice never fails?"

i wish that things were better
when we said goodbye today
but we had our share of good times though
along the way

remember
'hey mr. las vegas
you used to be so cool!!'
we met wayne newton down at pebble beach
and you acted like a fool

but we both just couldn't stop laughin'
it seemed so funny to us
we left our luggage back in the room and almost missed the bus

that was a great vacation
maybe the best of all
but goddamnit carmichael you're dead now
and i'm talkin' to the wall"

the force got back to normal
carmichael was replaced
for one year nobody parked a car
in carmichael's space

"bandit" by neil young

turnin' the pages
in this old book
seems familiar
might be worth a second look

wrappin' up dope in a paper bag
talkin' to yourself
takin' a drag
who are you kidding
with what you say?
what does it matter?
they'll never hear it anyway

got to get past
the negative thing
the lawyers and business
you get what you bring
no one's sorry
you did it yourself

it's time to relax now
and then give it hell

someday you'll find
what you're lookin' for
someday you'll find
what you're lookin' for

you didn't bet on the dodgers
to beat the giants
then david came up
now you gotta pay up
you didn't count on that

geez half the money's gone
the month is still young
where you gonna go now?
things are closin' in

got to trust someone
trust someone
someone you trust
got to be careful
be careful

you can't go to your brother
that money's all gone
can't go to your friends

someday
you'll find
everything you're lookin' for

someday
you'll find
everything you're lookin' for

someday
you'll find
everything you're lookin' for

someday
you'll find
everything you're lookin' for
yeah

made out like a bandit
for so many years
what are you workin' for?
one more big score?
what are you tryin' to prove?

try to get closer
but not too close
try to get through
but not be through

no one can touch you now
 but i can touch you now
 you're invisible
 you got too many secrets
 bob dylan said that
 somethin' like that

someday
 you'll find
 everything you're looking for

someday
 you'll find
 everything you're looking for

someday
 you'll find
 everything you're looking for

someday
 you'll find
 everything you're looking for
 yeah

"grandpa's interview" by neil young

"grandpa here's your coffee,"
 said edith as she filled his cup,
 "nobody'll find you here
 and earl is glad you guys showed up

the way things are downtown
 you might have to stay for a while
 there was a helicopter flyin' over your house
 when i talked to your neighbor kyle"

"who the hell do they think they are?
 invading our home like that
 grandma and i had to leave so fast
 we couldn't even catch the cat

the helicopter scared the shit out of it
 and it took off down the trail
 down past the railroad track
 towards the county jail"

"jed you really screwed up now
 what'd you have to do that for?
 everybody wants to hang your ass
 here's a note from lenore"

she touched the cold steel bars
 as she pushed the paper in
 jed took it up and read it
 and couldn't hide a grin

outside the jail window
a crow flew across the sky
completely disappearing behind each bar
then a helicopter flew by

"say hi to earl and edith
tell'em i'm doin' fine
tell'em you're ready to leave home now
and they should cut the line

can grandma come and see me?
i've got a new song to sing
it's longer than all the others combined
and doesn't mean a thing"

the noise was unfamiliar...
a walkie talkie squealed
generators were runnin'
vans parked in the field

tv crews and cameras
they wanted to interview grandpa on the porch
they came through the gate and up on the lawn
knockin' down edith's tiki torch

grandpa saw them there
looking through the venetian blind
"those people don't have any respect
so they won't get any of mine

i ain't gonna talk about jed...
i don't watch channel 2 or 6 or 9
i don't have time to talk that fast
and it ain't my crime

it ain't an honour to be on tv
and it ain't a duty either
the only good thing about tv
is shows like 'leave it to beaver'

shows with love and affection
like mama used to say
a little mayberry livin'
can go a long way"

he took earl's gun from the closet
and loaded up both barrels
went out on the porch and fired them off
and up walked a woman named carol

"susan carol from early magazine
i've got some questions to ask"
"well you can stick 'em where the sun don't shine,"
grandpa said with a gasp

then he fell face first and let out a sigh

edith came out in shock
 grandpa was whispering to her from down on the floor
 he looked like he was tryin' to talk

"that guy who just keeps singin'
 can't somebody shut him up?
 i don't know for the life of me
 where he comes up with this stuff"

they laid his head on a newspaper
 with a picture of carmichael on the front page
 posing with a little league baseball team
 and a seedy shot of jed with a motorcycle.

grandpa died like a hero
 fightin' for freedom of silence
 tryin' to stop the media
 tryin' to be anonymous

share your lovin' and you'll live so long
 share your lovin' and you'll live so long
 share your lovin' and you'll live so long
 live so long

"bringin' down dinner" by neil young

the evening fog was rolling in
 it was getting hard to see
 the old white car edged down the road
 headed for the double e

she was bringin' down dinner for grandpa
 it was crawlin' with vitamins
 and tender as a mother's love
 when she saw the tv vans

the side door was open
 there were three tvs
 grandpa's face was on every one
 he was talkin' to a woman with a microphone
 she was sexy and her hair was all done

sun green came out and met grandma then
 "my, you're such a beautiful girl
 mother earth needs more like you
 you should go out now and see the world

what's grandpa doin' on tv?
 i got his dinner in the car
 all these vans have blocked our road
 but we can carry it, it's not too far"

"sun green" by neil young

sun green started makin' waves
on the day her grandpa died
speakin' out against anything
unjust or packed with lies

she chained herself to a statue of an eagle
in the lobby of powerco
and started yellin' through a megaphone
"there's corruption on the highest floor"

suits poured out of elevators "they're all dirty"
phoneheads began to speak "you can't trust anybody"
but security couldn't get her down
she was welded to the eagle's beak

sun green leaned into that megaphone
and said, "truth is all i seek"
security brought in some blowtorches
news cameras recorded the speech

"when the city is plunged into darkness
by an unpredicted rolling blackout
the white house always blames the governor,
sayin', 'the solution is to vote him out'"

on top of that great bronze eagle
sun's voice was loud and clear
she said, "powerco is workin' with the white house
to paralyze our state with fear"

it was a golden moment golden moment
in the history of tv news
no one could explain it
it just got great reviews

"hey mr. clean, you're dirty now too
hey mr. clean, you're dirty now too
hey mr. clean, you're dirty now too
hey mr. clean, you're dirty now too"

the imitators were playin'
down at john lee's bar
when sun went down to see 'em
someone followed her in a car

so now when she goes dancin'
she has to watch her back
the FBI just trashed her room
one of them kicked her cat

the damn thing scratched his leg
and he had to shoot it dead
and leave it lyin' in a puddle of blood

at the foot of sun green's bed

"hey mr. clean, you're dirty now too
 hey mr. clean, you're dirty now too
 hey mr. clean, you're dirty now too
 hey mr. clean, you're dirty now too"

john lee's was rockin'
 the imitators drove it home
 sun was dancin' up a heatwave
 for a while she was all alone...

when up walked a tall stranger
 he shadowed her move to move
 in perfect unison
 a supernatural groove

he took her by the hand
 and the room began to spin
 he said, "i'm earth... earth brown
 you know the shape i'm in

i'm leavin' tonight for alaska
 and i want you to come in the spring
 and be a goddess in the planet wars
 tryin' to save the livin' things"

"i'm ready to go right now,"
 sun green told earth brown
 "let's go back to my place,
 pick up my cat and leave this town behind"

hey mr. clean, you're dirty now too
 hey mr. clean, you're dirty now too
 hey mr. clean, you're dirty now too
 hey mr. clean, you're dirty now too

next day sun green got busted for pot
 and it made the headline news
 but then the charges all got dropped
 and the story got confused

she'd still like to meet julia butterfly
 and see what remedy brings
 and be a goddess in the planet wars
 tryin' to save the livin' things

but that might not be easy
 livin' on the run
 mother earth has many enemies
 there's much work to be done

"hey mr. clean, you're dirty now too
 hey mr. clean, you're dirty now too
 hey mr. clean, you're dirty now too
 hey mr. clean, you're dirty now too"

"be the rain" by neil young

save the planet for another day
 "attention shoppers, buy with a conscience and save"
 save the planet for another day
 "save alaska! let the caribou stay"
 don't care what the governments say
 "they're all bought and paid for anyway"
 save the planet for another day
 "hey big oil, what do you say?"

we were runnin' through the night
 never knowin' if we would see the light
 paranoid schizophrenic visions
 livin' in fear of the wrong decisions

we got to wake up
 we got to keep goin'
 if they follow us
 there's no way of knowin'

we got a job to do
 we got to
 save mother earth

be the ocean when it meets the sky
 "you can make a difference, if you really try"
 be the magic in the northern lights
 "six days....six nights"
 be the river as it rolls along
 "it has three eyed fish and it's smellin' strong"
 be the rain you remember fallin'
 "be the rain, be the rain"

yeah rain was fallin' and we're soakin' wet
 hail is beatin' down on our heads
 the wind is blowin' through our hair
 faces frozen in the frigid air

we got to get there
 alaska
 we got to be there
 before the big machines

we got a job to do
 we got to
 save mother earth

dream the hunter on the western plain
 "the birds are all gone, where did they go?"
 dream the fisherman in his boat
 "he's comin' home empty, he's barely afloat"
 dream the logger in the great northwest
 "they're runnin' out of trees, they got to give it a rest"

(there's no other way to cut it)
dream the farmer in the old heartland
"corporate greed and chemicals are killin' the land"

next mornin' sun was up at dawn
she looked around and earth was gone
dark visions he had last night
he needed peace, he needed light

he heard the rumble and
he saw the big machines
the green army rose
it was a bad dream

he had a job to do
he had to
save mother earth

be the ocean when it meets the sky
"greek freighters are dumping crap somewhere right now"
be the magic in the northern lights
"the ice is melting!"
be the river as it rolls along
"toxic waste dumpin' from corporate farms"
be the rain you remember fallin'
"be the rain, be the rain"
save the planet for another day
"be the rain, be the rain"
be the river as it rolls along
"be the rain, be the rain"

Appendix 4.2: 'falling from above' Script

"FALLING FROM ABOVE" - (Recently)

EXT. L GALLERY - MORNING

Earl gets out of his motor home with a recent painting. He walks up to the gallery and knocks on the door. No one answers. He leaves.

EXT. DOUBLE E PORCH - MORNING

Grandpa and Jed are sitting on the porch. Grandpa has his newspaper...

NARRATOR

Grandpa said to cousin Jed
sittin' on the porch

GRANDPA

I won't retire...
but I might retread.

Seems like that guy singin' this song
been doing it for a long time
Is there anything he knows
that he ain't said?

GRANDPA/JED

Sing a song for Freedom
Sing a song for Love
Sing a song for depressed angels
falling from above

Jed sits playing the harmonica.

NARRATOR

Grandpa held the paper
pretending he could see
but he couldn't read without his glasses on....

GRANDPA

How can all these people
afford so many things?
When I was young
people wore what they had on ...and mama said

GRANDPA/JED

A little love and affection
in everything you do
will make the world a better place
with or without you

NARRATOR

A little love and affection
In everything you do...

Jed continues playing the harp.

INT. BAR - EVENING

The Artist Lou and a fireman are having drinks, playing dice, and talking with some ladies at the Harbor bar.

NARRATOR

Slammin' down a late night shot
the Hero and the artist compared
goals and visions and afterthoughts
for the 21st Century
but mostly came up with nothin'
so the truth was never learned
and the human race just kept rollin' on...
Rollin' through the fighting
Rollin' through the religious wars
Rollin' down the temple walls
and the church's exposed sores....

Rollin' through the fighting
the religious wars...
Mostly came up with nothin'

EXT. DOUBLE E PORCH -MORNING

Jed continues playing the harmonica. Sun appears on the porch to give Grandpa his glasses.

SUN

Grandpa, here's your glasses
You'll see much better now...

NARRATOR

Said that young girl of Edith and Earl's.
But Grandpa just kept starin',
He was lost in some distant thought,
then he turned and said
to that young girl

GRANDPA

A little love and affection
in everything you do
will make the world a better place
with or without you...

NARRATOR

With or without you,
A better place...

With or without you
With or without you...

EXT. BARNYARD AT THE DOUBLE E - NEW MORNING

Edith feeds chickens in the barnyard.

NARRATOR

Hear that rooster crowin'
down on the Double E.
It's a new morning
dawning on the green

Bouncing off the Towers,
the sun's heading down to the streets
The business meeting
window shades are drawn

INT. DOUBLE E KITCHEN - NEW DAY

All the Green family, Grandpa, Earl, Edith and Jed are having breakfast. Edith is standing at the stove cooking. Grandma comes into the room to give Grandpa the paper. Sun picks up her books and heads out the door on her way to school...

NARRATOR

Another morning edition
is headed for the porch
because Grandma puts down the paper
before Grandpa raises his fork

A little love and affection
in everything you do...
With or without you...

EXT. DOUBLE E - SAME TIME

POV from behind Sun as she runs down the sidewalk to the lane and on through the gate...

NARRATOR

Hear the rooster crowing
down on the Double E...

TRANSITION SHOT OF A DRAWING OF THE LANE AND GATE. TURNING THE PAGE TO A DRAWING OF THE DOUBLE E.

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