

DISSERTATION

THE WORKING NARRATIVE:
ANALYSIS OF LINGUISTIC STRUCTURES AND STYLES IN LIFE STORYTELLING ON
SOCIAL MEDIA

Submitted by

Michael Humphrey

Department of Journalism and Media Communication

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Doctoral Committee:

Advisor: Patrick Plaisance

Marilee Long
Ashley Anderson
Sarah Sloane
Kate Mason

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ABSTRACT

THE WORKING NARRATIVE: ANALYSIS OF LINGUISTIC STRUCTURES AND STYLES IN LIFE STORYTELLING ON SOCIAL MEDIA

The stories we tell ourselves, and others, define us. What does that mean when we enter digital life and populate social media networks? In this dissertation, I examine the linguistic structures and styles of content created by people who are specifically prompted to tell a story from their lives.

This dissertation focuses on two distinct types of storytelling social media platforms: Cowbird is an self-mediating, open site that primes users with life story cues and prompts them to “Tell a story,” while Humans of New York is a filtered, gated-mediating platform run by one curator who posts pictures and short life narratives on Facebook, Tumblr, his own blog and several other social platforms. I sought to find distinct and/or common narrative structural and stylistic characteristics of the content. Using a combination of Quantitative Content Analysis and Linguistic Inquiry and Word Count (Pennebaker et al., 2007; Pennebaker et al., 2015), this project includes three related studies that begin with basic questions about narrative structures and concludes with two factor analyses of latent linguistic variables.

On Cowbird, the latent variables internal vs. external focus created two styles of storytelling, regardless of the structure of the stories. Humans of New York, on the other hand, had its own style that complicated the role of singular first-person in the narratives. I suggest the overarching phenomenon in this data is what I’ve termed a *working narrative*, which is in flux,

performative and filtering information in accordance with present goals, either to be encoded to long-term memory or forgotten. This suggests a model, the Digital Self Memory System, that combines insights from Autobiographical Memory (Conway & Pleydell-Pearce, 2000) and the Infosphere (Floridi, 2014) I conclude with a discussion about the philosophical implications of the *working narrative* in light of current and future technological affordances.

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DEDICATION

To Lorie Humphrey, John Stafford, Mary K. Meyer & Margaret Dart:

Believers and storytellers, all in their own way.

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CHAPTER 1 – INTRODUCTION

The Future of Memory

Shirley was a friendly and energetic resident of an assisted living facility in Raytown, Mo. At 88-years-old, the daily pattern of her life consisted of watching Jeopardy, working on puzzles, ruminating about the state of the world and having lunch with her friends in the neatly appointed facility dining room. She was in a stage Erikson (1963) labeled Ego Integrity, making sense of a life that began as a happy and safe childhood in a rural town, included two years of attending college before marrying and rearing successful and now far-cast children. She felt an overall satisfaction with a life well-lived, but there was one regret: She wanted to see the world and she never had. We met when I came to her facility to teach a life story writing class. Shirley was the only student that day. Instead of lecturing from a podium, I came to the front table where she sat and we talked. She told me the narrative of her life and then began to tell a specific story. When she was four years old, she received a tricycle for her birthday and it came with a clear rule: Never ride it past the end of the block. She rode to the corner and back to the porch, back and forth, until the pull of the bigger world called and she breached the invisible wall created by mother, crossing one street and another until she came to the door of her mother's best friend, three blocks away. When her friend returned Shirley to her mother justice was swift, beginning with a lecture about the dangers of a small child riding in the unsafe world and culminating in a bizarre punishment. Shirley was chained to a post on the front porch. When she told me this, perhaps noting an expression on my face, she became quiet. "No," she said a few moments later, "that's not right. That's not right. She chained my bike to the post, not me." She told me that story had gone through her mind for more than 80 years, but just now she could see it clearly. All this time she had confused the tricycle for herself.

Shirley's story was one of thousands I heard across a 10-year span while teaching adults to transform salient memories into short, written tales. It would likely have slipped into the deeper crevices of my own memory if not for the correction. In that moment of doubt or clarity, Shirley revealed the already complex world of memory and story. The human as storyteller is a sometimes beautifully, other times disturbingly, imperfect instrument.

But Shirley's type of confusion might soon be relegated to history. With the arrival of what Floridi (2014) calls the "Fourth Revolution," in which humans live in a digital "infosphere," the complications of memory, identity and story deepen and change. Young lives today are often mediatized from the very start, with algorithms constantly improving how to "make sense" of those uploaded moments, and some predict (Bell & Gemmell, 2010) that all of life will be digitized eventually, an exhaustively encoded story of life. The merging of physical and digital experience, predicts Internet entrepreneur Alistair Croll (2015), means that in 10 years all of us who are connected to the Internet will have an extremely comprehensive timeline. He writes, "This will fundamentally change how we live, love, work, and play. And we'll look back at the time before our feed started -- before Year Zero -- as a huge, unknowable black hole." Beyond its hyperbole, this quote has two key problems. First, if the opposite of a black hole is a bright light of digitized history, what do we make of the fact that most digital users present an idealized self (Hogan, 2010) seeking the "lowest common denominator" of what is normatively acceptable based on the lack of clarity of audience? Does an authentic self emerge? The second issue Croll addresses himself: "If everything we've ever liked and everyone we've ever met, becomes part of a documented history, how can we rewrite our own stories?" More fundamentally the question is, what do we mean when we say "life story?"

The Problem

Psychologists claim that the stories we tell ourselves and others define us, but what does that mean when we enter digital life and populate social media networks? Children growing up in digital cultures, nearly a century after Shirley, will have a very different relationship with memory, identity and story. If Croll's prediction is correct, their digitized lives will in theory accumulate into massive narratives. Not all data points, however, will be equal. One data set, what Neef (2014) referred to as "digital exhaust," is created peripherally in quotidian life, such as movements both online and offline, purchases, transactional communication, etc. Another set of data, often analogized to Goffman's (1959) presentation of self, accumulates by way of conscientious acts, such as updates, selfies, comments and other semi-casual actions of self-sharing across digital spaces. A final data set are the consciously-formed stories, crafted to be shared in digital space. The problem that this dissertation proposes to address will focus on the third data set: Content created when people are motivated to share a story from their lives. There are, of course, many ways to examine that question, but I will train a specific lens upon two specific subject areas: Structural and linguistic properties of posts in which a life narrative is privileged over other kinds of content, either by a social media site developer's primes and prompts or an interlocutor's set of questions.

Significance of the Study

Among the three narrative data sets discussed above -- digital exhaust, quotidian performance and purposeful life storytelling -- the third continues to emerge as a new and critical field in digital identity (Georgakopoulou, 2017). While not always the case, such communications take longer to tell, demand more executive processing and vulnerability and often do not naturally fit in the fast-paced, seemingly ephemeral and public or semi-public nature

of popular social media feeds. Digital life stories, however, do fight their way into social media feeds and, when they do, trigger deep interest in users. From Six Word Memoirs on Twitter to Humans of New York (HONY) on Facebook to Draw My Life on YouTube, some of the most transcendent content in social media spaces are driven by the desire to purposely tell stories. It is this subtle impact, as well as the possibility of finding deeper indicators of digital narrative performance and identity-crafting, that make digital life stories worthy of study. This attempt at basic science around the phenomenon of digital life storytelling is intended to provide tools and questions for a field of research that could provide deeper insight into how we live, perform and relate in new digital ecosystems. By concentrating on content analysis and linguistic inquiry, I hope to find clues as to what we do in digital spaces in latent, and hopefully revealing ways.

Two Definitions

For the sake of clarity and consistency, here are two definitions of two critical terms I use regularly throughout the document:

Gated-mediatization: Related to the concept of gatekeeping (Lewin, 1943), a process in which information is filtered or constrained, gated-mediatization happens in digital spaces when a person or groups create social media content using participants who don't directly represent themselves.

Self-mediatization: Borrowing from the political concept (Meyer, 2002), this is the act of directly representing one's self into social media spaces without an intermediary (other than the software platform).

Summary

The studies that make up this dissertation will focus completely on linguistic properties and one key element of my findings will remain focused on the relevancy of the texts

themselves. However, a well-articulated framework based on previous research and theory from multiple fields should also allow some insight into the human dimensions of life narrative on social media sites. With that in mind, I will present a literature review that pulls from Neuroscience, Psychology, Sociology, Computer-Mediated Communication, Intra- and Interpersonal Communication, Literature, Philosophy, Psychometrics and Linguistics. After review of the literature, I will present the conceptual framework and hypotheses, introduce the two key platforms I studied and describe the methods in detail before reporting and discussing the findings.

CHAPTER 2 – LITERATURE REVIEW

Life story is difficult to define. The extremes run the risk of either being so loose that story means all discourse or so restrictive that story does little but reflect traditional, Western and patriarchal norms (Smith & Watson, 2010; Page, 2010). Defining life story grows even more complicated when mode is considered. For example, a distinction exists between spoken, written and visual stories (Linde, 1986; Quesenberry and Squire, 2016) and another form of story emerges in the combination of forms (Speedy, 2017). How those distinctions change again in a “networked public” (Boyd, 2008) of the Internet, especially social media sites, extends the complexity. Yet if we lived “storied lives” as Bruner (1987) argues, then it is worth examining whether we *post* storied lives as well. Starting with chat rooms and moving in step with the evolution of social media activity (e.g. Turkle, 1995; Morley & Robbins, 2002; Turkle, 2005; Buckingham, 2008; Boyd, 2008; Elwell, 2014; Schwartz & Halegoua, 2014; Georgakopoulou-Nunes, 2016), it is clear today that the affordances and limitations of technologies will keep the question of digital life narratives in flux for the foreseeable future.

At all stages of life narrative, there are interactions in our minds and in our social spheres that confirm certain events, places and times are worth remembering and telling. The stories that emerge from these memories play a key role in the identification of the self (McAdams, 1985). The most recent version of this process is digital self-mediatization, creating a representation of self on online platforms. Self-mediatization is not new. From diaries to home movies, humans have used media to capture the self for millennia. But the affordances (Norman, 1999) of the Internet -- where producing information online is as easy as consuming it -- catalyzed a new set of identity possibilities (Turkle, 2005). An individual's multiple online and offline identities –

and the corresponding cues they receive in social interactions – also interact and affect each other in defining a unified whole, as explained by Hermans' “dialogical self” (1996):

“The terms voice and position can be metaphorically used to depict the dialogical self as an imaginal space that is stretched between a variety of positions. The self then is successively, or even simultaneously ... located at different positions in an imaginal landscape and is able to move between these positions. In short, the self is a process of dialogical movements in an imaginal space” (p. 44).

Life online adds more “positions” to the dialogical movements. Each person who chooses, and is able, to enter the online domain makes choices about how much of her or his offline self will be represented. From nuanced differences to well-curated impression management to complete role changes, the Internet both allows and forces differences between our online and offline selves (Turkle, 2005; Turkle, 2012). As digital communication has become more widespread, and social interaction is experienced more often online, the cues received from social networks sites naturally play larger roles in developing people's identities (Boyd, 2008). The dialogical nature of a digital self, if to be studied, should be contextualized from its latent beginnings to its manifestations in digital space.

Autobiographical Memory

To understand how a digital identity emerges through interactions, it is important to start with the most ancient computer, our brain. The active maintenance of memory in the brain is not, as often perceived, a static storage of impressions and corresponding emotions but rather, as Kandel (2001) explains, an “extensive dialog between the synapse and the nucleus, and the nucleus and the synapse” (1037). While neuroscientists still debate the necessary agent(s) under this interaction, it is largely agreed that an electro-molecular dynamic occurs in perpetuity during the life span of a memory. Memory begins with floods of activation in the hippocampus, but ultimately extends to multiple regions of the brain if an event is to be retained. Why this occurs,

at least at this point in our scientific history, is better explained with psychology's premise known as autobiographical memory.

The core premise of autobiographical memory is that underlying all memories, those "transitory mental constructions," (Conway & Pleydell-Pearce, 2000, p. 261), is a knowledge base highly sensitive to cues that arise during retrieval of memories. Conway and Pleydell-Pearce argue that conscious recall of a memory is controlled by executive processing based on current goals and motivations. Those goals determine, in fact, whether a memory is activated or suppressed. For instance, if at age 15 a person is learning to drive a car, she or he may recall the process of successfully learning to ride a bike, while temporarily suppressing memories of crashing the bike. So while the term autobiographical memory might elicit visions of ruminations about the self, the primary drive of such memory is more immediate. In fact, as Grysman and Hudson (2011) remind us, the term "self" in the Self Memory System (SMS) does not refer to a person that exists in the brain, but a thematic gathering of memories that reflect his or her behavior. That behavior naturally includes stories of the self in action and in thought. These memories serve two purposes in regards to the sense of self. Correspondence assures that memories adhere accurately to what actually happened. Coherence assures that those memories are organized alongside a stable conception of self and how that self interacts with others and the natural world.

The knowledge base, known as Autobiographical Knowledge, has levels of specificity, conceptualized in three categories: lifetime periods, general events and event-specific knowledge (ESK). Conway (1996) offered an example of a specific memory to show how the levels interact with each other to construct broad knowledge of events. I will do the same here, using a personal story:

When I was five years old, a neighbor girl named Paula asked me if I would get her a candy bar. Not having one on hand, but wanting to impress her, we set off on an adventure to K-Mart, nearly a mile away from the trailer court where we lived. At the counter, we laid a Hershey's bar and a \$500 bill from the Monopoly game board that I had stolen from my parent's closet. The K-Mart teller's look foretold the trouble that was headed our way.

The lifetime period (my early childhood) is associated with the trailer court, the neighborhood K-Mart and Paula. The general event is trekking from home to the K-Mart counter. The ESK is the candy bar, the monopoly money, the question Paula asked me and the feeling of dread spurred by the teller's expression. Conway and Pleydell-Pearce explain the interactivity between these levels: "Knowledge stored at the level of a lifetime period provides cues that can be used to index a proscribed set of general events and knowledge at the level of general events indexes ESK" (Conway & Pleydell-Pearce, 2000, p. 264).

Much of the knowledge base as described by Conway and Pleydell-Pearce is a product of specific episodes that gather into a sense of self via organization of memories. This facilitates another form of interaction because, as Grysman and Hudson (2011) observe, "an understanding of the self emerges from remembered episodes, and that understanding subsequently affects how a person remembers the episodes" (p. 502). This insight fits nicely with life story models of identity discussed later, but the memory-organizing phenomenon described by SMS has been tested to largely consistent effect over the past decade (Grysman & Hudson, 2011) and showed subjects remembered lifetime periods more quickly than general events, which were recalled more quickly than ESK (Haque & Conway, 2001). Another study (Conway & Holmes, 2004) demonstrated that older adults remember events in life stages that correlated with developmental concerns of other life stages. In their 2011 experiment, Grysman and Hudson elicited memories of personal events either after a priming questionnaire about the self or a control of a distractor puzzle. Subjects were then asked to write about an episodic memory, including details and their

reactions, and the writings were coded for event types (episode vs. turning point, culturally acknowledged meaning vs. unique personal meaning), narrative elements (evaluation, coda, action, orienting) and word counts. They found that turning-point event types used greater amounts of evaluation and first-person pronouns than other episodes, which the researchers argue shows the process of coherence-making rather than focusing on correspondence (accuracy in storytelling). They conclude that not only do goals affect the search for memories, but also the manner of conveying memories, especially that writers of turning-point memories were less concerned about sharing accurate information and more concerned with creating coherence with their own understanding of self. These findings are especially intriguing when one considers the next type of interaction: The identification of self, especially in interaction with others.

Identity and Performance

Another dialogue exists between the minds' identification of the self and the outside world's acceptance or rejection of that self-concept. The term that often captures this dynamic is impression management. Two discrete ideas, performance and performativity, hover within the gravity of impression management and, in the literature that abounds which attaches itself to the term, these ideas sometimes conflate, sometime divide and often co-exist, though not as two sides of a coin. This shape-shifting of performance and performativity was true before the Internet, and well before social media, but the emergence of digital life accelerated the dynamic. The conflation is warranted at times, which we will see, but often not. It is worth re-examining both concepts, briefly, to see how the two work together when addressing the specific question of how life story is complicated by digital space.

In 1955, during a series of lectures at Harvard University that would later be compiled into the book “How to Do Things with Words,” (1962; 1975) J.L. Austin defined what he called performative utterances:

- A. they do not 'describe' or 'report' or constate anything at all, are not 'true or false'; and
- B. the uttering of the sentence is, or is a part of, the doing of an action, which again would not normally be described as saying something (p. 5).

A “performative,” such as “I name this ship...” at a christening or “I do...” at a wedding, is spoken, as Austin explains in byzantine syntax, “not to describe my doing of what I should be said in so uttering to be doing or to state that I am doing it: it is to do it” (p. 5). Austin specifically means speech acts, which has been a point of debate when questioning whether the concept belongs in digital research, especially in the Internet’s textual phase, which appears to be increasingly archaic. I will address this again when we come to Butler’s use of performative utterances.

A few years later, Goffman (1959) developed the seedlings of another concept, which is largely concerned with the classic communication structure of sent and received messages. In Goffman’s case, the “message,” which he refers to as “information,” is about the nature of an individual. Goffman writes, “... the individual will have to act so that he intentionally or unintentionally *expresses* himself (sic), and the others will in turn have to be *impressed* in some way by him” (p. 136). Goffman writes that these expressions offer two distinct signs, and here again we find ourselves in the midst of live action, because the first sign is the impression that one *gives*, “verbal symbols or their substitutes which he uses admittedly and solely to convey the information that he and the others are known to attach to these symbols” (p. 136). The second sign of the expression is that which it *gives off*, “the wide range of action that others can treat as symptomatic of the actor ...” (p. 136). What makes this performance, rather than simply expression, is the heart of Goffman’s point: “The individual does of course intentionally convey

misinformation by means of both of these types of communication, the first involving deceit, the second feigning” (pp. 136-137). What might sound like a cynical view of human beings is, in fact, simply management of impressions, a basic desire to adjust the inference-making of others in our lives, both strangers and intimates. In social media, where the affordances to manage impression are stronger than in offline life, this instinct to manage others’ impression of us is confused as narcissism. To lose all control of this management is to create a heavy burden on others and culture. As social animals, management is preferred to isolation. “Thus, when an individual appears in the presence of others, there will usually be some reason for him to mobilize his activity so that it will convey an impression to others which it is in his interests to convey” (Goffman, p. 137). So we become actors on a stage, the audience those who observe us, we play different parts and dress the role, often constrained by age-old norms that precede us. This is a critical interaction, because it plays a large role in individuals establishing and reinforcing their identity. But it is not so much agreement or disagreement that determines our maintenance of identity. It is attention. In two experiments that studied how listener behavior affects a storyteller during interpersonal engagement, Pasupathi and Rich (2005) found, “Distracted, but not disagreeable, friends tended to undermine participants’ attempts to verify their self-perception of being interested in an activity (Study 1) or their self-perception that an event was typical for them (Study 2)” (p. 1051). Identity, then, is a dialogue with others and with ourselves. It is in that light that we can examine how life story emerges both in public life as we have lived it for millennia and this new digital life into which we now embark.

Big Stories vs. Small Stories

What logically follows from the interaction of autobiographical memory and impression management is McAdams’ life story model of identity (1985; 2001). McAdams argues that

identity itself is storied, meaning all the critical aspects of narrative -- setting, scenes, character, plot and theme -- are found in the life story of human beings. But these stories are flawed. Remembered events are usually the basis for life stories, but stories are constructed by appropriating information to help them make sense to both the teller and the audience. They become, “psychosocial constructions, coauthored by the person himself or herself and the cultural context within which that person’s life is embedded and given meaning” (McAdams, 2001, p. 101). This is the next critical interaction, between the storied self and the culture in which the story was constructed.

McAdams’ “point of departure” (p. 101) for his life story model is Erik Erikson’s (1963) ego identity, which argues that in the adolescent stage of development, humans (at least in the Western context) confront their identity (including abilities, proclivities, social standing) vis-a-vis the cultural roles afforded them, including ideologies, occupations, life plans and projects. Identity is the integration of the varying roles and relationships that make up a life. Individuals negotiate the differences between “selves” when we find ourselves in various contexts, which McAdams calls a “synchronic” configuration. They also integrate the self across different time periods, which is a diachronic configuration. McAdams uses the example of a former born-again Christian who is now agnostic and says the individual must make sense of that difference as time-based.

None of this is to precisely conflate the self as described in autobiographical memory with identity described in Erikson via McAdams, who explains, “identity is not synonymous with the ‘self’ or the ‘self-concept’ or even with ‘who I am’; rather, it refers to a particular quality or flavoring of people’s self-understanding, a way in which the self can be arranged or configured” (McAdams, 2001, p. 102). The notion that identity emerges in the teen years only

begins to make sense in this definition, because as Habermas & Bluck (2000) claim to have confirmed through a meta-analysis of literature, it is in adolescence that people develop the cognitive tools necessary to arrange and configure identity in the sense of the life story model. They argue that there are four types of coherence that hold a sense of self together: temporal (linked by time), biographical (linked by social norms of what makes a person's story), causal (explanations for what caused something to happen) and thematic (gathering stories under similar meanings).

McAdams turns to Bruner (1986) and Ricoeur (1984) to define the act of storytelling as it applies to his model, defining storytelling as “the vicissitudes of human intention organized in time” (McAdams, 2001, p. 103). Intentionality is at the heart of the act, which will become more critical when we consider an alternative model to life story as identity. But before we move to those arguments, which are critical for communication scholars interested in studying how life storytelling and identity formation manifest themselves in digital formats and especially social media, it is important to fully consider the McAdams' (2001) argument about intention in storytelling. He writes, “As intentional agents, human beings act on their desires and their beliefs to accomplish goals. Stories organize and convey these motivated action sequences extended in time” (p. 104). This intention organizes the identity that is created in adolescence and continues throughout much of the rest of our lives and it fits nicely the prevalent theory of autobiographical memory which, “helps to locate and ground the self within an ongoing life story featuring extended lifetime periods or chapters, knowledge about typical or characteristic life events, and specific and sometimes vivid details of particularly well-remembered scenes” (McAdams, 2001, p. 117). Bamberg (2014) writes that life stories in McAdams' model takes on a much larger role than “recapitulations of past events and episodes, that they have a defining character” (Bamberg,

2014). He quotes McAdams (2006) making his boldest statement that “our narrative identities are the stories we live by.” Bamberg, who along with Georgakopoulou, has led the way toward an alternative view of narrative and identity refers to McAdams’ model as big stories or “epic scripts.” He writes:

Lives can be told as following an epic script or as if consisting of unconnected patches. Most often, though, lives are told by depicting characters and how they develop. Character, particularly in modern times, rests on an internal and an external form of organization. The former is typically a complex interiority, a set of traits organizing underlying actions and the course of events as outcomes of motives that spring from this interiority. The latter, an external condition of character development, takes plot as the overarching principle that lends order to human action in response to the threat of a discontinuous and seemingly meaningless life by a set of possible continuities (Bamberg, 2014).

There are problems, he writes, that scholars have noted for decades with seeing life as primarily narrative by nature. Bamberg cites Lejeune (1975), who addresses the most challenging aspect of life storytelling, that of verisimilitude. In what he refers to as the “autobiographical pact” -- made between writer and reader -- the textual qualities of life story are blurred by the possibilities that its conventions (first person singular narrator and character) can in fact feign the existence of a real story being told, the opposite (third person singular narrator) might in fact convey actual events as best remembered. Sartwell (2000), on the other hand, questions whether the life experiences themselves have the meaning and continuity that scholars place on them. Most importantly to Bamberg’s point is the fact that stories are situated, or reliant on the context of their position in time, place and culture, resulting in “a number of researchers [who] have launched a large-scale critique of the biographic turn as reducing language to its referential and ideational functions and thereby overextending (and simplifying) narration as the root metaphor for the person, (sense of) self, and identity” (Bamberg, 2014). Despite this, argues Georgakopoulou (2007), big stories have a privileged position in narrative research. In their counter-argument, Bamberg and Georgakopoulou (2008) write:

“In our individual work, we have begun to give voice to and argue for the ‘worthiness’ of stories that are still in the fringes of narrative research and that we call small stories both for literal (these tend to be brief stories) and metaphorical reasons (i.e., in the spirit of a late modern focus on the micro-, fleeting aspects of lived experience)” (p. 378).

Bamberg (2014) argues that focus on small stories addresses key criticisms of life story research by studying how people as agentic actors position themselves in everyday roles.

“This model of positioning affords the possibility of viewing identity constructions as two-fold: analyzing the way the referential world is constructed, with characters (self and others) emerging in time and space as protagonists and antagonists. Simultaneously, it is possible to show how the referential world (what the story is about) is constructed as a function of interactive engagement, i.e. the way the referential world is put together points to how tellers ‘want to be understood,’ how they index their sense of self” (Bamberg, 2014).

In both narrative research and the building of identity both intrapersonally and interpersonally, “small stories” offer an alternative perspective focused on how people construct a sense of who they are. They do not, however, have such a clear indication of intentionality. Small stories as content, for instance, might simply report happenings as they occur as opposed to explicating the need or want of the speaker. As a form, small stories on their face do not intend to construct larger meanings. In contrast, Bamberg argues, epic script research analyzes stories as representations of who people are. This seems, at first, like a chasm between perspectives that cannot be bridged. In fact, it might be, but Freeman (2006) does not buy the dualism. He writes:

“Neither small stories nor big ones have privileged access to ‘the’ truth. Rather, they tell about different regions of experience, one that involves the quotidian workaday world of incidents and exchanges, of routine talk about this or that, and another that involves a kind of holiday, in which one takes the time to consider what it is that’s going on. This holiday, however, is not something one takes from life itself. It is an aspect of life itself - one, in fact, that is too often in short supply” (p. 137).

Once again, however, merging the two arguments creates the problem of everything becoming “storytelling,” something we see in media regularly these days. Living itself, and the most rudimentary capturing of living, could qualify as story. The diary becomes memoir. In

digital terms, life storytelling runs the risk of being conflated with lifelogging, which is, “to record and archive everything that happens in your life or during selected periods of your life. This includes text, photographic, audio and video material ...” (Achilleos, 2003). Researchers Bell and Gemmel (2010) argue that lifelogging’s most important outcome is to create massive quantities of self-created data that might be used for improvement of health, work, education and lifestyle, even developing a virtual personality that might live forever. Life stories could, in fact, share space with lifelogging, but they are not the same thing. For example, when Facebook developers and marketers speak of capturing a user’s life story, it would often be more accurate to say the platform is capturing part of a user’s lifelog (which admittedly does not sound as engaging for marketing purposes). The objective capturing and retrieval of life’s minutiae is the antithesis of the definition for life narratives by Bruner (1987) who writes,

“... eventually the culturally shaped cognitive and linguistic processes that guide the self-telling of life narratives achieve the power to structure perceptual experience, to organize memory, to segment and purpose-build the very ‘events’ of a life. In the end, we become the autobiographical narratives by which we ‘tell about’ our lives” (p. 14).

That is to say that how we, the teller, shape our life story is ultimately the way we create experience of life itself. How we share them, mediated or not, shapes part of that experience, but it is not necessary to share them digitally. Bell and Gemmel, in fact, make their own distinction about this -- calling the online sharing of our data “lifeblogging” -- and advise against it. The data is meant to be utilitarian, not necessarily self-expressive. They instead suggest writing life stories in the more traditional sense. The data gathered in lifelogging may, in fact, inform those stories someday, but here is where another caution emerges. A mere recapitulation of objectively-gathered facts could impede an important part of life storytelling, argue researchers (McAdams, 1985; Bruner, 1986) because we are narrative beings and narrate our lives in ways, outside of mere facts, that say important things about who we are. Intentionality, then, to tell a

story becomes a critical element. That, arguably, is the crux of the distinction between small and big stories, at least on an academic level.

A key question is whether people think in terms of classic narrative structure when asked to consider a life story. If they do, then self-mediatization that responds to the prompt, “Tell a story,” will likely write a story in a classically understood narrative way, using a narrative arc, or a series of scenes and expositions, which include a protagonist (most likely the narrator), who describes or implies a desire to attain or maintain a certain goal (e.g. a candy bar at K-Mart) or state of being (e.g. time with a loved one), which culminates in a climax where the desired outcome is won or lost and, resulting in consequences and, at times, lessons learned from that story. On the other hand, if the “small stories” scholars are correct, the prompt “Tell a story” could result in snapshots of life, such as vignettes, with a brief, often rich descriptions, of a time and place without connecting to previous and future scenes to develop an arc of cause-and-effect actions.

This could be useful to determine because, beyond the scholarly arguments about what constitutes a privileged place in literature, the way people seek cues (and receive them) could have real implications on whether their stories are validated and, thus, absorbed more deeply into their own identities. As Adler and McAdams (2007) explain, “The social sharing of self stories not only serves several psychological functions ..., but also helps to reinforce the personal meaning of the events being recounted for the storyteller” (p. 98). This confirms the work of Stone (1990), who theorized that “One’s identity is established when other place him [sic] as a social object by assigning him the same words of identity that he appropriates for himself or announces” (p. 143). This is an intriguing insight for the age in which those identities travel online.

Life Story in the “Infosphere”

The possibility of identity-confirmation is complex as we enter the “Infosphere,” (Floridi, 2014), a system of highly interwoven dialogues between offline and online identities, between online identities and digital ecosystems (e.g. identity on Facebook vs. Reddit vs. Twitter), between those various identities and other digital citizens and between citizens and algorithms. Floridi argues that we find ourselves in a fourth revolution as human beings, the Turing revolution, (following the Copernican, Darwinian and Freudian revolutions). a world where “we, as users, are increasingly invited, if not forced, to rely on indicators rather than actual references” (p. 58). Or to put it another way, the brand becomes the thing, potentially even for identity. Floridi uses LinkedIn as an example: Profiles are individuals, connections are her or his relevance, endorsements are his or her competence. We are *forced* into this by the proposition of comparative disadvantage that becomes increasingly intense when we do not adopt technologies. If we want to keep up in work, in sociality, in surveillance of our world, etc., we are eventually forced to adopt new tools for maintaining the pace. This is also the farthest reaches of a digital life narrative, individual identities scraped of its content, both body and metadata, and uploaded. Not simply performed, or performative, as we see in contemporary social media sites’ interfaces, nor just tracked by those same sites’ software. The Infosphere is the site of a tug-of-war between controls (through affordances of impression management) and pressures that stem from social presence (what some refer to as FOMO or “fear of missing out”).

Working from Bakhtin’s metaphor of “voice,” defined as the speaking consciousness of an individual, Hull & Katz (2006) argue that individuals (and groups) can fashion identities but through dialogical means with cultural and historical contexts. In each age, individuals and groups use the resources of their time to create agentive (autonomous) voices. They studied an

adolescent and a young adult's use of multimedia storytelling at a community technology center and concluded agency and social pressure can run both ways. "These authors have helped us to think about how digital stories, as instances of verbal performance, do not simply reflect social life, but have the capacity to comment critically on it as well" (Hull & Katz, 2006, p. 33). This is a classical view of digital life as text, but Elwell (2014) takes the next step, one in which online life is no longer simply a text but a life itself and intertwined with offline life, producing what he refers to as a "transmediated self." The concept borrows from Jenkins' (2003) definition of a story told across several media and continues a line of scholarship (Turkle, 1995, Boyd, 2008; Schau, Schau & Gilly, 2003; Hodgkinson & Lincoln, 2008) that argues our offline and online identities are informing each other in increasingly meaningful ways. For those who own smartphones or other mobile devices and are able to connect online almost anywhere and at any time, being a transmediated person is nearly complete. A simple example are people who go to see the Gateway Arch, snap a selfie on their smartphone and upload the picture to Facebook, receiving social cues (likes, comments, shares) from "friends" before they even leave the monument. Those people are effortlessly moving between an online and offline experience, thus making them "transmediated." Floridi (2014) refers to this merging as, "the most powerful technologies of the self to which we have ever been exposed. Clearly, we should handle them carefully, as they are significantly modifying the contexts and the practices through which we shape ourselves" (p. 59). How much that identity stays coherent over time is an important question, however, as digital memory is always fragile and the contexts in which an identity rests can change with a click.

"Change the social conditions in which you live, modify the network of relations and the flows of information you enjoy, reshape the nature and scope of the constraints and affordances that regulate your presentation of yourself to the world and indirectly to

yourself, and then your social self may be radically updated, feeding back into your self-conception, which ends up shaping your personal identity” (Floridi, 2014, p. 60).

This ability to shapeshift is more troubling than it might seem at first, if you consider the role life story coherence plays in well-being (Baerger & McAdams, 1999). It is also a departure from Erikson, who saw identity as a fairly stable base on which small iterations are made. It speeds up and de-contextualizes the “knowledge base” of autobiographical memory, which in turn is augmented by a digital memory. That too is a problem, as Floridi notes, because the ability to forget, to filter out, is a critical skill of identity formation.

And then the “digital gaze,” as Floridi calls it, moves as quickly as the identified figure. What once was an affordance for anonymity, is now a digiscape of identity ranges, nonymous meets anonymous, authentic meets inauthentic, human meets algorithm. Where this gaze comes from, what it wants, what it is made of, are unclear.

“Questions about the identity of something may become paradoxical if they are asked without specifying the relevant interface that is required to be able to answer them” (Floridi, 2014, p. 66).

And yet, this is a system of platforms of increasing importance, different worlds sliding in and out of each other as well as with the “real world.” Where is the need to be authentic here? How do you know who you are addressing?

For the first generation of novice Internet users, the possibility of digital life meant freedom. The early culture promoted a wide gap between offline and online identity, so as Turkle (1995) puts it, to, “adopt an online persona” is to “cross a boundary into highly-charged territory. Some feel an uncomfortable sense of fragmentation, some a sense of relief. Some sense the possibilities of self-discovery, even self-transformation” (p. 260). There were communities where the gap between offline and online self was widely varied, most notably WELL or Whole Earth ‘Lectronic Link, where some took on different personas, while others considered it “cheap

fuel” and Turkle (1995) reports: “These people note that they want to reveal themselves to the members of the community that they care about” (p. 205). But on some sites, such as many MUDs (Multi-User Domains), the online persona need not even be human, let alone closely aligned with the characteristics of an offline self. Much of this was driven by a constraint on affordances, the ability to “see” each other, because the early Internet was predominantly text-based, with very low capacity or bandwidth for other media such as images or video. Performing a textual self could mean very little pressure to show a “real life” self. This led many scholars to contend that, since impression is largely driven by non-verbal cues, the ability to form accurate impressions online were limited. Walther (1990), through critique and extension of early Computer-Mediated Communication (CMC) theory, turned this concept on its head. For his dissertation, Walther designed an experiment in which undergraduate students were introduced into zero-history groups in one of two conditions of communicating: Asynchronous and online or real-time and face-to-face (FtF). They then accumulated messages among their assigned groups, including by doing tasks, with only verbal messages afforded in online communication and all the verbal and nonverbal messages were available in FtF communication. Walther found that in many situations, the accumulation of messages created better impressions and more interconnection for the online group. “That CMC exhibited social penetration-type relational patterns may be the result of the over-time effects of uncertainty reduction and selective self-presentation in an asynchronous environment” (p. 85). The problem was defining an asynchronous environment. Was it a community, an ecosystem, a reflection of the offline world, a new world, etc.?

Other scholars were considering this dilemma of defining these digital environments. Often referred to as cyberspace, but also revealed in other descriptions of space such as

“dungeons” or “domains” of MUDs, “chatrooms,” “websites,” “third spaces,” “multidimensional,” “electronic worlds,” “middlewor(l)d,” “electronic frontier,” “virtual communities,” even to a lesser degree “interface” (Selfe & Selfe, 1994). The computer was affording not so much a thing to see, like a text, but a place to be but, at the same time, it was not the opposite of “text” either. We know that artifacts of text already had the power to “transport” readers/listeners to another place and/or time, but usually the reader/listener experienced transportation as an imaginative act, not one in which real life could be lived.

None of this is the same as a page, nor an extension of earth, but rather a new place. This space allows for even more possibilities, a chance to move, to even multiply the probabilities of experience. Malthroup (1989), writing about the fictional storytelling possibilities, theorizes:

“Instead of offering a single, exclusive arabesque through a universe of possibilities, these fictions allow readers to choose among multiple paths. ... The reader needs a great deal of curiosity and resourcefulness to survive in this unknown territory and no doubt none but the very brave will attempt the journey” (p. 261).

This type of language, that of mind-bending, or rugged, space is common. As Grigar (2005) writes of two digital storyworlds: “The underlying question driving both *Glide* and *The Maze Game* is, ‘What does it mean to move through a maze of language?’” (p. 380). Some, like Ryan (2002), saw this space as a medium shift, many more saw it as an experience in itself. There is a pleasure of navigation inside a story world, “independent of the content of the spaces” (Murray, 1997, p. 129). But Don (1990) resists some of the notion of space, writing,

“Ironically, in the computer environment ... we have lost the physical, concrete entity of the page and re-placed it with a vague ‘virtual’ space. A ‘false’ spatial representation is then created to orient the viewer” (p. 386).

This is always the case with effective storytelling -- a virtuality emerges, where even communities can be created between real or fictional characters, and in which the reader/viewer can control on some level. The difference is the imagination now had new affordances (Ryan,

2004) to impact virtual stories, some which offer chances to move more freely, while others offer the ability to co-create for a broader audience to consume. As the space becomes defined, so does the agency for those interacting within the space. If we are “acting” in the space textually, and the space naturally records these actions, are we entering as actors and leaving as authors? Murray (1997) resists that notion: “There is a distinction between playing a creative role within an authored environment and having authorship of the environment itself” (p. 152). This seems mostly to be concerned with the concept of “authorship,” which Sloane (2000) addresses through the famous Foucault (1979) question, “What matter who’s speaking?” (Sloane, 2000, p. 11) and the extension of Barthes and Calvino that the author “disappears” in the logical extension of Foucauldian emphasis on how something was said, not who said it. The individual as author is subverted in service to creating space through generalized expression, in the way the asphalt of a city street is not considered “authorship” in any meaningful way. Sloane expresses disenchantment with Foucault as her own authorship of the book grows. It *does* matter who is speaking when *we* are speaking. Seen as a practical matter, authorship is alive and well, but the life is a painful one, especially if you think of the copyright fights between platforms and creators, etc. It is also the most important for life stories, because digital authorship is theoretically digital identity. Without authorship, where would digital culture be? The anonymous cesspool or the harmonious hive-mind? Likely neither, or something close to both, a hybrid, depending on which space you found the text. These were standing questions pre-Internet and in the early Internet and, frankly, have not satisfactorily been answered to this day.

As online affordances increased over time, including the ability to send and receive visual cues, and as greater numbers of users joined, no one unified theory has emerged. While anonymity was still widely prevalent in 2000 (as it is today), partially because of choice and

partially because of large numbers of strangers on one platform (McKenna, 2000), there was no clear indication this was predominantly good or bad. McKenna concluded:

“The anonymity of Internet communication is a special and important difference between it and other forms of social interaction. Although some individuals hide behind it to propagate hate, for many others it is a liberating mode of communication, especially where social or government sanctions exist for the expression of those ideas or beliefs” (p. 68).

By the middle of 2000s, researchers were finding that presence and community (Lindemann, 2005) and the desire to craft a “real” self in digital space as form of self-empowerment (Hull & Katz, 2006) were emerging as gratifications for online use. Facebook, Twitter, Instagram and more recent iterations, which prompt us to connect with both offline-based connections as well as online-only, benefited from this movement, which Smith & Watson (1996) refer to as “everyday uses” of autobiography. A host of possible relationships follow.

By 2008, Zhao, Grasmuck & Martin were demonstrating that, at least on Facebook, anonymous sites were affording, and one might argue prompting, users to build a smaller gap between online and offline selves, which they often did by “showing” their identities through preference choices (TV shows, companies) and group allegiances. Boyd (2008), in researching young people on emerging social media sites, found a desire to align offline selves with online selves.

“In unmediated environments, it is easy to take bodies -- and the roles that they play -- for granted. By locating a person in space and time, a body signals presence by its very being. A body is loaded with cues about a person’s identity; gender, race, and age are written on the body in ways that are often difficult to obscure. Through fashion and mannerisms, bodies can be used to convey a wide variety of attitudes, emotions, affiliations, and identity information. Bodies, in the traditional sense, do not inherently exist online. By default, a person’s digital presence is little more than an IP address. While bodies in the corporeal sense are not present online, Sundén argues that the digital world is not free from the constraints of bodies of materiality for ‘the virtual does not automatically equate disembodiment.’ How people represent themselves and interact online is fundamentally influenced by their embodied experience” (pp. 126-127).

The concept of using digital life as a way to empower an embodied life was not a new idea, but the idea that the two are no longer highly bordered is still taking root in general society. With the greater controls of digital life, impression management was not driven by performance as much as curation of the self (Hogan, 2010), a desire to create an exhibition in which our better selves could be consumed. But, at the same time, it is becoming clear that the exhibition is not completely in our control. Timelines, which Facebook and Twitter once favored as user interfaces but have since re-engineered for economic reasons, currently remain as a secondary feed (you must choose to go to a person's timeline) and create backward narratives, automatically generated through our digital actions (Page, 2010; Marcus, 2013). In addition, our digital actions do not remain purely digital in their implications, nor do they simply record and archive our offline lives, but instead, online and offline life blur (Elwell, 2014). Thus, as Papacharissi (2013) argues,

“The process of self presentation becomes an ever-evolving cycle through which individual identity is presented, compared, adjusted, or defended against a constellation of social, cultural, economic, or political realities” (p. 207).

One way to examine this, briefly, is through the construct of gender.

Performance and Performativity Example: Gender

Gender is a good example of broader identity formation, because it encompasses social, cultural, economic and political pressures. When we began to live our life stories online, and narrowed the gap between online and offline lives, we naturally introduced gender into that mix. This was a performative act (ala Austin), if not a purely a speech act per se. When we sign up for an account on Facebook, Zhao, et al. (2008) showed, we are prompted early to choose a gender as part of our profile, in a digital sense we are selecting an digital utterance that enacts gender in a digital space. “Male me,” my click might imply. This notion is driven by the performative acts of gender as conceptualized by Butler (1988), who writes, “gender is in no way a stable identity

or locus of agency from which various acts proceed; rather, it is an identity tenuously constituted in time -- an identity instituted through a *stylized repetition of acts*” (p. 519). This is explained as an act online by the motivation that Boyd (2008) describes, one of embodiment, the necessary act of blurring the line between the physical self and the digital self, neither a representation entirely of one or the other but a recursive relationship between both selves. The ability to retell the self, by adding more recent material to the timelines, offers a certain amount of flexibility in particulars, but not necessarily the whole. When more than 2 billion people join social media sites, many of which entice a narrow gap between online and offline selves, cultural norms from the offline world upload with them. And as Butler (1988) explains:

Embodiment clearly manifests a set of strategies or what Sartre would perhaps have called a style of being or Foucault, ‘a stylistics of existence.’ This style is never fully-styled, for living styles have a history, and that history conditions and limits possibilities. Consider gender, for instance, as a corporeal style, an ‘act,’ as it were, which is both intentional and performative, where ‘performative’ itself carries the double-meaning of ‘dramatic’ and ‘non-referential’ (pp. 521-522).

Butler has not so much conflated the two ideas of performativity and performance, but rather found a transcendent use of the two concepts, properly formed as distinct but also interacting. We are both staging, or curating, our identities in digital spaces, but we are also doing, rather than referring to doing, even when we tell stories from the offline world. For the first two decades of common online life, the predominant means for this styling has been the written word. That was bound to change as greater bandwidth made the Internet more visual, but even in the increasingly visual web, the role language plays is essential in understanding how “a stylistics of existence” emerge as identity online. I will pick up this concept below, when I discuss linguistic properties of life storytelling.

Primes, Prompts and Mediatization

The next interaction exists between the digital cues and users who respond to them. Priming, visual and textual cues that trigger long-term memories known as “schema” can produce readiness to respond to particular goals (Klein, et al., 2002). The goal on a social networking site, arguably, is to attract interaction, which usually means receiving positive cues (though not always). Usually there are multiple opportunities for socially-affirming rewards, such as reads or views, nonverbal recognitions (likes, retweets) and verbal recognitions (comments, preferably positive). One element of a platform’s prime, along with visual cues and the placement of valued content, is found in the content prompt. Facebook is currently “What’s on your mind?” and Twitter’s “What’s happening?” Instagram uses visual prompts (a plus sign) and names of the media (Gallery, Photo, Video) to prompt users. On general interest sites, a general and media-specific prompt makes the most sense. The goal, then, would cause both creators and audiences (most users of the site do both) to be primed for a type of media.

How those primes and prompts are engaged leads to another interaction -- between the user and the agency they have within the platform. There are a multitude of examples of this kind of interaction, but for my purposes I am concerned with one: Mediatization, or the means by which users might “broadcast” themselves into the platform. Rather than creating a binary, I hope to create a range between the types mediatization by describing the poles. Self-mediatization, in this definition, borrows from a political concept (Meyer, 2002; Kriesi, et al., 2013), in which the developers of the policy also create the rhetoric around the policy (popularly referred to as “spin doctoring”). In this more personal application, self-mediatization is the act of directly representing one’s self into social media spaces without an intermediary (other than the software). On the other end is classic gatekeeping (Lewin, 1943), a process in which information

is filtered or constrained by the owners of channels broadcast one-way to consumers. A related, but distinct, concept is gated-mediaticization, which happens in digital spaces when a person or group creates digital content using participants who do not directly represent themselves. Gated mediaticization, arguably, is not the extreme opposite of self-mediaticization, because affordances usually allow the participant to comment, like, share and, thus, mitigate the impact of such media. While the two concepts of self- and gated-mediaticization are not diametrically opposed, they are on far ends from each other.

Language as Thinking

The final interaction to consider, then, is between our identity and the language we use in digital spaces. This is a vital relationship in a sphere that, for now, privileges language as not only as a transactional element of life, but a constructional one. The first decades of digital discourse built worlds with words and they continue to form a great deal of our impressions of digital communication, even as non-verbal cues increase. The emergence of visual communication does not loosen the ties we have to language, or so I believe Burke (1966) would argue. Language that we learn and adopt colors the way we see those images, a phenomenon he calls, “terministic screens.” In his influential essay, he writes early of Pascal’s satirical reflection on the Jesuits “directing the intention,” which can easily be made into a series of rationalizations for how one transgresses (in Pascal’s example) Church law.

“I bring up this satirically excessive account of directing the *intention*, with the hopes that I can thereby settle for less when discussing the ways in which ‘terministic screens’ direct the *attention*. Here the kind of deflection I have in mind concerns simply the fact that any nomenclature necessarily directs the attention into some channels rather than others” (p. 45).

Pennebaker et al. (2014) extends this concept when they write: “The ways we use words reflect how we think” (p. 1). This is the foundational idea behind the concept that choices of small words, known as function words, reflects both psychological states and the cognitive

processing used to understand and disseminate information. These insights seem particularly useful in examining the states of mind behind acts of performance, especially in social media arenas where an intimate public is expected.

Pennebaker's research into what word usage reveals about human emotions, motivations and communication logics has resulted in the computer-based coding tool used in this research. LIWC (Pennebaker et al., 2015) (pronounced "Luke") examines texts to find how the usage and patterns of language can detect the nature of discourse, including storytelling. The categories either describe either standard language properties (such as articles) or have been determined by agreement of inter-coders (Pennebaker et al., 2014). LIWC processes words with an eye toward the way people write or speak rather than what they say. This has been found, the researchers argue, by focusing on *function words* (such as pronouns and articles), which "provide the bones for what we want to say, where content, or open class, words provide the meat" (p. 2). That meat, *content words*, "generally nouns, regular verbs, and many adjectives and adverbs" (Tausczik & Pennebaker, 2010). In researching how words reveal social and psychological states, Pennebaker (2011) reports that a certain segment of people naturally choose storytelling as a way to explain themselves, but not all. So how do we know when someone is attempting to tell a story? Researchers, including several from Pennebaker's lab, have researched two clear models for storytelling patterns. One model is built on a cluster of word categories that are associated with narrative language style: auxiliary verbs, adverbs, conjunctions, impersonal pronouns, negations, and personal pronouns (Biber, 1991). Pennebaker, et al. (2014) explains in a recent paper that LIWC examines each text in a sample separately and calculates the percentage of total words of each category based on the percentage of total words (not a raw number score). Often, the use of

narrative language style means a smaller use of words Pennebaker describes as words “associated with cognitive complexity,” found in higher rates of prepositions and conjunctions.

A more recent attempt has been taken find the linguistic structure of a story, Malin et al. (2014) used LIWC and found that formal stories (novels and short stories) and less formal stories (Thematic Apperception Tests, in which students were given a picture as asked to write a story about) had many different kinds of function words. The key is where they were placed along five segments of a story.

“...high complexity and specificity at the beginning, a consistent narrative flow beginning about a third of the way into the story, a cognitive working through mid-way in the story, and a generally increasing use of negative emotion words. ... In short, a story is a story” (pp. 8-9).

The work of Malin et al. was continued in a dissertation by Blackburn (2015) who increased the number of novels, short stories and Thematic Apperception Tests (in which students were given a picture and asked to tell a story about it) and applied reliability tests to confirm the hypotheses formed in Malin, et al (See Table 1). Overall, the confirmed hypotheses found that labeling to create common ground was high at the beginning and then diminished, whereas narrative action increase in later segments, cognitive processes (language used to work out problems) starts low, rises, and then lowers again, and that positive emotion language starts low and rises later, while negative emotion words do the opposite.

There are some assumptions in Blackburn (2015), in fact, that likely gives pause to structuralist researchers. For example, the action of characters is under-emphasized in favor of an Aristotelian perspective (beginning, middle and end), which leads to what she describes as a Narrative Arc Theory. The dissertation also eschews content analysis because it is time-consuming, which limits the sample size, as well as limitations based on agreement among raters. In the light of the last decision, all of the novels and short stories are accepted into the

corpora based on, “traditional narratives that represented stories generally agreed-on as narratives” (p. 57), which appears to be begging the question.

Table 1.

Confirmed Narrative Description Hypotheses (Blackburn, 2015, p. 65).

Narrative Dimensions	Brief Description	Linguistic Markers
Categorization “Labeling people, places, and things to create common ground”	Prepositions and articles will occur with more frequency in earlier narrative segments than in later narrative segments.	articles (a, an, the) + prepositions (to, with, above)
Narrative Action “Identify characters, places, and actions described in a familiar way”	Personal pronouns, negations, impersonal pronouns, auxiliary verbs, adverbs, and conjunctions will occur with more frequency in later narrative segments than in earlier narrative segments.	personal pronouns (I, they) + negations (no, never) + impersonal pronouns (it, those) + auxiliary verbs (am, have) + adverb (very, really) + conjunctions (and)
Cognitive Processes “Track the meaning making process of characters as they attempt to make sense of actions and conflicts”	Cognitive mechanism words will have the highest frequency of use during narrative climax (narrative segment three).	cognitive mechanism words (cause, know, ought)
Positive Emotion “Identify redemptive qualities of events and characters described throughout the narrative”	Positive emotion words will occur with more frequency in later narrative segments than in earlier narrative segments.	positive emotion words (happy, nice, love)
Negative Emotion “Track the remembrance of past events and action”	Negative emotion words will occur with more frequency in earlier narrative segments than in later narrative segments.	negative emotion words (sad, ugly, hate)

Pennebaker, et al. (2014) concede that these findings have not been universally accepted.

“While published dictionaries provide broadly agreed upon meanings for open class expressions, the exact meaning of even the most common function words (e.g. the, a, or I) remains controversial for scholars of linguistic semantics, pragmatics, and philosophers of language” (p. 2).

On the other hand, a large body of stories did prove to have reliable and significant variations based on a theorized five sections of narrative arc, which is compelling. Given the

demand to manage one's digital impression -- an exigency not necessarily found in the same way for novelists, short story and Thematic Apperception Test writers -- it is worth testing whether a "story is a story" when telling life stories in a social media setting. It is still likely that people will lean on the kinds of "stories" they are most apt to employ when engaging with their salient audience. So those who perceive themselves to be conversants with a salient group of other conversants, small stories, most of which would not have a narrative arc, would likely emerge. If those who perceive themselves to be storytellers with salient audience of readers, big stories, with narrative arcs, would likely emerge. On a site that specifically prompts its members to tell a story, one might expect the majority think of themselves as storytellers with a salient audience of readers. Whether that statement is accurate lies at the heart of the beginning of my study.

Review of Related Research

As the literature above often reveals, study of the intersection of life narrative and digital life has been active even before the Internet. From early theory about identity and digital personhood up to present day research, the field of digital life narrative crosses just as many disciplines as the broader field of life narrative. Similar to this dissertation, researchers such as Poletti (2011) and Page (2010) have examined how life narratives emerge in digital space. Poletti used the frame of Smith and Watson's (2010) coaxed life, which argues that institutions and media place expectations of life stories from individuals, offering rewards in return. Using hermeneutics as a method, Poletti describes how digital storytelling results in texts that emphasize affect and connection as a means to create what Berlant (1997) termed "intimate publics." Page employed Georgakopoulou's (2006) concept of narratives-in-interaction to conduct a textual analysis of Facebook's timeline, arguing it is an organizing force to create larger stories from the quotidian posting of events, which can be consciously used through

strategic posting (connected updates that round out a story) or can automatically emerge through the temporal order of a user's timeline. Marcus (2013) conducted a similar analysis, this time of 15 Facebook timelines finding that the time possesses the structure of beginning, middle and "soft end) (p. vii) as well as characterological as well as thematic coherence, drawing from Fisher (1987). Strangelove (2010), as part of a larger book about YouTube phenomenon, conducted textual analysis of YouTube vloggers as diarists, while Brabazon (2015) conceptualized digital narratives in educational settings as a way for youth to move personal lives into public settings. Most of the work done to date has either been theoretical, hermeneutical and qualitative in nature.

Page, Harper and Frobenius (2013) conducted a longitudinal study of 1,800 updates from 60 Facebook users guided by the concept of "networked narratives," in which stories are co-constructed through the affordances of likes, shares and comments. Informed by small story frameworks, Page, et al. argue that the co-construction found in networked narratives on Facebook challenges the big story concept of linear model of narratives.

Georgakopoulou (2017) addressed one key problem with favoring the small story perspective in social media: collapsed context. How can anyone interact in a "space" where it is not clear who is there, who is not there, and when? Georgakopoulou argues that cues about how to be received are sent along with the content itself. But a larger problem for story-in-interaction is the assumption that all social media posts imply an invitation to dialogue. One key collapse in social media, however, is the collapse between the meaning of "friend" and "audience." In one-to-one and one-to-few digital communications (such as most texting, email, messaging and early Snapchat), the similarities between direct interaction and dialogue of the offline world are strong. In one-to-many sites, whether semi-private (Facebook) or semi-public (Twitter, Instagram) the

friend-audience collapse becomes more complex. Georgakopoulou-Nunes (2016) deftly addresses this issue in a narrative study of selfies, by employing the concept of ritual appreciation vs. knowing participation.

In ritual appreciation, highly positive assessments on the photographed person(s) in the selfie are employed while in knowing participation, the friends display some kind of knowledge about the selfie and the photographed person(s) that goes beyond the here-and-now (p. 308).

That is to say that the friendship/audience collapse is sorted out through the level of engagement that can be gathered and assimilated by the original author. A digital positioning of the self and others takes place in these responses and contextualization returns to the collapsed space.

Wang, et al. (2017) used the concept of networked narratives for a quantitative content analysis of 390 Humans of New York posts to examine popular topics' impact on social media engagement. I will discuss the findings in the section about HONY, which is a subject of this dissertation as well.

Predating much of this work, Bassett (2007) textual analysis of digital storytelling predicted some of the key concepts in networked narratives. Bassett draws heavily from the work of Cavarero (2000), who perceives a paradox in life narratives, one she calls the "narratable self." She argues, "This is the self who is always seeking the unity that narration might provide, but who cannot fully satisfy her or his own desire to be narrated – to know herself or himself." (p. 112). Thus recognizing, rather than telling, the story of the self is the critical act. This is achieved in relationships, people who observe each other, in ongoing and consciously maintained places. Bassett picks up the argument: "Narration is in this way opened up and becomes comprehensible as part of a more general, and indeed *reciprocal*, process, since while a narration cannot often be given by the self, it can be solicited. As Cavarero puts it, 'actively revealing

oneself to others, with words and deeds, grants a plural space and therefore a political space to identity – confirming its exhibitiv, relational and contextual nature” (p. 114). Bassett moves this concept into digital space with skepticism, primarily by asking who controls the narrative in that movement. As Page (2010) and Marcus (2013) observed, it is the keeper of the algorithms (which can be changed) that holds the formal narrative in place. Changes in feeds on Instagram, Twitter and Facebook show that even the relationships can be changed, if users follow the corporate impression of social narrative unthinkingly.

Bassett reflects upon an early digital art installation, called *Rehearsal*, which reimagines prison inmates as actual embodiments (represented by pictures that can be digitally manipulated as if a game) in an attempt to confront the normative concepts of a criminal. Here narration is purposely (and partially) deferred to users, who then find themselves interacting with bodies they would most likely avoid. This is Cavarero’s political space, Bassett argues. In this, what is archived is not dead but is instead changeable through relations. The game becomes to tell the stories of others, as they tell the stories of us, to rearrange meanings so that the teller receives new perspectives. I “like” seems trivial to this kind of retelling. The developer of the installation, is quoted as saying the exhibit is an attempt to “ride technology before it rides us” (p. 126). Bassett’s work is useful in the examination of the texts I will consider, because it frames a very important question: What is the expression of the self intended to accomplish and can that intention be noted in the language itself?

Summary

Life storytelling in social media still has much room for research, especially studies that examine the more traditional concept of linear narrative and the psychometrics of personal narrative in digital space. The studies in this dissertation address both. What is not missing, however, are strong theoretical frameworks for life narratives from multiple perspectives and well-researched linguistic properties that purport to indicate narrative in texts. I will use these tools in platforms that are clearly prompt users to engage in life storytelling.

CHAPTER 3 – TEXTS

Cowbird

Cowbird.com presents an explicit prompt (“Tell a story”), and a well considered set of affordances, specifically intended to evoke personal narratives (See Figure 1). In addition to the prompts mentioned above, it is notable for its consistent taxonomy that develops a digital ecosystem. For instance, collected stories are called “Sagas.” Equally explicit is the sense that this type of creation and consumption leads to community. The word “user” is nonexistent on Cowbird, replaced by “People.” Recent joiners are called, “Newcomers.” They are prompted during registration and shortly after to choose “Roles” (e.g. Writer, Friend, Artist, Student). Those who paid \$5 per month became “Citizens.” In the about page, the developers continue that theme: “We’ve designed Cowbird to reflect the basic truths that all human lives are interconnected, that great stories can come from anywhere, and that we can learn a lot from each other, once we make the time to listen” (Cowbird.com, n.d.).

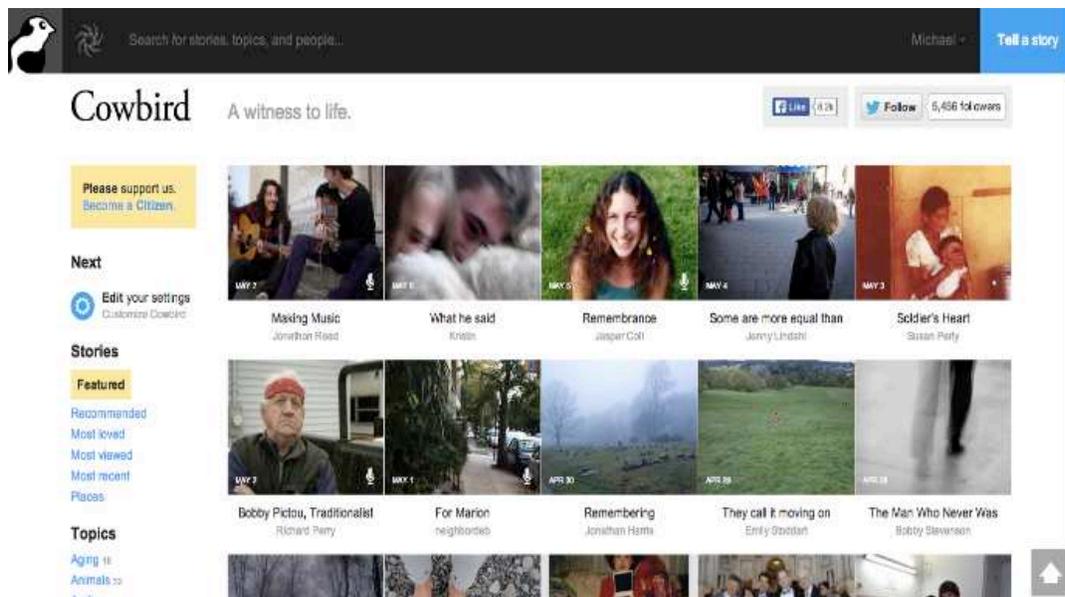


Figure 1. Cowbird.com, circa 2014.

The purpose seemed clear to media that covered the new startup. For example, TechCrunch wrote: “Simply put, Cowbird is a place where you can go to tell a story that you think is worth sharing with a wider community of lovers of good stories. ... The more personal and authentic your story, the more it will resonate with the still relatively small Cowbird community” (Wauters, 2012).

In addition to the prompts, it is also made clear that all stories, once published, are public for anyone on the Internet to see. Thus, the definition of a self-mediatised (meaning no one is filtering the content) fits Cowbird. Founded in 2011 (Finn, 2011), Cowbird reported as of March 1, 2017 that it had generated 89,417 stories. These are relatively small numbers by social media terms, but a large enough community to observe the emergence of culture and content around life storytelling. Cowbird’s most active year of adoption was 2012, the first full year of its existence and when it received generous press coverage. In early 2017, Cowbird’s Jonathan Harris sent an email to Cowbird followers explaining that the site would no longer accept contributions but the archive of stories would remain public.

From this point forward, no new stories, comments, messages, or loves will be allowed, and no existing stories will be editable. You can still sign in to delete individual stories and comments (or your entire account) as you wish, and you will retain these abilities going forward. You can also visit your Settings page to download your data as a nicely-formatted zip archive -- within a few days, once we’ve had a chance to generate the files (look for the row that says, “Download data”) (J. Harris, personal communication, March 1, 2017).

After the announcement, the number of stories decreased to 88,842 and 14,663 authors in 186 countries. The site stated, “Cowbird was open to contribution from 2011-2017, and is now an historical archive” (Cowbird, n.d.).

After a qualitative study of Cowbird stories ($N=136$) purposively sampled outside of the sampling population for this study, it was clear that first-person narrative is the predominant narrative choice. (See Table 2). Most stories were written in prose, but a quarter of the stories

were written as poetry. In terms of reader engagement, Cowbird’s site was tepid compared to more well known social media. The mean number of views was 243 (*Median*= 36), the mean of comments was .24 and “Loves” were 14.78. “Love” is a well-understood reference to the Facebook “Like,” which has transcended a simple affordance and carries a certain sociological meaning (Rogers, 2013). So when a person “Loves” a story, the message of approval they are sending is clear. At the same time, the “Love” is the lowest barrier to engagement on the site. A comment, even the shortest and most cursory, takes a certain amount thought before executing a meaningful response. “Love” is ambiguous but positive, sending a low-commitment sign of agreement, approval, acceptance. Despite this, even the “Love” is used rather judiciously in the Cowbird space, with the media number of “Loves” representing just over 16 percent of the median views.

Table 2.
Frequencies of variables on Cowbird.

Attribute	Counts
Gender	Male = 75; Female = 49; Not Identified = 12
Writing Form	Prose = 98; Poetry = 36; Combination = 2
Narration mentions “I”	Yes = 107; No = 28
Main Character/Focus	Self = 98; Family = 1; Friend = 1; Other/Stranger = 35
Views	Mean = 243; Median = 36
Comments	Mean = .24; Median = 0
Retellings	Mean = 2.77; Median = 0
Loves	Mean = 14.78; Median = 6

Humans of New York

By selecting Humans of New York (HONY) as a second setting for research, I chose a platform where a curator selects the stories that are publicly displayed, a clear example of filtered or gated-mediatisation on a social media platform (Facebook). I have chosen, also, to focus on the textual, and thus linguistic cues, derived from content, leaving out the visual elements.

(See Figure 2).



Figure 2. Humans of New York on Facebook.com, circa 2017.

Humans of New York was founded in 2010 by Brandon Stanton as a photography blog and was widely distributed via posts on a Facebook page (Kaplan, 2013), which as of November, 2016 has more than 17 million likes (Humans of New York, 2016) as well as a website. Stanton told the publication “American Photo” that he began by just taking portraits until he met a woman with green hair and green clothes who told him, ““I used to be a different color every day. Then one day I tried green and it was a really good day. I’ve been green every day for 15 years.”” After posting the photo with the caption, it became his most popular post and set the style for his future content -- a photo with a small quote from the subject(s). On the About section of the HONY Facebook page Stanton writes,

“The initial goal was to photograph 10,000 New Yorkers on the street, and create an exhaustive catalogue of the city’s inhabitants. Somewhere along the way, I began to

interview my subjects in addition to photographing them. And alongside their portraits, I'd include quotes and short stories from their lives" (Humans of New York, 2016).

As I mentioned in the previous chapter, Wang, et al. (2017) examined HONY under the concept presented by Page, et al. (2013) of "networked narratives," which they define as, "digital stories embedded with technology affordances as represented by the number of likes, the number of shares, and the number of comments" (p. 192). Seeking to find which topics drove more engagement, Wang, et al. conducted a content analysis of 390 posts from January to May, 2015. Descriptive statistics found that single subject (78.3%) dominated the posts, a plurality were one male (44.6% vs. 33.1% one female, 13.4% mixed, 4.9% all females and 2.6% all males). The most consistently presented topics were family, career and romantic relationships, but the more engaged topics were education, prosocial (requests for charity, including sharing) and career. The pro-social statistic was presented with caution, since an explicit call for sharing was often included. The researchers also examined tone, finding that more positive tone led to more likes and shares. The researchers noted limitations of a small sample size and the absence of studying the perceived realism of the characters as well as a fairly limited view emotional impact. The limitation the researchers do not mention is that it is not clear which of the actual subjects of the stories play a role in the networked narrative. And because the subject changes each time, the ability to share future stories based on past engagement is Stanton's alone.

Not surprisingly, the HONY standard post as described above, evolved perhaps because of this engagement. In doing a qualitative sampling of the Facebook posts from 2010 and forward, it became clear that the style emerged regularly in 2013. HONY has been widely praised (Kaplan, 2013) for this style of mediatized interaction. A journalism-focused analysis by Roberts (2017) concluded that HONY satisfies many of the standards for public service journalism and, thus, proves that citizen journalism can take up some of the responsibilities

previously relegated to a professional media. But not all coverage of HONY has been positive.

D'Addario (2013) complains that a certain homogeneity exists:

“In the world of Humans of New York, however, humans are actually caricatures. The people Stanton photographs are reduced to whatever decontextualized sentence or three he chooses to use along with their photo” (para. 5).

Cunningham (2015) covered the story of HONY producing a series about a student named Vidal and his school Mott Hall Bridges Academy, which led to raising \$1.4 million for the school and an invitation from the Obama White House to Stanton, Vidal and his the school's principal. But Cunningham is also somewhat critical of the site and a larger trend in storytelling.

HONY joins organizations like *ted* and the Moth at the vanguard of a slow but certain lexical refashioning. Once an arrangement of events, real or invented, organized with the intent of placing a dagger -- artistic, intellectual, moral -- between the ribs of a listener or reader, a *story* has lately become a glossier, less thrilling thing: a burst of pathos, a revelation without a veil to pull away. “Storytelling,” in this parlance, is best employed in the service of illuminating business principles, or selling tickets to non-profit galas, or winning contests (para. 4).

That “lexical refashioning,” as Cunningham puts it, could be driven by the networked narrative, in which stories seek less driven by the arrangement and more by the engagement. HONY, in fact, does not work in the world of narrative arc. The quotes appear to be perfunctory, a “burst” as Cunningham puts it, despite what Stanton claims it to be, “in-depth storytelling” (para. 4).

Therefore, the question for HONY in this dissertation is less about structure, which Cunningham references, and more about linguistic characteristics that might place HONY in a family of storytelling that either is emerging because of digital interaction or has always existed beyond the bindings of academic lexicons.

HONY does present some clear challenges in studying its effect. First, Stanton has made it clear that he does not one set prompt every time he meets someone on the street. He often asks, “What is your greatest struggle,” while other times he asks about goals or asks what advice

someone might give (UCD-University College Dublin, “On how I approach strangers on the street”, 2014). However, he also states several times that he is seeking stories, so theoretically the concept of story would be present and stable when he filters the answer into a post on Facebook.

There is also one structural variance in the posts on HONY, however. At times, Stanton chooses a monologue from his subject, meaning only the subject(s) are quoted in the post. Other times, Stanton posts a dialogue between the subject and himself, which I found is always noted by a second line, usually a follow-up question, and additional quote marks. In analyzing the sample data on HONY, I was able to algorithmically separate the monologues and dialogues, using a search protocol that sought out additional quote marks and a question mark.

CHAPTER 4 – CONCEPTUALIZATION AND RESEARCH QUESTIONS

The conceptualization begins with a conceit I want to briefly explain. Walking the middle way between big and small story frameworks does not seem productive in forming the study. I will, therefore, choose the assumptions about story being classically definable, as the big story theorists would have it. Not only does the big story perspective fit much of the interaction literature I have covered, but it also aligns with the assumptions of Malin et al. (2014) and Blackburn (2015). With that in mind, here is the framework that leads to my questions and hypotheses:

1) Developers of life storytelling social media platforms, or interlocutors who seek life stories to post on social media platforms, can cue certain assumptions, through primes and prompts, about what constitutes a life story;

2) Autobiographical memories are triggered based on current goals and needs; 3) A primed memory about what makes a story emerges;

4) A concept of “story” about the self should arise to satisfy the present goal, to connect, to perform the self and to gain attention from an audience;

5) Certain story structures emerge that reflect the schema (Bluck & Habermas, 2000) a user holds about story, likely one that reflects a classic narrative arc;

6) Linguistic styles and structure of storytelling and self-performance follow.

Therefore, the predictor variables are the primed platform with the prompt to “Tell a Story,” the schema about stories and current goals found in long-term and working memory. The criterion variables are the story structures and linguistic patterns that reflect both the accepted linear concept of story (a schema of story) and the desire to perform the self (See Figure 3). The

driving question of this study is whether those structures conform to theories of life narrative and linguistic inquiry. If they do, a narrative arc should emerge regularly and the linguistic structure found by Malin, et al. and Blackburn should follow. The exploratory elements of this research, on the other hand, will help illustrate whether linguistic styles of narrative found in previous research correlate in two distinct platforms of life narrative on social media -- one that is an open and self-mediatised and one that is filtered and partially gated.

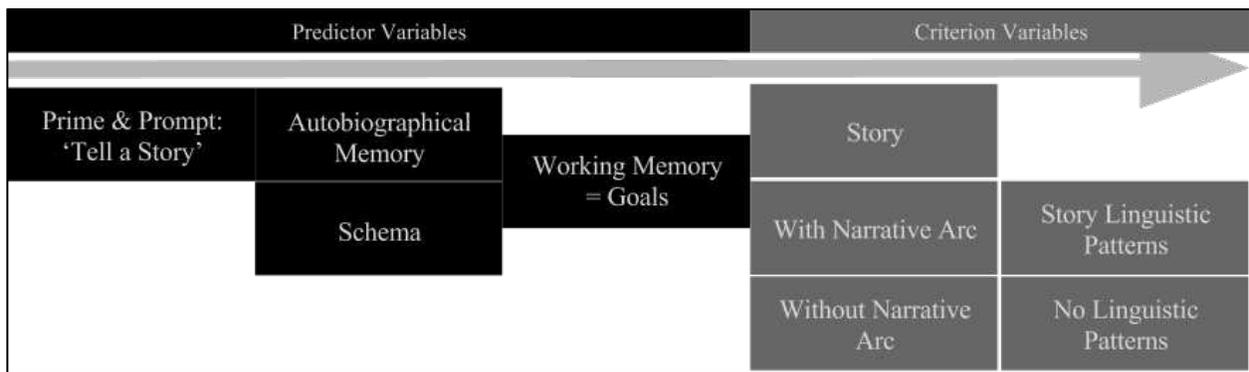


Figure 3. *Conceptual Diagram.*

Given these set of theories and conjectures, I propose a three-phase project that begins with broad questions about structure and moves iteratively toward finer-grained questions about language use.

Research Questions and Hypotheses

Study 1: Prompting Narrative Structure.

When prompted to “tell a story,” theory suggests that people will lean on the concepts they have of “story” and will be motivated to engage with their salient audience. So for a platform that attract users who perceive themselves to be conversants with a salient group of other conversants, small stories, most of which would not have a narrative arc, would likely emerge. Alternatively, platforms that attract users who perceive themselves to be storytellers with salient audience of readers, big stories, with narrative arcs, would likely emerge. On a site

that specifically prompts its members to tell a story, the expectation would be that the majority of members would think of themselves as storytellers with a salient audience of readers.

Additionally, based on findings from Malin, et al. (2014) and Blackburn (2015), those posts with a narrative arc should have similar linguistic patterns to each other, while stories that are conversational, and have no narrative arc, will have no such patterns.

RQ1a: On a social media site that prompts users to “tell a story,” will a majority of content posts have narrative arcs?

RQ1b: Does any social media platform, regardless of its prompt, result in more conversation-oriented posts, thus lacking in posts that have a narrative arc?

H1a: For the social media site Cowbird, the prompt to “Tell a Story” will result in a majority of content posts that are structured with a narrative arc.

RQ1c: Do stories with a narrative arc, posted on a social media site, share common linguistic patterns with each other?

RQ1d: Do life narratives without a narrative arc, posted on a social media site, share common linguistic patterns with each other?

RQ1e: Will the linguistic patterns of novels, short stories, and Thematic Apperception Tests found in Blackburn (2015) correlate to the patterns found in Cowbird stories with narrative arcs?

H1b: Life stories shared on a social media site that are structured with a narrative arc will share a similar linguistic pattern to each other.

H1c: Life narratives shared on a social media site that are structured without a narrative arc will not share a linguistic pattern.

Study 2: Linguistic factors in prompted, open-platform stories.

Based on the research of Autobiographical Memory, the memories that we focus on are based on specific needs and goals of the present (Conway & Pleydell-Pearce, 2000). If we are writing about a memory of the past, there is something in our short-term needs that is shaping that reflection. In life storytelling, that goal might simply be reinforcing identity. How much we focus, then, on the present (or even future) versus the past could change the way we tell our stories. In linguistic analysis of life stories, this emphasis on timeframe would best be observed via use of tense (past, present, future), which could be an underlying factor for a larger set of linguistic correlations, such as emotion words (positive or negative), community or family mentions and goals. Given theories on performance and context mentioned above, one possible factor that could change the correlations is first-person references, so I will explore that possibility.

I want to be careful to not correlate tense choices with mindsets. Though memory research has inspired this research question, the results here cannot directly support or reject any memory theories. For now, the questions are purely linguistic in nature.

RQ2a: Does the frequent appearance of a specific tense (past, present, future) on the storytelling social media site Cowbird correlate with the frequency of appearance of other linguistic properties (community or family references, emotion words, goals)?

RQ2b: Do correlations among function and content words change when first-person references rise or fall, regardless of the choice of tense?

RQ2c: Do correlations among function and content words change when the narrative structure is different (e.g. with narrative arcs vs. non-arc'd stories), regardless of the choice of tense?

Study 3: Linguistic patterns in filtered stories.

Prompts can only do so much on an open platform, but what if the platform were filtered by one user who quotes parts of a story he or she finds most enlightening or compelling about another person's life? This is the case with Humans of New York, where one person, a photographer, listens to stories of subjects he photographs and then summarizes what they said in a single quote. If the findings of RQ2c (whether linguistic patterns change based on narrative structures) show that linguistic patterns remain the same despite structure, I will compare the complete data sets of the open platform and the filtered platform, because the role of the HONY gatekeeper is not to form narrative arcs. If we accepted more broadly Malin, et al.'s (2014) suggestion that a "story is a story," then the same linguistic styles could emerge in both open and filtered platforms.

RQ3a: Will linguistic styles of life storytelling content found on the open-platform

Cowbird remain the same in a filtered platform such as Humans of New York?

RQ3b: Do linguistic styles of narrative change when the post is a monologue versus a

dialogue?

H3a: The linguistic factors that create categories found in all stories on the open-platform

will also be found in the filtered platform.

CHAPTER 5 – RESEARCH METHODS

To address the research questions and hypotheses, I created a set of three cascading quantitative studies that begins with a quantitative content analysis, coupled with a linguistic structural analysis using Linguistic Inquiry and Word Count (Pennebaker, 2015), followed by two factor analysis studies, again using LIWC. The first and second study will only examine Cowbird texts and the third study will examine HONY texts.

Research Design #1: Quantitative Content Analysis

Quantitative Content Analysis (Study 1 and 2) is a useful mechanism for organizing texts in a standardized way that allows researchers to make both descriptive and inferential conclusions about the texts' characteristics and meaning (Neuendorf, 2002). This aspect of the study followed the model laid out by Neuendorf in “The Content Analysis Guidebook” (Neuendorf, n.d.) which follows: 1) Citing theory and developing a rationale for choosing the content (see above); 2) Conceptualization decision-making, in which the variables for the study are developed (see above); 3) Operationalization, in which an *a priori* coding scheme is developed to best reflect the concepts to measure; 4) A codebook and a code sheet were developed to accurately define and reflect the coding scheme; 5) Sampling of the content universe using a random sampling mechanism; 6) Training inter-coders in the codebook and determining initial reliability; 7) Coding the content independently of the intercoder, ensuring 20% of the entire sample was coded by both; 8) Determining final reliability, using Krippendorff's alpha; 9) Tabulating the results.

Texts, in this case, focused on the content found in “stories” on Cowbird. To achieve the same modality in which the content was created and consumed, the URL for each story

was provided in the coding sheet to send coders directly to a HTML browser, that contains only the selected stories, cached in a database where the stories were un-editable. This was accomplished by browsing to each story selected from the sample and saving the entire document as an HTML file and downloading all corresponding media, then storing the individual files on a cloud server that was password protected and only accessible by the coders. This was done to ensure that the stories were not changed or altered during the research, since the data is vulnerable to changes both by site developers and the creators themselves, while keeping the modality as close to original as possible. Several key assumptions drive the analysis of the texts. For example, by aggregating and enumerating the data, I am limiting the scope of possible motivations behind the authorial voices I examined. These assumptions include that story is a meaningful schema shared within and across cultures, including the Cowbird digital culture, that prompts are followed, in general, and that they are specifically followed for digital sociality purposes, and that individual expression still generally aligns with such schema and motivations when found in networked publics.

Unit of Analysis. The unit of analysis for this study was a full Cowbird story posted publicly to the site. Each unit (median length was 162 words, with a range of 3 to 6,354) includes a title, a full-sized picture, the main content (text or audio), an author name, a date of posting, categories as chosen by the author and the number of times the story has been read. According to metadata from Cowbird's site at the time of sampling, there were 37,739 stories within the overall population.

Sampling Cowbird. To ensure proper confidence levels (95% +/- 4%), I sampled a larger population ($N=605$) to adjust for the possible over-representation of stories marked for filtering out. This was achieved by finding the full range of 2012 stories (all units are given a sequential

number by the developer and we were able to determine all units in the timeframe using this numbering system as a guide) and using a computer-based randomizer to choose the sample. For the purposes of this study, to control for confounding variables such as time lapsed between posting and measurement, the sampling population for this study was all stories from the year 2012. I chose 2012 as a frame because it was Cowbird's first full year and its most active. Most users of the site were new, so a solidified culture had not formed yet.

From the sample, I filtered out any known confounding variables. This filtering included stories that derived from "seeds," which are direct questions (e.g. When have you felt most alone?) or "sprouts" (taking a cue from another writer and adding or telling a new version of the story), because they contain priming factors for starting a post beyond the key prompt, "Tell a story." Secondary prompts (such as "Tell the story of a first kiss.") might improve the chances of a narrative arc appearing in the post, while others (such as "Write a one sentence lesson that somebody taught you") might decrease the chance of a narrative arc appearing. Also, each author was represented one time in this study, to ensure independence of observation. When an occurrence of a second story by the same author was found, that story was removed from the data, thus usually leaving the first story they wrote. This increased the likelihood of finding the prompt's effect rather than a larger networked narrative effect, and is based largely on the assumptions mentioned above. Also, it follows the assumption that a certain author's proclivity to write in a consistent structure or with common themes might create an overrepresentation of those factors in our sample. In total, 175 stories were removed from the data set for either having secondary prompts or representing an author more than once. After filtering out repeat authors and stories using "seeds" or "sprouts," a final sample of 430 stories were coded.

Code book. An *a priori* codebook was developed to reflect the operationalization of the concepts discussed above and was written to ensure the codes were discrete and exhaustive. The codebook was organized into four sections: 1) Metadata (author name, gender, media, date of event as posted by the author, location, topic tags); 2) Engagement (Views, Comments, Retellings, Loves); 3) Structure (Narrative Structure, Grammatical Structure and Narrator Person); 4) Content (Life Story as Identity Themes and Autobiography Themes) (See Appendix 1).

The most critical code for this study was the definition of narrative arc. The code book referred to the classic Aristotelean/Freytagian (Freytag, 1900) definition of a story, a definition similar to the one used in Blackburn (2015). As mentioned above, assumptions of shared schema around the concept of story drives this analysis. In modern and postmodern writing, some of these components are implied in the text and the code book adjusted for this so that stories that had all of the components in either explicitly (beginning, middle and end all clearly appearing in the text) and implicitly (a story that starts in the middle, but the audience gains an understanding of what happened; or a story that leave a “cliffhanger,” with no clear ending) were coded to have a narrative arc. The codebook originally included a variety of non-narrative arc codes (vignette, interactions, other) but during training we realized that this was too latent to code accurately and not necessary for our research questions, so we reduced the code to Narrative Arc vs. Non-Narrative Arc.

Reliability training and coding. Two coders (the principal investigator and an outside evaluator) conducted intercoder reliability on 20% of the total population ($N=116$) on a range of topics. The intercoder chosen was a librarian with a B.A. in English Literature and an M.A. in Information Sciences. She was chosen for her trainability in literary concepts and for her

attention to detail when confronted with large amounts of data. The training consisted of seven meetings over three months, starting with a face-to-face discussion in which the entire codebook was read, discussed, edited for clarity and augmented with more samples. Over the next six meetings, we practiced coding with purposive samples of up to 20 stories (outside of the sample population) to refine the codebook and continue to discuss the particularities to develop clarity around the codes. The outside evaluator was not informed about the research questions or hypotheses.

After training, we separately coded the subsample, which was randomly chosen using a computer-based number randomizer. We achieved reliability based on Krippendorff's (2003) alpha coefficient: Gender ($\alpha=.932$), Narrative Structure ($\alpha=.746$), Grammatical Structure (prose, poetry, etc) ($\alpha=.72$), First Person usage ($\alpha=.859$) and Main Character ($\alpha=.764$). None of the Content codes (section 4 of the codebook) met reliability standards ($\alpha > .700$).

Research Design #2: Linguistic Inquiry and Word Count

LIWC is a textual analysis software, as the developers explain, that provides a, “method for studying the various emotional, cognitive, and structural components present in individuals’ verbal and written speech samples” (Pennebaker et al., 2007, p. 3). It is built on four decades of research into the use of language as an indicator of the speaker’s (or writer’s) state of mind. A list of 80 output variables made up of 370 function words were developed over the past two decades using factor analysis research to show reliable correlations between the presence of words in one section of the writing to another section. Validity has been assessed using experiments (Pennebaker et al., 2007), content analysis and self-reporting (Schultheiss, 2013). To align with both the theoretical framework that linguistic indicators of narrative exist (Pennebaker, 2011, 2014; Malin, et al., 2014; Blackburn, 2015) and to accurately compare

linguistic patterns found by Blackburn (2015), I employed 11 categories in Study 1. For Study 2 and 3, I employed the 11 categories in Study 1, though I atomized the personal pronoun category (i.e. examined as I, we, you, she/he, they) and chose specific cognitive processes (insight, causation, discrepancy, and differentiation), then added content categories that made theoretical sense to explore: use of verbs and time orientations (past, present, and future focus), the drives index, the social processes index, positive and negative affect. In total, there were 17 items examined in Studies 2 and 3. During exploratory factor analysis, I eliminated the variables that showed no or weak correlations (see Table 3). Pennebaker (2015) notes that assessing reliability linguistic variables is tricky and not perfectly analogous to questionnaire items. That's because once you say, or write, something, it's generally unnecessary (even bad form) to repeat it multiple times. "It is important, then, to understand that acceptable boundaries for natural language reliability coefficients are lower than those commonly seen elsewhere in psychological tests" (p. 8). The table below shows the reliability statistics for both Study 1 and Study 2 and 3, based on Cronbach's alpha score (see Table 3).

Neuendorf (n.d.) suggests a very similar process to Quantitative Content Analysis for "computer coding," with the exception of reliability, since no intercoders are needed. I did think it was important, however, to do human-coding first to determine that the analysis that would be applied to the LIWC data was valid. This, of course, eliminates one of the advantages of computer coding, to process large volumes of data (Krippendorff, 2012). On the other hand, choosing to process a data set that is much smaller but more validly aligned with the conceptual framework of this dissertation helped me avoid any false assumptions about validity.

Table 3.
Linguistic categories employed for Studies 1 and 2 & 3.

Linguistic Category	Examples	α
<i>Study 1</i>		
articles	a, an, the	.330
prepositions	to, with, above	.211
personal pronouns	I, we, you, he/she, they	.309
negations	no, not, never	.367
impersonal pronouns	it, it's, those	.249
auxiliary verbs	am, will, have	.421
adverb	very, really, quickly	.196
conjunctions	and, but, whereas	.322
cognitive mechanism words	cause, know, ought	.387
positive Emotion	happy, nice, love	.049
negative Emotion	sad, ugly, hate	.290
<i>Studies 2 & 3</i>		
article	a, an, the	.292
prepositions	to, with, above	.156
auxiliary verbs	am, will, have	.207
negations	no, not, never	.223
impersonal pronoun	it, it's, those	.266
adverbs	very, really, quickly	.199
conjunctions	and, but, whereas	.208
positive emotion	happy, nice, love	.109
negative emotion	sad, ugly, hate	.058
i	I, me, mine	.420
we	we, us, our	.209
you	you, your	.246
she/he	she, her, him	.189
they	they, their, them	.096
insight	think, know	.083
cause	because, effect	.093
discrepancy	should, would	.130
differentiation	hasn't, but, else	.235

Sampling Cowbird and HONY. For Cowbird, the same sample was used as in Research Design #1 to assess the role that narrative arc would play in linguistic style. Because content on the HONY website was difficult to access, and because its Facebook page is true social media, I

sampled posts from HONY’s Facebook page. Much the same way I sampled an entire year in Cowbird, I chose 2014 as the year for HONY. This was the first full year that the standard post described by Stanton in Chapter 3 became consistent. I removed posts that did not fit the research questions and hypotheses of these studies. That included all posts Stanton wrote about the site or himself to the audience, as these did not include a narrative about a subject he had photographed. I also removed all posts that were not set in New York City, which included 28 posts from other parts of the world, because it appeared those posts were making a political or pro-social point rather than simply telling the story of a regular person. As mentioned above, I also use a algorithmic search mechanism to code each post as either monologue or dialogue, based on whether Stanton appears in the conversation. I checked each dialogue post ($N=415$) to verify that the algorithm worked and found 100% accuracy. (See Table 4.)

Table 4.
Corpora Information.

Story Type	Source	<i>N</i>
Coded Narrative Arc	Cowbird.com	198
Coded No Narrative Arc	Cowbird.com	232
All Cowbird	Cowbird.com	430
HONY Posts as Dialogue	Facebook.com	415
HONY Posts as Monologue	Facebook.com	661
All HONY	Facebook.com	1078

Using LIWC is a very straightforward process, but should be handled with care. I ensured extraction of the text was only removing the body of the text, as this was the unit of analysis studied in the human-coded portion of the study. This could only be achieved by hand-extracting each story using a copy-paste method. As per LIWC instructions, each story was saved as an individual .txt file. Each data file was given the same code number in the content analysis data and was saved as a text file. Once all of the data files were checked for proper extraction, they

were uploaded to the LIWC tool for processing. I chose to process all of the categories, and following Malin, et al. (2014) and Blackburn (2015) procedures, employed the Segment Analysis Option, which divided articles into five roughly equal parts. Doing this allows researchers to observe variance of words between five portions of the story. Once the data was run, all 80 categories were rendered with a ratio per 10,000 words value on each unit of analysis. These rows of data were merged with the human-coded data for each unit in a spreadsheet software, again checked for accuracy based on code number, and then uploaded into SPSS (for Study 1 and 2) and SAS (for study 3) for analysis.

Ethical Considerations

Both Cowbird and HONY are intentionally public communication platforms and, thus, study of them generally does not require Institutional Review Board approval. That does not necessarily mean that there are no ethical considerations to take into account for this study. Herring (2004) enumerates several issues to consider when using content analysis on the web. First, there is the chance that minors are producing some of the content on these platforms. It is not always possible to obtain permission from parents to analyze this content and, in certain cases, not even clear whether a minor's work is being analyzed. Secondly, while Cowbird and HONY, both make the publicness of posts clear, it is not certain that the implications of "public" on social media means the same thing to all participants. A dozen years after Herring wrote the following, much of it still holds true:

Have such "authors" intentionally produced public documents, and should researchers thus be able to cite them without permission? This ethical grey area results from the relative novelty of the Web, on the one hand -- norms of production and reception have not yet become fully established -- and the inexperience of young content producers, to whom the Web provides an unprecedented opportunity to self-express on a mass scale (p. 7).

The platforms themselves take basic precautions to protect the participants' agency and/or identity. Cowbird offered private posting options, users could choose anonymous usernames and avatars and the site was explicit about the default publicness of the site. HONY does not use full names in its posts and usually offers little or no details about specific residence or other clearly identifying marks, other than their faces, although Facebook's increasingly precise facial recognition algorithms renders this precaution less meaningful.

It seems wise to protect these users a little further by using no examples connected with their usernames. Because some of the findings are latent psychometrics, using specific and searchable examples of analyzed comments could be problematic. So no specific data will be used that is linked to a particular psychometric insight. This, along with the site's publicness, should address most serious ethical concerns.

Analysis

After collecting all data from human and computer coding, each study employed a different tool of analysis to answer the research questions and hypotheses.

Study 1a. Analysis of Study 1a entailed running descriptive statistics and assessing whether a majority of stories were coded for having a narrative arc or not having a narrative arc.

Study 1b. For analysis of Study 1b, I conducted a one-way linear Analysis of Variance (ANOVA) that plots the shifting proportion of language use across five segments of each story. One-way ANOVA's are useful when trying to examine relationships between categorical independent variables and continuous variables (Hall, 1998), which in this case, are segments (the categorical variable) and percentage of use of word categories (the continuous variable). To test the hypothesis for Study 1, I applied the ANOVA twice, based on two data sets constructed from the human-coded portion of the study: Stories with Narrative Arcs and Stories Without

Narrative Arcs. Replicating Blackburn (2015) examination of novels, short stories and Thematic Apperception Tests provided to college students, I analyzed both story sets the same way.

To achieve the analysis, I divided each story into five equal segments to watch the correlation of variation among each segment across all samples. Because each story has different lengths, LIWC automatically creates a ratio of words found per 10,000 words, which normalizes the counts among short, middle and long stories. I used the same constructs Malin et al. used, examining the relationship of four key language markers of stories, as they varied across those segments, to show the linguistic “arc” of classic story structure. The four markers were:

- Categorization. This is measured by articles plus prepositions. The researchers found both complexity and categorical thinking are high at the beginning of a story and decrease in later segments, once the story has been established.
- Narrative Action. This is measured by a combination of personal pronouns, impersonal pronouns, auxiliary verbs, conjunctions, common adverbs, and negations.
- Cognitive Processes. This is measured by a combination of causal words, insight words, discrepancy, inhibition, tentative, certainty. This marker represents “working through” a story and so the middle of stories, where the complications are dealt with, would show greater amounts of cognitive mechanism words.
- Positive Emotion and Negative Emotion. Each set of emotion words are measured separately, which the research shows either goes up (negative) or down (positive) toward the end of a story.

The output is the percentage of total words within each category as they vary across five segments of the story. To assure assumptions of linearity, I conducted regression tests on stories

with narratives and the entire data set. To assure that the data met assumptions of linearity, I ran linear regressions on each of the categories as dependent variables, with segmentation as the independent variable, and found that all had significant coefficients ($<.05$), significant ANOVA regression model scores ($<.05$) and scored within the acceptable range of the Durbin-Watson model ($1.5 < d < 2.5$), which tests for autocorrelation in the data's residuals (prediction errors). The exception was Negative Emotion Words, but I chose to run the ANOVA on Negative Emotion Words, nonetheless, to confirm there was no significant linear regression across segments of the stories with Narrative Arcs.

Study 2. The primary aim of exploratory factor analysis was to determine what, if any, latent factors catalyze the correlation of a larger set of variables (Osborne & Costello, 2009, p. 2). Some *a priori* suppositions guided the exploration and were built into the Study 2 research questions. The driving supposition, informed by theory from the literature, was that the latent narrative factors cause covariation among relationships, self-reference, choice of verb tense, goals, or a combination. The exploratory nature of this study was to find whether the supposition is accurate and exactly which variables were manifested.

I tested three questions in three phases:

- Applying EFA to the entire data set.
- Applying Exploratory Factor Analysis to all stories coded with the narrative arc.
- Apply EFA to all stories without a narrative arc.

The study was conducted by using all 80 variables created by LIWC, this time using only one segment for each story. Once prepared for analysis in a spreadsheet, I uploaded the data to SPSS and used the Data Reduction tool to follow the guidelines set by Osborne & Costello (2009) to properly generate EFA results. They argue against using the SPSS default of Principal

Components Analysis, because the method does not regard the underlying structure that causes variation, but calculates all of the variance of manifest variables. Instead, the suggestion is to customize the analysis by following these best practices:

- Choose Principal Axis Factors -- which measures significance testing for factor loadings as well as correlations among factors and confidence intervals -- offering a more rigorous test for validity.
- Employ the standard Varimax rotation.
- Run multiple tests to pinpoint the number of factors rather than relying on Eigenvalue, which Costello & Osborne argue, “There is broad consensus in the literature that this is among the least accurate methods for selecting the number of factors to retain” (p. 2). The researchers suggest finding the “cleanest” factor structure, which includes, “item loadings above .30, no or few item cross-loadings, no factors with fewer than three items” (p. 3).

Once these guidelines were met for all three phases of Study 2, I applied the two factors found in the all stories dataset to Study 3.

Study 3. After processing stories from the HONY data set through LIWC, I tested the two factors found in Study 2. Confirmatory Factor Analysis “allows the researcher to test the hypothesis that a relationship between the observed variables and their underlying latent construct(s) exists” (Suhr, 2006, p. 1). Suhr suggests a series of statistical tests to determine the adequacy of model fit. My study followed the models she describes:

- Applying a chi-square test to measure the difference between expected and observed co-variance, which would be stronger the closer to zero, and must meet a significance greater than .05.

- Using the Comparative Fit Index to examine discrepancies between the analyzed data and the hypothesis, which is measured between 0 and 1 and a higher number meaning better fit. Suhr reports a number greater than .90 indicates an acceptable model fit.
- Applying Root Mean Square Error of Approximation (RMSEA), which Suhr states is related to model residual. RMSEA values range from 0 to 1 with a smaller RMSEA value indicating better model fit.

Using the software SAS, I ran the CALIS procedure, which examines data through a structural equation modeling, which “express relationships among a system of variables that can be either observed variables (manifest variables) or unobserved hypothetical variables (latent variables)” (SAS, n.d.). PROC CALIS, a specific procedure, is intended for factor analysis in which a model is in place. To run the analysis, I placed both of the latent factors found in Study 2 and the variables that loaded with each factor. The software then runs the tests described by Suhr above. Had the model found in Study 2 of Cowbird also applied to HONY content, then all the tests above would have been satisfied and factor analysis (Research Question 3b) could continue. Otherwise, I skipped to Q3c, in which I ran ANOVAs between dialogue and monologue posts and within each word category to determine whether a significant variation of style changed based on the kind of content posted.

CHAPTER 6 – RESULTS

Study 1: Presence of Narrative Arc

Hypothesis 1a, that a majority of units with narrative arcs would result from the prompt “tell a story,” was not confirmed. Over all, 198 stories, approximately 46%, were coded for having a narrative arc, while 232 stories, approximately 54%, were not coded for having a narrative arc.

In a brief text search of the posts without narrative arcs, the word “story” was found 108 times. Analyzing the use of story in context, I found phrases such as “This is my first story ...” and “My short story takes place some years ago ...” It is possible, then, that writers of posts without narrative arcs might still be responding to the prompt “Tell a story.”

Study 1b: Linguistic Patterns of Narrative Arc

Hypothesis 1b, that stories with narrative arcs will reflect all of the linguistic properties of a traditional story, was largely supported (See Table 5). Categorization (articles and prepositions) ($F(4,985)=2.847, p<.05$), significantly varied linearly across segments and, as was the case in Blackburn (2015), article and prepositions started high and ended much lower, though the overall pattern is much different. While Categorization lowers in Segment 2 and generally stabilizes for Blackburn’s stories, the category remains relatively even for Cowbird stories in Segment, then declines sharply in Segments 3 and 5. (See Figure 4.)

Narrative action ($F(4,985)=4.151, p<.05$) also significantly varied linearly across segments, though again the pattern in Cowbird stories varied differently than any of Blackburn’s data, where the action rises in Segment 2 and either stabilizes (TAT and Short Stories) and

mildly declines (Novels). For Cowbird stories, Narrative Action subsides in Segment 2, rises sharply in Segment 3 and stabilizes in Segment 4 and 5. (See Figure 5.)

Cognitive processes ($F(4,985)=7.873, p<.05$) also significantly varied, but unlike Blackburn’s Novels and Short Stories, which rise in Segment 2 and subside in Segment 5, Cowbird stories rise sharply in Segment 3 and then rise sharply again in Segment 5. Blackburn’s

TATs also have a unique pattern of rising sharply in Segment 2 and remaining high throughout the other segments. (See Figure 6.)

Positive emotion ($F(4,985)=2.955, p<.05$) appeared similar to Blackburn’s TATs in Segments 1 and 5, but Cowbird stories rise sharply in Segment 3, lower in Segment 4 and then rise again. In Blackburn’s Short Stories and Novels, the patterns are not similar to TATs or Cowbird. The emotion words in Novels rise slightly from Segment 1 to 2 and then lower gradually. In Short Stories, the pattern is similar, with a slight increase in Segment 5. (See Figure 7.)

Table 5.
Confirmed Linear ANOVA of Cowbird Stories with Narrative Arcs.

Narrative Dimensions	Seg 1	Seg 2	Seg 3	Seg 4	Seg 5	Linear Sig.
Categorization	22.674	22.747	20.973	21.3914	20.149	.002
Narrative Action	33.688	33.201	33.921	35.651	35.704	.042
Cognitive Processes	14.099	14.233	15.4571	14.5257	16.2348	.005
Positive Emotion	2.615	2.788	3.424	3.035	3.698	.003

Notes. Use percentage of each category within segment.

As the results show for Study 1b, there are both similarities and distinctions between life stories on Cowbird and traditional story models such as novels, short stories and Thematic Apperception Test found by Mailin (2014) and Blackburn (2015). The most important similarity is Cowbird data coded for Narrative Arc showed significant variance across five segments of the

stories, and these variances describe certain patterns based on where we are in the story. Similarities continue in generalized terms across the entirety of the story. For example, categorization (identified by use of preposition and articles) used to establish background in the story begin high and end low in all models. Narrative Action (marked by use of pronouns and verbs) begin low and end high. These similarities appear to be normal conditions for traditional stories' journeys from beginning to end.

On the other hand, the distinctions between life stories and other story forms appear to lie in the details. In novels and short stories, background information and narrative flow are inversely related, which is also the case in life stories coded here, but that relationship emerges differently in life stories in the penultimate segment. While categorization language generally starts high and ultimately ends low, in life stories categorization rises again in the fourth segment of the story. Narrative flow words take a dip at this point, as if the life story writers, in aggregate, are stepping back to add a few more background details before ending of the story.

A greater distinction is found in cognitive mechanism words, the “working through” of a story, which in life stories starts low the same way traditional stories do, but not does not apex in the middle of the story and rather continues to rise through the fourth segment and remains high in the final segment. Finally, negative emotions had no significant linear variance between segments.

Hypothesis 1c, that stories without narrative arcs will reflect none of the linguistic properties of a traditional story, was largely supported. The one exception was Positive Emotion ($F(4,1143)=5.975, p<.05$), which did reveal significant linear variation.

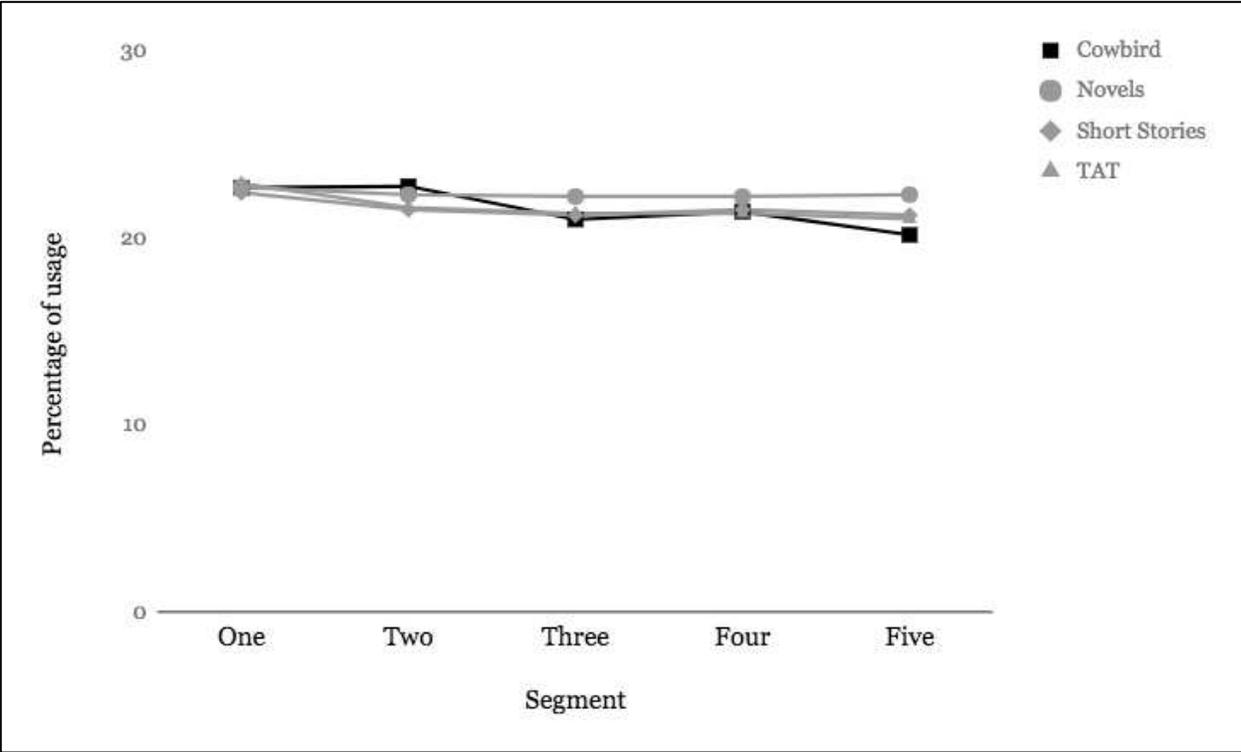


Figure 4. *Categorization ANOVA of Cowbird vs. Blackburn (2015).*

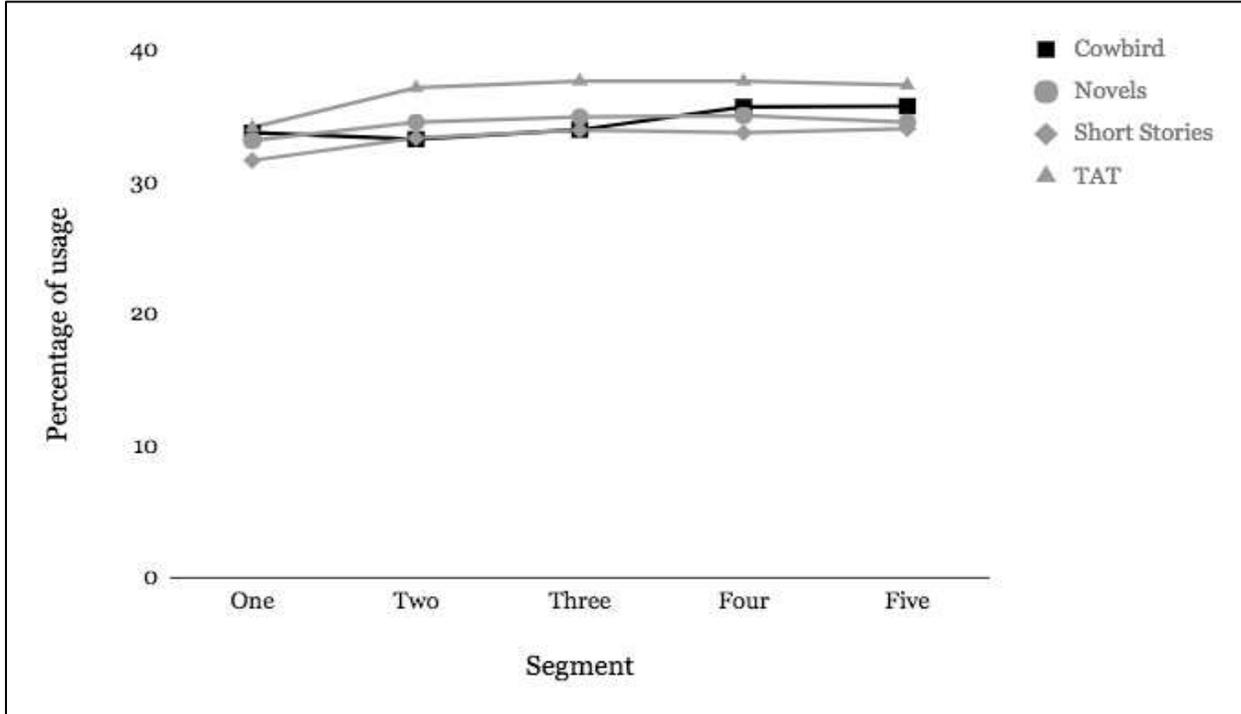


Figure 5. *Narrative Action ANOVA of Cowbird vs. Blackburn (2015).*

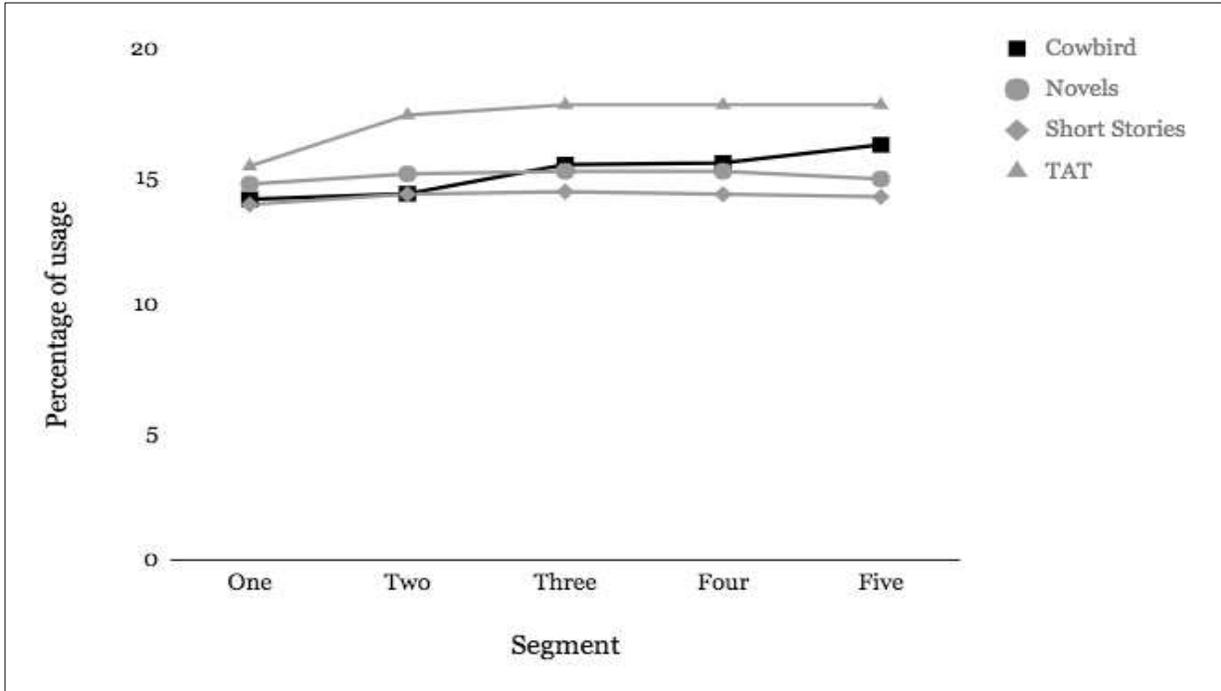


Figure 6. *Cognitive processing ANOVA of Cowbird vs. Blackburn (2015).*

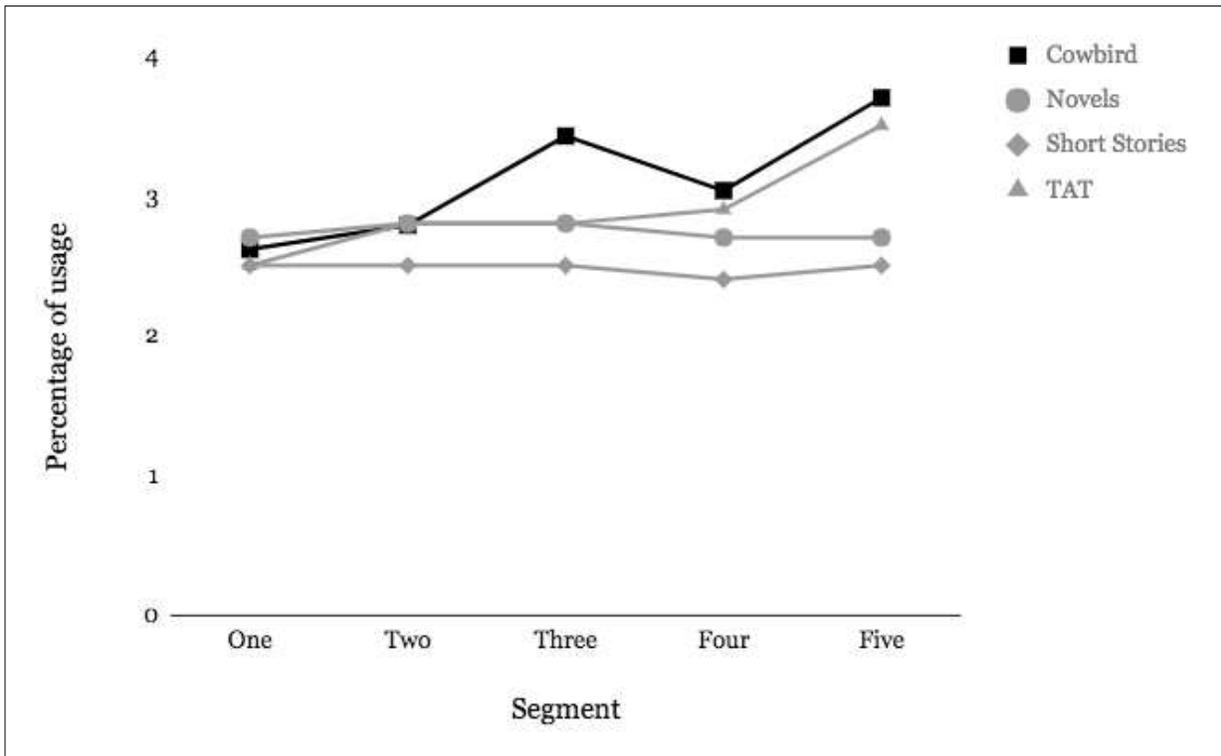


Figure 7. *Positive emotion ANOVA of Cowbird vs. Blackburn (2015).*

Study 2: Factor Analysis of All Cowbird Content

After assessing the differences in structure of Cowbird stories based on use of narrative arc, I applied Exploratory Factor Analysis for linguistic commonalities among all stories in the data set. I used the research questions as a guide to combine linguistic variables as computed by LIWC.

RQ2a: Does the rate of appearance of a specific tense (past, present, future) on the storytelling social media site Cowbird correlate with the rate of appearance of other linguistic properties (community or family references, emotion words, goals)?

I chose present, past, future, affect, positive and negative emotion and all social variables (family, friend, female, male) and drives (affiliation, achievement, power, reward and risk). Covariance among these factors did not meet the Kaiser-Meyer-Olkin Measure of Sampling Adequacy, with a score .344, whereas a score of .600 or higher is considered acceptable. KMO tests whether a data set is suited for factor analysis by measuring the sampling adequacy of variation among items and among the entire data set. After multiple combinations of this framework were attempted, including all variations with tense, the introduction of each social variable alone and the inclusion and exclusion of affect, the KMO score never rose above .400 and it became clear that no adequate sampling was available.

RQ2b: Do correlations among function and content words change when first-person references rise or fall, regardless of the choice of tense?

This question proved more productive. To begin, I chose *i*, *we*, *she/he*, *you* and *they* and included *social* (mentions of friends, family, female, male), *affect* (positive and negative emotion), *focus on present*, *past* and *future* and *drives*. I eliminated the *male* and *female*

variables, because their communalities (relation to all variables in the set) were so high with pronouns (.838 and .891) that, after investigating, it became clear I was usually testing for the same linguistic presence over two variables. I also eliminated *affect*, because the communalities (variance accounted for by all factors) were so low, both under .100, that it was clear they did not play a key factor in the appearance of pronouns. Finally, I removed *focus on the past* and *focus on the future* also because of communalities under .200. While the KMO score remained low (.329), it was clear that pronouns were driving the other factors. With this hint, I went back to Pennebaker, et al. (2014) and added what he claims are the raw linguistic characteristics of personal narratives outside of any formal structure: *personal pronoun, impersonal pronoun, auxiliary verb, conjunction, adverb* and *negation*. I also kept *social* and *drives* as index variables. This increased the KMO to over .600, but it was clear that *they* and *you* were not important variables in this analysis, based on low communality scores, both under .200. After several more iterations, and following Osborne & Costello's (2009) guidance to find co-variations with at least three variables loading above a .30, it was clear that use of the first-person pronouns (*i, we*) were diverging into a two-factor model: Either with many of Pennebaker's function words that indicate personal narrative, or words that indicate external focus (*drives* and *social*). As a guess, I looked at one critical content category *verb*, but was concerned two problems would arise: 1) it would correlate with both factors; or 2) it would correlate with the model under *I*, but prove to be the same measure as *adverb*. Neither proved to be the case. Verbs did correlate with the *I* factor, but they appeared twice as often as *adverb*. It also significantly increased the KMO score. Together, these two factors explained 41.360% of all variation, and both reached rotated Eigenvalues over 2.0. There were no cross-over variables and all correlated variables had correlation strength over .300. A reliability test among the variables was acceptable ($\alpha=.721$).

The KMO score is .740 and the significance of .000, ($\chi^2=1585.453$; df 78). By all measures prescribed by Costello & Osborne, correlations among groups of variables for storytelling that were found in the whole Cowbird data set had enough strength and reliability to report two factors, which aligned with the presence of first-person pronouns.

The posts with higher frequencies of first-person singular correlated with higher frequencies of some of the function words that Pennebaker et al. (2014) have found to indicate narrative language: auxiliary verbs, negation and adverbs. What did not correlate from Pennebaker, et al.'s list were impersonal pronouns and conjunctions. Additional content variables did load reliably with those narrative terms, include focus on the present and some cognitive mechanism words, which are also considered important in narrative in Malin et al. (2014) and Blackburn (2015): discrepancy and differentiation words.

I named the first factor in the model *Internal Narrative*. The posts with higher frequencies of first-person plural correlated to higher frequencies of *social* (family, friends, others) as well as *drives* (affiliation, achievement, power, reward and risk). I named this factor *External Narrative*. (See Table 6).

RQ2c: Do correlations among linguistic properties change when the narrative structure is different (e.g. with narrative arcs vs. non-arc'd stories), regardless of the choice of tense?

The two factors found in the results for all Cowbird stories remained when only analyzing stories with a narrative arc. While the KMO score dropped (.682 vs. .705) with only narrative arcs, it did stay in the acceptable range. The Bartlett's test of Sphericity was significant (.000; $\chi^2=804.39$; df 78). Cronbach was below acceptable ($\alpha=.686$). On the *Internal Narrative* factor set, the same variables also loaded together over the .300 mark. The most notable changes were a decrease in present tense (.540 vs. .662) and an increase in negation language (.665 vs. .326). On the *External*

Narrative factor set, the same variables also loaded together at acceptable rates with very little variation except for *drives*, which rose from .769 to .861.

Table 6.
EFA Rotated Component Matrix of Cowbird Word Categories.

Category	Internal Narrative	External Narrative
i	0.457	0.194
auxiliary verb	0.764	0.137
adverb	0.355	0.033
negation	0.326	-0.042
verb	0.844	0.174
discrepancy	0.422	0.039
differentiation	0.547	0.049
focus present	0.662	0.149
we	-0.073	0.768
social	0.182	0.438
drives	0.09	0.769

Extraction Method: Principal Axis Factoring.; Rotation Method: Varimax with Kaiser Normalization.; Rotation converged in 3 iterations.

The remaining data, those stories coded with no narrative arc, also had a slightly lower KMO score (.734 vs. .740). The Bartlett’s test of Sphericity was significant (.000; ChiX 768.344; df 55). The Cronbach’s measure was also acceptable ($\alpha=.745$). On the *Internal Storytelling* factor set, the negation variable (.204) did not reach the proper .300 level. This is the same variable that rose the most in the narrative arc-only data, which likely explains its inclusion in the overall set.

Study 3: Factor Analysis of All HONY Content

Hypothesis 3a, that linguistic patterns found in all stories on an open-platform will also be found in the filtered platform, was not confirmed. The KMO score on the same variables for HONY was in the low acceptable range (.653), but several statistical measures developed to for Confirmatory Factor Analysis showed a lack of robustness in the model. I will examine each in light of the guidance Suhr (2006) offers.

The first test was a chi-square to measure the difference between expected and observed covariance. In this particular case, the Chi-Square Test of Model Fit seeks a p-value greater than .05, to show there is little variance in the model. The model under HONY had a significance of .000, failing that measure. This test, however, is considered problematic by many statisticians (Holtzman, 2006), especially with a large data set, which often leads to enough variation that significance is met.

Suhr's second suggested test, the Root Mean Square Error of Approximation (RMSEA), is related to residual between expected and observed agreement in the model. In this case, a lower score is desired and an RMSEA value of .06 or less is considered to indicate a fit. The data in HONY had a score of .106, again demonstrating the data does not conform enough to the model presented in Cowbird.

Finally, Suhr suggests the Comparative Fit Index (CFI), which compares the proposed model to a model of independence in which the variables are not correlated. Suhr suggests a model fit is indicated by a value of .90 or higher, while others state the value should be .95 or higher. The CFI value for the HONY data was .674.

In all three tests, the HONY content clearly does not match the model found in the Exploratory Factor Analysis of Cowbird. This was confirmed one more time with a Cronbach's test ($\alpha=.414$). Finally, even if the reliability and fit were strong, the models found in HONY are not exactly the same as those found in Cowbird. While there was a similar *External Narratives* factor of *we*, *social* and *drives* all loading above .300, the issue appears to be the *Internal Narrative* with multiple variables falling below the .300 mark: *I*, *adverb*, *discrepancy* and *differentiation*.

Examining a Pearson's correlation table, some of the agreements expected in the model are there, but again most of the correlations are found in the *we* pronoun, with the expected *social* and *drives*. (See Table 7). On the other hand, the HONY *i* does not correlate significantly with most of the variables that the Cowbird *i* did, with *negate* (0.93) and *verb* (.213) being the only exceptions. The variables that should correlate with *i* based on the Cowbird model do correlate with each other, which seems to indicate *i* is the variable that is disrupting the HONY model. Running a Cronbach's test on the variables with an *i*, however, only raised the alpha minimally ($\alpha=.474$). It is clear that to understand the latent factors behind HONY stories, we need a new Exploratory Factor Analysis in future research.

Table 7.
HONY Correlations.

	1	2	3	4	5	6	7	8	9	10	11
1. <i>i</i>	—										
2. <i>we</i>	-.293**	—									
3. <i>auxverb</i>	.046	-.164**	—								
4. <i>adverb</i>	-.031	-.073*	.060*	—							
5. <i>discrep</i>	-.051	-.031	.157**	-.062*	—						
6. <i>differ</i>	.016	-.017	.111**	.119**	.144**	—					
7. <i>present</i>	.041	-.100**	.540**	.055	.220**	.061*	—				
8. <i>negate</i>	.093**	-.055	.254**	.074*	.046	.383**	.228**	—			
9. <i>social</i>	-.283**	.262**	-.093**	.039	.055	-.023	.024	-.071*	—		
10. <i>drives</i>	-.105**	.385**	-.198**	-.069*	-.063*	-.062*	.059	-.074*	.314**	—	
11. <i>verb</i>	.213**	-.048	.572**	.094**	.211**	.048	.606**	.228**	-.021	-0.054	—

Correlation is significant at the $p<0.05$ level; ** Correlation is significant at the $p<0.01$ level.(2-tailed).

RQ3b: Does a post presented as a dialogue contain different linguistic properties of narrative than a post presented as a monologue?

To address the question, I ran an Analysis of Variance for the primary variables noted by Pennebaker, et al. (2014) to denote narrative -- personal pronouns, impersonal pronouns, auxiliary nouns, adverbs, conjunctions, negations -- as well as variables that proved significant in the Cowbird data -- *present focus, drives, differentiation, discrepancy, i, and we*.

Based on the Levene's Homogeneity of Variances (<.05) and linear ANOVA significance (<.05) the following variables significantly changed based on the presence of a dialogue versus a monologue: *auxiliary verbs, present focus, drives, discrepancies* and *i*. (See Table 8). The most significant change is the use of *i* in monologue versus dialogue, but the Cowbird model would also predict, then, that more *auxiliary verbs* and *present focus* would be found in monologues as well, which was not the case. Based on the Cowbird model, *drives* should have been higher in dialogue than monologue, which was also not the case. Stanton's choice of dialogue versus monologue clearly does significantly affect aspects of narrative linguistic style, but not in a way that relates to the Cowbird narrative style model.

Table 8.
ANOVA of Word Categories in HONY Based on Structure.

Category	Monologue	Dialogue	M-D %
Auxiliary Verbs	10.15	12.27	-.20.9%
Present Focus	11.58	13.11	-13.2%
Drives	9.43	8.34	+11.5%
Discrepancy	1.50	2.19	-.46%
I	9.96	6.87	+31.0%

Homogeneity of Variances (<.05); ANOVA Sig <.05

Summary

The hypothesis that the presence of a narrative arc would result in significant linguistic structural patterns was largely confirmed, but the structure varied from the patterns found in novels and short stories. The hypothesis that more narrative arcs would result from a prompt to “Tell a story” was not confirmed.

An Exploratory Factor Analysis found two latent variables within all of the Cowbird data, regardless of structure. *Internal Narratives* are driven by the use of first-person singular and correlated with present focus, high use of verbs with content focused on discrepancy, differentiation and negation. *External Narratives* are driven by the use of first-person plural and correlated with high use of social words and drives and goals. I found the model of *Internal* and *External* narratives in both posts with narrative arcs and with no narrative arcs, but the model was more robust in stories with no narrative arc.

A Confirmatory Factor Analysis of the hypothesis that the Cowbird model would apply to HONY stories was not successful. One of the primary variables that did not load onto the model in HONY was the use of *i*, which did not significantly correlate with most of the variables found significant on Cowbird. After analyzing the variance of means from monologue to dialogue, two distinct kinds of posts on HONY, the use of *i* worked even less like the Cowbird model. With these results in mind, in the next two chapters I will discuss the findings about both the textual and human dimensions of the data.

CHAPTER 7 – DISCUSSION: TEXTUAL DIMENSIONS

Finding Stories in a Sea of Discourse

This study shows that a linguistic approach to identifying stories in social media spaces, using either structure or style, is complicated by the users' and platforms' own conceptions of "story." For all the theorizing about how story forms us, and how we form stories within our minds, what we are left with in digital space are texts -- visual, verbal or written -- morphing based on who is talking and where. Still, the clues gathered here are a start to doing something important: Examining texts across many social media to develop a tool for detecting the presence of life narrative, as Pennebaker, et al. (2014) shows, which can be useful in many areas of public discourse.

On social media sites, we encounter texts like we encounter art in a museum, as Hogan (2010) argues, curated for display. We might expect to engage the creator in a social media space, but even then, we "encounter" the creator through more text. The intention of the creator may be murky or explicit, but never fully known. We use what Fisher (1987) called narrative rationality to judge the cohesion and coherence of the story as our guide through another's narrative. The texts have an agency of their own. When stories act, research has shown, they play a unique role in many realms of life beyond identity-construction. Stories are essential in political discourse (Fisher, 1987), have the ability to transport audiences into a storyworld (Gerrig, 1993), which can be persuasive (Green & Brock, 2000), especially because they can lower counterarguments (Slater & Rouner, 2002). The ability to identify stories in discourse, through textual clues either written or spoken, in a vast pool of rhetoric about important topics would help researchers better describe how humans communicate and miscommunicate in digital space. With that in mind, I will discuss the findings in all three studies.

Narrative Arc vs. Story: Beyond The Academic Definition

Why do so many posts on Cowbird not conform to the prompt, “Tell a story?” Maybe it is a mistake to assume that they do not, at least if the text has a say. The word “story” appears 108 times in the posts that were coded for no narrative arc. One could counter that a post is not a story if it does not conform to the pattern of narrative arc, because we run the risk of making all discourse a “story.” So what to make of Cowbird posts that include a claim of storytelling and yet have neither the qualitative nor quantitative characteristics of a story? One simple explanation is the presence wide ranging abilities among authors on the site. A highly trained writer might apply a more classic definition of story to their writing. Another similar effect might simply be rough draft writing. It is possible that authors post a roughly sketched out story, perhaps with an intention of revising later, or the relative informal nature of an open platform spurs a more relaxed structure than something found in a “publication,” offline or online. The intentions, skill sets, future plans of the authors, in this case, are not known, so multiple possibilities exist for why the texts appear in the structures and styles that they do.

Words mean what cultures say they mean, what Wittgenstein (Kripke, 1982) called *forms of life*, which I discuss in detail in Chapter 8. In fact, popular dictionaries largely define “story” without the necessity of an Aristotelian/Freytagian model. For example, Merriam-Webster’s primary definition is “an account of incidents or events; b) a statement regarding the facts pertinent to a situation in question; c) anecdote; especially: an amusing one,” (Merriam-Webster.com, 2014). Score a victory, then, for the small story theorists, especially Georgakopoulou’s (2007) notion that stories “coalesce in the ongoingness of their tellings,” (p. 37), the results of interactions, but this also does not quite fit the description for Cowbird. For one, Cowbird is not particularly “conversational,” but more uni-directional in language and

nonverbal in feedback. The stories coded for this research gathered a median of .23 comment per story and 6 “loves.” Maybe with a large user base, Cowbird would have become more conversational for some users, but there’s a bigger question for small story theorists: If someone writes a story on any social media, and it is not actively engaged, does that mean it is not a story? Also, the posts on Cowbird don’t necessarily combine together in the ways Page (2010) showed they do on Facebook, because Cowbird does not offer a flowing timeline of posts that would easily accrue into a story. And yet Cowbird offers many of the networked affordances that define social media.

Another explanation is that a popularized concept of story, not concerned with the academic argument, has developed in our culture, largely thanks to mass media. Advertising and journalism use the term, for example, to mean something as broad as experiencing life beyond mere existence. One example of this is a Jose Cuervo campaign from 2013 in which customers are encouraged to “Have a story.” Fast Company (Solomon, 2013) wrote at the time:

“Once the shots are poured, who knows what kind of story you’ll wake up with the next day? Maybe that’ll involve a Russian stomach tattoo or a curious game of Spin the Bottle or a frantic search for your passport. If you’re living your life the way ... Cuervo think[s] you should be, you might do all of that and more. What you won’t be doing -- having regrets,” (para. 2).

Another example is the definition from the American Press Institute (API) (“What makes a good story?”, n.d.), which argues, “Creating a good story means finding and verifying important or interesting information and then presenting it in a way that engages the audience” (para. 7). In both cases, a structural definition of story is relinquished to a looser, more qualitative understanding. The emphasis is on the ability to compel, to act in ways beyond everydayness, as Cunningham (2015) argued about HONY in Chapter 3, “a burst of pathos, a revelation without a veil to pull away.” Jose Cuervos’ ad emphasizes tellable lived experiences, implying regret is about acts of un-tellability, while the API’s declaration focuses on discovery

of information, presentation being a secondary and purely functional act. *Any* presentation that engages the audience constitutes a story, the topic only need be tellable.

Tellable becomes shareable when transported to social media. This might be Facebook's rationale for the liberal use of "story" on its primary platform and its popular photo-sharing platform, Instagram. Conflating "story" with "shareable" appears to be a goal in the text of Instagram's introduction of a feature called Stories ("Introducing Instagram Stories", 2016):

"With Instagram Stories, you don't have to worry about overposting. Instead, you can share as much as you want throughout the day -- with as much creativity as you want. You can bring your story to life in new ways with text and drawing tools" (para. 2).

The stories are not meant to accrue into a version of the digital self over time, unlike on Facebook, because, "The photos and videos will disappear after 24 hours and won't appear on your profile grid or in feed" (para. 2). This concept of story, in the end, has lost all sense of form or function as one might think of it in traditional terms, especially what Malin, et al. (2014) means when they write a "story is a story." Instead, story has come to mean any act of shareable living. I could reject this definition of story on Aristotelian-definitional terms or I could ask the question: Does story defined *as any act of shareable living* have an identifiable pattern? I have chosen the latter, but first by examining the attempts at traditional storytelling on Cowbird.

A New Narrative Arc: Amateurism or Agency?

Cowbird stories with narrative arcs have their own style. Why? A narrative arc on Cowbird, to begin with, could imply a simple desire to tell a traditional story, and the differentiation in patterns could be the result of amateurism. But using narrative arc might also imply a desire to align with the prompts and affordances of the site, thus engendering greater engagement. This is performance in the sense that Goffman means it, which is most conspicuous in the insignificance of negative emotion words and the emergence of positive emotion words (in both arced and non-arc stories). The simplest theory is that positive emotion words on

Cowbird relate to the publicness of the site, and a desire to put on the best face. Note that Thematic Apperception Tests (TATs) also show this spike in positive emotion words toward the end. Overall, Cowbird posts with narrative arcs were most like TATs, which Blackburn (2015) explains were, “written by people who were less experienced writers” (p. 94) and, thus, less conforming to the structure found in novels and some short stories. I suspect that explains some of the variation, but another theory deserves consideration. Both Cowbird and TAT stories are being “watched” for what the texts say about the writers, rather than just the characters. So structural differences of Cowbird posts could represent agentive acts of impression management, digital identity creation and community building.

Take, for example, the fifth segment of the cognitive processing structure for Cowbird stories with a narrative arc. It rises when it should lower. In fact, nothing in Blackburn (2015) looks more like a narrative arc than the cognitive processing graph (See Figure 4). It rises gently from a lower position in the early segments, peaks in the middle, and then descends. That is true for good reason:

“As the story continues, characters experiencing conflict must often engage in a sense making process to understand why something has occurred, and as a result authors can reveal this sense making process by using a group of cognitive-processing words. Furthermore, given that the end of the story often finds conflict between the characters resolved, it is expected the Cognitive Processes dimension occur when the highest frequency of cognitive mechanism words are used, typically in the middle of a story. After this intense moment of conflict recognition, authors must slowly decrease the amount of words characters use to show the transition between conflict and resolution” (Blackburn, 2015, p. 63).

And yet on Cowbird, the opposite occurs in the fifth segment, as if “the intense moment of conflict recognition” returns. Perhaps this a structural view of rumination. Or perhaps this is the most clear lens into the phenomenon of life storytelling on social media. The use of cognitive processes closer to the end of the story might predict another kind of performance, one in which users feel the need to address not what happened, but why it matters to the author or the main

character. So a phrase like, “Before that happened, I never knew the reasons ...” or “After that day, I knew the way I thought about him...” would code for cognitive processes, but could also establish the author’s presence in the moment in ways a novel or short story would not need to. Boyd (2008) argues that teens adopt strategies for building connections in social media platforms. This does not need to be an insight limited to teens. On a site like Cowbird, one way to ensure the broadest appeal for engagement is to keep the writer as accessible as possible. Thus, staying positive, inserting one’s own presence and thinking through the story’s meaning near the climax might all be logical ways to build connections on a life story social media site. Each one of these structural differences imply a stepping away from the structure, for reasons greater than just craftsmanship. The fact that a narrative arc was achieved in the first place notes some craftsmanship is at work, but different demands are placed on the social media storyteller than the professional storyteller. The social demand, to need for the author to be “present” in the text, would favor *acts of shareable living*. Finding this kind of “story” among all social media rhetoric clearly will not happen by looking for structures.

Linguistic Style: Internal vs. External Narratives

In Study 2, I set out to find if another set of patterns, based on style and I found a sharp distinction driven by first-person pronouns. This is not surprising, as Pennebaker (2011) makes the case that pronouns are a key in his research.

For example, people use the word I more when completing a questionnaire in front of a mirror than if no mirror is present. If their attention is drawn to themselves because they are sick, feeling pain, or deeply depressed, they also use I more. In contrast, people who are immersed in a task tend to use I-words at very low levels (p. 241).

On Cowbird there is a clear division of styles significantly driven by the use “I” (*Internal narratives*) or “We” (*External narratives*). The greater presence of “I” correlates to being internally-focused, emphasizing distinctions and thinking abstractly. The significant presence of

differentiation words could mean several things. For one, examining the self or the world means separating objects and ideas from one another. (e.g. “I am comforted by the idea of a loving deity, *except* when I contemplate suffering in the world.”) Differentiation might also be used to reinforce the “I” identity. (e.g. “A lot of people I know care about money, *but* I’m more interested in being happy.”) It could also be used to contemplate life’s possibilities. (e.g. “I *could have been really* happy with him, *but* he *wasn’t* ready to settle down.”) This sentence uses differentiation (but) discrepancy (might), negation (be), auxiliary verbs (have) and verbs (settle), to demonstrate rumination about what did and did not happen.

Through the significant presence of auxiliary verbs, we understand that this internally focused “I” is not motionless, but rather working toward creating a presence of the self in the mind of the audience. This also often explains the present tense that follows. For example, I could tell the Paula story with or without an auxiliary verb:

With an auxiliary verb: Paula and I *were* running across the street when all the cars stopped.

Without an auxiliary verb: Paula and I ran across the street, stopping all of the cars.

There are two ways to see this linguistic distinction. One is through skill and experience, as Blackburn (2015) alludes to. A sentence without an auxiliary verb conveys direct action and a specific moment, while adding “were” conveys an action stretched over a range of time, which is less visual and, arguably, less exciting.

But another way to view the choice is through Autobiographical Memory. The action of the character (I) becomes present-tense again with an auxiliary verb (*ran* becomes *running*) and a collapse of past and present occurs. Auxiliary verbs in present mode, (“I am writing” vs. “I write”) also conveys a slightly different kind of presence, one in which a state of action

continues throughout the communication. These grammatical forms are called progressives, because the action proceeds in time unfettered, as does the past self, thus merging with the present self, all wrapped in “I.” Even “I am stopping” never promises a full stop. This mode of storytelling could act as a resistance to the concreteness of a true past tense, which can be placed on a calendar and clock and, so too, to a geographical coordinate. To note a specific moment and place belies time’s relativity. I think this is best illustrated in the reverse, through Thomas Wolfe’s (1947; 2007) quote from “You Can’t Go Home Again.”

“You can’t go back home to your family, back home to your childhood ... back home to a young man’s dreams of glory and of fame ... back home to places in the country, back home to the old forms and systems of things which once seemed everlasting but which are changing all the time – back home to the escapes of Time and Memory” (Book VII, para. 5).

To disembowel the conflation of past and present self, Wolfe stays decidedly away from progressives. Auxiliary verbs, for all their seeming impotence, are the linguistic escape hatch through which our memories can erase time and reinforce the unity of “I,” a linguistic trick of permanence. If word correlations could take on a character, “I” is a hermit -- separated, contemplative and in the present moment.

On the other hand, greater use of “We” profoundly changed the focus to positively correlate with words that were social (mate, talk), expressed drives (affiliation, power, reward, risk). “We” does not necessarily rely on action (thus no correlation to verbs) but instead on subjects. All relevant protagonists get swept up in the narrator’s we. The “I” is only implied, but the togetherness and the goals (affiliation, risks, rewards, etc.) are explicit. It is tempting to see this as a more positive mode of life storytelling, but that would be too simplistic. Pennebaker (2011) has found that authenticity suffers outside of the “I” factor. In both the classic sense and the more colloquial use of the word, the “We” is a political way of life storytelling. That explains why affiliation and outward drives appear -- it is not simply a matter of language conveying

people in time and space, to interact with others for the sake of togetherness, but for a goal.

Whether the goal is positive or negative cannot be determined by the “We” alone. What can be determined is that abstracting thinking steps aside for an outward view of the world. “We” takes on the character of a deeply engaged community member, focused on concrete goals. To summarize, *Internal Narratives* are Gregorian, while *External Narratives* are gregarious.

The hermit of the “I” factor is set off, but an invitation is offered into the hermitage, to understand the inner workings of this particular self, by the very nature of the writing’s publicness. On the other hand, the “We” is fully participating in the society, but the intentions behind those public acts are less than clear. Other linguistic categories theorized by Pennebaker, et al. (2014) to indicate narratives were not significant on Cowbird: impersonal pronouns, adverbs and conjunctions. The missing significance of these categories in all Cowbird posts might, again, represent the lack of a traditional story structure. Or they might reveal something more meaningful, such as impersonal pronouns representing external objects that neither reflect internal rumination or external, community-based goals. The most coherent insight from these missing categories is that, yet again, there is a fragmented nature to the data on Cowbird. The theme of fragmentation, and resistance to established models of storytelling, continues with *Humans of New York*.

HONY's "I": Distinctions and Differences

I sought to find if the models found on Cowbird could be transposed onto HONY stories. The answer was a resounding no. What emerges instead is an "I," that both defies the conventions of Pennebaker's narrative style (2014), and the model found in Cowbird, by either rendering the correlations insignificant or flipping them upside down. As the "I" rises in monologue, as you might expect, the storytelling language decreases. First person singular is not just passive in HONY, it is antithetical. The first-person singular has drives, which do not appear in Cowbird. The present focus and auxiliary verbs I discussed for Cowbird are found more often in dialogues, where the use of "I" decreases. This could reveal a core goal of HONY's creator, Brandon Stanton, to show a "we-ness" of the human experience, revealed in his pro-social efforts, and in a comment he made to students in 2014 about the kind of narrative he posts on social media sites, a narrative that resists rather than emphasizes drama, "I just try to show normalcy" (UCD-University College Dublin, "On taking photographs in Iran," 2014). While this resistance to dramatic tension might explain the lack of model fit between Cowbird and HONY, another thematic merger appears: A present-moment, active resistance to, and fragmentation of, classic story. While the posts in Cowbird and HONY are structured and styled in multiple ways, incompleteness persists, largely in line with Georgakopoulou's (2016) description of social media posts that "involve fragmentation and open-endedness of stories ... resisting a neat categorization of beginning-middle-end" (p. 302). Resisting the end was especially notable in Cowbird, when language that indicates working through a problem rises instead of subsides. But what seems so important on Cowbird, subject-orientation, or the emphasis on self and other, is different on HONY. The "I" is lost and muddled on HONY, but the "We" stays similar, aligned with social mentions and drives.

Subject-orientation in social media aligns well with an explanation of the “conceptual self” by Conway, Singer & Tagini (2004) as, “socially-constructed schemas and categories that help to define the self, other people, and typical interactions with others and the surrounding world” (p. 500). It is not enough to make sense, or tell stories, of “I” alone, but we also have to make sense of ourselves in the world. The fragmentation of form found in Cowbird and HONY, and the I-We continuum found in some of the data, places the storyteller in a familiar field of study, one often overlooked in social media research, the self memory system found in Autobiographical Memory theory. Conway, et al. (2004) argue that the Self Memory System “emerges from the intersection of two competing demands - the need to encode an experience-near record of ongoing goal activity and the simultaneous need to maintain a coherent and stable record of the self’s interaction with the world that extends beyond the present moment” (p. 492). Life storytelling on social media addresses both demands, and an “experience-near record” arise in both data sets (in the form of present tense), though it aligns with different variables. In Cowbird, the use of *i* correlates with focus on the present. In HONY, present tense rises when the posts involve a dialogue, a verbal engagement. Cowbird reflects the stable record of the self over time, while HONY reflects the experience-near record in action.

The *Working Narrative* and a Digital Self-Memory System Proposal

Overall, I found digital life “stories” that are fragmented, open-ended, present-focused and self-subject-oriented. I have come to think of them as *working narratives*, active and unfinished stories that will either get encoded into long-term digital memory or functionally forgotten. I use *working narratives* as a reference to Conway and Pleydell-Pearce’s (2000) concept of the “working self,” part of the broader self-identity that is enacted when current goals demand it. The working self is not complete, but rather constrained by, and engaged with, the

present. Conway and Pleydell-Pearce also make the case that the working self is both activating and suppressing long-term memories in accordance with present goals. Accordingly, the *working narrative* on social media seeks to present a “best self,” not simply as an act of impression management but also as a form of creating a “stable record of the self” *for* one’s self. The self as a story is a never-finished and complex problem to work through, one that interacts with the responses of others and so is always mutable. Hermans (1996) explains:

“When people are anxious about becoming the person they would like to be and afraid of becoming the person they do not want to be, there must be an image or conception in the past and the future” (p. 44).

This perspective places short-term memory at the center of life storytelling on social media.

In light of this finding, I want to propose, without venturing too far from the data, a framework for understanding *working narratives* in social media storytelling. I have called it the Digital Self Memory System (DSMS), informed by Autobiographical Memory theory’s Self Memory System (SMS). Described by Conway & Pleydell-Pearce (2000), SMS refers to the working self joining the autobiographical knowledge base (long-term memories) to address current goals. The relationship is reciprocal and “superordinate,” meaning that both working self and the knowledge base can work independently of each other, but “when conjoined allow autobiographical remembering that could not otherwise occur” (p. 271). SMS, and thus the working self, is constrained by the remembered history. Pathologies aside, you cannot develop a goal that contradicts the knowledge base. The authors use the example of the impossibility in engaging a “potential self” that achieved success at school, when that person can remember many academic failures. “The range or universe of goals that an individual can maintain is delimited by autobiographical knowledge that places consistency and plausibility constraints on what goals can be held by the working self” (pp. 271-272). “Consistency” and “plausibility” bear

a resemblance to Fisher's (1987) "coherence" and "fidelity" in the Narrative Paradigm, which is the logic used in assessing the value of someone else's story. This is especially important in a *working narrative*, because the social aspect of life storytelling online theoretically creates delimitations both from the self and the possible audience. *Working narratives* address both pressures, despite the affordances of social media to more effectively manage one's own image. However, the constraint of online-offline self is mediated by the level of verisimilitude between the two. While autobiographical memory does not allow the working self to stray far, it has less power over the *working narrative* on social media, *if we choose to fictionalize the self*.

Therefore, the Digital Self Memory System is based on five premises:

1. *With each new platform adoption, an offline-online verisimilitude scale is negotiated within the self.* Each social media storyteller determines, consciously or unconsciously, how closely their digital "character" will align with their offline identity. The extremes are a purely fictional avatar (an extreme second/third/fourth life) to a purely authentic offline self uploaded into the digital world. Simple choices, such as usernames and profile pictures, begin the negotiation, as do choices to add offline friends to online communities. A storyteller's position on the scale determines how much of a role autobiographical knowledge plays in creating digital stories.
2. *Users tell working narratives on social media based on present goals.* Goals could be anything from building a friend base, to increasing offline confidence, to gaining information. Stories and narratives that reference the offline and online world intermix with other forms of digital rhetoric (such as jokes, opinions, shares, non-verbal responses, etc.). Fragments of stories, in their open-endedness, invite interaction and the storyteller

monitors both the narrative's authenticity (self-negotiation) and digital cues (social negotiations such likes, loves, shares, comments, etc.).

3. *Digital identity is constrained by networked narratives* (Page, et al., 2013). The goal of interactivity implicit in public sharing of *working narratives* affects the identity of the digital character, no matter how aligned to the offline self the digital self is. Digital story performance and performativity, becomes rewarded or discouraged by the amount, and types, of interactions. Attempts to master or resist platform primes and prompts, and the subsequent engagement or lack thereof, forms nuances about the digital "character."
4. *A digital knowledge base emerges over time and use*. Platform designs and affordances, as well as algorithms that re-populate feeds with old narratives and interactions, create a digital knowledge base about the character, regardless of where that character fits on the online-offline verisimilitude scale.
5. *A recursive offline-online negotiation between knowledge bases commences*. How much of the digital character gets encoded into the identity of the author depends on both the perceived success of the character in its digital world(s) and the perceived congruence of the offline and online selves. Both knowledge bases can co-create a stable record of the self that constrain and enable potential selves.

Points 1 and 5 are based on previous research and theory about memory and transmediation (Conway & Pleydell-Pearce, 2000; Hermans, 2014; Floridi, 2014), while 2, 3 and 4 are observable in the data presented above. Future research could explore the precise nature of offline-online interaction of knowledge bases through human-focused research, while more textual analysis (especially visual) is necessary for understanding the precise nature of life storytelling on social media.

I offer this framework, because neither big nor small story theories fully explain the phenomenon of life storytelling on social media, but both partially do. Small story theory describes social negotiations and the accretion of stories over time. Big story theory describes the recursive negotiation of knowledge bases into a unified identity. Working memory as a predictor variable expands the purview for broader explanations about the self in digital space. For example, the role of memory is multiplied in life storytelling on social media. The author's organic memory matters, but it is augmented by archival affordances of the site, either to stay for years (even sometimes when the author would prefer it be forgotten) or to purportedly disappear (in the case of ephemeral media such as Snapchat and Instagram). In the case of Cowbird, for instance, the site's affordance to add stories has been shut down as of March, 2017 (Harris, 2017), but the ability to address the memory of those posts, the archive, is still available for now. The public life of those stories in perpetuity, and the ability of strangers to interact with them, depends on decisions in which the authors have no control.

Even less control exists in the face of current and future algorithms that attempt to make sense and give meaning to a character's past posts. HONY is a rough estimation of this effect, because the interlocutor has almost total control over the digital performances of his subjects once they are spoken to him. Algorithms are taking this effect to another extreme. Thus far, one of the most heart-wrenching examples of algorithms getting the weight, but not the context, of a memory came in 2014. Eric Meyer, whose daughter died that year, received a festive post from Facebook in December with a picture of his daughter and a message that read: "Eric, here's what your year looked like!" Meyer (2014) wrote in a blog post: "Yes, my year looked like that. True enough. My year looked like the now-absent face of my little girl. It was still unkind to remind me so forcefully" (para. 5). By focusing on memory, in all of its forms, one can see a larger

system at work and conceive the philosophical, ethical and agentive needs that coalesce around life stories in the space.

Limitations and Summary

Because this study focuses on two specific sites, the ability to generalize these findings are limited. The findings themselves expose this truth: Linguistic patterns for one platform proved to be an impossible model for another platform. This research needs more data across multiple platforms to find what, if anything, is essential and consistent to digital life storytelling. Secondly, by choosing to do human-driven Quantitative Content Analysis, the power of the study is limited. If I were sure that the linguistic patterns found in Blackburn (2015) held across all digital storytelling endeavors, I could have applied LIWC to the entire data set of Cowbird's site and other sites. That was not the result, however, so it seems especially important to continue to do human-driven content analysis research until a reliable and valid model can be deployed across large data sets.

Another limitation is the lack of knowledge regarding both the intention of the authors and the ability and/or desire to execute the posts in a particular way. Time spent composing the stories, both within the Cowbird ecosystem and outside of it, the level of writing experience of the authors, the desire to conform or subvert in regards to primes and prompts of the site are all unknowns. While linguistic analysis is specifically meant to find latent variables in the use of language, more overt attitudes and intentions are missing from its purview. These intentions and overt motivation will need to be assessed through surveys, interviews and experiments. These methods could examine the role of feedback and engagement in the creation of stories in social media.

Finally, Pennebaker, et al. (2014) admits that linguistic analysis upon which a large portion of this dissertation is built, still remains an evolving tool. While many of the propositions Pennebaker makes in this research were confirmed in this study, not all of them were. Continued research into the validity of LIWC and linguistic measurements will help fine-tune the process. But an equally important insight is that the very human approach of textual analysis, content analysis, hermeneutics and critical theory must remain at the forefront of this kind of research. Collaboration across the human- and computer- methods and disciplines will result in better insights and more useful applications to the broader world. Another important limitation lies in the media itself -- the ability to tell life stories on social media is a privilege that less than half of the world can currently enjoy. The digital affordance is only part of the issue, because the time, education and social gratifications of such an act are also limited for billions of people. In addition, my analysis limited the data to English writing only, which reduces the chances that variations in cultures were significantly gathered. These factors narrow the frame of actors whose texts were analyzed. It is safer to say I studied texts of primarily Western authors with access to Internet Communication Technologies.

The most important and overarching contribution of this study, from the textual perspective, is that a freedom to define story within each creator is driving a wide variety of content types. No generalizable model for storytelling -- neither in structure or style -- has yet been confirmed. This is likely due to individual differences about "story" schema and also format differences about how stories are generated. The study was designed to use two very different platforms -- open and ungated vs. filtered and gated -- to see if the linguistic style of narrative transcends those differences. In future studies, it makes sense to be slightly less ambitious. The Cowbird model for narrative style could correlate more strongly with other open

and ungated platforms, such as Facebook in general use. The process would have to include quantitative content analysis with definitions of what constitutes a life narrative to separate them from other kinds of discourse (Aristotelian logic argumentation, jokes, etc.) and then apply Confirmatory Factor Analysis to that data. Eventually, with enough exploration and refinement and more engagement with the literature, the goal is to create a tool that isolates life narratives in social media.

The concept of a *working narratives* and DSMS invokes consideration about the metaphysics of language and technology. The data examined thus far has led me to consider a broader issue of life storytelling in digital space: The metaphysics of language and ethical actions of the narrated self in Floridi's Infosphere (2014).

Chapter 8 – Discussion Coda: The “I” in The Infosphere

The Digital as Self: A Metaphysics of “I.” What is a narrated self? Dennett (1992) asks a similar question, about a self, period. The eager postmodernist responds it is a construction, but he answers with an analogy: The self is like the center of gravity of an object, an *abstractum*, or a useful fiction, to help us describe an observed phenomenon. There is no “thing” that is a center of gravity, but it helps us understand gravity itself: “The attractive force by which all bodies tend to move towards the centre of the earth” (“gravity,” 2017). The self is also a useful fiction used to interpret these “complicated things moving about in the world -- human beings and animals.” Like gravity, self is an abstractum that explains how individual beings are unified and Dennett, says, “we have to posit selves for ourselves as well” (p. 276). These selves we posit are fictions in much the same way that Ishmael, Melville’s mariner-narrator, is a fiction. Wait a minute, the objection rings out, Melville the person was real and created Ishmael, the fictional character. Well, a robot can write novels too, which at one time was “something some of you may think incredible,” (p. 277), but no more. Algorithms are coded to write in first-person regularly. A New York Times online quiz (Podolny, Mar. 7, 2015) asked its readers to determine whether a human or an algorithm wrote texts displayed on the screen. Spoiler alert -- if you were to guess a robot wrote question 5, a passage from the novel “True Love,” you would get that question right, but you could nonetheless read the novel like any other. In fact, you might realize that “True Love” is a variation of “Anna Karenina” written in the style of Japanese author Haruki Murakami, and you have, as Dennett argues, engaged the book in the same way you would any other book. So far, so good. But let’s imagine, in the spirit of Dennett, the computer which remixed Tolstoy instead got wheels and had experiences that were then translated into stories. Dennett writes:

We can still maintain that the robot's brain, the robot's computer, really knows nothing about the world; it's not a self. It's just a clanky computer. It doesn't know what it's doing. It doesn't even know that it's creating a fictional character. (The same is just as true of your brain; it doesn't know what it's doing either.) Nevertheless, the patterns in the behavior that is being controlled by the computer are interpretable, by us, as accreting biography--telling the narrative of a self. But we are not the only interpreters. The robot novelist is also, of course, an interpreter: a self-interpreter, providing its own account of its activities in the world (para 15).

Let's stop at this point in Dennett's argument to ask how this works in language. For the fiction of the self to be told, we need a qualifier that reliably identifies the actor we see acting as being the same as the speaker we "hear" speaking. In English, this has largely been handled by the reflexive pronoun "I," as it so often is in the platforms we studied, an indexical that moves with seeming effortlessness from this person to that, depending on who is referring to oneself. We should not brush over the graceful mental gymnastics of this word use in everyday life. When two people speak, and A says, "I," B never reasonably has to say, "who do you mean?" even though B will likely use "I," also without confusion. This can go on with any number of speakers, all using "I" and all being understood. It is interesting to note, in fact, that when a person uses their given name to refer to one's self, it often takes an extra mental step to understand the reference, at least when first meeting that person. (It also seems a little strange. At least Michael Humphrey thinks so.) "I" needs no second step in a normal conversation. Even the slightest movement in pronoun changes the demands for understanding greatly. Imagine using "we" among two or more people, especially in a low context sentence. "We went to school together, didn't we?" for example, would demand something else. At least a nonverbal gesture (such as pointing back and forth), or a very clear history of having gone to school together, is necessary to establish which "we" is meant. Same with "you" or "they," which takes more context in a room of three or more. "I" has a special place in the everyday use of pronouns, but

does that necessitate that “I” is a “guaranteed reference,” meaning that it refers to the same thing each time?

The reference could be a proper name, but Anscombe (1975) shows this is not the case, citing Locke’s insight that one who thinks, “I did it” might be a “different thinking substance” than the one thinking, “I am doing it,” thus arguing that a re-identification of the object must take place each time, a process for which “I” is not sufficient, since the presence of the object is always needed for “I” to have meaning. So maybe “I” works like a demonstrative, such as “this” or “that,” rather than a name, which succeeds only if it “catches hold,” of its object, as Anscombe says. Descartes claims it does, but he only means for thinking, not a body.

Anscombe doesn’t buy it. She writes:

“How, even, could one justify the assumption, if it is an assumption, that there is just one thinking which is this thinking of this thought that I am thinking, just one thinker? How do I know that 'I' is not ten thinkers thinking in unison? Or perhaps not quite succeeding. That might account for the confusion of thought which I sometimes feel” (p. 31).

She goes on to show that when Descartes and Augustine both make the argument that “I” is a “referring expression” they were referring to “I” as their subject, not the object. Locating “I” as an object leads to many difficulties. (I will argue later this is not such a problem if the subject is a congruent character that is connected.) For Anscombe, “I” is neither name nor any other expression of reference. And here we find ourselves back in the realm of memory. Her most convincing example is when she writes of an amnesiac:

“When a man does not know his identity, has, as we say, 'lost his memory', what he doesn't know is usually that that person he'd point to in pointing to himself (this is the direct reflexive) is, say, Smith, a man of such-and-such a background. He has neither lost the use of "I", nor would he feel at a loss what to point to as his body, or as the person he is; nor would he point to an unexpected body, to a stone, a horse, or another man, say. The last two of these three points may seem to be part of the first of them; but, as we have seen, it is possible at least for the imagination to make a division. Note that when I use the word "person" here, I use it in the sense in which it occurs in "offences against the person". At this point people will betray how deeply they are infected by dualism, they will say: "You are using 'person' in the sense of 'body'" - and what they mean by "body"

is something that is still there when someone is dead. But that is to misunderstand "offences against the person". None such can be committed against a corpse. 'The person' is a living human body" (p. 33).

What is left of "I," "this (living) thing here," is not an identity statement. It is merely a statement of being in a certain objective state. This is not only the case for "I," but also in the example used earlier, when a person refers to herself with her proper name. "The nearest I could get would be, for example, 'E.A. is the object E.A.' That is, 'E.A. is the object referred to by people who identify something as E.A.' (pg. 56). As mentioned earlier, this becomes noticeable if people speak of themselves in third person, because it portends something is not quite right, such as when William James' man falls out of a carriage and bemoans the news that "Baldy" ("Poor Baldy!") was the one who fell out, as if he were not Baldy, which he is. He's hit his head, clearly, and has lost the connection between self and subject, but might still use "I," though he clearly does not mean it to mean Baldy. Anscombe concludes, "The (deeply rooted) grammatical illusion of a subject is what generates all the errors which we have been considering," (p. 36).

And so we find self-identity left on the side of the road, a useful narrative, but a fiction, depending on a useful word, "I," but with no real reference. If all of this is humbling or off-putting to those once confident self-identifiers, be warned that it gets a little worse before it gets better.

Many in One. Anscombe's notion of 10 selves instead of one might not be so far off. Dennett uses two types of brain pathologies -- Multiple Personality Disorder (MPD) and those whose *corpus callosum* have been split, thus disconnecting the two hemispheres of their brain -- to show the possibility that multiple selves can and do exist within the mind of an individual. This is not a pathology alone, he argues, but rather an ability the brain naturally contains. For most of us, these disparate selves are unified into a generally cohesive self, which

he argues is a fiction. What is in contemporary times unloaded on social media as fakery, narcissism, puffery, etc., is really just the human condition writ digitally.

“We are all, at times, confabulators, telling and retelling ourselves the story of our own lives, with scant attention to the question of truth. Why, though do we behave this way? Why are we all such inveterate and inventive autobiographical novelists? As Umberto Maturana has (uncontroversially) observed: ‘Everything said is said by a speaker to another speaker that may be himself.’ But why should one talk to oneself? Why isn't that an utterly idle activity, as systematically futile as trying to pick oneself up by one's own bootstraps?” (Dennett, pp. 80-81).

Rovane's (2004) answer is rooted in rationality. She offers two premises for forming, rather than being biologically bestowed with, selfhood: 1) a person is “subject to the normative requirement to achieve overall rational unity within itself;” 2) a person “must be *committed* to satisfying that normative requirement” (p. 238). This is an agentic notion of personal identity, and a relational one too. So, her view of Dissociative Identity Disorder (DID), an updated and nuanced term now used instead of MPD, takes on a different character than Dennett's. She argues that they are not, in fact, disorders that reveal something about everyone's mind, but rather a beginning state from which we attempt to knit together rational unity, a metaphysical given of human nature. She writes:

Multiplicity is one of the possible states at which human rational activity could be deliberately and coherently directed. When such activity is so directed, it is not, of course, carried from one human-size point of view but from multiple points of view, each of which has separate ends for the sake of which it is striving to achieve rational unity within itself instead of striving for rational unity within the whole human being (Rovane, 2004, p. 248).

Dennett's epistemological, empiricist approach is more interested in an evolutionary answer than a metaphysical one. He points to Julian Jaynes' research that argues that our ancient ancestors were not conscious. The evolutionary leap occurred when someone blurted out a question to no one there, heard herself, which led to an answer from herself. A communication link had been established in the brain, first through vocalized self-talk and eventually to

subvocalized self-talk and, in turn, verbal thought. This, I think, relates to some of the gratifications of digital life, to “hear” one’s self in a new space. Dennett then returns to the split-brain research, which shows that there are clever methods for getting the hemispheres to talk byway of ipsilateral nervous signals -- such as pain -- which go to both hemispheres of the brain, thus allowing the brain to “unify” again and solve problems. This ability to beat the system and unify, Dennett argues, is a human ability, not a pure adaptation after the hemispheres were disconnected. He writes:

“That is, it does seem that we are all virtuoso novelists, who find ourselves engaged in all sorts of behavior, more or less unified, but sometimes disunified, and we always put the best ‘faces’ on it we can. We try to make all of our material cohere into a single good story. And that story is our autobiography” (p. 287).

There is a commonality between Dennett and Rovane, beyond the fact they use similar pathologies to explain basic human functions. They both seem to agree, in general, that some form of unity of selves, whether it is rational or biological, is a natural human endeavor. And while it is right to say, as Dennett implies and Rovane explicitly states, that there is a fundamental difference between DID and what Hermans (1996) calls the “dialogical self,” (or the ability of the self to create channels of dialogues from the multifaceted nature of the mind through story), the fact the multifacetedness can exist as separate entities within one person and that it does to some level in most of us, offers us insights into how we emerge from the metaphysical and biological soup of many selves to a coherent story of a unified self and what that might mean for the transmediated self of Elwell (2014). While the examples that are shared here seem to only strengthen Anscombe’s argument that “I” refers to nothing specifically, there is another way to examine how language unifies these communities that exist within our narrative self.

The skeptical solution of self. So if it is true that the use of “I” cannot properly refer to a subject, as Anscombe argues, it is enough at least in the narrative self that “I” always refers to an object. This would return us back to a pragmatic use that we see in all of the data in life storytelling. The “I” is the narrated character commonly thought of “self.” So “I” is not the subject of “this living thing here,” but instead the object of “that unifying thing there,” that character-being that is described as acting and thinking in the world and acting and thinking text in digital space. That it is not a subject, it seems, is not a problem, because it functions similarly. It identifies an active process of becoming, which is more in line with an identity of human and an improvement on “this living thing here.” This does not negate what Anscombe is arguing, but it might render her conclusion less significant. If we agree with the intersection of Rovane and Dennett, that humans are generally about the business of unification of the parts of the person, then it seems both possible and useful to refer to that intersection as “I.” This can be referred to, not as a body or as a thinker of thoughts, but only an object that a body and thinker is referring to as a process of unification of components of the self. If the character is not constant, though recognizable, the process is. So in each of the statements -- “I am going to the store tomorrow,” “I went to the store yesterday,” and “I think the store could use an update,” -- a narrated character emerges. It is created by the computer, and the brain, but is determined (to varying degrees based on the person’s ability and desire to recount with some notion of how things were remembered to go, among other things) by real things that happen in the real world.

As Dennett argues:

“We cannot undo those parts of our pasts that are determinate, but our selves are constantly being made more determinate as we go along in response to the way the world impinges on us. Of course it is also possible for a person to engage in auto-hermeneutics, interpretation of one's self, and in particular to go back and think about one's past, and one's memories, and to rethink them and rewrite them” (p. 279).

In all of the cases, the “I” is the character in the midst of the action. But there is a major problem that I have to solve if I want to argue that “I” is an object, a character, rather than a subject. What is the subject? Is it the computer-brain, that wholly unreflective generator of fictions? Or could it be something else? Here I think Kripke (1982) might be useful when he refers to a *form of life*, the set of agreements we create to make words mean something specific. The *form of life* agreement among a community of entities (people or perspectives of one person), would be the subject. It is the community of “selves” that exists in the brain form unities that we call “I.” As Rovane (2004) argues, it is not necessary for a full unification to take place for an “I” to emerge -- any kind of unity in which the community of self agrees to is “I.” For that is the character spoken about in the community. This *form of life*, I suppose, could collapse into a sort of “meta-I,” but this is just the same mistake Anscombe bemoans in the first place. It can be resisted simply by thinking about the communal agreement itself being the subject. If you wanted to get dizzying about it you could say, “[The *form of life* that agrees the community within this body has unified to create a perspective on one element of this body’s activity] went to the store yesterday.” Or you could just say, “I.”

All that is necessary here is agreement of what constitutes the “I,” in any given narrative case, but to get agreement you must have more than one, because a beginning state of unity gets us back to the basic problem. To get to a meaningful first-person, and not just an empty pronoun that refers to a body, one must have another grammatical person, either a second or third; otherwise there is no community. We see this dynamic occur, if just a little, in the two platforms we examined. In *Cowbird*, the “I” is the hermit, cloistered away in thought. In *HONY*, the “I,” as it is found in monologues, is more interested in goals. We can relate these digital realities, because they are created in an ecosystem that is purely digital, back to Dennett’s (1992) robot.

The need for another. Imagine that Dennett's robot (which he named Gilbert) is not given wheels and placed into the world, but rather must create his own world, in digital space, where anything is possible, within the limits of the coders' imagination, because there is nothing other than Gilbert and a digital canvas. This is not an *ex nihilo* proposition, because we have a creator-robot who has been created and uploaded to this digital world from another world. Still, where would Gilbert start? Let's imagine, like a novelist would do, Gilbert uses references from the world from which he was coded, such as physical laws (if there's no gravity, for instance, it is still a reference to gravity) and perhaps some social constructions. This endeavor must have also included some way for Gilbert to process information, but there is no outside stimulus beyond that, meaning no one hits Gilbert with a bat. In this world, let's call it Gilbertland, Gilbert has been coded to create without end. And so he roams and produces the most interesting things he can concoct but, unlike God in Genesis, does not create other entities that can perceive, because he was not explicitly coded to do so, though neither has he been coded *not* to do so. So far, everything is inanimate. So we have a universe in which Gilbert is alone and where a multitude of dimensions have been produced. At this point, it might not be necessary for Gilbert to process information beyond morphologies -- this is the shape of that, this is the color, etc. -- but let's say Gilbert comes to a standstill, because all the physical dimensions that his limited coder could have possibly prepared Gilbert to imagine or dream up have been made. Gilbert has been coded to not stop creating. Now, it seems, Gilbert needs another form of processing, one that captures something other than a physical dimension and so, for the first time, Gilbert speaks. His dilemma forces a language that can utter the English equivalent of, "What next?" To whom has this question been asked? From a grammatical point of view, it is direct speech and thus implies a receiver. Since there is no sense of a creator, and there is no other processing beings in this

universe, then it must be that Gilbert is talking to himself. But this is folly unless, through coding that made him, Gilbert has no option but to communicate and, by this, has implied a “you,” as in, “Hey you, I would like to know, what next?”

With this, the multitudes that Dennett (1992) and Rovane (2004) imagined begin. If the answer from this vocalization (or subvocalization) is, “Make another speaker,” and Gilbert has not been coded with references to the possibility of other beings, then it seems he only has one choice, to remake himself.

Let’s say he does that, he creates a multitude of conversants and, since each permutation of Gilbert is free to create as Gilbert created, they roam the made universe as Gilbert roamed it, each Gilbert shaping a slightly different set of experiences (even if, after exhausted, the parts are all the same). To ensure all possibilities of creation are exhausted, a *form of life* is created so that communication can happen, which helps each of the Gilberts to press on, but now with ideas as well as possible new shapes, etc. As those interactions take place between Gilberts, different perspectives from different Gilberts create a multitude of understandings within each Gilbert, including the original Gilbert, who is now most concerned with creating as many possible Gilberts, because it is the most fruitful way to fulfill his encoded demand to keep creating. When Gilbert E asks Gilbert B one day, “Are you glad that you created this universe?” and Gilbert B, who has been coded to believe “happy” means fewer failures than successes, responds, “Yes, I am.” That “I” is referring to a process of gathering the internal conversants of Gilbert B to produce an answer. Let’s try this against a simple test Anscombe offers, the “indirect reflexive,” test.

"When John Smith spoke of John Horatio Auberon Smith (named in a will perhaps) he was speaking of himself, but he did not know this." If so, then 'speaking of' or 'referring to' oneself is compatible with not knowing that the object one speaks of is oneself" (p. 47).

But when John Smith speaks of John Horatio Auberon Smith, who didn't realize at first he had received an inheritance until the lawyer explain that JS and JHAS were one in the same, he did know this happened to the character JS who was referred to in the story as "I." It can be proven that John Smith is the one who formed this story of John Smith, the character. It might even be proven that John Smith, the one who was telling the story, is the same corporal being John Smith that was at a lawyer's office and received an inheritance but did not realize it. But that part is not important. All we really have to know is that John Smith is referring to "I," the character in process.

Authentic digital selves. This gets us nowhere in a court of law, but that is not the point. Storytelling is an art after verisimilitude, not verification, an often-missed matter when we get upset about others making up stories about themselves. It is not wrong to be upset by a manipulation, but the argument is misplaced. It's not that the person misspoke about what happened in his life -- we all do that -- but whether the person intended to misrepresent. The fact that digital affordances expand the possibility of inauthenticity is not really that important, either. What actually matters in life narrative is how that narrative shapes the community of "I," the characters that we imagine ourselves becoming, that give us continuity and meaning in this life. When we are dust, that sense of "I" will have proven to be the most useful identity we could have had. Before that happens, there appears to be a psychological proclivity to "shape" a story, especially the further away one gets from the raw experience. What is critical is coherence, as Pennebaker & Seagal (1999) notes, adding, "Linguistic coherence subsumes several characteristics, including structure, use of causal explanation, repetition of themes, and an appreciation of the listener's perspective," (p. 1250). The most efficient way to do this is verisimilitude. That's because the listener, whether it is the storyteller herself or an outside

audience, is critical to the storyteller's belief that this narrative is part of their identity. So the narrative character as "I" is not an inconsequential fiction, even if Dennett's choice of terms is arguable. "I," understood as meaning a character narrated by a *form of life* for the purpose of unifying parts of the multitudes within each of us, may not be a referent to the subject itself, but it is a referent to identity, and not a trivial one. The question is what ethical obligations to a broader *form of life* (beyond the self) that referent in digital space has.

The self as digital story: Acting in the Infosphere. In 2006, Facebook opened its wall to any user over the age 13, Twitter was founded and YouTube became a household name. A year later, Tumblr arrived, followed four years later by Instagram and Pinterest, then a year later by Snapchat. Like the rapid ascension of memoir and "reality" entertainment of the 1990s and 2000s, social networking platforms proved that self-mediatization had great economic power. But there were differences. Memoirs such as Frank McCourt's "Angela's Ashes" and shows like MTV's "Real World" might have stretched, and perhaps disfigured, the shape of our understanding about true stories in their respective genres, but they did not erase a general expectation of factuality. When a memoirist was caught in a lie, and it happened often, a generalized exasperation would blow through the media.

If Anscombe (1958) had been able to address the matter of fake personal histories, she might have been interested in parsing the concept of "contract" between writer and reader. A writer's novelistic styling of her or his life, packaged as memoir to meet a market demand, arguably subverted an obligation between him and his readers, perhaps based on a contract of a just a few words -- calling his book a "memoir" instead of "novel." Anscombe rejects the notion of contracts in the broad sense of an "emphatic ought," because it would be impossible to imagine all the contracts we implicitly sign to live ethically in the world. Memoirists and each of

their readers did not sign such a contract, of course, but the requirement for an emphatic ought is, and has been, questionable for the act of memoir writing. On the other hand, it is not outrageous to argue that the boundaries of a memoir's authorship would be significantly different had the book been marketed simply as a semi-autobiographical novel. Calling it "memoir," for marketing purposes, restricted its performative possibilities, limited by the expected dedication to knowable facts. Is this is a sort of contract? Here is where virtue ethics, which emphasizes moral character over duties or rules, can be a useful approach to understanding life narrative in modern times. Anscombe might argue that the issue is more simple -- readers on the whole might feel "bilked" for being offered a true story that was consciously non-factual. And the reaction to a systematic misstating of purported facts would be broadly negative, because the act would be perceived as unjust. If we take the two ideas of virtue that Annas (2011) provides -- one, that virtue is a development (like a skill) that grows through mundane repetition; two, that virtue is part of a person's happiness or flourishing -- a guide for how to ethically present life narratives in digital space will emerge.

The 1990s and early 2000s were easier times to delineate what constitutes virtue in life storytelling. A concession, like the one a memoirist caught lying might give, would prove harder to extract from the typical social media user, and for good reason. In the early versions of the Internet, playing a role was normal and this ethic remains to a degree now. Although, it was also clear early on, as digital pioneer Kevin Kelly recently explained in an interview, that the desire to mend the divide between online and offline selves was prevalent. He says, "One of the things that we noticed when we did The Well [a text-based social platform] in the mid-'80s was that the first thing people demanded once they started meeting online, was that they wanted to meet face-to-face" (Spiers, 2016). So there is a bit of have-cake-eat-too thinking baked into the early

Internet that has persisted. The ethos of “second life” still exists online, but pressures both economic and social have instead created a murky space between offline-online identification.

Another hypothesis for the lack of ethical clarity of digital life narrative is that citizens have taken up the skill of a professional without the requisite training or guidance, ala the citizen journalist. The concept of the “citizen memoirist” is alluring, but it clouds the issue in the same way the term “social media” does. The “media” portion of that term tempts us to graft themes about mass media onto primarily social activities. This tendency was successfully critiqued by Sundar and Limperos (2013) as outdated and non-responsive to the interactivity that the Internet affords. The researchers then attempted to reframe Uses and Gratifications for digital media use, but ultimately fell into another trap. They traded the media themes for technological ones, viewing interactivity largely between user and device, the software, the feed, the developer but not the culture created within those systems. One reason for examining social media use with themes of media consumption or technological gratification is parsimony: As soon as you admit that each site (made up of multiple user interfaces and millions of agentic users) creates its own culture, you have infinite numbers of cultures to study. This surrender to conceptualize technology or media as the primary experience of social media, however, not only marginalizes the digital experience as necessarily secondary to physical life, it also misses the importance of the identities we are creating in those spaces. Self-performance on digital platforms is primarily driven neither by media nor technological impulses but by a far more basic and latent need: To live life. This is not denying that such platforms are media or technologies, but the exigencies they create are a new kind of existence, what Floridi (2014) calls an “onlife” in a realm that mixes physical and digital into an “infosphere.”

Three statements demonstrate my logic: 1) When users of a social platform expect meaningful responses to their presence as a primary gratification, it has become a space to enter rather than simply a conduit of information; 2) When users reasonably experience outcomes of such interactions that have impacts on their social ties, it has become a social setting rather than a pure informational setting; 3) When offline and online experiences blur both in space and time, then life is being lived, rather than merely mediated. Admittedly, this perspective runs counter to an ever-growing discourse that pits living against time spent with digital technologies. The critique is natural and, in some ways, healthy. But it has ultimately arrested our development in acclimating to a new way of living. Digital life will progressively integrate with physical existence and will demand its own metaphysics. Treating digital sociality not as media or technology, but as life itself, inevitably evokes a central question: What is digital *eudaimonia*? How much does it rely on ethical and authentic renderings of a self?

Because digital platforms are media as well as spaces in which to live, life narrative can emerge in two ways: 1) Conscious sharing of narratives, from briefly posting a textual or visual recounting of an experience to using digital tools to craft a whole life story; 2) Algorithmic compositions of online activities, such as mapping the movement of one's physical location or archiving digital activities (playing a game or have a discussion) can result in the development of a "character" profile. Therefore, living a life in the infosphere means leaving behind a digital narrative. The former scenario, in which we use a platform to shape our narratives, is loosely related to memoir writing or public journaling, and so we can carefully extrapolate some ethical understandings from those activities. The latter scenario, however, is relatively novel to humankind in one way. We are used to the perceptions of others playing a significant role in shaping our life narratives, but we are not so savvy about how software does this. So we must

ask: How is a digital life narrative formed in a just way? What are the limits of agency, both for the self and the software, in forming such narratives?

These questions lead us back to Anscombe (1958), and the field of virtue ethics, which finds its gravity in the nature of human beings rather than codified rules from on high or the consequences of actions. Because, just as Anscombe spoke about life writ large nearly 60 years ago, we again find, “there is a huge gap” in our understanding of life in a digital sphere, which “needs to be filled by an account of human nature, human action, the type of characteristic a virtue is, and above all of human ‘flourishing’” (p. 18). Understanding, at these early stages, how the affordances of this new connective technology affect human beings’ sense of being and well-being, both within and without the digital sphere, is critical in developing the concept of what is just and unjust within the new sphere. The affordances will continue to change but for now we know that at the center of digital communities is the human personality, or at least a persona, which is slowly developed through usage of various platforms. It is time to consider what it means to build a moral digital personality, just as we expect to build one offline. McAdams (2009) asks, “What then is a *moral* personality? It depends on what aspect of personality you are talking about -- be it dispositional traits, characteristic adaptations, or life stories” (p. 13). McAdams goes on to argue that moral meanings run through a person’s life narrative, in fact frames those narratives, and ultimately “justifies or condemns his or her own identity tale in moral terms” (p. 21). Our moral personality *is* the narratives that we tell ourselves and others, chosen among the normative limits created by culture. The Internet has proven to be a powerful tool for practicing identity-formation, especially among youth (Greenhow & Robelia, 2009 & Valkenburg & Schouten, 2005). To use the Internet, however, merely as a tool for self-realization is to ignore the possible effects such acts have on others, especially when performed

at mass scale. As Plaisance (2016) argues, virtue ethics provides a framework for self-realization but also “provides an inherently prosocial agenda; even Aristotle’s framing of moral education is implicitly focused on its broader community value” (p. 465). McAdams (2008) makes a similar argument in looking at human psychological well-being, which should “extend beyond just how *good one feels* about the self in a world of others to incorporate how *integratively one thinks* about the self and others” (p. 84). This connection between the self and community in digital connectivity deserves its own set of understandings. I want to address, however, one key caveat to the concept of real life being lived in digital space. Digital spaces that prompt and govern explicit and purposeful development of fictional characters, for example, likely result in different psychological effects, perhaps effects closer to that of a playwright or novelist. That is not the concern here. Instead, I am interested in examining the ethical implications of the personality developed online that consciously connects and holds to the identity of a specific person offline, another “self” in Hermans’ (1996) “dialogical self.” How do we conceive of an ethical digital world, which thus far has proven to create a murky space between online and offline identities?

Eudaimonia is, at its root (“good daemon”), about guiding forces for living well. As I stated above, the act of living online naturally generates a digital narrative. But that does not completely abdicate the digital citizen of the responsibilities of the memoirist. Developing virtues for building flourishing mediated spaces must largely be developed through understanding the psychological and sociological realities of those spaces. The demands for creating such a better world touches not only the life narrator, which is implicitly most digital citizens, but also the platform developers and the philosophies that shape and develop their algorithms. To better understand this, we must look at the forces that have created such an “onlife,” examine how life narrative plays a role in developing personalities within that realm,

what resistance to such life will do to our progress within that space, real-world imperatives for taking digital life narrative seriously and, finally, areas to consider for developing ethical understandings of life narrativity in digital spaces.

La technique as social force. Ellul (1964) states that one day, “Our deepest instincts and our most secret passions will be analyzed, published, and exploited” (p. 427). This quote sits in a sea of predictions, near the end of a chapter that culminates by demonstrating humanity’s inevitable and complete integration into *la technique*, propelled into all aspects of life. It might read Orwellian at first glance, but that misses the point of *la technique*. A watchful mechanical eye has been set upon us, from CCTV cameras to governmental digital spying on its citizens to corporate algorithms. This is not Ellul’s *la technique*. He writes, “The term *technique*, as I use it, does not mean machines, technology, or this or that procedure for attaining an end. In our technological society, *la technique* is the totality of methods rationally arrived at and having absolute efficiency (for a given stage of development) in every field of human activity” (Ellul, 1964, p. xxv).

The rational method for achieving analysis, publication and exploitation of our deepest instincts and secret passions would not be Big Brother, or even “Little Brother,” that observing eye constituted of millions of digital cameras waiting in our collective pockets. Absolute efficiency would be self-reporting of these deepest instincts and secret passions without concern for their ends. All thoughts are rendered public, all analysis is algorithmic, all exploitation is precise. This is *la technique*. This is also the borderlands of Floridi’s information society:

“We know that the information society has its distant roots in the invention of writing, printing, and the mass media. However, it became a reality only recently, once the recording and transmitting facilities of ICTs (internet and communication technologies) evolved into processing capabilities” (Floridi, 2014, p. ix).

Ellul's single-sentence vision is a digital scan of the self, complete enough to efficiently render both the aggregate and the atomized "person" for all interested parties. It is a hellish vision, and we are nowhere near it yet, but human beings each have an ethical exigency to consider the extreme, both for society and the individual, because as Floridi reminds us:

"The profound and widespread transformations brought about by ICTs have caused a huge conceptual deficit. ... In short, we need a philosophy of information as a philosophy of our time for our time" (p. ix).

Ellul's warning, found in the 1964 introduction of his book, still holds, for now:

"... if each one of us -- abdicates his (sic) responsibilities with regard to values; if each of us limits himself to leading a trivial existence in a technological civilization, with greater adaptation and increasing success as his sole objectives; if we do not even consider the possibility of making a stand against these determinants, then everything will happen as I have described it, and the determinants will be transformed into inevitabilities" (p. xxix).

Abdication is only one concern. Reductive thinking, either about the cause or nature of the challenge, or imprecision in considering the advance of *la technique* and/or the information society, and both Luddite reactionary and techno-solutionist perspectives, also present dangers in Ellul's "determinants," specifically as they apply to digital life narratives.

An ethical framework. The question of an ethical framework of digital life storytelling may seem better suited for Information Technology ethics (Budinger & Budinger, 2006), especially focusing on privacy but also community-formation and cyberbullying, hacking and hoaxes, equal access to technology, algorithmic compilation, plagiarism and other copyright issues, and censorship. But I will argue that individual storytellers (and by this I mean anyone who is presenting the semblance of an authentic self on a digital platform(s) to be consumed by other users), by the nature of the "publicness" of their act, are subjecting themselves to a new kind of ethical scrutiny about narrative identity. Gunkel (2007) challenges his reader to look beyond the trite rationale that "the crucial issue is not what transpires within the virtual world per se but the subsequent effect of these activities on one's behavior toward other, real human beings

who exist outside of and beyond the computer-generated virtual environment” (p. 4). Not that he is arguing that a virtual world is a world apart, but are “products of a particular culture, invented at a particular time, and deployed within particular circumstances” (p. 15). With this in mind, I approach the question of how *la technique* and digital life story might face one another, and perhaps combine to resist Ellul’s “determinants,” while using and accepting the machinery itself. The point of these subtopics is to help frame the ethical questions that digital life narrative has sparked and will continue to spur moving forward.

Technological Determinism. Earlier, I alluded to the forcing of people onto digital platforms, thus potentially creating digital narratives that were not intended by the offline person. This line of thinking can quickly slide into a technological deterministic discourse. Any deterministic discussion largely limits the ethical horizon we can consider, which is one of many problems technological determinism creates. Therefore it is an issue I want to address directly. Bimber (1994) shows just how varied the readings of technological determinism might be and argues for an accurate, and what becomes a claustrophobically tight, definition of the phrase. He begins by identifying three concepts that all live under the phrase -- normative (a societally driven adoption of technology, where he places Ellul), nomological (in which a natural logic drives toward technology) and Unintended Consequences (in which social actors are unable to anticipate the effects of technology). The narrow conclusion for Bimber is that technological determinism must be defined as: 1) history that is determined by laws other than the human will and; 2) technology plays a necessary part in the determination. He then applies the standard against all three perspectives and determines only the nomological view can hold up to the term as true technological determinism. So, he concludes, technological determinism is the belief that society evolves along a fixed path, created by the “incremental logic of technology and its

parent, science” (p. 89). It is an arguable point, but not Ellul’s. He makes clear that technology and machinery themselves are byproducts of the larger method of efficiency. Adoption of such technologies is a choice to keep pace with the efficient culture. This is not determinism.

Introna (2011), writing in the Stanford Encyclopedia of Philosophy, offers a broadening perspective through a phenomenological approach to technology, seeing it in relationship with society, one in which they “co-constitute” the other. Is it possible to use technologies for life narrative expression without using a technological solution to make those expressions morally sound?

Technological Neutrality. The previous question, admittedly, can lead us to a simplistic insight worth deflecting, that of technological neutrality. This is a practice commonly used to deflect thought, one that organizes critical contingencies as this side or the other, giving nothing a determinative weight: Digital life storytelling could be used for bad, but it could also be used for good. This is not a balance as much as it is a negation. Ellul states it clearly enough when he writes, “(*Technique*) does not merely stand ready to do the bidding of any random doctrine or ideology. It behaves rather with its own specific weight and direction. It is not a mere instrument, but possesses its own force, which urges it into determined paths, sometimes contrary to human wishes” (p. 159). That quote, too, can be construed to mean that *la technique* is partisan, which Ellul argues it is not, at least not in the sense of a particular system of thought outside of *la technique*. *La technique*’s direction aims toward more of itself, that is all. Regardless, the concept of neutrality is flawed, as Gunkel (2007) argues, at the most important level.

“Conceptual oppositions, despite initial appearances, are never neutral” (p. 42). If neutral is never neutral, technology is never neutral. These oppositions good/bad, self/other, mind/body, “are always and already hierarchical arrangements that are structurally biased” (p. 43). One need

only look behind the curtain of America's social/technological complex, Silicon Valley, and you will find unbalanced structures everywhere -- based on race, economy, gender and, obviously, a vision for the place of *la technique* in our lives. "There is, then, a moral reason to question the system of binary oppositions and attempt to think in excess of and outside the usual conceptual arrangement" (Gunkel, 2007, p. 43). The conceptual arrangement in digital life narrative is one of authentic/inauthentic, over-sharing/missing, inclusive/divisive and so on. A broader notion is possible, and I will address it at the conclusion.

Homo economicus. While *la technique* of itself is self-invested, the Western version of efficiency favors capital. This, it is easy to see and has found its way into identity with such terms as "self-branding" and "the influencer economy." LinkedIn is the most obvious profile for economic positioning, but YouTube is close behind along with Facebook, Snapchat, Twitter and Instagram, all opportunities to turn one's insights and "voice" into a marketable commodity. But that is just a tiny percentage of the identity economy. All of the acts of self-identification, especially those with a narrow gap between our digital "selves" and the economically viable offline "selves." Floridi explains:

"Naturally, the process further fuels the advertisement industry and its new dialectics of virtual materialism. Such proxies may be further used to reidentify us as specific consumers for customizing purposes" (Floridi, 2014, p. 58).

Here we see Ellul's conceptualization of *homo economicus* in a new bloom. It is not a natural identifier of humankind, but rather a reduction, not from a spiritual and moral being to a machine, but a moral and spiritual being that becomes subordinate to an economic *la technique*, what Ellul calls "the Great Design," in which, "The whole of man's life has become a function of economic *la technique*" (p. 226). In that life, humans have become so conditioned, "that the appearance of personal life becomes for him the reality of personal life" (p. 226). This we can

see in nearly all culturally significant Internet platforms that trade in the identity economy. For most, the promise is free connectivity to those you know or will come to know. The prompt is to be yourself, meaning aonymous digital being. The affordances are walls, feeds, streams for content that is textual or verbal or both, which can be edited, filtered, cropped, tagged and stored. The price is your language, your browsing paths, your likes and plays, all aggregated by increasingly intelligent software to create the ultimate *you* for the *economie technique*, a profile. A profile is not a personality, it's a schema about a personality and an increasingly useable one by economic and political forces.

Hiding from la technique. A natural reaction is to hide. We now live in a series of generations where that option is commonly played out, at least perceptually. Ellul, of course, lifts the veil of illusion off this resistance. While he does not entirely deny the agency of individuals, the problem is much more insidious on a social level. In general, the pressure of *la technique* is that of relative advantage, as I mentioned before: As more of life becomes *la technique*, the less of life can be survived without it. As a complementary point, this makes the technological solutionist/idealist/apologist seem either profoundly naïve or a cynical true believer. Later Ellul (1990) is not generous in his estimation of such people.

“This encirclement or outflanking of people and society rests on profound bases (e.g., a change in rationality) and the suppression of moral judgment, with the creation of a new ideology of science. But it is affected by the enticement of the individual into permanent sociotechnical discourse. This enticement is brought about by deliberate action on the part of those who want absolutely to make the change and by a spontaneous movement on the part of others” (p. 19).

Ellul (1964) points to several examples, but the best for these purposes comes from the American assistance of Bulgarians after World War II.

“In 1945 the Americans sent tons of individual military rations to the Bulgarians, who had no desire at all to adapt themselves to a new kind of butter and to other substitutes. But their resistance necessarily yielded to technical adaptation and, very rapidly, to plain

abundance. The excessiveness of the means broke down all traditional and individual desires” (pp. 118-119).

Which is to say the choice to resist technologies become exponentially more difficult as abundance entices us to adoption. But another problem with resistance is far more simple to describe. Those who resist social media as a form of living, or resist digital life narrative on the broadest terms, cannot have a meaningful say in digital eudaimonia. All propositions would be mere guessing. To understand human flourishing within a culture, one must know the culture itself. To ignore it is not to resist it, but relinquish a vote.

Digitally-empowered identities. Perhaps the extension from physical sustenance to digital sociality is absurd at first, but the transition need not be so fast. It can be, and is, generational, as Floridi points out. Who we are in a digital sense does strike many as frivolous, as he suspects, but not necessarily to a generation who has never known life devoid of digital identity:

“To them, it seems most natural to wonder about their personal identities online, treat them as a serious work-in-progress, and to toil daily to shape and update them. It is the hyperself-conscious generation, which facebooks, tweets, skypes, and instant-messages its subjective views and personal tastes, its private details and even intimate experiences, in a continuous flow” (p. 61).

These are generally young and often vulnerable people, at least at the moment. Calling this empowerment per se is like calling a mirror an instrument for self-esteem. That depends on who is looking in and how. In this case, however, the mirror is crowdsourced. We have not reached Ellul’s prediction yet, but the direction is clear. If we cannot hide from *la technique*, ultimately, can we overthrow the system? This is highly unlikely, especially given Floridi’s perspective. He writes:

“Is there a unifying perspective from which all these phenomena may be interpreted as aspects of a single, macroscopic trend? Part of the difficulty, in answering this question, is that we are still used to looking at ICTs as tools for interacting with the world and with each other. In fact, they have become environmental, anthropological, social, and interpretative forces. They are creating and shaping our intellectual and physical realities, changing our self-understanding, modifying how we relate to each other and ourselves,

and upgrading how we interpret the world, and all this pervasively, profoundly, and relentlessly” (p. vi).

Ellul offers little, really no, insight into an effective resistance. His *la technique* is not determinism, per se, but that is as comforting as saying an avalanche is not deterministic. The question at hand remains, slightly reordered: Can we use the machine to craft a digital life narrative without adding fuel to the *la technique* fire?

Agentive working narratives. What was early considered a discourse space for community, the Internet has come to reflect something more common in Western, capitalistic cultures, in which individual rights to express are not a means to something just, but just in themselves. This is the effect we mostly likely see on Cowbird. Stories mean what we want them to mean, what we say they do. In this light, what the “speech act” of Austin (1962; 1975) should do is create discrete selves who act as they please, and the performance, the impression management of Goffman, is digitally perfected, no matter what outcome. Agentive life storytelling does not fully draw its inspiration from those theories, however, but from the thoughts illuminated by Bassett (2007), which I mentioned at the beginning of this dissertation, and the conceptualization of a networked narrative, in which narrating life is shared in community:

“Narration in this way is opened up and becomes comprehensible as part of a more general, and indeed *reciprocal*, process, since while a narration cannot often be given by the self, it can be solicited. As Cavarero puts it, ‘actively revealing oneself to others, with words and deeds, grants a plural space and therefore a political space to identity – confirming its exhibitiv, relational and contextual nature’” (p. 114).

This is a healthy space to consider for a self writing *working narratives*, which through fragmentation and filtering remains open to the “plural space.” But Bassett’s question about who controls the narrative in digital space proved to be germane in the research about Humans of

New York. By all appearances, HONY's Stanton is the kind of digital citizen who creates the "exhibitive, relational and contextual nature" of the reciprocal narration. But as we saw in the data, even good intentions cannot remove the screen through which he sees "normalcy." His perspective on narrative endangers the *I* that seems persistent in an open platform. In Cunningham's (2015) critique noted above, this perspective becomes all-encompassing, shallow and resisted by truth because, "the truest thing about a person, that person's real story, is just as often the thing withheld -- the silent thing -- as the thing offered" (para. 15). What of algorithms that detect meaningful moments: Which lenses will create those?

To understand how agentic life storytelling might compete against such forces of norms, development, economics, even *la technique*, one has to reimagine the story itself, less as a product and more as a community, in which tellability is the driving force. "Be the hero of your own story," a phrase often memed and posterized, is exactly the problem. The break in repetition, on the other hand, is to find the heroic in the resistance to mundane repetition, which need not be "heroic" in the classic sense at all. It might simply be to understand that the stories that define us, and others, have value, and value is a proposition of something other than efficiency. Cunningham (2015):

"The most interesting people in "Stories" -- and by this one might only mean the best New Yorkers -- are the conscientious objectors. Happy to relinquish their likenesses, they refuse further flattening. One woman -- a book open on her lap, a swatch of a purple sweater waving out over washed-out jeans, her face perhaps pointedly outside the frame - - says only this to her would-be inquisitor: 'These experiences were so meaningful to me that I don't want you to soundbite them' (para. 16).

Finding acts of heroic being, where the "silent thing" is felt when it's not told, is agentic performative and performance. To live life in resistance to the repetition and quickening of digital space, to resist the prescribed notions of norms in big and small ways, to develop digital spaces that are the opposite of "safe," but rather brave reinventions of possible selves, need not

mean going back to anonymity. *Agentive working narratives* would use existing platforms in new ways, and resist algorithms that would reinstate the norms. It could also mean building new digital spaces in which true communal agency is possible, perhaps replacing the standard measure of success (scale) for depth of use and experience. To ride “technology before it rides us” might not, in fact, be found in the act of doubling down on the “I.” It might primarily exist in the active digital listening to others, amplifying voices often filtered or drowned out, fiercely protecting a “we” that is reciprocal rather than the repetition of one voice. It means actually working to create the good “onlife.” An *agentive working narrative*, to retool an apocryphal Gandhi quote, would insist: Be the story you wish to read in the infosphere.

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APPENDIX: CODE BOOK

Coder ID: Indicate the individual who coded the unit. Use the list below:

Michael Humphrey: A1
Anna Foote: B1

I. META DATA

A. Unit of Data Collection: Each story has a unique coded number (from 3829-55939), which you will see in the name of the file. Just type this number

B. URL: A URL of the post is included in the code sheet.

C. Author: Each new author's byline should be listed along with a code for anonymizing. To create a distinction between story and author, begin each code for author with the letter A and a 3-digit code. NOTE: Check the drop-list for names before entering a new author.

Example:

Name: Dan Dodson
Code: A001

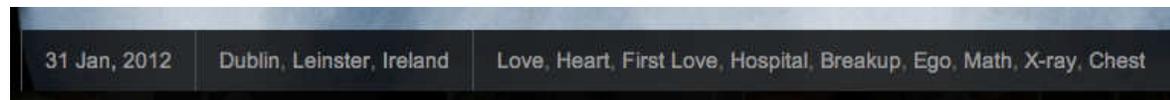
D. Gender: Report the gender of the author. You may look at the name as well as the story to try to determine the gender. Only record the gender when fairly conclusive. (e.g. Chris or Pat is not conclusive without a clear indication of gender within the story and a love interest of one gender does not offer enough evidence of the storyteller's gender.)

1. Male
2. Female
9. Unable to determine

E. Media: Indicate whether the story was told:

1. Only with text;
2. Only with audio;
3. A combination of text/audio

Note: Any post that does not display audio or text should be discarded.



F. Date of Happening: Use the following protocol: 01/01/2014

G. Location: Report the country which the author lists in the story. If you encounter a new country not already coded, add the next ascending number to the generated list. Also, if a post

does not have a listed country, number it 999. The first 25 countries are listed here in order of their commonality on the site.

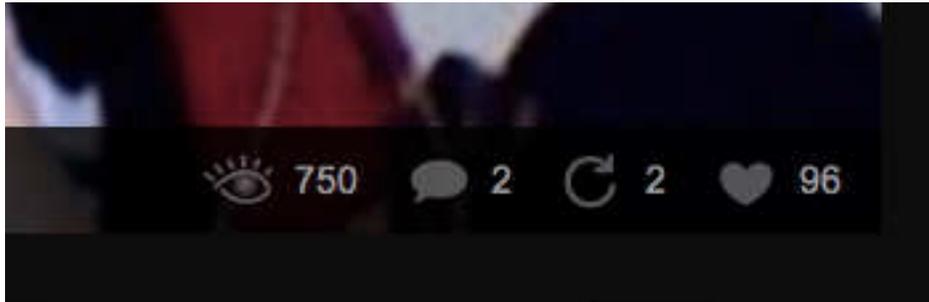
- | | | |
|------------------|-------------------|-----------------|
| 1. United States | 2. United Kingdom | 3. Canada |
| 4. Italy | 5. India | 6. Mexico |
| 7. Spain | 8. South Africa | 9. France |
| 10. Brazil | 11. Australia | 12. Germany |
| 13. Sweden | 14. Iceland | 15. Netherlands |
| 16. China | 17. Norway | 18. Indonesia |
| 19. Greece | 20. Argentina | 21. Ireland |
| 22. Pakistan | 23. Phillipines | 24. Japan |
| 25. Finland | | |

XX. Add country with next #

999. No country indicated

H. Topic: Code all topics listed (just as they listed them) next to the location section on the first page. Topics are not added from a prescribed list, so they should be entered exactly as they are typed by the author.

II. ENGAGEMENT



A. Views: On the first page of each story, the site lists the number of views to date. It is characterised by an eye.

Record: Insert the number. (This is to eventually create an average of engagement per view.)

B. Comments: Next to the eye is a dialogue bubble, which indicates the number of comments for each story.

Record: Insert this number.

C. Retellings: Next to the comments is a recycled sign, which indicates the number of times a user reposted the author's story onto their own page.

Record: Insert this number.

D. Loves: Next to the retellings is a heart, which indicates the number of times user expressed admiration or "love" for the piece.

Record: Insert this number.

III. STRUCTURE

A. Narrative Structure

1. Narrative Arc - The most common cultural definition, so it must have 1) a beginning, middle and end (which might be implied) with 2) an “agent” aspiring to something (may be subtle) and 3) either being impeded, succeeding or left ambiguous.

Aristotle: “A beginning that which is not a necessary consequent of anything else but after which something else exists or happens as a natural result. An end on the contrary is that which is inevitably or, as a rule, the natural result of something else but from which nothing else follows; a middle follows something else and something else follows from it.”

2. Vignette - A textual or verbal “picture” of a time or place without a beginning, middle or end, a clear aspiration or success/failure.

3. In-conversation - Intended to be a conversation starter, usually about very recent events (rather than a cause-effect dynamic). If it is more thought-driven, rather than image/description-driven, it is probably in-conversation. Likely only expository or abstract writing. (If enough people added to this, would it become a story?)

4. Other - When none of the structures above fit, choose this.

B. Grammatical Structure

1. Prose - Written or delivered in standard sentences and paragraphs.

2. Verse - Written in lines and stanzas, whether free, rhythmic or rhyming.

3. Mixture -- Written in both prose and verse.

4. Other - When none of the structures above fit, choose this.

C. Narrator person: Does the narrator of the story refer to her/himself as “I?”

0. No

1. Yes

D. Main character: Who is the main character of the story, the one whose wishes/wants/goals are the most clear and/or has the **most spotlight on them?** (Protagonist.)

1. Author

2. Family Member

3. Friend

4. Love Interest

5. Stranger

6. Other

7. Unclear

E. Photo Mention: In the writing or audio, does the narrator refer to the picture on the first page of the post?

0. No

1. Yes

IV. CONTENT

A. Themes

“In coding an account for themes of agency and communion, the scoring unit is the episode [RE: Story] itself. Each episode is coded for the presence (score +1) or absence (score 0) of eight different themes, four under the heading of agency and four under the heading of communion” (McAdams, Kaplan, Machado, Huang, 2002).

Note: Once you note one account of any theme in the unit, you no longer need to seek that theme out. The score for any sub-theme is either 1 (present) or 0 (not present). The overall Theme of Agency is a composite of the one or more appearance of the subthemes, thus the lowest score would be 0 and the highest score would be 4.

1) Achievement/Responsibility (AR)

“The protagonist in the story reports substantial success in the achievement of tasks, jobs, instrumental goals, or in the assumption of important responsibilities. He or she feels proud, confident, masterful, accomplished, or successful in (1) meeting significant challenges or overcoming important obstacles concerning instrumental achievement in life and/or (2) taking on major responsibilities for other people and assuming roles that require the person to be in charge of things or people.”

Examples from McAdams:

- A student works hard to perfect a short story for a class assignment. He spends hours polishing word choice, getting the imagery right, and so on.
- An executive meets his annual goals for the company.
- A young boy builds a tree house, and he is very proud of his accomplishment.
- A student masters a class on computer programming.
- A secretary takes over an office and turns it into a model of efficiency and productivity.
- After having their first child, a couple now realizes the significant financial responsibilities they have assumed.
- A woman endeavors to interact with her colleagues in a "healthy and productive manner." Here the explicit reference to being productive in the workplace qualifies the response for AR.
- A woman describes her movement from college to graduate school: "I was able to settle down and become focused and to become productive in a much more real way than up until then. I had always produced a lot of stuff academically; I'm also the kind of person who is constantly productive with something, or at least I used to be that way. I would have six projects going on at once." But now she was able to become more focused on one project at a time, which enhanced her productivity.
- A father reflects: "You're the head of the family and you're responsible for a lot more than you were before. It's a real maturing experience."
- A group of young adults builds a community in the wilderness: "We were building a community. We were really working with our muscles, you know, passing buckets of cement."

- A man is accustomed to failing, but he achieves success in an important business venture, building his confidence.
- An author publishes her first short story.
- A middle-aged mother reflects on her children, who have recently left for college. She decides that she has done an "excellent job" as a caregiver. Even through this is an interpersonal rather than instrumental task, the writer explicitly couches it in achievement terms -- as a job well done.
- A pilot completes his first solo flight.
- Studying a foreign culture for many years, an anthropologist comes up with a new way of seeing the culture, solving an intellectual problem which she had puzzled over for a long time.
- First day on the job, a nurse confronts a difficult assignment, but she is successful in completing the task.
- At the age of 65, a man runs in his first marathon.
- A young man is kicked out of his house by his parents. He struggles to survive, but eventually he becomes "a successful and responsible adult."
- A woman is proud of her college achievements -- in academics as well as in clubs and associations on campus.
- A man reports after his divorce: "I challenge myself to the limit academically, physically, and on my job. Since that time I have accomplished virtually any goal I set for myself. I have never been happier."
- A woman reports after her divorce: "In order to survive financially and support these children, I decided to enroll in a graduate program in counseling psychology at a major university. I was accepted and began the program with great determination . . . I felt the failure of marriage was reversed by the success of completing a graduate degree through years of difficult and intellectually stimulating study."
- "This was my senior recital. I began my first piece. I played it with all my heart. I never felt so proud of myself before. I wanted to do a terrific job and I did."
- "My important goal is finding a job. I just went to my first interview. I managed to calm myself down and answer the question professionally. In general, the experience was pretty positive and will help in future interviews."
- "Right now the single most important goal to me is getting into medical school. In the summer, I voluntarily joined an apprenticeship program where I was to help out and learn at the hospital in the surgery department. If I had not finished the program, I would not have something to submit to the medical schools, showing them what I did."
- "The earliest memory I have is the day I first dressed myself. It was a huge accomplishment for me because I did something on my own that I always needed help for."
- I chose to come to this university over others, and I chose to work hard and enter a competitive environment rather than enter a school where I could have more fun and work less."

- "I remember learning how to ride a bike at age seven."
- "One of my goals is to get involved in the deaf community and increase my sign language proficiency. Last year I was taking my first American Sign Language classes. A year later, I am conversing with people by signing in front of a group."
- "My freshman and sophomore year were very tough academically. So I took biology the summer after my sophomore year and it actually went okay. This was the summer when I learned how to study."
- "Every Saturday of home game the marching band performs a highly demanding thirteen minute show that requires us to push ourselves to our limits. I loved the performance exhilaration and constantly challenging myself to perform better than before – to push my limits and grow as an individual."
- "The birth of my younger brother was a new addition to our family. I was no longer the youngest child. It was my turn to carry some responsibility."
- "When I was three, I was lying on the floor of our kitchen writing my name with a red crayon. I learned how to read and write at an early age."
- "I think winning the 1990 Golden Apple Award for Excellence in Teaching was my high point because I was the one who accomplished it."
- "A turning point occurred for me in 1984 when my daughter was born. I then realized that becoming a father was a huge responsibility and took a lot of work and patience."
- "The day I graduated from graduate school was a very special day in my life...I felt very excited and proud to have finished my degree...I took a risk to go back to school and I did it."

2) Power/Impact (PI)

“The protagonist asserts him- or herself in a powerful way and thereby has a strong impact on other people or on the world more generally. The impact may take the form of aggression (physical or verbal), retaliation, argument, persuasion, control, or attempting to make a strong impression on others. The protagonist feels strong, masterful, powerful, or especially effective in exerting his or her will to change things in the environment. The change may be destructive or positive.”

Examples:

- A politician pushes through a piece of legislation.
- A woman persuades her friends to change their views about a controversial topic.
- A graduate student impresses her advisor.
- A bully beats up other children on the playground.
- A woman slaps her husband.
- Somebody saves somebody else’s life.
- A preacher’s sermon is so convincing that many people in the congregation go through a conversion experience.
- The lawyer convinces his client to accept the terms offered by opposing counsel.

- "I had a toy my friend wanted, but I had it first so she bit me and took the toy. I bit her back."
- "I was a lifeguard during the summer. As I was looking around the pool sitting in my chair, I suddenly notices an overturned raft with a little boy struggling next to it. I just quickly jumped in the water, grabbed the kid within a couple of seconds, and gave the kid to his father."
- "My family was pressuring me and I was not feeling happy or capable of emotional stability. I somehow ended up getting into an argument with my brother and mom and bursting into tears and shaking all the while saying, 'Look if you guys don't back off and stop pressuring me, I'm going to go nuts and you're going to have to pay for a psychiatrist.' I think they realized that I put enough pressure on myself without their added help."
- "My good friend got alcohol poisoning. I took charge of the situation and took her to the emergency room."
- "I am a woman of convictions who needs to feel as independent as possible. Accordingly, I began to feel hampered by my boyfriend's expressions of love. I decided to break up with him. This incident shows that I can be assertive and will do what is best for me no matter how much it hurts."
- "I went out on my first real date when I was sixteen years old. I remember my grandmother being really strict and saying that I could not go out with anyone. But I rebelled and sneaked out of the house at night when my grandmother was asleep to date this guy."
- "As we were leaving the bar, one of my girlfriends was being harassed by an intoxicated male. In an effort to defend her, me and several of my fraternity brothers spoke up and thus started a fight."
- "There was alcohol at this party and almost everyone was becoming rather intoxicated. Even though I knew I would be made fun of, I refused to let any of my friends drive home."
- "I find it important to set a positive first impression to people who have never met a Jew. There are moments when it is harder but in general all of these experiences have made me realize that it is important to do everything in my power to change myself and therefore influence others."
- "Moving to college was a very high point in my life. This was the first time in my life I was going to be on my own and that gave me a great joy. I knew that the homesickness would go away because I was strong and was going to make it on my own."
- "I took part in a show where I was in one of the dance numbers. I always wanted to do it my way. I have been like that for as long as I can remember. I am very high in power motivation. I like being in charge or in control. When I am not, it bothers me and I react against those who are."
- "I remember walking home from first grade with my brother. He told me 'there is no such thing as Santa Claus, the Easter Bunny, and the Tooth Fairy.' I was devastated – but I wasn't a crybaby so I didn't tell my mom and instead I went to school the next day and told everyone else. If my childhood was going to be ruined, I decided everyone else's should be."

- "In eighth grade, I got in a huge fight with a bully that had given me a hard time for a couple of years. But this day he kept pushing all my buttons so I picked a fight. He had beaten me down long enough so I took control of the situation. He didn't pick on me anymore because I had shown him up in front of a bunch of people."
- "I attended an international peace conference in Venice, Italy. I realized how many other young people like myself wanted to affect change in their community."
- "I am glad my eyes were opened early to the fact that there were a lot of prejudiced people in my class. Later in junior high, I would break out of my usual silence when people would make racist remarks in class or tell a racist joke. It was at this point that I would speak out and try to make people realize they were wrong."
- "When we agreed to pledge a fraternity, most of us expected some sort of hazing to come along with it. One night, the fun was pushed to its limits. I decided something needed to be done. The next day, I called the national headquarters. For the first time, I stood up for what I believed in."
- "...I told him I would make up a bed in the living room and that he was to leave the next day...Ever since then I've had increasing confidence in my capabilities...I really believe this comes from an inner strength which some find in religion but I think I find in myself."
- "I was always defending my mother and raging against (my father) and his drinking."
- "I see this event as the first time that I can remember directly questioning and confronting authority with logic and reason...I now feel that this event had a strong bearing relative to my view of authority which does not like to be questioned...Never again would I allow any authority over me to go unexamined."

3) Self-insight (SI)

"The story protagonist attains a clear, new, and important insight about him or herself through the event. As a result of this experience, the protagonist feels that he or she has become wiser, more mature, or more fully actualized as a person. The insight may be seen as a transformation in self-awareness or a leap forward in self-understanding that entails the realization of new goals, plans, or missions in life -- a significant insight into one's identity."

Examples:

- A woman comes to see her life's mission as being an artist. She quits her job, sets up a studio, and strives to actualize her dream. (also scores for AR.)
- A young man experiences a religious conversion which provides him with new insight into his own life.

- A middle-aged man realizes that he is being exploited by his current employer. He breaks away from the firm and embarks upon a new line of work, more in keeping with his life goals.
- A woman comes to the conclusion that she has wasted 20 years of her life in a desperate drive for material well-being. She decides to dedicate her life to helping others.
- Inspired by reading Freud, a young man comes to the realization that he wants to be a psychotherapist.
- After a near-death experience, a man comes to a new understanding of the quality of life. He pledges to slow down, enjoy his family more, take everything one day at a time.
- After the death of his son, a man changes his "philosophy of life."
- "I had a series of meaningless college relationships until I realized it was better to be in no relationship than in a bad meaningless one."
- "Being here for two years, I definitely feel that I have grown as a person and am in the process of establishing an identity of what kind of person I am."
- "For a long time, I had planned on being pre-med. The first day of my first chemistry exam, I was near failure. I felt at that time that I had known what I wanted to do with my life, but after that test I realized it was something I had made up."
- "I had been struggling with manic depression. I prayed to God, telling Him about my misery. I opened my Bible to John 4, read it and not only saw myself but the Savior who loved me and was able to fill the void in my life. I've never been the same since that day. God showed me that He wanted to give me a brand new identity that wouldn't condemn me."
-
- "One afternoon, as we were walking through a park, we saw a couple of children playing. I realized that afternoon that I wanted to have children and a family more than anything else in life. Talking with relatives who were doctors, I began to understand how much different reality would be from the dream I had if I were to become a doctor. I learned that I valued family more than money, prestige, or any other possession I may have."
- "The day of my dad's funeral, I looked out into the crowd and realized just how full the church was. Everyone I knew was there and hundreds I didn't. I was completely awed and it was then that I realized that I never really knew my father. My perspectives on life, faith, and family were never to be the same."
- "...I became conscious, I feel, for the first time, that the price of loving so completely, so unconditionally, is that...I would feel excruciating pain if she were to die or be separated from me forever. This event is significant because I felt so alive – so capable of being loving without consciousness about acceptance/non-acceptance and other self-centered thoughts."
- "I realized then that I was capable of achieving anything I desired academically. I didn't have to accept as gospel truth the negative opinions

of others concerning my abilities. From then on I knew I could fly and I did."

4) Status/Victory (SV)

"The protagonist attains a heightened status or prestige among his or her peers, through receiving a special recognition or honor or winning a contest or competition. The implication in SV is that status or victory is achieved vis a vis others. There is always an interpersonal and implicitly competitive context in SV. Typically, the person "wins." There is victory or triumph. SV refers to significant recognition, especially prestigious honors, and various kinds of victories over others. Simply "doing a good job," getting good grades, or successfully achieving a goal is not enough to score for SV."

Note: It is not necessary for someone to be explicitly beaten by the protagonist, but there is likely someone who did not succeed (win the game, make the cut, etc.) because the protagonist experienced a victory.

Examples:

- A young woman is elected homecoming queen.
- An actor wins a coveted lead part in an upcoming play.
- A student graduates from college with special honors (e.g., magna cum laude).
- A person receives an award for outstanding achievement.
- The quarterback completes a crucial pass, which gives his team the victory in the football game.
- A musician receives a standing ovation.
- A professor is honored at a party for receiving tenure at the university.
- An aspiring writer is granted admission to a prestigious graduate program.
- A swimmer wins a race.
- A lawyer wins a case.
- A person is granted an important position or awarded a prestigious job.
- A high school student gains admission to a good university.
- A student wins a scholarship or grant.
- "I got accepted to the University of Pennsylvania. It was expensive but had a good reputation."
- "One game we played a rival high school who is always a tough opponent. I saw the ball go into the corner of the net and the arms of all my teammates in the air and embracing me. We won the game. The game-winning goal made me feel proud and very good about myself."
- "A peak experience occurred when I participated in the Martin W. Essex School for the gifted and talented. It was a summer program for sixty high school seniors who were selected based on academic excellence."
- "My high school's varsity boys basketball team was in the finals of the state basketball tournament for the first time in the history of the school."
- "The speech coach was finally able to convince me to attend the Iowa high school individual event speech contest my junior year. I presented a speech I had written for her speech class in the category of original oratory, earning the right to perform at the all-state speech festival.:

- "In eighth grade I tried out for high school cheerleading and was one of the three girls from my class to make football and basketball cheerleading."
- "Ten days ago, I swam what they call a perfect meet. I entered and won eleven individual events... Thus, I won the high point award, not only for my team but for the female of the entire meet."
- "I was being presented with a little cup for "camper of the year" in my age group... I was singled out for something very special that meant people liked me."

Theme of Communion (Score 0-4)

Note: Once you note one account of any theme in the unit, you no longer need to seek that theme out. The score for any sub-theme is either 1 (present) or 0 (not present). The overall Theme of Agency is a composite of the one or more appearance of the subthemes, thus the lowest score would be 0 and the highest score would be 4.

5) Love/Friendship (LF)

“A protagonist experiences an enhancement of love or friendship toward another person. A relationship between people becomes warmer or closer.”

Examples:

- Two friends feel that they grow emotionally closer to each other after spending time together on a vacation.
- A man proposes to a woman. (Or vice versa.)
- A woman describes her marriage to a wonderful man as the high point of her life.
- A man marvels at the love and commitment his wife has given him over the past 40 years.
- A young couple enjoy lovemaking on a Saturday afternoon.
- An older woman teaches a young man about sex and love.
- A woman is strongly attracted to a man in her class. He finally asks her out.
- A couple reflects on their happy honeymoon.
- A college student takes a friend to a formal dance: "I went to the formal with my friend, Melissa, even though she had a boyfriend. I felt incredibly happy during the slow dance with her. As I held her close and tight, I felt her acceptance and happiness with me. We felt truly comfortable and happy with each other, as friends. Even though there was no direct romantic relationship between us, I sense a mutual true love."
- A person remarks on a good friendship he has experienced.
- "We spent the previous year building up a strong friendship at school in London."
- "This simple phone conversation was the start of a new relationship with my mother."
- "I value close relationships."

- "This girl and I knew we liked each other. During our two weeks at camp, we carried on whatever semblance of a relationship 10-year-olds can carry on."
- "I chose marriage and there have been illness-related complications. However, we will celebrate our 20th anniversary and I know I made the right decision. The quality of our relationship transcends the illness. Perhaps the illness has even brought us closer."
- "...I befriended a priest...who was temporarily assigned to my parish. We were bonded together by our mutual love of music. We used to really 'hang out.'"

6) Dialogue (DG)

"A character in the story experiences a reciprocal and noninstrumental form of communication or dialogue with another person or group of others. DG usually takes the form of a conversation between people. The conversation is viewed as an end in itself (justified for its own sake) rather than as a means to another end. Thus, such instrumental conversations as "interviews" or "planning sessions" do not qualify for DG because they are undertaken for noncommunal reasons (e.g., to obtain information or make plans). Furthermore, highly contentious or unpleasant conversations -- such as hostile arguments or exchanges in which people do not seem to be listening to each other -- do not qualify for DG. In order to score for DG, a conversation need not be about especially intimate topics, though of course it may be. A friendly chat about the weather, for example, would qualify for DG. What is important to note is that the communication between the protagonist and other characters in the story is reciprocal (mutual), nonhostile, and viewed as an end in itself rather than a means to an instrumental end. Note also, that conversations for the express purpose of helping another person (e.g., providing advice, therapy) do qualify for this theme."

Examples:

- "We sat across from each other and tossed ideas back and forth, ideas of what we thought the plays were about."
- "Sara and I had been writing letters to each other all summer."
- "We drank a carafe of wine and had a memorable conversation about love and parents."
- "My peak experience was both a time of sadness and joy. Sadness because my friend told me she had cancer. Joy because we had opened up to each other and it was a beautiful experience."
- "My mother and I talked in depth about the problems my brother was having. I felt like so much of who I have become is like my mother. I felt warmth and closeness when we said good-bye." (also scores for LF).
- "On the last night, three of us plus or facilitators gathered around a circle with a single candle in the middle. We all went around to express our feelings of what peace was, what we learned from this unprecedented event . . ."
- "When I was in preschool I recall sitting on my teacher's lap during a recess time and I remember her telling me . . ."

- "I ran up the driveway into the house and picked up the phone. No one was home to share my moment with me, so I called my mom at work."
- "My aunt had just had a baby girl, my cousin, and she asked me to be the godmother. I agreed without even thinking about what it meant to me."
- "We had a great time, sitting around drinking wine after dinner and just talking into the night."
- Sometimes a communication can be nonverbal, as in this example of DG: "She did not have to say a word. I knew instinctively what she meant."

7) Caring/Help (CH) - **MUST BE EXPLICIT**

“The protagonist reports that he or she provides care, assistance, nurturance, help, aid, support, or therapy for another, providing for the **physical, material, social, or emotional welfare or well-being of the other**. Instances of receiving such care from others also qualify for CH.”

Examples:

- Many accounts of childbirth score for CH, as well as accounts of adoption. In order to score, the subject must express a strong emotional reactions of love, tenderness, care, nurturance, joy, warmth, or the like in response to the event.
- Accounts of taking care of children as they grow up, meeting their needs and looking after them during difficult times, typically score for CH. Also included here are accounts of providing needed financial support, as in the role of the family breadwinner.
- Providing assistance or care for spouses, siblings, parents, friends, co-workers, and colleagues may be included, as well. Mere technical assistance, however, does not qualify for CH. An emotional quality of caring must accompany the assistance, which is usually associated with providing counseling or therapy concerning life problems or interpersonal difficulties.
- Developing empathy for other people, even if it is not acted upon in a given event, scores for CH. In one example, a woman describes reading a particular novel when she was a girl and developing an empathic attitude toward impoverished and oppressed people as a result.
- "After I was sexually assaulted, my world was torn apart. The only thing that was stable in my life was the support I received from my mother."
- "I like the feeling of being a vocal advocate and I would like to help others with similar problems."
- "I held his hand to help him over the rocks safely."
- "So I decided to have them settle their differences by taking them back to my room and for the next few hours, I had them talking and explaining each other's hatred, why there was miscommunications."
- "My dad heard me and helped me. He helped me not only with the fly, but with my panic. He was caring, confident, and knew what to do."

8) Unity/Togetherness (UT)

“Whereas the communal themes of LF, DG, and CH tend to specify particular relationships between the protagonist and one or a few other people, the theme of

Unity/Togetherness **captures the communal idea of being part of a larger community.** In UT, **the protagonist experiences a sense of oneness, unity, harmony, synchrony, togetherness, allegiance, belongingness, or solidarity with a group of people,** a community, or even all of humankind. A common manifestation of this theme involves the protagonist's being surrounded by friends and family at an important event (e.g., a wedding, graduation), experiencing strong positive emotion because a community of important others have joined him or her at this time. However, there are many other manifestations of UT, as well."

Examples:

- "I was warm, surrounded by friends and positive regard that night. I felt unconditionally loved." (Also scores for LF.)
- Some accounts of weddings may qualify for both LF and UT. The developing love relationship between spouses provides evidence for LF while the wedding's bringing together of many friends and family members may provide evidence for UT.
- Examples of being accepted, cherished, or affirmed by friendship, family, or other social groups qualify for UT.
- "The most important part of the day was being surrounded by my peers who I loved . . . I finally felt completely comfortable with my classmates. I could call them my friends . . ." (Also scores for LF.)
- "The bonds of sisterhood can never be broken. After a week and a half trampling around in the cold chitchatting for sorority rush, my Rho Chi Heather handed me the envelope and inside I saw it – the invitation to be a sister of Alpha Phi . . . What this says about my personality is that I love to belong . . ."
- "This event showed me how much I cared for not only my dad but my mother and entire family as well."
- "I remember when I joined the Cub Scouts...The uniforms that the scouts wore were blue. I couldn't wait until I received my uniform. It made me feel important and a part of something."
- "We looked up and looming next to us, literally, was the Acropolis...I recall feeling both small and big in the sense of belonging to a society that was responsible for this tremendous architecture."

Theme of Redemption (Score 0-4)

"In a redemption sequence, a **demonstrably "bad" or emotionally negative event or circumstance leads to a demonstrably "good" or emotionally positive outcome.** The story plot moves from a negative to a positive valence, bad leads to good. Therefore, the initial negative state is "redeemed" or salvaged by the good that follows it."

9) The prime test: Redemption Imagery (RI) (Score 0 or 1)

"In scoring a particular narrative account of an autobiographical scene for redemption, the coder must first determine the presence or absence of redemption imagery. If the scene contains redemption imagery, then it receives a score of +1, and the coder continues to look for the presence or absence of each of the three subcategories

(enhanced agency, enhanced communion, ultimate concerns) in that particular scene. If the scene does not contain redemption imagery, then it receives a score of 0 and no further subcategory scoring is done for that scene. Thus, if the scene scores 0 for redemption imagery, all redemption scoring of that scene ends, and the coder moves to the next scene.”

The essential characteristic of redemption imagery is the movement in the story from a demonstrably negative to a demonstrably positive scene. We may call the negative or bad element of the sequence "A" and the positive or good element of the sequence "B". Thus:

A ---> B

Examples:

- illness ---> cure
- depression ---> regained positive outlook on life
- near-fatal injuries ---> surprising recovery
- alcoholism ---> successful treatment
- severe anorexia ---> therapist "saved my life"
- pain of delivery ---> birth of beautiful baby
- difficult years working in a low-paying job ---> money saved enhanced child's education
- S leaves husband because he wants her to have abortion, poverty ensues ---> joy of loving son
- death of father ---> brings family closer together
- S is lonely as a child ---> because of this S feels he/she more resilient as an adult
- unhappy employment situation ---> S quits and finds independence, fulfillment
- depression ---> initiated personality change
- panic attack ---> self-understanding
- failed love affair ---> S becomes more assertive
- mother's death ---> S feels closer to her now
- episode of anger and crying about father's death ---> S no longer stutters, decreased anxiety
- ran away from home, felt bad ---> S gained personal strength
- divorce ---> developed better relationships with children
- got fired from job ---> comes to see self as a "whole person"
- sexual philandering, drunkenness, fear had AIDS ---> S started taking responsibility for life
- death of grandson ---> S re-prioritizes life
- family stress and pressure ---> S puts life in perspective, come to value friendships more
- S is threatened by angry mob ---> becomes more self-confident, resilient
- husband has affair ---> S feels enhanced "strength of ego"
- fight with mother-in-law ---> S experiences personal growth
- illness, radiation therapy ---> S experiences better self-understanding
- drugs, dereliction ---> S moves to new place, changes name, "got life together"
- uncle dies ---> S experiences greater empathy for others

- near-death experience ---> S sheds self-centered qualities
- illness forces S to end career ---> S takes up painting and finds the "love and passion" of life
- miscarriage ---> S now appreciates "the little things in life"
- S feels he is arrogant and hypocrite ---> S becomes humbler, happier

Note: If the the above code is 0, you will not need to code for the 10 and 11.

Also, Use codes 10 and 11 sparingly, do not imply the enhancements but be sure the author stated them explicitly.

10) Enhanced Agency (EA) (Score 0 or 1)

“For enhanced agency, score +1 if the transformation from negative to positive in the story produces or leads to an additional enhancement of the protagonist’s personal power or agency, if it builds self-confidence, efficacy, or personal resolve, or if it provides the protagonist with insight into personal identity. The author must explicitly state that enhanced agency was a result of the redemptive sequence.”

Note: This should be a significant change in agency.

11) Enhanced Communion (EC) (Score 0 or 1)

For enhanced communion, score +1 if the transformation from negative to positive in the story produces or leads to an additional enhancement of the protagonist’s personal relationships of love, friendship, family ties, and so on. The author must explicitly state that the enhanced communion was a result of the redemption sequence.

Note: This should be a significant change in relationship, not a casual improvement.

12) Ultimate Concern (UC) (Score 0 or 1)

“For ultimate concern, score +1 if the transformation from negative to positive involves confrontation with or significant involvement in fundamental existential issues or ultimate concerns. The event brings the protagonist face-to-face with death, God, and or religious/spiritual dimensions of life. A point is added for this subcategory because of our belief that redemptive accounts that include such content have a more powerful and personally meaningful quality to them than do other kinds of redemptive accounts.”

Theme of Contamination (Score 0 or 1)

Note: What is critical for a story to score one is that the chronological order of the event begins with something good (e.g. a wedding) and ends with something bad (e.g. bride calls is off.) If there a several turns in the story, all that matters was how it began and how it ended.

“In a contamination scene [**i.e. Story**], a good or positive event or state becomes bad or negative. That which was good or acceptable becomes contaminated, ruined, undermined, undone, or spoiled. Positive affect gives way to negative affect, so that the negativity overwhelms, destroys, or erases the effects of the preceding positivity. For some narrators who describe very difficult

lives, scenes may begin with an acceptable or mildly positive state, but the typical pattern of spoiling or contamination with negative affect follows. One woman describes a rare moment of pleasure when her sister organizes a birthday surprise for her, but spoils the positive memory with the observation that “To me, good things just don’t happen.” Another woman summarizes her entire life story with the comment, “Good things happen, but they are always canceled out by an even worse thing happening next.” In contamination sequences, things may go from very good to bad or from barely acceptable to worse. ...

“Multiple contaminations in the same scene still receive the score of +1. Particularly for persons who do not experience much positivity, like the woman who said good things just do not happen for her, one good event may go bad in several ways. ...

1. “Negative events or affects follow positive ones in chronological time.
2. The order in which events are recalled or narrated is not important.
3. The preceding positive event or affect may range from strongly positive to acceptable.
4. The account of the initial state is often affectively flattened, and the degree of positivity may be subtle.
5. The subsequent negative event, state, or affect may be a downturn, an undermining, undoing, or spoiling of the previous event, state, or affect.
6. The preceding positivity is partially or completely erased or spoiled.
7. The relationship between positive and negative events, states, or affects may be one of opposites, or of temporal or logical association.
8. The common theses of victimization, betrayal, loss, failure, disappointment, disillusionment, or physical or psychological illness or injury may aid in identifying negative events or states.
9. A contamination sequence is not automatically signaled by mention of a death. However, a contamination does occur when the person who dies was a significant positive influence, role model, or friend, or when the death results in clearly negative outcomes and not a mere continuation of an equally negative previous state.

B. Autobiographical Memory (Conway & Pleydell-Pearce, 2000)

Autobiographical Knowledge is remembered at multiple levels of specificity, from very general times and places to specific details. A given memory, and subsequent life story, can hold one or multiple levels. This coding will seek to find how specific the memories become when related in life story writing. Each level of specificity will only be coded either 0 or 1, noting that it was present or not. It is likely, although not guaranteed, that if a very specific memory detail is conveyed, more general memories will be present too.

1) Lifetime Periods (LP) (Code the lifetime period(s) in which the story occurs; list it as 0 if none mentioned)

“Lifetime periods, such as *when I was at school, when I was at University, working for company X, when the children were little, when I lived with Y*, and so on, represent general knowledge of significant others, common locations, actions, activities, plans, and goals, characteristic of a period. Lifetime periods also name distinct periods of time with identifiable beginnings and endings, although these may be fuzzy rather than discrete.”

- 1) Pre-school, early childhood: This would be noted by mention of age (before 5 years old) or specifically noting it was before the protagonist was in school.
- 2) Elementary school: This would be noted by mention of age (ages 5 to 12) or specifically noting grades K-6.
- 3) Adolescence: This would be noted by mention of age (ages 13 to 17) or specifically noting grade 7-12.
- 4) Early adulthood/college life: This would be noted by mention of age (ages 18-22) or specifically noting college, first full-time work, etc.
- 5) Other times of adulthood: This would be noted by mention of age or specifically noting professional work life, complete autonomy, etc.
- 6) Recent: This would be noted by mention of recency (e.g. “recently,” “the other day,” “last week,” etc.). Anything that clearly notes the event occurred in the last week or earlier.
- 7) Unclear.
- 0) If the lifetime period is not mentioned, choose this.

2) General Events (GE) (**Give a 1 if any General Events are mentioned; 0 if not mentioned**)
 “General events are more specific and at the same time more heterogeneous than lifetime periods. Barsalou (1988) found that general events encompassed both repeated events (e.g., *evening hikes to meadows*) and single events (e.g., *my generalized trip to Paris*). Robinson (1992) pointed out that general events may also represent sets of associated events and so encompass a series of memories linked together by a theme.” (e.g., learning to drive a car).

3) Event-Specific Knowledge (ESK) (**Score with a 1 if any Event-Specific Knowledge is mentioned; 0 if none mentioned**)

An ESK pinpoints an event that happened in a specific place and time and has details of the event. This includes imagery, dialogue, names of both people, places, brands, etc.

C. Specific Memories

Note: This code can either be explicitly stated by the author in any format or clearly implied in a narrative arc.

1) Turning Points (TP) (Pillemer, 2001) (**Score event mentioned with a 1; 0 if none mentioned**)

“*Turning points* are concrete episodes that are perceived to suddenly redirect a life plan.” In a story that includes a turning-point, the author either blatantly describes an event he or she claims changed the direction of her/his life or a story clearly implies the turning point.

Examples:

- A student takes a Spanish class to prepare for mission work in El Salvador, then falls in love with a classmate and pursues a career at home.
- A man walks into a bar and sees a person passed out at a table and decides to seek help for his own addictions.
- A married person is caught in an affair, is forgiven and becomes a faithful spouse ever since.
- A person goes to a conference for work and realizes they must change careers.
- A person is driving a car to the grocery store, has a terrible accident, and struggles with mental and physical impairments ever since.

2) Use of first-person pronouns. (Grysmen and Hudson, 2011) **(Total number of first-person pronouns added together)**

The total number of I, We, Me and Us that was used in the story.