



Embodied Being: Examining Tool Use in Digital Storytelling

Stacey O. Irwin	Millersville University of Pennsylvania, United States
	Stacey.irwin@millersville.edu
Keywords	Abstract
Technological Other	In this interconnection of embodied being and environing world, what happens in
Digital storytelling	the interface is what's important. At least that is the way a phenomenological perspective takes shape. Ihde, 2002, p. 8
Phenomenology	We are embodied beings. Our flesh, our manner of being in the world as an intertwining of
Embodiment	perceiver and perceived is a notion that makes it possible for us to articulate the human body with respect to its ontological dimensionality and the claim it has within the lived
Techne	 body with respect to its ontological dimensionality and the claim it has within the lived world. This claiming is our being-in-the-world and it is situated in the understanding of the Self. This fleshly schema called the body is a "opening and clearing, in the multi-dimensional field of Being, for it articulates the embodiment-character of our responsiveness and elicits its potential for development on the basis of our initial, most primordial sense of Being-in-the-world." (Lakoff & Johnson, 1999, p. 62). As such, our everyday life takes place within this opening and clearing of personal space and personal movement. In this Being in the World, through history, humans have told oral then written stories to solidify culture and share knowledge for the future. Our Being-in-the-world comes through story. A different part of Being also intertwines with technology. When story and technology meet, digital stories are born. This theoretical reflection aims to connect the philosophy of technology and new media theory to clarify the role of digital processes in the storytelling, and explore the notion of techne. A variety of perspectives work to shed light on the phenomenological notion called Being-in-the-world-with-technology. Latour (2005) Giltrow (2002) Ihde (2002) and Orlikowski (2001) contribute to unpacking the interaction and relationship between humans and technology to identify the materials artifacts, characteristics of human agents, and context. This reflection aims to flesh out new media perspectives about digital storytelling through the phenomenological work of Gadamer, Heidegger, Ihde, Leder, Merleau Ponty, with concepts of mediation, mediatization, embodiment, motility, praxis, context, and aesthetic stance toward <i>techne</i>.

Embodied Being: Examining Tool Use in Digital Storytelling

The significance of a basic medium to its civilization is difficult to appraise since the means of appraisal are influenced by the media, and indeed the fact of appraisal appears to be peculiar to certain types of media. (Innis, 2007, p. 29)

In this interconnection of embodied being and environing world, what happens in the interface is what's important. At least that is the way a phenomenological perspective takes shape. (Ihde, 2002, p. 87)

We are embodied beings. Our flesh, our manner of being in the world as an intertwining of perceiver and perceived, is a notion that makes it possible for us to articulate the human body with respect to its ontological dimensionality and the claim it has within the lived world. This claiming is our being-in-the-world and it is situated in the understanding of the Self. This fleshly schema called the body is a "opening and clearing, in the multi-dimensional field of Being, for it articulates the embodiment-character of our responsiveness and elicits its potential for development on the basis of our initial, most primordial sense of Being-in-the-world." (Lakoff & Johnson, 1999, p. 62). As such, our everyday life takes place within this opening and clearing of personal space and personal movement. This is where we create our digital stories, using digital toolsⁱ.

For phenomenologists, writing and thinking take place in the lifeworld of experience. Also, in this place, our "modeof-being" or "way-of-being-in-the-world" (van Manen, 1990, p. 182) occurs. This is defined as the experience where the chosen phenomenon occurs. What is the experience of the digital storyteller whose story begins like this?



Figure 1 Example of my digital storytelling project viewer, browser and timeline using Apple's Final Cut Pro software.

Is the lifeworld of experience in the digital storytelling software tools, the digital artifact, the story, the audience, the landing location for the digital story, or an intertwining of all of these through the windows, clips and timelines? Throughout time, we have told oral then written stories to solidify our cultures and share knowledge for the future. Our sense of Being-in-the-world comes through story and through technology. While oral traditions continue to endure essentially unchanged, the written word began to ride the age of technology. Eventually, the oral tradition too, became entwined with technology. Harold Ennis, in *Empire and Communcation* (2007), writes of how media has influenced civilization. He states, "It is scarcely possible for generations disciplined in the written and printed tradition to appreciate the oral tradition (p. 15). But now, through increasingly complex tools and public landing places like social media, blogs, and digital archives, digital storytelling is been able to continue many aspects of the oral tradition while exploring digital

opportunities and options. When story and technology meet, digital stories are born. This theoretical reflection aims to connect the philosophy of technology and new media theory to clarify the role of digital processes in the storytelling, and explore the notion of techne.

A variety of perspectives work to shed light on the phenomenological notion called Being-in-the-world-with-technology. Latour (2005) Giltrow (2002) Ihde (2002) and Orlikowski (2001) contribute to human-instrument studies to identify material artifacts, characteristics of human agents, and context. Marshall McLuhan (1964, 1962) reveals the role of media in culture. Ideas from Couldry, Gadamer, Heidegger, Ihde, Leder, and Merleau-Ponty connect philosophical concepts like mediation, mediatization, embodiment, motility, praxis, context, and aesthetics toward *techne* in the digital storytelling experience.

Today's new media theory of digital storytelling is rooted in foundations from many different disciplines and theoretical underpinnings. In its more than twenty year history, digital storytelling has provided a "format that moves people to reflect on their own experiences, modify their behavior, treat others with greater compassion, speak out about injustice, and become involved in civic in civic and political life. It is an affair of the heart. Whether online, in local communities, or at the institutional/policy level, the sharing of stories has the power to make a real difference." (Center for Digital Storytelling, About Us, Values and Principles, para. 7.) (http://storycenter.org/)

Scholars like Goffman (frame analysis), Foucault (technologies of the self), Mead (symbolic interactionalism) and Lev Vygotsky (cultural mediation) form a strong platform for understanding the way media shapes social and psychological understandings to learn about this a new and emerging social and communicative space (Lundby, 2008). The potential for study in the field of digital storytelling is full of opportunities as scholars try to understand both the history and the phenomena of this mediatized self representation in narrative work (Lundby, 2008). Interpretive flexibility, instrumental response (Orlikowski, 2001), Actor Network Theory (Latour, 2005), and Ihde (1990, 1993, 1991, 2001) work to find ways of explaining and exploring the agency in the tools we use and the ways the digital material is part of the organization and design process. Reflecting on this notion of embodied being, intertwined with a digital tool in a creative pursuit, allows us to recast the relationship between the artist, the tools of production and the materials of production (Bolt, 2007). A focus on embodiment, motility, praxis, context, and the aesthetic stance toward *techne* are philosophical ways to interrogate the creative pursuit of making digital stories. The dialectic of the Technological Other (Irwin, 2005) is a narrative where the digital tool has a voice in the process.

Being, Mediated

Digital storytelling is more than recasting personal material through digital means. Storytelling tools have become increasingly flexible and software designers have adapted the design, symbols and software for viewing on increasingly smaller (smart phone) and larger (LCD) screens. The ability to publish one's work through the web has allowed storytellers to share narratives in the "global village" (McLuhan, 1962) through social media, blogs, and story sharing sites.

The digital material, void of image or pattern, becomes "something" when the bits and bytes are transformed to an image that was once "material without qualities" in the process of creating the story (Löwgren & Stolterman, 2006). The embodied storyteller, digital tool, and digital material make the story happen. The digital object becomes technology-inpractice (Orlikowski, 2000) as it collects the meaning through the individual user, and creates a story based upon his or her ideas. The storyteller is created, through techne, and meaning is made (Bachman 2000). In the case of the digital storyteller, "what may matter most about 'materiality' is that artifacts and their consequences are created and shaped through interaction (Leonardi, 2010)."

One specific notion that links digital storytelling with the tool, used to create it, is the process by which the stories so easily move from idea to digital and on to various social networking sites and online channels. The actual degradation of image only occurs through the specific codec the digital code is compressed to. Codec (compressor-decompressor or coder-decoder) make different sized files in varying degrees of quality. The data stream is transformed to a smaller version, which removes empty space to decrease file size. A more compressed file yields a less perfect digital image. But when the digital stories in these highly compressed files are viewed on the small screen, as most are, the quality loss is barely noticed. And smaller files travel more easily through the Internet so publication of digital stories is an easier process.

Digital editing software designers are providing easy ways of compressing the digital files to make them "web ready" within seconds after completion. As stated by Nick Couldry in his text *Mediatization or mediation: Alternative*

understandings of the emergent space of digital storytelling (2008), "we can understand mediation as the results of flows of production, circulation, interpretation, and recirculation (p. 383).

These digital editing software programs, from the more sophisticated Avid or Final Cut Pro, to the less expensive Moviemaker, and iMovie, provide templates to mimic the way traditional media look. Countdowns, clips of black, font templates, and transitions are designed for ease and usability. This affects the final output of digital stories, and alters or codifies the "logics of use and social expectations" of digital storytelling. (Couldry, 2008, p. 383)

Kinds of digital software tools and the flow of the production of the digital stories can be explored through the notion of mediation. Mediatization, too, can be linked to tool use through the wider consequences that are brought about by the way the parts of the digital narratives are organized when they are put into the digital editing software, and the aesthetic way the moving visuals are compiled on the timeline, and compressed for sharing. As Couldry notes (2008), "Mediatization describes the transformation of many disparate social and cultural process into forms or formats suitable for media representation."Couldry's thoughts on synthesizing mediation and mediatization in digital storytelling inform digital tool use theory as a part in the process of meaning making within the new media theoretical landscape. This phenomenological reflection is written within the context of Couldry's placing of digital storytelling within new media theoret, and questions the very embodied essence of this mediatized and mediated experience.

Technological Intertwining

The importance of the body has increasingly become part of the philosophy of technology. The existential experience of embodied being in tool use has been explored in a variety of ways (Irwin 2006), (Ihde, 2002), (Brey, 1998), (Leder, 1990). My goal is to better reflect on being-with-technology in the digital storytelling process, in light of current new media theory. The craft of visual editing has a rich history rooted in the filmmaking craft. Storytelling too, is a craft with a rich oral and written tradition. Tool use is art and craft intertwined in techne. How might digital storytelling tools alter the world of bodies that use it?

The neutrality or non-neutrality of our chosen tools is often debated. The digital storyteller may find the tool altering the story as the storyteller uses the digital tools.

Does technological intertwining changing the story told in digital form? Thinking about tool use in a creative digital endeavor is an important philosophical exercise. Does the body's relegation to background noise in a highly technologized creative tool use experience change the nature of using and creating with the tool?

Our electronic culture has disenfranchised the human body and constructed a new sense of existential "presence". Television, videotape recorders/players, video games, and personal computers all form an encompassing electronic system whose various forms "interface" to constitute an alternative and virtual world that uniquely incorporates the spectator/user in a spatially decentered, weakly temporalized, and quasi-disembodied state. (Sobchack, 1992, p. 300)

What is it like to be looking through a threshold, the monitor, to experience the phenomenon of relating and creating with the digital interface? How does the activity of digital manipulation alter the storytelling? Marshall McLuhan (1963) explains that engagement with media creates a new extension of the self. For the digital storyteller, the digital experience creates technological and time related ease in creating, altering, and sharing stories. Conversely, stories "born-digital," and never materially presented in some kind of hard copy (DVD, print) may be lost in the translation because increasingly newer technologies cannot access the digital code of older technologies. Will the grandchildren of the future access the digital storytelling hard drive in the family cupboard?

And how might the process, along with the story, be considered in this digital tale of tool use? The telling and the person who constructed it are changed because the story is a restructured fragmentation of a different, previous whole? The "pure information" (McLuhan, 1964, p. 11) of the digital artifact is a medium without a message, until it is used by to tell a story. The thought that goes into the digital storyteller's story may be changed because of the difference between the technology-in-practice today and the techniques of storytellers in years gone by. What new medium does the digital storytelling process create? How might the imagining, the thinking and storytelling process changed with the possibilities of digital editing and image manipulation? Lev Manovich (2001) describes it this way:

Similarly, new media in general can be thought of as consisting from two distinct layers: the "cultural layer" and the "computer layer ... Since new media is created on computers, distributed via computers, stored and archived on computers, the logic of a computer can be expected significant influence on the traditional cultural logic of media. That is, we may expect that the computer layer will affect the cultural layer. (pp. 63-64).

The conventions of digital storytelling do influence the cultural layer of storytelling. For instance, the length and quality of stories, the location and grouping of their publication, and the contents of stories can change the very nature of oral storytelling as a craft.

Technological determinism has long proclaimed that tools are value free, and the issues lie in how the user chooses to engage the tool. However, several well-known philosophers note the non-neutrality of tools. Philosopher Don Ihde (1979) studies the non-neutrality of tools by exploring how an image's meaning can be changed when one views it through amplification and reduction technologies. Peter-Paul Verbeek's work, *What Things Do: Philosophical Reflections on Technology, Agency, and Design,* explores how technologies mediate actions and the ethical implications of devices and tools. And Melvin Kransberg's (1986) first law of technology proclaims that technology is not neutral, and context and circumstance changes the results of a tool's use. Without the storyteller, the tool is nothing. But without the tool, digital stories do not exist.

The Body Electric

The inter-face, the place where the body face and computer face meet, is where a relational embodied experience begins. The definition of interface suggests both a surface boundary, and a place where "two bodies, spaces, or phases" meet. The notion also focuses on the sharing of common considerations between two or more entities, an intersection between equipment and human beings, and the ability to coordinate and communicate with each other (Webster's New Universal Unabridged Dictionary, 2003). It seems that the connection between the artist and the digital tool is essential in this experience. Certainly when *techne* is part of the experience, both mind and body are engaged in the relating between digital tool, story, and embodied being.

A look at the etymological roots of interface reveals a somewhat different sense of the word. The Old French *interen*, to bury, and *facia*, Old Latin for form, figure and also disfigure (Barnhart, 2001, p. 213), suggest a kind of hiding of the form. This true nature of interface, the hiding of the Other, the disfigured face of technology behind a fabricated sign designed specifically for human-technology relating, reveals once more an intersection of two elements. The interface becomes the translator that allows face-to-face interaction between the user and the used. For the embodied being (the artist), digital editing software, graphic design programs, and simulation programs build stories, worlds and environments.

An early philosophical approach rectifies the body, art and tool in *techne*. The tension of *techne* moves between the work that is done in the mind and the work guided by the hand through a tool. Looking to philosophic notions of *techne* can help clarify the role of Technological Other as embodied being in the digital storytelling process.

Techne-ology

The notion of *techne* is embedded in the early etymological root of *technology*, but the two have parted ways in contemporary uses of the word. Now *techne* becomes techno and evokes understandings less related to the care and artistic pursuits of mind and body joining together in one effort and more related to machinery and instrumentality and cyborgs. Putting *techne* back in the creative pursuit of digital storytelling brings back the notion of the Self—the body-and awakens a new reply to the technological texture of the world. As noted in one recent study (Livingston, 2008), "[f]rom the user's viewpoint, more than ever before, using media means creating as well as receiving, with user control extending far beyond selecting ready-made mass-produced content. "Those who hear a story might not think about the altered embodied, temporal, spatial, and relational experiences that a digital collaboration brings to the creative process. However, this lived experience of creating a digital story is entering into a relationship with the digital tools in a kind of reciprocity in self-expression.

Catch phrases like convergence and integration explore the surface of humans/technology interaction, but the emphasis of the "user," pushes the body and the tool further apart to the detriment of the whole (body). Reintroducing the notion of *techne* may be the way to bring the embodied self to a new relationship with the Technological Other. Because, the "very nature of materiality is an entanglement. Matter itself is always already open to, or rather entangled with, the 'Other.'" (Barad, 2007, p. 393)

Discussion of *techne* dates back to early philosophical ideas about thinking and knowing as epistemological ideas. Early philosophers noted that oral speech and debate are not *techne* because the voice is part of the body, but writing is *techne* because the writing instrument is used in this physical and mental pursuit. In this same way, digital storytelling tools act as translatory instruments because of their use in both physical and mental ways in the digital storytelling process. The emphasis has increasingly become the mass acquisition and mass consumption of more and greater tools. This absence of *techne*, the theory and practice intertwined, pulls the art away from the craft within our tool-use society.

Levin (1985) asks, "What is the bearing of our body, when it bears our thought of being?" In other words, how is the body and mind working fully together to contribute to the creative mind? To bear means "to give birth," "to gestate." It indicates a gesture or movement that is essentially and intrinsically creative and renewing in its stance. The artist who realizes and fulfills the creative gift of bearing or considering the body in movement and thought together is one who dwells "on the earth in a 'poetizing' way... Thus, the bearing of thought must be to understand in relation to our skillfulness (*techne*)..." (p. 91). The body's relationship to the mind is both intrinsic and essential but the body may feel as if it plays a neutral part in one's existence with technology. Heidegger (in Levin, 1985) notes "use implies fitting response" (p. 127). How might the creation of digital story be altered by the way it was created AND through the relationship between the artist and the digital tool? What is a fitting response or call to this creative process? *Techne*, "simultaneously a craft and art object" (Ihde, 1993, p. 26) uses the hands to produce an object. "If the artifact was produced with purpose, care, and above all the proportionality of Greek sensibilities and values, then it was excellent as *techne*" (Ihde, p. 26).

If a storyteller "uses" the tool, does the story turn out differently than if the storyteller, as an embodied being, becomes intertwined in *techne* with the tool?

An embodied way of creating with a tool plays out in a kind of forgetfulness for a tool user. As the user begins to click and work the digital software, the mouse and the computer become absorbed and withdraw in the process being taken into the user's body. Through the work of the motion in the mind, the body is extended through the process. It is as if the body actually disappears in perceptual disembodiment (Ihde, 2002). This bodily concealment occurs for the storyteller bound in *techne*. The world is disclosed in a way that relegates the body to a background position (Leder, 1990). This "background disappearance" (p. 26) involves a shift of all ancillary movement to the perceptual background for complete focus on something specific in front of the body. This frontal location is where the work of most digital storytellers occurs in front of the camera, the screen and the interface.

Body Motility

The perceptual stance is corporeally forward in location and gaze. This movement from foreground to background, as the corporeal body recedes and perception shifts, is central to the artist's thoughts about the body. The body seems to disappear. This bodily sense is perceptual in experience. This is called motility.

A lack of human intentionality through the creating process goes on to suggest that Motility, then, is not, as it were, a handmaiden of consciousness, transporting the body to that point in space of which we have formed a representation beforehand. In order that we may be able to move our body towards an object, the object must first exist for it, our bodies must not belong to the realm of the "in-itself.". We must therefore avoid saying that our body is space, or *in* time. It inhabits space and time. (Merleau-Ponty, 2000, p. 139)

Motility, this gathering together of space and time, creates the feeling that we are inhabiting or living within the technology. We inhabit our bodies and our bodies inhabit the tool we are using. Motility is tied to the sense of perception. To experience "objects as there, near or far from my body, is only possible for a being that moves through space" (Leder, 1990, p. 17). The physical dimensions of creating with a digital tool becomes part of the background as the artist become engaged and absorbed (embodied) in work.

"Losing a sense of the world" and becoming absorbed by the work is at odds with one's lived experience in the lifeworld. When my gaze is fixed on the digital interface, facilitated by my laptop, aided by the screen as I work, my mind is on the story I create. My legs fade into the background because my attention is fixed on the screen. This is called background disappearance, a reseating of the perceptual focus in the experience of *techne*. The other kind of disappearance often experienced is named "absence" (Leder, 1990, p. 26) because it involves a kind of disappearance of self-awareness about the body like being on "auto-pilot." This way of thinking is automatic, not purposeful, and a kind of

transparent experience. The word automatic suggests spontaneity, mechanics, an action of the self (Barnhart, 2001). How might the "self" act without the body knowing? Heidegger (1977) names this experience equipment opacity and suggests that as we manipulate equipment, it disappears from its natural state and becomes part of our body. In that process, our body disappears too. This "circumspection," the way we look at a thing, as a piece of equipment "in-order-to" get something done (Heidegger, p. 98), is the place where we find our bearings in a particular way, based on the digital tool in front of us.

... there "is" no such thing as an equipment. To the Being of any equipment there always belongs to a totality of equipment, in which it can be this equipment that it is. Equipment is essentially "something-in-order-to"... A totality of equipment is constituted by various ways of the "in-order-to," such as servability, conduciveness, usability, manipulability. (Heidegger, p. 96)

Heidegger suggests that one's circumspection, one's stance for using a tool, is based on what it can do for the user. An objectifying stance toward the technology may cut off an ethical and authentic being-in-the-world. Circumspection rooted in *techne* is work toward the aesthetic, work through the hands and the mind.

Patterned Practice

A primordial calling to the body from the mind is an intertwining experience that is often denied through a philosophic label of dualism, the separation of the mind and the body. This instrumentality illustrates separateness between user and hand tools and machines but not between an artist with embodied digital tools. This idea of instrumental interactionism is brought together through the notion of praxis, putting a theoretical knowledge into practice. A thorough understanding of *praxis*, "a unique kind of knowledge associated with action or patterned practices" (Ihde, 1993, p. 39) can rectify this split of dualism. This work of *praxis* allows the "technology to take its proper place" (Ihde, p. 31) in the world. *Praxis* results in *techne*.

If all knowledge is situated within a specific bodily position and perceptual standing, then all knowing comes from activities that occur within the everydayness of the lifeworld. Activities like *techne* involve technology, the "tools of the trade," for authentic work to be done. Knowing the *techne* of one's endeavor means knowing one's tools. It does not mean knowing *only* the tools. Heidegger (1962) says:

Seeing, taken in the widest sense, regulates all 'procedures' and retains its priority. To whatever kind of objects one's knowledge may relate itself, and by whatever means it may do so, still that through which it relates itself to them immediately, and which all thinking as a means has a *goal* (author's italics) is intuition. (p. 410)

For digital storytellers, the objects of knowledge are the tool or instrument that becomes part of the process and the thinking, habits and aesthetic sensitivities of the story. Philosophy has used examples like Heidegger's "hammer" and Merleau-Ponty's "feather" to describe the spatial and perceptual work of instrumentality. Understanding the notion of instrumentality and taking the work into one's own hands in "those relations *to* or *with* the body" (Ihde, 1990, p. 97) can change the story being told.

There are a variety of ways an artist intentionally translates the tool. The experience often slides back and forth between hermeneutic translation and alterity translation toward Technological Other. Hermeneutic notions suggest the user has learned to read the technology and then properly change perception to match the instrument's reading (Ihde & Selinger, 2003).

"The bodily-perceptual focus upon the instrumental text is a condition of its own particular hermeneutic transparency" (Ihde, 1990, p. 97). Alterity relations suggest a link with the technology that constitutes a kind of self/other experience rooted in praxis. A digital storyteller's relationship with his or her highly technological computer tool with a complex contextually signed interface can be one of the strongest examples of alterity relations, because the linguistic and logical behavior patterns of the communicative action are programmed into the digital tool's design in most of today's technological tools. For digital storytellers, the intended translatory link between the artist and the digital tool is a shared context: a shared-text for communication and a relationship with the Technological Other.

In Context

Context is about wholeness. The Latin word *contextus* suggests a putting together or weaving of elements from "*con*-together + *texere*, to weave" (Barnhart, 2001, p. 213). A contextual experience involves knowing "how to do it." *Techne* is

born of this practical "how to," and the experience of being ingrained in a "free surrender or submission of the body" (Levin, 1985, p. 215). *Techne* is the notion that weaves and builds the pattern that reveals the context for a journey or experience. This notion of *techne*, "an articulatory *capacity*: is something, then, that we can measure by considering both the character of our effort and the nature of that which this effort makes appear" (p. 125). Through this creative wholeness, this gifted and skillful way of using one's hands in an intertwining way with a digital tool in praxis, *techne* is born. It is an answering and response felt when deep in the storytelling work. Sometimes this new thing seems like magic, born of a moment when everything went right. This event takes practice within a context of a well-known experience. This context comes from knowing the "rules," the history and the sense of storytelling that comes through praxis.

By virtue of patience, delicacy of touch, and gentle, careful motions ... an event of disclosing, a moment when the field of the gesture's encounter gives birth to, makes appear, a 'new thing,' and the emotional depth of the field's reserve of enchantment is somehow itself made sense of our emerging body of emotional understanding. (Levin, 1985, p. 126)

The idea of craft, meaning strength and skill (Webster's New Universal Unabridged Dictionary, 2003) in one's efforts, binds a person's identity to self. In earlier times people had last names that reflected a long family history in a specific trade or craft like building or blacksmithing. The *techne* of the craft becomes endangered when the focus becomes the technique, because "a body of skills that provides the foundation for effective work" (Douglass, 1996, p.xiii). Technical proficiency with the tool undermines the intertwining of the art and craft and seats the emphasis on the Other, the digital tool. Notions of effectiveness and skill over aesthetic values can suggest a break in the creative process, with a clear focus on the tool, the technology, and lacking in balance between the character of the process and the essence of a physical and mental storytelling craft.

Techne is also reflected in the master artisan, the one who know the craft. Gadamer (2000) writes that knowledge "is always related to practical application ... a genuine mastery of the matter is acquired practically in the *techne* ... " (pp. 315-316). Heidegger (1977) adds "What is brought forth by the artisan or the artist ... has the bursting open belonging to bringing-forth not in itself, but in another *(en alloi)*, in the craftsman or artist" (pp. 10-11). These notions of bringing forth occur during the evolution of the craft, when the "concealed comes into unconcealment" (Heidegger, p. 11). This bringing-forth creates a work of aesthetic value, a valuable story.

Aesthetic Stance

Aesthetics refine a digital computer user into a digital storyteller, when special skill, requiring dexterity and a careful eye for detail, is involved in the creative process. An artist sees the craft as an aesthetic experience when he/she is bodily involved in an activity in contextual understanding and praxis. To be aesthetically pleasing, a created object must be beautiful or involved in one's senses and emotions in a way that is more than an intellectual thought (Webster's New Universal Unabridged Dictionary, 1996) but that involves the work of the mind. This suggests embodied experience. Aesthetics involves the hearts and minds of artists who are captured by their work as they feel the nature of the contextual knowledge within them. Gadamer (2000) questions aesthetics, noting the shift from earlier Kantian ideas of "the critique of aesthetic judgment" (p. 82) to the idea that "art is an act of freedom" (p. 82), a noticeable shift from the philosophical to the content based sensitivities of creating:

Basically it is to the phenomenological criticism of nineteenth-century psychology and epistemology that we owe our liberation from the concepts that prevented an appropriate understanding of aesthetic being. The phenomenological return to aesthetic experience (Erfahrung) teaches us ... the ontological definition of the aesthetic toward the concept of aesthetic appearance ... (Gadamer, p. 84).

Part of this notion of aesthetic experience is getting to the genuine truth of an experience (p. 84). Without *techne*, the body is on the outside and the truthful nature of an intertwining of an aesthetic experience through technology may not occur. In his discussion of aesthetic truth Gadamer notes "It had become easy to write a good poem, and, for that very reason, hard to be a poet" (p. 88). Today it is relatively easy to sit down and edit a series of visual images one after another, but it is much harder to thoughtful tell a story rooted in *techne*.

The Greek notion of *techne* is not only a name for the activities and skill of a craftsman and for the arts of both mind and hand, but also is linked to creativity, *poiesis*. For the Greeks, *techne* was a production known as a kind of knowledge (Ihde, 1983). While craft is focused on the skill of the *techne*, the art is embedded in the design.

The advantage of art over natural beauty is that the language of art exerts its claim, and does not offer itself freely and indeterminately for interpretation according to one's mood, but speaks to us in a significant and definite way. And the wonderful and mysterious thing about this definiteness is by no means a fetter for our mind, but in fact opens up room for play, for the free play of our cognitive faculties. (Gadamer, 2000, pp. 51-52)

The artful posture can be created through what Ihde (1983) calls the "aesthetic stance" (p. 62), an experience that is between actional involvement and conscious observer. Heidegger (1977) also includes notions of the mind in his thinking about *techne* when he calls it "the name not only for the activities and skills of the craftsman, but also for the arts of the mind and the fine arts. *Techne* belongs to bringing-forth, to *poiesis*; it is something *poetic*" (Heidegger, p. 13).

Heidegger writes that the kind of knowing produced by *techne* is a kind of opening up to the world. "Thus, what is decisive in *techne* does not lie at all in the making and manipulating nor in the use of means, but rather in the aforementioned revealing. It is a revealing, and not as manufacturing, that *techne* is a bringing-forth" (Heidegger, p. 13).

The current separation of art and technics, then, is a modern solecism. Until the machine monopolized our attention there was a continual interplay between quantitative order and working efficiency on one hand, and the qualitative values and purposes that reflected the human personality on the other. To deny the name of invention to the creative expression of subjective forms is to deny the unity of the organism itself and the impression of the human personality. (Mumford, 1966, p. 253)

For a digital storyteller, there is tension between the concentration of working with the digital tool and the artistic creation of the story. Gadamer (2000) states that "Art is a special organ for understanding life because in its 'confinement between knowledge and action is where life reveals itself at a depth that is inaccessible to observation, reflection, and theory" (p. 235). Art offers the participant a sense of "being-with" the experience. This is a "creative uncovering" of intuition that brings forward the tension between art and craft and allows an opening for *poiesis*.

Toward Techne

It is understood without a doubt, that digital tools have changed the world. "New media and new conditions of telling 'my' and 'our' story are open to more and more individuals and groups in society (Lundby, 2008)."A less discussed topic is how using the digital tools have made changes in the digital storytelling process. "[A]s the technologies and artifacts become more complicated and less transparent (e.g. computers), their role in affecting values and cultures becomes greater" (Ihde & Selinger, 2003, p. 184). Reintroducing the notion of *techne* into the experience of digital storytelling, allows the embodied being to emerge in the self-reflective endeavor. Examining this experience means opening up possibilities in the embodied and holistic creative experience of digital storytelling to put forth a posture of openness toward the world that allows a storyteller to make sense of the world and all of its technologized experience.

Techne allows for understanding, rather than a preoccupation with mastery at every step in the instrumental process. A focus on embodiment, motility, praxis, context, and the aesthetic stance toward *techne* are philosophical ways to interrogate the creative pursuit of making digital stories.

Made aware of ourselves as questioners, as meaning makers, as persons engaged in constructing and reconstructing realities with those around us, we may communicate ... the notion that reality is multiple perspectives and that the construction of it is never complete, that there is always more. (Greene, 1995, p. 130)

Digital storytellers are questioners engaged in self-awareness and self-expression to make meaning and examine reality. Remembering *techne* in the material construction of digital stories remembers the embodied being in the process because "[t]hrough the lived body I open to the world" (Leder, 1990, p. 173).

References

Barad, K. (2007). *Meeting the universe halfway*. Durham: Duke University Press.
Barnhart, R. (2001). *Chambers dictionary of etymology*. New York: H.W. Wilson Company.
Bolt, B. (2007). "Material thinking and the agency of matter," in Studies in *Material Thinking*, Vol 1, no. 1, AUT University.

Center for Digital Storytelling - Home." Center for Digital Storytelling - About Us. N.p., n.d.Web. 20 Feb. 2012.

Couldry, N (2008) "Mediatization or mediation? Alternative understandings of the emergent space of digital storytelling," *New Media Society*, 10 (3): 373-391

- Douglass, J., & Harnden, G. (1996). *The Art of techniques: An aesthetic approach to film and video production*. Boston: Allyn & Bacon.
- Gadamer, H.G. (2000). *Truth and method* (J. Weinsheimer & D. Marshall, Trans.). New York: Continuum. (Original work published 1962).
- Goltrow, J. (2001). *Meta-Genre. The rhetoric and ideology of genre: Strategies for stability and change (Research in the Teaching of Rhetoric and Composition)* (pp. 187-206). Cresskill, NJ: Hampton Pr.
- Greene, M. (1995). *Releasing the imagination: Essays on education, the arts, and social change*. New York: Teachers College Press.
- Heidegger, M. (1977). *The question concerning technology and other essays* (W. Lovitt, Trans.). New York: Harper Torch books. (Original work published 1952)
- Heidegger, M. (1962). *Being and time* (J. Macquarrie & E. Robinson, Trans.). New York: Harpers and Row Publishers. (Original work published in 1926)
- Ihde, D. & Selinger, E. (2003). Chasing technoscience: Matrix for materiality. Bloomington, IN: Indiana University Press.
- Ihde, D. (2001). Bodies in technology. Minneapolis, MN: University of Minnesota Press.
- Ihde, D. (1993). Philosophy of technology. New York: Paragon House.
- Ihde, D. (1991). *Instrumental Realism: The Interface between Philosophy of Science and Philosophy of Technology*. Bloomington: Indiana UP.
- Ihde, D. (1990). Technology and the lifeworld. Bloomington, IN: Indiana University Press.
- Innis, H. (2007) Empire and Communications. Lanham, Maryland: Rowman & Littlefield.
- Irwin, S. (2005). Technological Other/Quasi Other: Reflection on the Lived Experience in *Journal of Human Studies*, Volume 28, No. 4, (October 2005).
- Lakoff, G., & Johnson, M. (1999). Philosophy of the flesh. New York: Perseus Books Group.
- Lambert, J. Center for digital storytelling: About us: Values and principles. Retrieved March 1, 2011, http://www.storycenter.org/principles.html
- Latour, B. (2005). Reassembling the social: An introduction to actor-network theory. New
- York: Oxford University Press, USA.
- Leonardi, P. (2010). "Digital Materiality? How Artifacts without Matter, Matter." *First Monday* 15(6).http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/viewArticle/3036/2567
- Leder, D. (1990). The absent body. Chicago: University of Chicago Press.
- Levin, D.M. (1985). The body's recollection of being. Boston: Routledge & Kegan Paul.
- Livingston, S. (2008). Taking risky opportunities in youthful content creation: Teenagers' use of social networking sites for intimacy, privacy, and self expression," *New Media Society*, 10 (3): 393-411.
- Löwgren, J & Stolterman, E. (2004). *Thoughtful Interaction Design: A Design Perspective on Information Technology*. Cambridge, MA: MIT Press.
- Lundby, N. (2008). "Editorial: Mediatized stories: Mediation perspectives on digital storytelling," New Media Society, 10 (3): 363-370.
- Manovich, L. (2002). The Language of New Media. Cambridge, MA: MIT Press.
- McLuhan, M. (1964). Understanding Media; the Extensions of Man,. New York: McGraw-Hill.
- McLuhan, M. (1962) The Gutenberg Galaxy; the Making of Typographic Man. Toronto: University of Toronto Press.
- Mumford, L. (1966). *Technics and human development: The myth of the machine volume one*. New York: Harcourt Brace Jovanovich, Publishers.
- Orlikowski, W. J. (2001). The Duality of technology: Rethinking the concept of technology in organizations. *The Contemporary Giddens: Social Theory in a Globalizing Age* (pp. 62-96). New York: Palgrave Macmillan.
- Orlikowski, W.J. (2000) Using technology and constituting structures: A practice lens for studying technology in organizations, *Organization Science*, 11 (4) 404–428.
- Sobchack, V. (1992). *The Address of the eye: A phenomenology of film experience*. Princeton, NJ: Princeton University Press.
- Van Manen, M. (1990). *Researching lived experience: Human science for an action sensitive pedagogy*. Albany, NY: SUNY Press.
- Verbeek, P.P. (2005). *What Things Do: Philosophical Reflections on Technology, Agency, and Design*. University Park, PA: Pennsylvania State UP.

Webster's New Universal Unabridged Dictionary. (2003). New York: Random House Publishing.

ⁱ Examples of popular digital editing tools include Avid (<u>http://www.avid.com/US/products/family/Media-Composer</u>), Final Cut Pro (<u>http://www.apple.com/finalcutpro/</u>) and Adobe Premiere (<u>http://www.adobe.com/products/premiere/features.html</u>).