Immediacy and Hypermediacy: mind the oscillation

Luciane M. Fadel¹; Jim Bizzocchi²

¹ Programa de Pós-Graduação em Engenharia e Gestão do Conhecimento, Universidade Federal de Santa Catarina
² Professor Emeritus, School of Interactive Arts & Technology, Simon Fraser University

ABSTRACT

This paper considers that web design contains the notion of transparency (immediacy) to support user immersion. But it also includes a sense of the opaque (hypermediacy) as a means to support interactivity. Therefore, the user oscillates between being immersed in the content and interacting with the interface, and this oscillation might disrupt the making sense process. We argue that the creative oscillation between immediacy and hypermediacy can enhance reality and thus support meaningful web experiences. To this end, this paper investigates the role of agency to sustain oscillation between immediacy and hypermediacy in a website. Therefore, this paper starts reviewing some of the works that instantiate narrative in design and those that focus on the agency experienced when interacting with a computer. Thus, agency is used as an analytical lens to investigate how interface design was used to support specific outcomes in the retail context: a sense of aesthetic, service excellence, playfulness and consumer return on investment. In order to do this, we performed a close reading in two versions of two specific genres of websites to understand how remediation changed over time and its implications for agency. The first genre is service design, and the second is product design. The results suggest that those designs that privilege narrative and cognitive interactivity provoke a sense of aesthetic and service excellence. The results also indicate that those websites that privilege explicit interactivity intend to evoke a sense of playfulness, and consumer return on investment. In addition, a creative oscillation between immediacy and hypermediacy enhances reality and supports meaningful user experience. In addition, this paper identifies some of the signifiers that support different levels of agency. Finally, exploring the oscillation between immediacy (transparency) and hypermediation (reflectivity) creates meaning to the experience because it acknowledges the interface and the role it plays in presenting reality.

KEYWORDS

Agency; Remediation; Poetics; Interface design; Retail

Imediação e Hipermediação: Considere a oscilação

RESUMO

Este artigo considera que o web design compreende a noção de transparência (imediação) como um meio de apoiar a imersão do usuário. Mas também compreende a noção de opacidade (hipermediação) como um meio de apoiar a interatividade. Portanto, o usuário oscila entre estar imerso no conteúdo e interagir com a interface, e esta oscilação pode dificultar o processo de criar significado. Este artigo argumenta que a oscilação criativa entre imediação e hipermediação pode melhorar a realidade e, assim, apoiar uma experiência significativa na web. Neste sentido, este artigo investiga o papel da agência em sustentar a oscilação entre imediação e hipermediação em um site. Assim, este artigo inicia com a revisão de alguns dos principais trabalhos que instanciam a narrativa no design e aqueles que se concentram na agência percebida ao interagir com um artefato digital. Desta forma, a agência é usada como uma lente analítica para investigar como o design da interface foi aplicado para resultados específicos no contexto do varejo: o senso de estética, excelência em serviços, diversão e retorno do investimento do consumidor. Para isso, é realizada uma leitura densa em duas versões de dois géneros específicos de sites para entender como o grau de remediação mudou ao longo do tempo e suas implicações na agência. O primeiro gênero é o design de serviços e o segundo é o design de produtos. Os resultados sugerem que o design que privilegia a interatividade narrativa e cognitiva pretende provocar um senso de excelência estética e de serviço. Os resultados também sugerem que o design de sites que privilegia a interatividade explícita pretende provocar uma sensação de diversão e retorno do investimento do consumidor. Além disso, uma oscilação criativa entre imediação e hipermediação, realça a realidade e dá suporte a uma experiência significativa do usuário. Além disso, este artigo identifica alguns dos significantes que apoiam diferentes níveis de agência. Finalmente, explorar a oscilação entre imediação (transparência) e hipermediação (refletividade) proporciona significado para a experiência, porque reconhece a interface e o papel que desempenha na apresentação da realidade.

PALAVRAS-CHAVE

Agência; Remediação; Poéticas; Design de interface; Varejo
1. INTRODUCTION

New media might be understood as remediation of older media (McLuhan, 1964). For Bolter and Grusin, remediation is “the representation of one medium into another” (1999, p. 45). This definition of remediation implies that one medium borrows the aesthetic or content from another medium. Bolter and Grusin describe four stages in a continuous degree of competition between the two media. First, the old medium is represented in the new medium with no critique or manipulation to one extreme of this spectrum. Second, the new medium emphasizes the difference between the electronic form and the old one in the second stage. In the third stage, remediation can completely refashion the older medium completely. Finally, to the other extreme, the new medium absorbs the older medium entirely. This rationale supports the formation of a media vocabulary. For instance, as a website moves toward more aggressive remediation from older media, different forms of visualization and representation may be achieved, which intend to create a more direct and meaningful experience. But this intention may be achieved, which intend to create a meaningful web experience.

Agency is conceptualized as operating in three levels: personal, creative agency, and collective agency. The most basic form of agency is the personal agency, which can be understood over different textual strategies: mastering narrative, mastering choice, mastering action, and mastering space.

In addition, we understand that the website design vocabulary includes the notion of transparency (immediacy) to support user immersion. But it also includes the incorporation of opacity (hypermediacy) as a necessary part of interactive processes. Therefore, the user oscillates between being immersed in the content and interacting with the interface. This oscillation has the potential to disrupt the sense-making process. At the same time, however, we argue that a creative oscillation between immediacy and hypermediacy can modify or enhance reality and thus support a more meaningful web experience.

In the following, we investigate the role of agency to sustain a creative oscillation between immediacy and hypermediacy. To do that, we compared some of the works that favor a more narrativized design with those that focus on agency that interaction. These works are used to examine two versions of two specific genres of websites. The first genre is service design, and the second is product design. Our goal is to understand remediation and its implications on agency manifest, and how they have changed over time. We performed close readings of two versions of each website to identify how agency was designed and then we drew our conclusions from these findings.

The websites' versions are 10 years apart, and the older version was visualized using the Wayback Machine. We reviewed selected sites that have a 10-year-old version in these archives. We identified Designed Hotels.com as a representative for design service and Honda.com for product design.

In addition, we examined agency as a mode of media involvement following the understanding of the human-centered design. We identify some of the signifiers that support different levels of agency. Finally, we conclude the role of the oscillation between immediacy (transparency) and hypermediacy (reflectivity) in the user experience.

2. WEB NARRATIVE

Several types of research focus on understanding the role and consequences of narrative use in design (Grimaldi, 2008; Tholander, Normark and Rossitto, 2012; Forlizzi and Ford, 2009). For example, Grimaldi, Fokkinga, and Ocnarescu (2013) categorized the “what, where, and why” of narratives in design. Those authors present five definitions of narrative based on elements extracted from different definitions of narrative in the literature. These definitions range from the most minimal requirements for something to be considered a narrative to a more restricted definition (see Figure 1). Thus, D1 means that a narrative represents one or more events, based on Abbott’s definition of narrative (Abbott, 2002). D2 means that a narrative represents characters in a series of chronological events (Chatman, 1978).

D3 defines a logically sequenced narrative, where one or more characters in a series of chronological events are joined by causality or agency. This definition is based on the work of Bal and Bordwell (2010; 2007).

D4 definition involves values and emotions evoked by one or more characters in a series of chronological events joined by causality or agency and is concerned with the effects of narrative on the audience (Bruner, 1991).

The last definition follows Aristotle and Propp’s definition of a narrative (Aristotle, 1920). Thus, D5 describes the

agency, creative agency, and collective agency. The most basic form of agency is the personal agency, which can be understood over different textual strategies: mastering narrative, mastering choice, mastering action, and mastering space.

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narrative as “an emotion-evoking and value-laden representations of one or more characters in a series of chronological events that are connected by causality or agency, and which progress through conflicts towards a climax” (Grimaldi, Fokkinga, and Ocnarescu, 2013, p. 202).

Grimaldi, Fokkinga, and Ocnarescu (2013) also propose a typology of narrative use in design: design facilitates a narrative, the narrative supports the design process, and design delivers a narrative. Also, the authors list seven functions for narrative in design: conveying information, evoking reflectivity, showing/teaching values, empathy, and identification, sparking imagination and creativity, memorability, and delightful.

The theoretical framework understands that the interaction between the user and the interface is a narrative (Grimaldi, 2008). That narrative has two components: a story and a plot or discourse (Abbott, 2002; Chatman, 1978; Bordwell, 2007). The plot or discourse constitutes everything that is presented to the viewer, including non-diegetic material. The story is a mental image, a cognitive construct that concerns certain entities and relations between these entities (Herman, Jahn, and Ryan, 2010).

3. AGENCY

The Oxford English Dictionary defines agency as “Action or intervention, especially to produce a particular effect.” Agency is understood as the capacity to alter something intentionally but not exclusively. The relation between agency and intentionality is an issue that many authors pursue, but no common acceptance has emerged. One possible reason for that is related to the fact that agency is an integral part of human actions and thus can be studied through a variety of lenses, such as sociology, anthropology, or psychology, to mention just a few. For instance, Davidson (1963, p. 685) argues “a reason rationalizes an action only if it leads us to see something the agent saw – in his action.” This reason can also become incipient depending on the social action orientation, as stated by Weber (1978):

1. Instrumentally rational: expects that objects or humans will behave accordingly;
2. Value rational: conscious belief in the value for its own sake;
3. Affectual: determined by the actor’s feeling states;
4. Traditional: determined by ingrained habituation.

Many other approaches bring up intentionality, process, and consciousness in one form or another (Eichner, 2014). For example, Giddens (1984) believes that agency is about people’s capability in doing things, which implies power. The power to effect changes by one’s actions is the foundation of human agency (the belief of personal efficacy), as stated by Bandura (2006). Bandura also emphasizes that agency does not primarily occur on a personal level but also proxy (relies on the expertise of others) and collective levels.

Eichner (2014) pointed out that the basic concepts of acting individuals in a social world shift from the rational and intentional actor towards a process of meaning-making. This shift is recognized by Reckwitz (2002), who identified three paradigm shifts on sociological action theory: the development progressing from homo economicus to the homo sociologicum; homo sociologicum toward the homo significans; from homo significans toward praxeologic. The first stage results from ideas elaborated by authors such as Descartes, Hume, Locke, and Kant, whose work supported a shift from social order from the utilitarian individual into collective actions that require social order. The second paradigm involves interpretive approaches with the individual and lifeworld at the center of the approach. Garfinkel, Gadamer, Ricoeur, Taylor, Levi-Strauss, Bourdieu, Foucault, Barthes take these approaches. They aim to explain how meaning is symbolically constructed and argue that social order is cognitively created. The third shift refers to culture-oriented theories in which action is a process occurring in time and space. Each social practice consists of body performance, as described by Bourdieu, Taylor, and Joa (Reckwitz apud Eichner, 2014).

This paper is not about the agency humans perform in the real world but about the agency we experience when interacting with a computer, specifically with a website. One of the most influential works in this area is Hamlet on the Holodeck (1998). Murray defines agency as “the satisfying power to take meaningful actions and see the results of our decisions and choices.” Together with immersion and transformation, they form the aesthetic of the computer. In this sense, agency is not a characteristic of the medium but an aesthetic pleasure perceived by the user (Murray, 2011). This also means that the user experiences the power to change the environment beyond simple interactivity. Murray argues that common venues for the experience of agency include the structured activities of games, the pleasure of navigation, and constructivist stories.

Spatial navigation allows the user to experience the pleasures of intentional navigation: using landmarks for orientation, perceiving the changes revealed by moving around the space, or mapping the space mentally to reinforce the experience. The navigable space is a critical form of new media because it allows the player to explore the environment and move the narrative forward (Manovich, 2002).

For Murray, the pleasure of narrativized orienteering can be played out in two variations of the labyrinth: the story in the maze and the rapture of the rhizome. The maze is about survival and requires intelligence, courage, and emotional involvement, like the story of the Theseus and the Minotaur at the King Minos of Crete. The perception of moving forward may highlight the sense of powerfulness, but having just one outcome (one way out) may upset the user.

The second and more complicated digital labyrinth is structured as a rhizome, like a hypertext narrative that offers no endpoint and no way out. However, this complexity might also diminish the pleasure of navigation. Thus, agency might also fall between these two forms: not as rigid as a maze and not as open as a rhizome. The user’s anxiety could be modulated if a goal is clear while free exploration can be performed.

Journey stories based on transitioning from one place to another and solving the how-to of the hero’s danger support...
free exploration. The latter offers creative forms of promoting agency. Agency can also benefit from games, especially constructivist stories because games often focus on mastery of skills and are goal-directed. In addition, games can be experienced as symbolic dramas where players are the protagonists in contest with opponents. Even though the interactors are not authors creating a narrative, they can act within the logic of the interactive storyworld (MURRAY, 2011).

Before Murray, Laurel (1993) faced the agency phenomenon with modeling human-computer interaction (HCI). Laurel employed Aristotle’s drama theory (ARISTOTLE, 1920), which is a model that has six hierarchical categories organized in material and formal cause relations: plot (action), character, thought, language (diction), pattern (song, melody), and spectacle ( enactment). The author’s drama begins with the actions performed by the characters that behave according to their thoughts. These characters externalize their thoughts using words to establish a pattern, which is externalized as a spectacle.

Adding interaction to this structure, Mateas (2004) argued that the introduction of a user (as the character) who can choose the path of the story implies two more causal chains: the player’s intention and the action material (see Figure 2). The users’ intentions become the formal cause of language to spectacle because they can choose their action. In addition, the user needs to recognize the material resources for taking action, which means that the interface should afford the action. Thus, Mateas (2004, p. 25) defines agency as a “balance between the material and formal constraints.” If the material constraints (plot) motivate the user to take action via appropriate material affordances, then the user will experience agency.

For instance, the game Quake induces agency because there are three formal cause principles (everything that moves will try to kill you; you should try to kill everything; you should try to move through as many levels as possible), which are supported by the material for action (MATEAS, 2004). Following the same approach, Wardrip-Fruin et al. (2009) define agency as “a phenomenon, involving both the game and the player, that occurs when the actions players desire is among those they can take as supported by an underlying computational model.” This means that the design of an interactive artifact should build within the player’s desire that the artifact can satisfy.

Tanenbaum and Tanenbaum (2009, p. 1) shifted from “agency as representing choice or freedom to one of agency as representing a commitment to meaning.” They explored the idea that the player should agree to be part of the experience and the intention that underlies a choice.

Most notably for this paper is the model of agency of Susanne Eichner (2014), which did not restrict agency to the game experience. Instead, Eichner (2014) investigated agency experienced in media reception and builds a model of agency as a mode of media involvement. Involvement refers to any kind of textual attachment (the text holds significance for the reader) related to the cognitive interpretation or emotional experience. Textual attachment is about points of attachment: relevant action-guiding topics, genre interests, and personal interest. This model attempts to aggregate findings from social action theory, psychology, film theory, television studies, and game studies.

Agency for Eichner is the sense of power, control, influence, and making a difference, a good feeling that emerges within the textuality of a program or movie. Eichner argues that the viewers of films might experience agency by being in control or having to rethink and sharing their own opinion about the film. Both manifestations are very close to Zimmerman’s cognitive and cultural interactivity (ZIMMERMAN, 2004). Interactivity as a technology-based feature of media and play as a form of social action are conceived as distinct agency-facilitating phenomena (EICHNER, 2014, p. 16). However, agency as a mode of media involvement is induced by specific textual strategies and is conceptualized as operating in three levels: personal agency, creative agency, and collective agency.

The most fundamental form of agency is personal, which can be understood over different textual strategies: mastering narrative, choice, action, and space. Mastering narrative supports agency when the text’s appeal pattern suggests playing with, and the text is interpreted following the reader’s representative knowledge. Mastering narrative evolves if the users accept the touchpoints (the film prompts inference making via narrative and aesthetic cues). Mastering action is the most apparent form of agency, which is perceived by performing interactively via an interface related to control and flow. Mastering choice evolves if the choice is deliberately made and users perceive that their choice makes the difference and it is influential. Mastering of space enhances immersion and the feeling of presence. The pleasure of navigation (MURRAY, 2011; MANOVICH, 2002) in space depends on finding orientation within it while exploring the space and the possibilities freely.

Creative agency encapsulates proxy agency (expertise of others) and becomes the possibility of an individual to engage in specific ways with the text and beyond. Allowing the players in the production or providing an open structure that enables different strategies to manifest in the textual structure sustains this agency level.

The collective agency has been described as fan engagement, similar to Zimmerman’s cultural participation (2004).

For example, agency is about being in control when watching a genre film such as “The Proposal” because what the viewers want to happen turns to be true. In addition, Eichner points out that the viewer can experience the character’s agency (EICHNER, 2014, p. 181). On the opposite direction, “Inception,” like other mind-game films, is too complex to allow this type of control. Instead, the pursuit of understanding by discussing the plot with friends or online investigation might bring a sense of collective agency. Indeed, the complex narration might impose a challenge (CSIKSZENTMIHALYI, 1990) to the viewer, which cues and intertextuality can also support. Eichner also points out that the intricate narrative of “Lost,” the uncertainty of space, the mystery led viewers to form a community (e.g., Lostpedia) that supported collective agency.
4. METHODOLOGY

Through a close reading of the two selected websites, we investigated the role of agency to sustain oscillation between immediacy and hypermediacy. Close reading requires a careful look and many visits to the artifacts to notice the layers of information. In order to guide the close reading, a sequence of analysis procedures based on Fadel’s structure (2020) was elaborated.

This structure consists of 5 phases:

1. choice of websites and identification of the remedied media;
2. review of analytic lens and media theories;
3. structuring the notational system;
4. data collection through iterative readings and notational system adjustment;
5. analysis and considerations.

The close reading aimed to identify how different elements present on the websites support immediacy and hypermediation. A notational system guided the readings. This system was built iteratively and related observable aspects of the websites to the agency qualities, immediacy, and hypermediation. Ten readings were performed on each website, and finally, the notational system was interpreted in light of retail theories.

5. THE WEBSITE ARTIFACT

One difficulty in understanding user participation in websites is most likely the understanding of what a website is. The Oxford English Dictionary (2016) defines a website as “A set of related web pages located under a single domain name.” These collections of pages are reachable through a unique URL (Uniform Resource Locator), which is a protocol for specifying addresses on the Internet. This URL usually leads to the home page, which might contain links to the other pages.

This techno-centric definition establishes some common ground: the structure (pages and links) and hypertext document. However, it also leaves flexibility to include all genres of websites, for instance, personal, business, informational, directories, community building, etc. These all vary in content, functionality, goals, users, media, and technology.

Internet users also have different motivations to browse online. Ruder Finn’s Intent Index (FINN, 2013) shows that learning, having fun, socializing, shopping, doing business, advocating, and personal expression are the main reasons people move online. Marketers use these motivations to impact promotion strategy as the Internet provides a rich way to deliver the company’s message (YANNOPOULOS, 2011).

With an increased focus on design for experiences, narratives are explored in web design to create an aesthetic that uses images and movies to deliver a concept (GRIMALDI, FOKKINGA and OCNARESCU, 2013). For example, a website might provide meaning through the narrative used to inform and delight. However, contrary to games, website users are expected to spend a short time navigating the artifact. Therefore, narrative, is constrained in its complexity, and must be creative to support agency. In this scenario, mastering narrative evolves when users gain control over the narrative, but at the same time, they are surprised.

Mastering action relies on what Mateas (2004) defined as agency: “the balance between the material and formal constraints.” This means that the interface should support users’ actions via appropriately perceived affordances (NORMAN, 2004) and a coherent conceptual model (JOHNSON and HENDERSON, 2012). For Gibson (1979), affordance is the perception of one’s ability to do something with what is sensed or meaningful to artifacts’ users. These meanings suggest the user’s act changes an existing sense to a preferred one (Krippendorff, 2005). For example, noting the sit-on-ability of a chair, the user anticipates a sequence of feelings that might lead to being seated (a desirable sense is achieved). Norman argues that affordance should be seen as two parts: the communicating component provided by the physical appearance of an object (“signifier”) and the set of potential actions specified by the affordance itself. There is no physical device in the screen-based interface, and the notion of affordance is weakened, and the signifier component becomes dominant. In screen-based interfaces, the physicality of the artifact is reduced to the screen, which affords to touch (real affordance), and the perceived affordances of the interface rely mainly on its communicative component or signaling possible actions, a “signifier” (Norman, 2015).

Mastering choice reflects on agency because the opportunities to decide can become a significant choice. Usually, it is perceived when individual choices add up and are related to the course of an unfolding narrative. But unlike a game, a website can be seen as a closed text. The user choice does not reveal a different path for the narrative, and it is limited to choose a page or information.

Mastering space facilitates agency by creating spaces that are not as rigid as a maze and not as open as a rhizome (Murray, 1998). The user’s anxiety can be limited if a goal is clear while still allowing free exploration. Space facilitates storytelling if space becomes a meaningful dimension (FADEL and BIZZOCCHI, 2019). In this case, space does not just mimic an existing physical reality but instead presents a coherent aesthetic scheme to the user.

Creative agency emerges in web artifacts through users’ input, such as publishing their opinions, comments, and evaluations.

Web artifacts exploit collective agency by offering social interaction, which is enhanced by mobile technology. In addition, opportunities for engagement are sustained by exciting content, including promotions and news (GOODMAN, 2012), distribution of content through multiple platforms, reorganized and additional web content, branded products, and interactivity (ARKWITH, 2007).

6. CLOSE READING THE DESIGNHOTELS.COM CASE

Design Hotels™ Original Experiences by Positioner & Design Hotels (Switzerland) is an online accommodation booking website with 289 hotels listed in 181 different destinations. The website is organized into four main sections: Hotels & Resorts, Deals, Originals Experiences, and Community. On the home page, the user can change the currency, access contact information, login or create an account, search, choose the check-in and check-out dates and number of persons (see Figure 3).

Figure 4 Screenshot of Design Hotels home page (Retrieved on June 5, 2016)
6.1 Agency at Designhotels.com

Personal agency is experienced on DesignHotels.com in terms of mastering narrative, action, and space. Mastering narrative evolves by making meaning of the images presented and the headlines. Meaning refers to whatever results from comparing the image and text with what is already in the users’ minds (ANSBACHER, 1999). The images are independent of each other, but collectively they do build a shared construct, and figuring it out gives a sense of agency.

For instance, Figure 5 shows an image of a porch and a pool and the headline: Bali above it all. The picture is taken from the point of view that makes the horizon and the clouds merge, which magnifies the height of the place. The users feel that they are in a very high position.

Besides, the page cites historical phrases from celebrities that share thoughts about the hotel’s concept, in this case, “the silent” (see Figure 6). The hotel owner also writes about his motivations to create the hotel. Citing celebrities and the owner elevates the sense of the web page’s truth and induces the feeling of passive agency, the sense of a predictable story, and supports the feeling of control. The user knows how the story develops and ends. From the beginning of the movie, the user predicted that the character would find the hotel and, in that place, he would feel the silence. But during this exercise of control, the user is excited about his journey and pleased with the beauty and uniqueness of the place.

Agency evolves as the user anticipates the connection between the headline and this short story. The sense of agency can be even stronger if the user empathizes with the character. Scrolling down reviews more stories and photographs about the hotel. The text is poetic and gives the hotel the aura of a setting for users’ stories to come true.

“Somewhere in Umbria, surrounded by 3,000 rolling hectares of the forested Italian countryside, you lean your head against a cool earthen stone and savor the slowness, the silence.”

Mastering action relates to performing interactively via the interface. Users can select different pages, search for a hotel or enter data, which supports the user’s intention of finding a hotel on a specific date and make the reservation. Mastering choice concerns the possibility of choosing from an exclusive set of hotels, each one offering “original experiences.” Originality is what makes agency evolve because the users’ choices ally them with the hotel’s concept. Mastering space comprises navigating on the website, exploring the space while feeling comfortable. The header of the website is visible on all pages, which allows free navigation without getting lost. Each movie enables users to experience different locations.

Creative agency is not fully supported because users cannot share their reviews. Collective agency can emerge through sharing the website link using social media. Although there is a community space, it is limited to a history of bookings and profile and does not add to agency experience.

The perception of agency at the 2006 website version is also based on the personal agency through mastering action, not mastering narrative (see Figure 7). Although the actions are the same, i.e., finding and booking a hotel on a specific date and place, in the 2006 version, these actions are reinforced by imperative verbs (book, select, check).
master action, users are expected to perceive the signifying components and act accordingly. Thus, mastering action means that the user felt comfortable with the website’s conceptual model and presented, so the signifiers invite the user to a specific action. For instance, the 2006 version of designhotels.com asks the user to choose a date to check-in and out, a place, and specify the number of people traveling. Design signifiers (position, area, contrast) highlight booking action while other actions such as read or explore are not emphasized and might not be perceived by the user.

Figure 9  Screenshot of DesignHotels.com using Wayback Machine (Retrieved on June 16, 2016)

7. CLOSE READING THE HONDA.COM CASE
Honda started with Soichiro Honda in October 1946, when he opened the Honda Technical Research Institute in Hamamatsu, Japan. In 1948 Honda Motor Company, Ltd. was born. The 2016 website starts with a short video with three shots that show planet Earth from space. The video begins with a view of the horizon at night-time with Borealis lights. The second shot is a view from inside the capsule, and the third and final shot shows the Earth above the camera during daytime (see Figure 8). This short video intends to communicate the Honda Way, which is “the joy of creating quality products that have a positive impact in our lives.”

Figure 10  First and second shots of the short video (Retrieved on May 12, 2016)

The website map is organized into 5 main sections: Our Brands, About Us, Racing, Recalls, and Service, which can be reached through the menu options or the site map at the bottom of the page. Each section contains many options, and some of these options form a mosaic that completes the homepage (see Figure 9). For instance, the Honda Motors option is part of the Ours Brands section and appears on the mosaic on the home page.

Like DesignHotels.com, personal agency on Honda.com is experienced in terms of mastering narrative, action, choice, and space.

Figure 11  Screenshot of homepage and mosaic (Retrieved on May 12, 2016)

Mastering narrative in the Honda website relates to connecting individual media to Honda’s concept. On the Honda website, the media used are video (opening) and photographs associated with text that form a mosaic of links. A sense of agency evolves as the users watch the video and imagine they observing earth from above. This opening creates an intense emotional reaction (STEFFEN, 2009). The sense of agency evolves even more if the user establishes a connection between the text and the video. The headline “The Power of Dreams” connects to conquering the space represented by the flight around the planet shown in the video. The following statement, “Everyone is born with the ability to think, create, and dream,” implying that users have the power to do something memorable. The users are led to believe in their self-efficacy, which is the foundation of human agency (BANDURA, 2006). The user is transported inside the capsule, and the sense of presence is intensified by the POV. The following statement, “At Honda, we believe the Power of Dreams is realized when we work together to make them real,” establishes a social meaning: the users are not alone in this endeavor, but they are called to exercise collective agency. The video shows the planet in daylight, reassuring us that we can see and do everything, and this last sight is the still image that composes the homepage. Mastering narrative on a website also involves the recognition of the links as coherent with the aesthetic scheme.

Users can choose different links that lead to associated websites accordingly (e.g., automobiles.honda.com). Only the section “About us” leads to other pages under the same domain, “Honda.com.” This means that navigation is very complex, and once the user is out of the main domain, he cannot find a way back. The complexity of information architecture also reflects on the actions. The only action allowed on the home page is to select a page.
Analogous to DesignHotels.com version 2006, the layout of Honda.com in 2006 supports agency as action (see Figure 10). The homepage was composed of links to Honda’s Brands, products, services, about the company, their inspirations, and news. This sense of agency evolves if the actions taken are meaningful, relying on each link leading to pages about what the user believes is related to. In this case, the user’s actions are also supported by the interface design that provided visual affordance: 3D buttons and underlined text for links. This apparent pattern is also reinforced by a gridded layout. There is no text explaining the website, and the photograph that appears below the header illustrates one of Honda’s brands.

8. DISCUSSION
The semantic turn acknowledges a paradigm change in the design of artifacts, shifting from how they function to what they mean to the user. This also implies the change from technology-centered design to human-centered design. Understanding meaning-making in the process of human-artifact interaction has been a challenge since Protagoras declared that “Man is the measure of all things: of things, artifact interaction has been a challenge since Protagoras declared that “Man is the measure of all things: of things, artifacts such as websites had changed the focus from mastering action to mastering narratives. The changing of focus follows the understanding of new media and its seductive power of a coherent aesthetic scheme, which means that reality can be modified or enhanced in a digital environment. Therefore, the aesthetic scheme is created upon signifiers that endorse meaning-making. Thus, mastering narrative contributes to perceived company values such as aesthetics and service excellence, while mastering action contributes to perceiving values related to playfulness and consumer return on investment. These are the four dimensions of experiential value suggested by Mathwick et al. (2001) based on Holbrook’s typology of experiential value (1996).

Consumer return on investment comprises the active investment of financial, temporal, behavioral, and psychological resources that potentially yield a return. A website user might experience this return as the perception of the artifact’s efficiency and pragmatic quality, utility, and usability concerning a given task. Navigation and interaction design elements, such as the menu, input fields, links, are the signifiers perceived by their pragmatic qualities. Mastering action contributes to consumer return on investment because users feel in control and perceive themselves as agents of a successful action. For instance, the Grovemade website (2016) is composed of a straightforward navigation menu because the information architecture is well structured, and each category has few items (see Figure 11). The users are presented with feedback, and the design pattern is easily recognizable.

Playfulness results from active sources of intrinsic values and is reflected in the inherent enjoyment of freely engaging in immersive activities. Play has been seen as one of the most important human activities and is at the root of all human culture (HUIZINGA, 1944). Plato and Aristotle investigated the joy and pleasure resulting from some activities, but only recently a large body of work was produced that relates to enjoyment (BLYTHE, OVERBEEKE, et al., 2004). For Aristotle, pleasure is caused by novelty because the mind becomes active and stimulated (ARISTOTLE, 1999). The stimulation of mind is the connection point to the work of Csikszentmihaly, who identified challenge as one condition to intense experiences in his account of “flow,” which is defined as “the state in which people are so involved in an activity that nothing else matters” (CSIKSZENTMHALYI, 1990, p. 4).

Therefore, mastering action that is performed interactively via an interface can result in playfulness because it refers to the in-artifact control of objects or the “self-efficacy experience” (BANDURA, 2006). Interface material (MATEAS, 2004; WARDRIP-FRUIN, MATEAS, et al., 2009) or

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**Figure 12** Screenshot of Honda.com webpage using Wayback Machine (Retrieved on May 12, 2016)

**Figure 13** Screenshot of Grovemade home page (Retrieved on June 27, 2016, from Grovemade: https://grovemade.com/)
signifiers (2015) should support self-efficacy, and when the users grasp them comes a sense of enjoyment. Such signifiers can be creative interaction elements embedded with narrative, such as in “Diadora: Bright Delivery” (2016) website created to track the racers’ journey to deliver a pair of shoes in 1500km across Europe (see Figure 14). Users can drag the cursor over the yellow points on the path to reading about the journey. Each interaction points shows heart rate and steps taken from the start by the current runner.

![Figure 15](Screenshot of Diadora: Bright delivery page (Retrieved June 26, 2016, from Diadora: http://makeitbright.diadora.com/))

Service excellence comes from reactive sources of extrinsic value and reflects the user’s admiration of an entity for its capacity to serve as a means to a self-oriented end. Therefore, service excellence extends emphasis on customer satisfaction to customer delight (OLIVER, 1997). Delight can be understood as a higher level of satisfaction and “encompasses those services and products capable of providing pleasing unexpected performance” (OLIVER, TRUST, and VARKI, 1997, p. 330). Under this light, a website service excellence might be designed to exceed user expectations. Thus, mastering narrative could reinforce service excellence because it presupposes the recognition of the text with its pattern of the appeal of a website. The recognition process is delightful because it implies overcoming a challenge (CSIKSZENTMIHALYI, 1990).

Image complexity, humor, and metaphor are some of the signifiers that can exceed user expectations. For instance, the timeline for the awareness of Subaru’s environmental history takes the shape of the rings of a tree (Zero Landfill, 2015). The user can navigate from 1989 (the inner circle) to 2016 (the outer circle) (see Figure 13).

![Figure 17](Screenshot of Subaru environment home page (Retrieved on June 27, 2016))

Mastering narrative rises from understanding this metaphor and connecting the microrreates through the years. This reveals the larger narrative of Subaru’s ongoing environmental concerns and understandings.

The aesthetic response derives from the hedonic qualities of the artifact, its visual appeal, and the entertainment dimension. The aesthetic judgment of an artifact starts with the perception of the visuals. At this initial stage, users are likely to perceive contrast, grouping, and complexity. These variables are implicitly processed with previous experience, and it is followed by the artifact explicit classification in terms of style and content, its interpretation, and evaluation (LEDER, BELKE, et al., 2004). This aesthetic judgment process might instigate a broad definition of aesthetics. Much research aims to narrow down to the physical attractiveness of the artifact, its beauty (HASSENZAHL, 2008), which is the definition considered in our paper.

Mastering narrative supports aesthetic response because it may rely upon what Eco (1992) named social treasury, the cultural conventions that language has produced, and the history of the previous interpretation of the text. The users’ competency in language as a social treasure is supported in many web design that emphasizes narrative using images, such as hero image, rich animations, galleries and slideshows, motion animation, scrolling, background animations, and videos.

For instance, the Papazian website presents a company that produces a great variety of jewelry mannequins and displays bases (see Figure 18). The website opens with background videos that show the process of the creation of such products. Mastering narrative results in admiration for the details and precision that is shown on the video and thus contributes to the pleasure of aesthetics.

![Figure 19](Screenshot of Papazian website home page (Retrieved on June 23, 2016))

9. CONCLUSION

This paper assumes that the visual media vocabulary evolves as the medium moves toward more aggressive remediation of the older medium. This happened with film, and many examples of this development can be seen throughout history. For instance, film vocabulary received contributions about the representation of reality with Ruttmann’s 1929 Berlin: Symphony of a Great City, about focalization with Kurosawa’s 1950 Rashomon, and more recently, about the deconstruction of time with Nolan’s 2000 Memento.

This is also true for the web vocabulary, incorporating contributions from different areas, such as specific design practices, a variety of academic disciplines, and broader interdisciplinary perspectives. The literature review indicated that agency is central to the web vocabulary because it is a mode of media experience. The understanding of agency experienced in the media reception process led us to investigate different levels of agency as determined by Eichner (2014), which in turn can support immediacy and hypermediacy. Immediacy led to immersion and was analyzed as a product of mastering narrative and space while hypermediacy is the outcome of mastering choice and action.
That is because agency is a structural part of acting, and as happens in the real world, it depends on dispositions and resources in the digital world. These resources are the symbolic material (signifiers) presented in the interface through what the users interact with and make meaning from it.

Thus, this paper used agency as an analytical lens to investigate how interface design was used to specific outcomes in the retail context: a sense of aesthetic, service excellence, playfulness and, consumer return on investment.

We analyze two versions of two websites and concluded that the sense of agency perceived in the reception of a website that emphasizes narratives and space is more likely to support immediacy. The outcome is the sense of aesthetic and service excellence. Those websites that emphasize choice and action support hypermediacy, and the result is the sense of playfulness and consumer return on investment.

In addition, we identified some of the signifiers that contribute to different textual strategies of personal agency: mastering narratives, mastering choice, mastering action, and mastering space and additional examples were given. We argued that emphasizing one of these strategies sustains a creative oscillation between immediacy and hypermediacy, which in turn enhances the reader’s and thus supports a creative oscillation between immediacy (transparency) and hypermediation (reflectivity), experience. This means that the user experiences the object in the web vocabulary, and therefore, part of the computer/interface holistic user experience. This means that the user experiences the object (computer) through the interface, and both become inextricably merged. Thus, exploring the oscillation between immediacy (transparency) and hypermediation (reflectivity) creates meaning within the experience because it acknowledges the interface and its role in presenting reality. Thus, the experience of booking a hotel online does not simply mimic the experience of booking a hotel in a physical shop. However, it does embrace the digital world and explores its virtual and practical potentialities.

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BIBLIOGRAPHY

1. ABBOTT, H. P. The Cambridge Introduction to Narrative. Cambridge: Cambridge University Press, 2002.
2. ANSBACHER, T. Experience, Inquiry and Making Meaning. EXH. [S.I.]: [s.n.], pp 22-26, 1999.
3. ARISTOTLE. The Poetics. Great Britain: Claredon Press, 1920.
4. ARISTOTLE. Nicomachean Ethics. Tradução de W. D. Ross. Batoche Books, Kitsher, 1999.
5. ASKWITCH, I. Television 2.0: Reconceptualizing TV as an Engagement Medium. Master Thesis. MIT, Cambridge, 2007.
6. BAL, M. Visual Narrativity. In: HERMAN, D.; JAHN, M.; RYAN, M.-L. Routledge Encyclopedia of Narrative Theory. Routledge, London, 2010.
7. BANDURA, A. Towards a Psychology of Human Agency. Perspectives on Psychological Science, pp 164-180, 2006.
8. BLYTHE, M. A. et al. Funology From Usability to Enjoyment. Springer, Netherlands, 2004.
9. BOLTER, J. D.; GROMALA, D. Transparency and Reflectivity: Digital Art and the Aesthetics of Interface Design. In: FISHPICK, P. Aesthetic Computing. MIT Press, Cambridge, pp 369-382, 2004.
10. BOLTER, J. D.; GRUSIN, R. Immediacy, Hypermediacy and Remediation. In: BOLTER, J. D.; GRUSIN, R. Remediation. MIT Press, Cambridge, pp 20-50, 1999.
11. BORDWELL, D. Poetics of Cinema. Routledge, New York, 2007.
12. BRUNER, J. Narrative Construction of Reality. Critical Inquiry, 18: 1, pp 1-21, Chicago, 1991.
13. CHATMAN, S. Story and discourse. Narrative structure in fiction and film. Cornell University Press, Ithaca, 1978.
14. CSIKSZENTMHALYI, M. Flow: The Psychology of Optimal Experience. Harper Perennial Modern Classics, New York, 1990.
15. DAVIDSON, D. Action, Reason, and Causes. The Journal of Philosophy, pp 685-700, 1963.
16. DESMET, P.; HEKKERT, P. Special Issue Editorial: Design & Emotion. International Journal of Design, 2009.
17. DIADORA: Bright Delivery. Diadora, 25 April 2016. Retrieved June 26, 2016, from: <http://makeitbright.diadora.com/>.
18. DIJADININGRAT, J. P.; OVERBEEKE, C. J.; WENSVEEN, S. A. G. Augmenting Fun and Beauty: A Pamphlet. DARE 2000. ACM, Elsinore, pp 131-134, 2000.
19. ECO, U. Interpretation and Overinterpretation. Cambridge University Press, Cambridge, 1992.
20. EICHNER, S. Agency and Media Reception: Experiencing Video Games, Film, and Television. Potsdam: Springer VS, 2014.
21. EPPS, P. H. Protagoras’ Famous Statement. The Classical Journal, 59: 5, pp 223-226, 1964.
22. FADEL, L. M. O método close reading aplicado à análise de mídias interativas. Universidade Federal de Santa Catarina. Florianópolis, SC, 2020. Notas de aula.
23. FADEL, L. M.; BIZZOCCHI, J. Designing background as space medium remediation. Design Articles, pp 5-22, 2019.
24. FINN, R. Ruder Finn. RF Intent Index, 2013. Retrieved June 3, 2016, from: <http://www.intentindex.com/>.
25. FORLIZZI, J.; FORD, S. The Building Blocks of Experience: An Early Framework for Interaction Designers. DIS ’00. ACM, New York, pp 419-423.
26. GIBSON, J. The Ecological Approach to Visual Perception. Taylor & Francis Ltd, Hove, 1979.
27. GIDDENS, A. The Constitution of Society: Outline of the Theory of Structuration. University of California Press, Los Angeles, 1984.
28. GOODMAN, G. F. Engagement Marketing: How Small Business Wins in a Socially Connected World. John Wiley & Sons, Hoboken, 2012.
29. GRIMALDI. Story of Use: Analysis of Film Narratives to Inform the design of Objects Interactions. Nordic Design Research Conference. Nordes, Copenhagen, pp 374-377, 2008.

30. GRIMALDI, S.; FOKKINGA, S.; OCNARESCU, J. Narratives in Design: Studies of the Types, Applications and Functions of Narratives in Design Practices. DPPI 2013 - Praxis and Poetics. ACM, Newcastle upon Tyne, pp 201-210, 2013.

31. GROVEMADE. Grovemade. Retrieved June 27, 2016, from: <https://grovemade.com>.

32. HASSENZAHL, M. Aesthetic in interactive products: Correlates and consequences of beauty. In: SCHIFFERSTEIN, H. N. J.; HEKKERT, P. Product Experience. Elsevier, New York, pp 287-299, 2008.

33. HASSENZAHL, M.; TRACTINSKY, N. User experience - a research agenda. Behaviour & Information Technology, pp 91-97, 2006.

34. HEKKERT, P.; DIJK, M. V. Vision in Design: A Guidebook for Innovators. Amsterdam: BIS Publishers, 2011.

35. HERMAN, D.; JAHN, M.; RYAN, M.-L. Visual Narrativity. In: Routledge Encyclopedia of Narrative Theory. Routledge, London, 2010.

36. HOLBROOK, M. B. Special Session Summary Customer Value - A Framework For Analysis and Research. NA - Advances in Consumer Research, pp 138-142, 1996.

37. HUIZINGA, J. Homo Ludens: Study of Play-element in Culture. Routledge & Kegan Paul, London, 1944.

38. JOHNSON, J.; HENDERSON, A. Conceptual Models: Core to Good Design. Morgan & Claypool, Philadelphia, 2012.

39. Krippendorff, K. The Semantic Turn: A New Foundation for Design. CRM Press, Boca Raton, 2005.

40. Löwgren, J. Toward an articulation of interaction esthetics. New Review of Hypermedia and Multimedia, pp 129-146, 2009.

41. Laurel, B. Computers as Theatre. Addison Wesley, Boston, 1993.

42. Leder, H. et al. A model of aesthetic appreciation and aesthetic judgments. British Journal of Psychology, pp 489-508, 2004.

43. Manovich, L. The Language of New Media. The MIT Press, London, 2002.

44. Mateas, M. A Preliminary Poetics for Interactive Drama and Games. In: WARDRIP-FRUIJN, N.; HARRIGAN, P. First Person: New Media as Story, Performance and Game. MIT, Cambridge, pp 19-33, 2004.

45. Mathwicka, C.; Malhotrab, N.; Rigdonc, E. Experiential value: conceptualization, measurement and application in the catalog and Internet shopping environment. Journal of Retailing, pp 39-56, 2001.

46. Mcluhan, M. Understanding Media: The Extensions of Man. The MIT Press, Cambridge, 1964.

47. Mottu, M.; Lamas, D. Aesthetics of Interaction Design: A Literature Review. MID’15. ACM, Warsaw, 2015.

48. Murray, J. H. Hamlet on the Holodeck The Future of Narrative in Cyberspace. MIT Press, Cambridge, 1998.

49. Murray, J. H. Affordances of the medium. In: Murray, J. Inventing the Medium Principles of Interaction Design as a Cultural Practice. MIT Press, Cambridge, pp 56-92, 2011.

50. Norman, D. Affordances and Design. Nielsen Norman Group, Fremont, 2004.

51. Norman, D. Affordances: Commentary on the Special Issue of AI EDAM. Artificial Intelligence for Engineering Design, Analysis and Manufacturing, 29: 03, pp 235-238, 2015.

52. Oliver, R. L. Satisfaction: A Behavioral Perspective on the Consumer. McGraw-Hill, New York, 1997.

53. Oliver, R. L.; Trust, R. T.; Varki, S. Customer Delight: Foundations, Findings, and Managerial Insight. Journal of Retailing, 73: 3, pp 311-336, 1997.

54. Oxford English Dictionary. 2016. Retrieved May 10, 2016, from: <https://www.oed.com/>.

55. Prece, J.; Rogers, Y.; Sharp, H. Interaction Design: Beyond Human-Computer Interaction. Wiley, New York, 2002.

56. Reckwitz, A. Toward a Theory of Social Practices A Development in Culturalist theorizing. European Journal of Social Theory, pp 243-263, 2002.

57. Schmitt, B. Experiential Marketing. Free Press, New York, 1999.

58. Shobeiri, S.; Mazarakeri, E.; Laroch, M. Improving Customer Website Involvement through Experiential Marketing. The Service Industries Journal, 34: 11, pp 885-900, 2014.

59. Steffen, D. Meaning and Narration in Product Design. International Conference On Designing Pleasurable Products And Interfaces. Compiegne: DPPI09. pp 1-9, 2009.

60. Tanenbaum, K.; Tanenbaum, J. Commitment to Meaning: A Reframing of Agency in Games. Digital Arts and Culture. Irvine: Digital Arts and Culture, 2009.

61. Tholander, J.; Normark, M.; Rossetto, C. Understanding Agency in Interactive Design. CHI 2002. Austin, pp 2499-2508, 2012.

62. Wardrip-Fruin, N. et al. Agency Reconsidered. Digital Games Research Association. ETC Press, London, pp 1-9, 2009.

63. Weber, M. Economy and Society. University of California Press, Los Angeles, 1978.

64. Yanopoulos, P. Impact of the Internet on Marketing Strategies Formulation. International Journal of Business and Social Science, 2:18, pp 1-7, 2011.

65. Zero Landfill. Subaru. 29 October 2015. Retrieved June 27, 2016, from: <http://www.subaru.com/csr/environment.html>.

66. Zimmermann, E. Narrative, Interactivity, Play and Games. In: Wardrip-Fruin, N.; Harrigan, P. First Person: New Media as Story, Performance, and Game. MIT Press, Cambridge, pp 154-164, 2004.