

Information Design and Rhetoric in Persuasive Interfaces

Omar Sosa-Tzec¹

¹ Indiana University, School of Informatics and Computing,
901 E. St. Bloomington, IN, 47408

omarsosa@indiana.edu

Abstract. In this paper, I describe my motivation for defining the applicability of information design and rhetoric in the design of persuasive interfaces. Moreover, I briefly explain the reason for selecting rhetoric as a potential lens for HCI and the exploratory work that I have performed.

Keywords: Persuasion, Interface, UX, Information Design, Rhetoric.

Motivation

The main motivation underlying my research work as a PhD student is to understand the relationship between information design and rhetoric, and its applicability for the design of graphical user interfaces (GUIs). This motivation has its origin from regarding GUIs as a form of *visual artifact*, a human-made symbolic composition through which people not only attempt to communicate or persuade each other, but to affect their environment in certain situations. This includes buildings, furniture, clothes, automobiles, television shows, advertisement and signage. The different visual artifacts that “participate” in people’s lives could be visualized as a *symbolic ecology* that affects their forms of communication, interactions, presuppositions, values, emotions and desires [1]. I emphasize that GUIs are not the exception. For many people, GUIs are crucial components in such ecologies. For example, mobile apps have shaped the ways in which people socialize, do business or manage their health.

Since *the visual* is the basic material for such apps, their degree of effectiveness for making people to choose them, use them and accomplish goals depends on how such material is *shaped* and *conveyed* to the user. This means how the visual information in GUIs is designed. In this context, information design corresponds to the designerly processes focused on the composition of information-based artifacts intended to be purposeful, meaningful and joyful for their users. Later, I consider that information design is relevant in the design of persuasive interfaces since interfaces are basically composed of information and interactions. A persuasive interface partially depends on how the information relates and is affected by the interactions with the system, and how together they aid the user to make sense of the experience. By considering the great amount of visual information in GUIs, I argue that paying attention to infor-

mation design for such interfaces is a relevant matter in HCI. Through my research work, I aim to define effects that information design decisions have on shaping the persuasive character of GUIs, to describe the rhetoric of persuasive GUIs.

Why Rhetoric? Exploratory Phase

In my research work, I talk primarily about rhetoric instead of persuasion. My intention is to use rhetoric as a lens for HCI design. I principally base my notion of rhetoric owing to Kenneth Burke. For Burke, rhetoric is the change of attitude or action through *identification* not only towards others but also to oneself as well [2]. In this notion of rhetoric, persuasion derives from identification. Therefore, identification is the key term to consider. Identification is the process through which people form identity by establishing bidirectional connections with other people, ideas, activities and values [2]. Thus, the goal of persuasion is not only to produce change but also to identify. Through the concept of identification, I think that it is possible to elaborate an account of persuasive interfaces as the result of paired relationships between the designer, client and user (including the stakeholders). Through that account, I aim to connect epistemologically HCI and rhetoric, and then observe where and how information design takes place.

Also from Burke, I consider *pentadic criticism* [3] as a potential framework for performing interaction criticism [4]. By means of the so-called *dramatistic pentad*, I argue that GUIs could be scrutinized to formulate the possible *motives* that led the current design, and then reflect upon the implications for the user experience. My intention here is to advance the application of rhetoric for the analysis of GUIs. Likewise, I have explored the concept of enthymeme, the form of rhetorical arguments [5]. Through the analysis of two health apps and one interactive map, I have observed that interfaces could be regarded as interactive visual enthymemes, creating thus a connection between interfaces and visual argumentation. Consequently, I aim to define the characteristics of interfaces working as visual arguments, either dialectical or rhetorical [5,6]. Since visual arguments need to be composed, I am also interested in defining the application of tropes and schemes, besides metaphor and metonymy, and the so-called *topics* for the design of GUIs [7,8,9].

Challenges and Future Plan

The next steps in my research work are the adaptation of the concepts from above and assemble a narrative that fits and works for HCI design. For that reason, I aim to formulate studies that validate those steps. By attending the doctoral consortium, I expect to obtain from colleagues in HCI involved with the design of persuasive interfaces. Since my work is currently sparse, formulating these studies will help to delimit its scope, and therefore make it cohesive.

References

- [1] H. Jung, E. Stolterman, W. Ryan, T. Thompson, and M. Siegel, "Toward a framework for ecologies of artifacts: how are digital artifacts interconnected within a personal life?," in *Proceedings of the 5th Nordic conference on Human-computer interaction: building bridges*, 2008, pp. 201–210.
- [2] S. K. Foss, K. A. Foss, and R. Trapp, *Contemporary perspectives on rhetoric*. Waveland Press, 2014.
- [3] S. K. Foss, *Rhetorical criticism: Exploration & practice*. Waveland Press Long Grove, IL, 2009.
- [4] J. Bardzell, J. Bolter, and J. Löwgren, "Interaction criticism: Three readings of an interaction design, and what they get us," *Interactions*, vol. 17, no. 2, pp. 32–37, 2010.
- [5] C. A. Hill and M. Helmers, *Defining visual rhetorics*. Routledge, 2012.
- [6] G. Roque, "Should Visual Arguments be Propositional in Order to be Arguments?," *Argumentation*, vol. 29, no. 2, pp. 177–195, May 2015.
- [7] W. A. Covino and D. A. Jolliffe, *Rhetoric: concepts, definitions, boundaries*. Boston: Allyn and Bacon, 1995.
- [8] E. P. J. Corbett, *Classical rhetoric for the modern student*, 3rd ed. New York: Oxford University Press, 1990.
- [9] H. Ehses and E. Lupton, "Rhetorical handbook: An illustrated manual for graphic designers," *Des. Pap.*, vol. 5, pp. 1–39, 1988.