

From Aristotle to Damásio: towards a rhetoric on interaction

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ABSTRACT

This project, emerging from the University of Aveiro, congregating researchers of areas of knowledge such as philosophy, design, rhetoric and design management is focused on two converging arguments. The first arises from the theories of António Damásio regarding the decisive role of emotion in decision taking. The second comes from the need to investigate further the potential of rhetoric in studying the theory and practice of design (namely, interaction design), either as an architectonic art (as defined by Buchanan), or as an analytical tool.

KEYWORDS: interaction design, rhetoric, and emotion

INTRODUCTION

If updating of classical rhetoric through semiotics has echoed in fundamental work on contemporaneous thought in this field, it seems indeed necessary to re-think the role of emotion more thoroughly in the rhetorical context (Aristotle, Rhetoric, Book II), namely, by starting with the work of António Damásio regarding the role of emotions when taking any stand whatsoever, which classically used to fall under the strict domain of reason.

Artefacts do not merely have an informative and communicative dimension, but above all, are appellative and persuasive requiring a rhetoric treatment of this interaction.

Knowing that all desire is manifested spatially and temporally in an attempt to shorten distance and to bring closer what is distant, Design strategically uses the actual perceptive process of emphasis-exclusion by deliberately targeting sectarianism of perception. In this manner, it attempts to suit the vector of our preferences and unleash the desire for the object within us. Variables of a diverse order are part of the absolute strategy to make the consumer approach the object, that is, to provoke within him an orientation towards the product by seducing him until he makes contact, and in this manner, fulfilling the amorous encounter.

Within this context, the focus of our research aims at Rhetoric on Interaction, seeing that interaction is, namely:

- the element of distinction with respect to classical multimedia (theatre, opera, cinema and television);
- the element which tends to qualify the surfaces of objects, either physical or virtual;
- a network of non-themed emotions.

We aim at outlining the shape of this project, its meaning, objectives and relevance, bearing in mind that both common sense and recent discoveries in neurology point to the absolute need to restore to emotion the role it was denied throughout many centuries.

RELATED WORK

Buchanan (Buchanan, 1989) states in the scope of design that “ironically, a unifying theory of rhetoric remains surprisingly unexplored”. Furthermore, he distinguishes between three elements – logos, ethos and pathos – in putting together an argument on design, adding that “they involve interrelated qualities of technological reasoning, character, and emotion, all of which provide the substance and form of design communication”. Moreover, he infers that “The strongest designers, those who are most articulate if not always most persuasive, are concerned with discovering new aspects of the utility of emotional expression in practical life”.

Studies on usability tend to format rules which essentially target logos. For example, Norman’s characterisation (Norman, 1999) on a good interface for a tool – visibility, feedback, good mapping on functionality, a conceptual model on a tool easily built by the user – seems to denote the conviction that intelligibility is the only determinant of use.

If we cross Buchanan’s opinion with the data supplied by Damásio, resulting from scientific experiments into neuroscience, one may simply conclude that an argument of design which devalues pathos will reduce the efficacy of logos. In other words, the design that refutes emotion from its argument by considering it superficial, tends to increase the cognitive charge on the product and hampers the set of decisions connected with their use. One of the challenges of this project shall be to prove this fact.

The significance of the emotional domain on the design of products has justified several studies. Desmet (2001) and McDonagh-Philip (2000), amongst others,

attempted to capture and classify the emotional reactions of users. In these studies, models and methodologies are put forward, which, using the involvement of users as a point of departure, strive to inscribe on the process of design the gathering and analysis of emotional responses from the various protagonist typologies that are present. Methodological approaches are usually associated with the definition of useful instruments in the scope of design management, providing leads on tasks to be performed but do not intend to get involved in neither an analysis on the discourse of design, nor for that matter, in its construction. This shall be the aim of the rhetoric approach followed by this project.

Hummels and Overbeeke (Hummels 2000) selected five essential aspects in composing an aesthetics on interaction (“the sense of beauty that arises during the interplay between a user and a product in their context”): functional possibilities and performance of the product; the user’s desires, needs, interests and skills; general context; richness with respect to all senses; possibility to create one’s own story and ritual. Furthermore, they propose methods to find “conditional laws with respect to the aesthetics of interaction” by means of “research through design”.

One may state that from the point of view of a rhetorical approach towards interaction, the proposals described above are prescriptive as to the hypothesis on the inventio (discovery of ideas/arguments), and possibly, dispositio (arrangement of ideas/arguments) phases but seem absent from the elocutio phase (form of expressing ideas/arguments).

The project that we are designing begins with an analysis on the various scientific contributions that have been referred to and works towards a proposal on rhetoric of complete interaction where thought on the elocutio phase is inscribed.

ABOUT INTERACTIVE OBJECTS

A new generation of objects emerged at the same time as digital, whose typology of interaction transcends the passiveness of use traditionally inscribed on shape and which lends itself to a colloquial relationship (typical interactive relationship between individuals) mediated by an interface which despite no longer coinciding with the shape, attracted greater visibility in revealing functionality.

These objects-quasi-individuals (Manzini 90) impart new challenges to the sphere of design, and furthermore, change the planning contexts of their gestation, mingling shape and behaviour as a presumption of desire and design.

For the first time in the history of objects, they seem like direct interlocutors. Petrol pumps talk, computers accept voice orders and safety systems look us in the eye to ensure our identity. Facsimile machines, photocopiers, telephone answering machines and ATM machines are several other examples of objects, which by being situated at different levels of interaction, present us with a novel experience regarding the relationship with objects, configured as “hybrid entities half way between different polarities, between the material world of things and the immaterial world of informative fluxes” (Manzini 90)..

This new generation of objects is able to change its behaviour in accordance with external events, winning over a positioning in the face of the closest individual in the individual/individual relationship.

These systems and commonly these new objects act like black boxes, static and with multiple and complex uses, requiring translators (frequently implying dialogue) to be able to achieve a functional relationship between their digital world and the person.

The object/person dialogue, therefore, requires an interface between operation and use which normally matches simulations stripped of the familiarity that traditional everyday objects had gained (how long has the “desktop” metaphor survived for?). Through technological innovation, new products tend to become more specialised or witness successive increases in their uses. Nevertheless, they also become more incomprehensible. From this, one may conclude that technological innovation does not necessarily lead to new qualities.

Consequently, the designer needs to find something that serves as a bridge between the machine world (sizes, velocity and operating criteria) and the person (senses, emotions, cognitive structures and cultural modules).

Time is the essential vector in planning these interactive objects because interactivity is something which takes place in time. Designing interaction means to plan in the fourth dimension, namely, allocating the parameter value organiser of quality to time as a sequential organiser of events. For the culture of design whose main role has always been to provide quality to shapes in space, to be busy with interactivity means to venture into a new territory whose cultural references arise more from cinema, theatre or music.

Which qualities must therefore be associated with interactive objects? May automation not become an alternative to decision?

Over and above its functional performance, an interactive object shall reveal its quality as an interlocutor, that is, the degree of ease present in the relationship it encourages, the grounds where formal and behavioural aesthetic merge.

In designing interfaces/interaction, one frequently resorts to metaphor. Nevertheless, rhetoric proposes a wider set of figures of style where the metaphor is merely an hypothesis. One of the lines of research of this project, therefore, handles the interpretation of those consolidated figures at a level of verbal discourse by striving to define (and implement) their equivalents within the scope of interaction.

FROM RHETORIC TO EMOTION

In Aristotle’s Rhetoric, the argument was targeted at reason. Emotion is understood as the privileged element which the orator uses to steer the listeners away from rational deliberation. After the work by António Damásio (Damásio 1995), emotion surfaces as a biological function guiding rational behaviour in terms of survival and the way of living, namely, with respect to decision but with a wider reaching spectrum. It is necessary, therefore, to justify emotion as a substrate of reason and definitely dismiss the idea that emotion is the vicious foe of reason.

The existence of one’s own body is the basis of behaviour that incorporates the art of living. The body determines by the regulating function of our organism’s emotions (both with respect to homeostasis and with respect to homeorhesis), what is pleasant and unpleasant, a source of happiness and pain and what is decoded into actions requiring our mobility through either approximation or withdrawal

with respect to the objects that surround us. Approximation reveals the appellative and persuasive capacity of objects, which must adjust the rationality of use to our emotions, i.e. so as not to disappoint our expectations as users after the purchasing act.

To mould the designer's emotions into the client's emotions reveals a dominant of appellation and persuasion. Nevertheless, persuasion in use introduces a temporal dimension where good performance becomes an empathic association with the product so that a positive emotion is sustained without yielding to a negative emotion.

The designer, therefore, must be an anticipator and simulator of the other's emotions to whom he targets his project and this he can only achieve through dialogue between the first and second person, between a "you" and a "me" and never in the anonymity of the third person singular.

Our body is his design endowed with utmost mobility, especially the body's feeling-of-itself, which is the basis of our strategies for survival. The idea that we only have five senses is largely surpassed. The five senses are merely those which convey the exterior within us or in Whitehead's words (Whitehead, 1978), they are vectors which transport the "over there" to "over here".

Nevertheless, the other senses called proprioceptives, provide us with indispensable information on ourselves with respect to the world and these are primitive in all species. Without them, we would never be able to feel that we are the ones who see, hear or feel.

From amongst the various proprioceptive senses we are concerned with focusing on the kinaesthetic and the vestibular. Both the one and the other provide us with information regarding our body, the relationship between each part of the body and our entire posture so that we may conduct ourselves well in order to maintain our balance, and furthermore, so that our gestures may be well adjusted.

It is impossible to carry out a study here on actions that more or less casually occur, on emotions such as the emotion triggered by danger and the manner how the brain relates with the rest of the body during these actions, which are well channelled towards survival. Nevertheless, there is a noteworthy principle of economics in these survival strategies since the action must be so quick that our most rational behaviour at this level, dispenses with reason.

Our work (Branco, 2002) lead us to conclude that in a great deal of voluntary behaviour there are physical laws which govern our gestures in an optimal manner (in addition to the fact that the gestures of whomever writes, regardless of whether this is done in English or Chinese, always obeys the law of the power of two thirds). Furthermore, these preferences of the organism which are felt and act in accordance with the anticipation of emotions must be taken into consideration in our relationship with interactive objects.

Using this base as a point of departure, this project will endeavour to respond to some issues which seem pertinent to us:

May it be said that primary emotions are declinable for a whole series of sub-species resulting from the interactive relationship with objects?

Which emotions may be controlled due to the maturity of individuals and sociability with external stimuli? What are the outcomes regarding the present saturation of the landscape of artefacts?

If the artefact is not successful on first perusal (I like/ dislike), is there any sense in speaking about interaction (emotion) through use? Would this lead to loyalty to the

brand name or to the typology of products or even to a purchase recommendation via “word of mouth” in the instance where the first is able to unleash the second? May emotion (especially when it crops up as an important agent over reason) be the mother of all explanatory variables of consumption regardless of whether they are intrinsic (personality, necessity, perception, memory, etc.) or extrinsic (fashion, social classes, reference groups, lifestyles, opinion leaders, etc.)? Is the symbolic and aesthetic configuration of a product and even the functional (practical) not the ideal field for transmitting emotions previously studied by the designer with the client or the user? What should be said about the contemplative function “discovered” by Alessandro Mendini for Alessi and about lines such as the “family follows fun or fiction” from the same company?

CONCLUSION

Our work, therefore, fits into a line of research which aims to detect and analyse the structuring elements of discourse on interactivity. By rejecting a merely technocratic point of view, a holistic vision is sought which incorporates logos and pathos in analysing the communicative process of interaction.

Semiotics used in this context as a tool of research allows an analysis to be carried out through which one is able to clearly show the relationship between a sign (regardless of whether it is graphic, photographic, sonorous or of any other nature whatsoever) and the process of allocating its meaning to the receiver.

In this context, rhetoric represents an architectonic art (Buchanan, 1989) to build a discourse on interactivity, and simultaneously, a highly structured analytical tool.

This research is not intended to replace the efforts that are being carried out in the field of usability, but indeed, complement them. The framework of reference, therefore, becomes wider and more complete by including components borrowed from other scientific areas seeking converging bridges which support the identification of basic communicative elements, transforming an interactive artefact into a cognitive and emotionally active agent, that is, into an intelligent rhetoric agent.

On the other hand, upholding a co-authorship for a process of design should imply interactive intervention by designers and organisations, the interpreters of the general and operational contexts of the project, as part of a shared overall strategic vision. From this presumption, it follows that the growing importance of the role of emotion in the process of design obliges resources towards study and research to be put together for effective communication between entities that are susceptible of feeling emotions which have sharing as their destiny.

The emotional component of objects with a strongly interactive dimension may anchor and develop itself taking into account the following observation by António Damásio:

“The outcome of our granting emotional value to objects which were not biologically intended to receive this emotional charge is tantamount to making the list of stimuli which potentially may induce emotions, as infinite. In one way or another, most objects and situations lead to some emotional reaction, although some do so to a far greater extent, than others. (...) A certain amount of emotion

necessarily follows the thought on either ourselves or on what surrounds us” (Damásio, 2001).

An unavoidable conclusion from the works of Hanna and António Damásio, is that our humanity must also be the humility with which we accept that the body of reason does not dismiss the reason of emotion of a body.

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