
Creative Engagement: From Instrumentality to Expressivity

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Abstract

Recently, the energy accumulated from the technological advancement such as ever smaller portable devices, pervasive networking and sensors has pushed computers out from the desktop and workplace into our everyday lives. Driven by this energy, it is crucial to explore new design spaces, so the power of computation can be transformed into humane and constructive elements, rather than invasive and destructive ones. In my view, new media art, where information and communication technologies are employed as new media for artistic purposes, provides unique opportunities to usher this energy. In particular, the proposal of Creative Engagement, with its emphasis on engagement for creativity, sociability and sense-making, reflects this line of pursuit. It seems there is natural need to incorporate this effort into the current HCI research agenda. But, where and how? In this position paper, I explore two general themes from socio-psychology – expressive and instrumental oriented actions – to articulate its position in the general HCI agenda, and draw attention to the significant role expressive activity, or “acting out” plays towards the end of Creative Engagement. I suggest studying the everyday expressive activities, and exploring how to turn technologies into means and media to support them.

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Introduction

In Ubiquitous Computing and HCI, increasing attention has been paid to reexamining the role that computation can play in our everyday life. While the arrival of Ubiquitous Computing frees us from the confines of “desktop”, it also broadens our perception of what computation is going to be in our lives. Along with this trend, various themes of research have emerged to explore the alternative forms of computation, such as affective computing, intimate computing, ludic computing, culturally embedded computing, etc.

In my view, what these various themes have in common is a turn of interest from instrumental to expressive orientation - to adopt the two general themes from socio-psychology¹. While the former is usually oriented towards efficiency, functionality, and usability, the latter is more concerned with enjoyment, aesthetics, novelty, and affections.

¹ According to Parsons, this typology is based on the temporal position of gratification. Instrumental action is oriented to achieve future goals, and it may involve renunciation of immediate gratifications; for expressive action, however, it is the other way around - the immediate gratification is of primacy over future goals [7].

I hope that, by exploring these two thematic concepts, this position paper can serve two purposes: one is to help to understand the position of the new stream of interests in the more general research agenda; a second is to locate the relevant theoretical, methodological resources.

From Instrumentality to Expressivity

Given its origins in laboratories and workplaces, where goals and tasks are relatively well defined, the instrumental aspects of computing (making tasks easy and efficient) have long been at the fire. However, when computing is freed from the desktop and work place, expressivity becomes increasingly relevant, from two points of view: the shift of settings where computing is embedded, and the change of roles that computing can assume. The former refers to the fact that computing has entered into the various aspects of our lives where expressivity is of higher priority such as tourism, home, and gaming. The latter concerns the role of computing in these settings, and there are still two options it can take. One focuses on the tasks to perform in everyday lives, such as finding a place in tourism, execution of routines at home, and winning a game in gaming. In this option, the traditional role of computing as instrumentality still remains. Another option focuses on the interaction with and through computing itself, instead of some external tasks, and its expressivity becomes the central concern. It seeks for the richness of experience and explores possible meanings it can produce. I think, as a turn from instrumentality to expressivity, the second option is more fundamental, since it challenges the very values and assumptions embodied in traditional computer as instrumental tools. It is also the second option that is,

in my understanding, what Creative Engagement is to explore.

The expressive oriented design has already manifested itself in various forms in HCI, as an alternative to traditional approaches. Instead of designing things to use, designing things for us to think, to explore, and to experience is proposed. Besides rationality, and cognitive models, affective, emotional and aesthetic factors are gaining increasing attentions for design considerations. In order to make the interaction itself engaging, rich, and reflective, various concepts that are suppressed in traditional instrumental-oriented HCI design such as slowness [5], ambiguity [4], and multivalence [9], are reexamined, exploited, and turned into powerful design resources.

“Acting Out”

However, despite these broad and profound transitions from instrumentality and expressivity ranging from design values, human factors, and design resources, it seems the very nature of expressive orientation in terms of “acting out” still haven’t received sufficient attentions. Here, “acting out” is used to denote the act of meaning projection into the world. It is also called, in Dewey’s term, the act of expression², or expressive activity. Although interaction is an exchange process

² According to Dewey, “Not all outgoing activity is of the nature of expression” [2]. Only when past experience is called upon, and through thoughtful and ordered actions, things in the external environment are converted into means and media, to fulfill internal needs, can activity be viewed as expression. He also distinguishes it from emotional discharge and artificial activities, where the intent and appearance split.

involving both giving and taking, so far, we still mainly assign the “taking” to “users”, and leaves the “giving” to designers. The engagement channels for users to participate are rather limited, mainly focusing on leaving space for “using”, “interpretations”, “exploration” and “reflection”.

I believe, if Creative Engagement is our interest, the “acting out” as an inherent nature for expressive oriented actions is of particular significance, and deserves special attentions for design. Especially after examining the criteria for evaluation of constructive experience in the next section, the importance of acting out will become clearer.

Criteria for Constructive Experience

In traditional instrumental oriented design, the evaluation is straightforward. The given task provides the clue: to finish as quickly as possible (efficiency), to accomplish as many as possible (functionality), and to be used as easy as possible (usability). The task is the key, and the interaction should retreat into the background. However, with expressive oriented design, this situation does not stand true anymore. The quality of interaction itself comes to the foreground, and we have to rethink the criteria for evaluation.

Dewey’s criteria of quality experience from his experience theory [3] give us some clues. We will examine his criteria first and see how “acting out” work towards his criteria.

In Dewey’s experience theory, there are two principles: interaction and continuity. The interaction of experience equally assigns significance to the internal conditions

and external environment in the formation of experience. The continuity of experience means “every experience both takes up something from those which have gone before and modifies in some way the quality of those which come after”. These two principles, as the longitudinal and lateral aspects of experience, are not separate from each other, but intersect and unite with each other. Their active union provides the measure of the value of an experience: whether it is immediately agreeable or not and whether it promotes or retards further growth and development. Some experience, such as a child being spoiled, might be immediately agreeable, but overindulgence confines the person on a low plane of development, which limits his capacity for later growth. Some experience might be oriented towards growth, such as education, but if the immediate disagreeableness engenders callousness and lack of sensitivity, it will arrest and distort the growth of further experience too. On the other hand, if an experience is immediately enjoyable, and also arouses curiosity, strengthens initiatives, and sets up desires and purposes for further growth, the experience becomes a positive moving force and is more valuable.

As we can see, Dewey’s criteria start from the *people* involved, not the *task*, and it emphasizes the “growing”, or the constructive aspects of the people side. It is the constructive significance, either for individual, community, or society in terms of self-realization, learning and social construction that of central importance now.

In recognition of the constructive effects on the people side as an important measure, “acting out” has proven to play significant roles, from various research areas. In the last several decades, social scientists have paid

more attention to how people’s construct their identities through storytelling, not in the sense of simply presenting identities and selves, but the telling itself as the very constitution of the core experience of personal identity [6]. Communities of Practice, as an established learning theory, have identified reification (the process of giving form to our experience) and participation as two fundamental processes for us to experience the meaning, learn and become who we are [8]. In anthropology, it is recognized that “self and society are not taken as given, as fully formed, fixed, and timeless, as either integrated selves or functionally consistent structures. Rather, self and society are always in production, in process...” and all these expressive activities such as “play and games, storytelling, verbal arts, parades, carnivals, rituals, and performance” are means by which the reshaping occurs. [1]

Conclusion

By exploring two thematic concepts – instrumentality and expressivity - from socio-psychology to examine the emerging trends in the HCI research, I drew attention to “acting out” as the nature of expressive oriented actions and its role in individual and social construction. I suggest that turning technologies into means and media to support everyday expressive activities be one potential direction for new media art to contribute to HCI

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