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# Beyond personalization: the influences of culture in advergaming design

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## Abstract

Personalization in gaming environments tends to be related to customization and prediction of player behavior. This position paper aims to discuss the role of cultural-oriented persuasive elements integrated and enhanced by gameful experiences in the context of advertising. We discuss the role of culture in advergaming and review the perspectives of cross-cultural advergaming design. To conclude, we argue about perspectives of advergaming design through cross-cultural HCI and personalization techniques.

## Author Keywords

Advergaming, persuasive gaming, culture, cross-cultural design, HCI, persuasion

## ACM Classification Keywords

**H.5.m** [Information Interfaces and Presentation (e.g., HCI)]: **Miscellaneous**; **K.8.0** [Personal Computing]: **General—games**; **J.4** [Social and Behavioral Sciences]: **Psychology**.

## Introduction

Globalization and the advance of innovative technologies expanded the influence of culture in consumer experiences. In this scenario, design, games, gamification and culture have been discussed as: patterns of interpersonal relationships in particular

cultures for gameful systems (e.g. competition, sense of community and sharing) [1]; models of persuasive affordances for collectivist cultures, such as group opinions and attitudes [2]; cultural orientation guidelines (product features, motivation and social influence) [3]; cultural appropriation, through the adaptation of game's mechanics, storyline and interface design [4]; interface design familiarity [5]; the design of tailored game elements, like visual assets [6]; and representational variations such as colors, icons, symbols, pictures, time formats, jargon and abbreviations [7]. Those approaches reflect the combination of visual and systematic representations that could help to influence and localize particular design strategies. However, this aspect might not give the player the choice of customization. For example, localization could bring only one side of the game [7]. Thus, it is necessary to understand the limits and applications of this strategy in game design.

### **Advergames and persuasive gaming**

Advergames are games designed around a rhetorical message, usually related to a brand/product [8]. Topics involving advergame design evoke the analysis of individual, social and cultural factors, combined with other characteristics, such as cognitive responses, attitudes towards the brand and features of advergame design [9]. In fact, most of the research of advergame and culture is related to people's attitudes towards the game and the brand. Advergames are part of the family of persuasive gaming [10] and they usually incorporate brand messages. Persuasion, then, becomes the main objective of the game. However, differently from persuasive games with particular objectives such as health or sustainable consumption, advergames are advertising in form of

games, followed by a brand or product. Thus, it is necessary to address the issue of advergame design in a different way. For example, the addition of brand-related aspects such as brand familiarity in advergame design could influence consumer behavior [19]. In this scenario, brand identifiers and previous experiences with the product could convey familiar associations. For this reason, advergame design context differs from other persuasive games, as it is connected with a product and purchase behavior.

Considering persuasion across cultures, there is a variation between collectivist and individualist cultures towards motivational drives (e.g. being different from others or part of a group), influence from other's opinion and product attributes [3]. This suggests that the combination of product features and the social context influences people differently. For example, in collectivist cultures, credibility is strongly related to group opinion, whereas individualistic content is more appealing for Western cultures [3].

Furthermore, persuasive design is composed by the ability to perform the task, combined with triggers and motivation [11]. Hence, designers should have in mind that although triggers are important, persuasive systems should be easy to use. For this reason, advergames should be both intuitive and persuasive. However, as advergames are forms of advertising it is possible that other aspects that are cultural-situated could influence consumer's attitudes. Why would consumers play advergames?

### **Cross-cultural consumer behavior and advergame design**

In collectivist and individualist cultures, motivation, product attributes and social influence shape consumer

behavior differently [3]. Consistently, from the cross-cultural advertising perspective, concepts of the self, personality, motivation, emotion, thinking patterns, categorization, and information cognition are the main elements that might vary across collectivist and individualist cultures [17]. This means that the product itself evokes particular consumer attitudes. Cross-cultural consumer behavior is often represented by cultural values, represented by heroes (models of behavior), symbols (signs, objects, icons) and rituals (habits) [12]. From the design perspective, those values could be embedded inside the advergaming. For example, it is possible that heroes could be embodied by character design. However, those perspectives need further investigation.

### **Cross-cultural games and personalization**

Personalization in games is related to player prediction, including the adaptation of the game during gameplay [13]. This is often related to the understanding of players' motivations and preferences. However, the study of variations and preferences regarding the cultural background needs to be expanded. Furthermore, there are other ways to comprehend the personalization in games and its impact into player behavior. For example, the customization of avatar inside games could promote user loyalty and engagement [14]. This aspect could be also related to the integration of culturally situated elements with native character design choices (e.g. clothing and wallpaper) [16]. Consistently, in advergaming design, there are at least three ways of identifying customization in advergaming design: game mode, product attributes and game avatar/character design [15]. This means that the adaptation of characters inside advergaming could be one strategy of

personalization. Conversely, not all advergaming might have avatar choice.

Advergaming can be viral marketing tools [15]. This means that one of the outcomes of advergaming design is sharing it with friends and impacting directly a social group. Furthermore, it is possible that the predictive characteristic of personalization in advergaming could be related to cultural orientation. For example, members from different cultures might have different motivations before interacting with the advergaming. As models of behavior and habits tend to shape cultural behavior [12], the identification of those elements a priori could impact advergaming design.

Another way to see personalization and advergaming could be through the lens of advertising. For example, advertisers often utilize consumer data to provide filtered content to the user [18]. However, how would this work in advergaming? What is the limit of adaptation of one advergaming? If the personalization goes too "personal", the cultural characteristic might be difficult to measure.

### **Discussion and conclusions**

As mentioned by Karpinskyj et al. [13], there are experiences that occur before, during and after gameplay that should be considered while studying personalization in games. For this reason, it is possible that the integration of culture inside advergaming goes in three ways: (i) before the interaction, as a predictive characteristic, (ii) during interaction as a way to translate the codes inside the advergaming and (iii) after playing the advergaming and sharing with friends, for example. This could be influenced by cultural behavior. Culture is about social interaction and values that are

shared in a group [12]. This means that one way to understand patterns of behavior in advergames design is through group-related comparisons.

In this position paper, we proposed to go beyond cross-cultural HCI. By combining elements borrowed from advertising and persuasive gaming, it could be possible to present strategies for cross-cultural advergames. The challenge of this combination is the expansion of methodologies that could incorporate this approach. We expect that qualitative methods, such as participatory design could help to build the bridge between design, persuasion and user in different cultural settings. Moreover, other approaches such as ethnographic research, interviews and focus groups could help to understand the relationship between culture and advergames design. In addition, it is possible that a combination with quantitative methods, such as questionnaires could help to explore the dimensions of cross-cultural consumer behavior and advergames. This will be addressed in future research.

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