Using Evaluation Grid Methods to Extract Attraction Factors of Game Characters

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1. Purpose and Motif

A game role is a character, which serves as the player’s avatar. An attractive character may induce players to have affectionate feelings for the avatar, and in turn, make game play more fun (Hsu, Kao, & Wu, 2007). Furthermore, an attractive character always directly dominates games’ advertisements or demonstrations, which has an influence on game buyers’ decision. Hence a good character design is not only “fun-to-player” but also “appealing-to-buyer” (Hsu, Lee, & Wu, 2005). Intuitively, the character attractiveness is merely referred to as the degree to which a character attracts the players. In fact, the character attractiveness is consisted of a multidimensional attributes that might be including: visceral feedback, cognitive immersion, social affordances and fantasy affordances dimensions (Figure 1). Moreover, character design should expand its individual variability, focusing on pursuits of attractive variability. This research investigated diverse game characters from four countries (Taiwan, Japan, Korea and America) to extract the attractive factors from an EGM survey with 12 highly involved Taiwanese game-players.

![Figure 1: Game-characters’ attributes](image)

2. Literature Review

2.1. The Video Game and Character

Video game is a promising industry (Bethke, 2003) and much research on the effective design of computer games has been published in the last two decades. Research results showed that games with different characteristics elicit differential emotional response patterns, and the engagement elicited by the games varies as a function of the sensation seeking trait of the player (Ravaja, Salminen, Holopainen, Saari, Laarni and Järvinen, 2004). Choi and Kim (2004) indicated that player continues to play games if they have optimal experiences while playing the games. To make player have enjoying experiences, some studies focused on the identification of design factors to make a game fun. However, Malone and Lepper (1987) argued that a fun game has to involve four factors: challenge, fantasy, curiosity and control, which can intrinsically motivate game-players. To achieve the same goal, other researchers then focused on game-character design because character is the key mechanism to connect between the four factors and player in a video game.

Most of them attempted to create an attractive avatar of a player by emulating human behaviors, such as motor-skill actions (Blumberg & Galyean, 1997), dialogue (Brusk & Eladhari, 2006; Jan & Traum, 2005), and emotional expressions (Wallraven, Breidt, Cunningham, & Bulthoff, 2005). But, games are not very good at imitating reality, because elegance requires them to be affective. To create a sound character, visual clues that people use to make judgement have to be controlled and a clear, unified message has to be established to make players not just interested in but also fond of the attractive character.

2.2. The Character and Player

Characters are one of the core elements of video games (Lankoski & Heliö, 2002; Yee, 2007). It is especially important that the goal of the character has to be well-defined and motivated as the goal is what provides the player with a link to the character and the game itself. Players immerse and have fun in games through controlling characters (Poole, 2000). Characters were avatars of players who interact with competitors or partners in the games.

Previous researches focus on multi-dimensional player requirements. Perlin and Goldberg (1996) emphasize on character design that may be preferable to the psychological or biologically driven models of recognizable human behavior. Osbeck, Moghaddam, and Perreault(1997) point out that character is modeling by multiple cultures. Nass and Lee (2000)
prove that characters from the same ethnic background as the inter-actor is perceived to be more socially attractive and even more trustworthy, than those from different backgrounds. Hayes-Roth and Doyle (1998) distinguish from other synthetic characters by their lively autonomy and individual personas - should possess, as perceived and ascribed by the inter-actors. They have identified ten key qualities: identity, backstory, appearance, content of speech, manner of speaking, manner of gesturing, emotional dynamics, social interaction patterns, role and role dynamics. These attributes of a game character are completely decided by game players’ requirements. They conclude that player’s loyalty could be enriched if a game character could provide attractive factors.

3. Method
Sanui (2000) refined the evaluative aspects to develop the Evaluation Grid Method (EGM) that are used to elicit “original evaluation items” (OEI) and “related evaluation items” (REI). OEI are identified through asking participants to explain why they prefer one comparative element over another, and REI are derived from “laddering,” in which participants are asked questions about their OEI. By clarifying the relationship between their OEI and REI, participants’ evaluation structure can be identified. There are three steps in EGM:
1. Preparation of the comparative elements
2. Identifying the extradites of the OEI
3. Laddering (derivation of the REI)

Figure 2 shows the general outline of the EGM.

Figure 2: The Evaluation Grid Method (EGM).

Furthermore, combining the direct evaluation data of OEI and REI form what is referred to identify participants’ evaluation structure figure. (Figure 3) Through EGM, player can express freely what they feel towards game characters and fully describe their hidden thoughts. This study employed the EGM interview method to find the attractiveness of game characters. Their values, motives, needs and attitudes were gained to provide valuable information for game characters design.

4. Evaluation and conclusion
Using Evaluation Grid Method interview method to find the attractiveness factors of game characters, there are as follows:
First, characters’ identity
The character identity includes not only demographics but also personality traits, signature, idiosyncratic behaviors and back story.
Second, characters’ appearance
The character appearance refers to the demographic information - age, weight, gender, race, socioeconomic background and culture – in the chosen embodiment of the character and graphical representation of this embodiment.
Third, characters’ capability
The capability aspects include power, skill, weapon and war-craft (strategy).
Fourth, interaction aspects
The interaction aspects include content of Speech, manner of gesturing, emotional dynamics and social interactions.