

# Roleplay Fundamentals in Environmental Empowered Agents

Rough Draft 1

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## Abstract

It is undefined how long roleplaying has been existing in history of the human species. Social skills has been a determining factor for the survival of the individual: evolutionary psychology literature explained that the ability to influence others and disguise yourself could be one of the most important social skill tool for the survival of the fittest. Therefore, we can argue the roleplaying has been a constitutional part of the evolution of humans and of what we are today. Roleplaying as a game in a fixed environment has became more popular in the last century. Dungeons & Dragons, arguably one of the most popular tabletop roleplaying game (RPG), was first published in 1974. World of Warcraft, a massively multiplayer online roleplaying game (MMORPG), has been the most popular online game for decades and it was launched in 2004. However, even if they share the same acronym, there are substantial differences in these roleplaying games. For example, in Dungeons & Dragon players do not have control of the environment: instead it always exists a player called usually "master" who is not representing any agent but instead controls and manages the environment. Such differences change completely the dynamics of the game, the skills required by the players and the final goal pursued by the agents. I state that these differences are structural enough that these games are fundamentally different ones. In May 2006 it was released San Andreas Multiplayer, a massively multiplayer online game mod for the PC version of Grand Theft Auto: San Andreas. The most popular mods created by players were roleplay based. After years, a dominant design of roleplaying in SAMP was established: here the agent was able to control both himself and the environment around him. An essential difference was the fact that agents were able to control not only the environment that they interacted with, but also the one surrounding them which their character could possibly had no authority over it. For this reason, in this roleplaying setting each player is also a sort of "master" with restrictions. I define such agent as an environmental empowered agent. In this report, I will explain the fundamental skills and outcomes that roleplaying in an environment empowered agents scenario implies.

An agent ( $\alpha$ ) is a roleplaying player who has control only on its character. A environmental empowered agent ( $\alpha_\epsilon$ ) is a roleplaying player who has control on its character but also on the local environment. A master agent ( $\alpha_m$ ) is a roleplaying player who has control on the global environment and the non-playing characters (NPC), but it does not have his own character. A local environment ( $\lambda_{\alpha_\epsilon}$ ) is the environment that surrounds the agent but it is not limited to what the agent can interact with<sup>1</sup>. The global environment ( $\Omega$ ) is the entire existing environment (Figure 1).

A roleplaying game which is populated by  $\alpha_\epsilon$  is defined as Environmental Empowered Agents Roleplaying Game (EEARPG) or shortly  $RPG_\epsilon$ . A  $RPG_\epsilon$

server is populated by characters controlled exclusively by  $\alpha_\epsilon$  and there is strictly no presence of  $\alpha$ ; however, it is possible to have temporarily  $\alpha_m$ . Representation of  $RPG_\epsilon$  that this paper takes in consideration are San Andreas Multiplayer roleplaying servers<sup>2</sup>.

In  $RPG_\epsilon$ ,  $\alpha_\epsilon$  roleplays through the usage of the two skills: *acting* and *screenwriting*. I define acting as the ability to interpret a character, and screenwriting as the ability to write a script, which for  $\alpha_\epsilon$  is restrained to the local environment. This is in fact the main difference in  $RPG_\epsilon$ : while other kind of RPG only requires the skill of acting,  $RPG_\epsilon$  also requires  $\alpha_\epsilon$  to screenwrite; this is a consequence of the ability of  $\alpha_\epsilon$  to describe and animate physical and non physical objects in his  $\lambda_\epsilon$ . Acting and screenwriting are there-

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<sup>1</sup>This definition is intentionally weak. The environment that surrounds an agent can sometimes be restricted to what is physically close to him, but other times can includes also something outside is physical reach

<sup>2</sup>This refers to the dominant design of the roleplaying servers (Example). However, there exist servers which design does not lead to an  $RPG_\epsilon$  and should not be taken in consideration for this paper

fore the two fundamental skills to perform roleplay in  $RPG_\epsilon$ . I will therefore provide a framework that explains what it means being good at these skills.

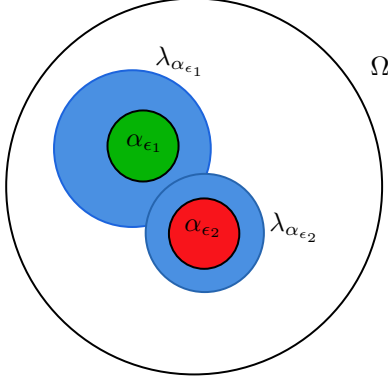


Figure 1: Set Theory of Interactions between  $\alpha_\epsilon$

*Acting* is already a difficult skill to define in its original context of performing plays and movies. One should not see acting in roleplay as a different skill of acting in real life. In fact, acting in roleplay is just a different dimensional form of acting –  $\alpha_\epsilon$  is not required to be able to reproduce a certain tone of voice, accent or body language; the dimensionality of physicality is absent and this makes acting in roleplaying more accessible and arguably easier<sup>3</sup>. However, a balance in dimensionality has to happen: much weight is now on the dimensionality of the writing – a roleplayer has to act through writing<sup>4</sup>. This dimensionality shift allows us to provide a framework to evaluate (and therefore improve) the ability of acting in roleplay. I define Player  $i$  as the human person managing  $\alpha_{\epsilon_i}$ . Through the process of acting,  $\alpha_{\epsilon_i}$  impersonates and behave as a character ( $\chi_i$ ). One can go further stating that  $\alpha_{\epsilon_i}$  is behaving as an another character<sup>5</sup>. In this process of switching between be-

<sup>3</sup>It is therefore foreseeable a value of democracy in the process of roleplay.

<sup>4</sup>In consideration here is the medium of the most popular EEARPG, which is text.

<sup>5</sup>The difference here is that Player  $i$  is assumed to be a character himself and now he has to behave as a different character. Ergo, there is no difference in interpreting a human or a character. Further investigation in the question would lead to an existential debate definitely out of the scope of this paper

having as himself and behaving as  $\chi_i$ ,  $\alpha_{\epsilon_i}$  implicitly goes through the mental model of Player  $i$ . I define mental model of Player  $i$  ( $\psi_i$ ) as the beliefs, experiences, mental states, thinking framework, culture and more that Player  $i$  built during his personal life – in less words, it is the perception influenced by a nurture and nature different of  $\chi_i$ . This is the fundamental limit in humans with acting: we cannot switch character without having trace of the original one we have grown up with. If this was not the case, we would not have a job called *actor* and not even famous good *actors*, given that humans would be naturally predisposed to behave as another human being. We can further look into the topic questioning that if any human can behave as another human naturally, in the first place behaving as another human would not mean anything. I prefer to stop here this investigation to not have to deal with the decision on what name to give to a new paradox.

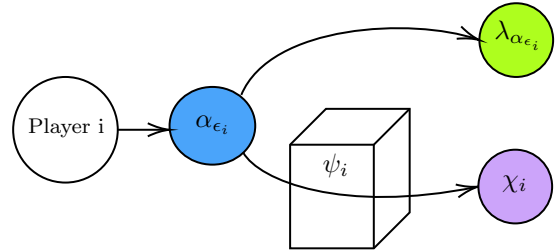


Figure 2:  $\alpha_\epsilon$  Roleplay Framework

We can define  $\psi$  as a function  $\psi : \chi \rightarrow \chi$  such that  $\chi \leq \psi(\chi)$ , where  $\chi \geq 0$ . Therefore,  $\psi$  can be interpreted as the bias that affect Player  $i$  when he interprets  $\chi_i$ . To measure the quality of a roleplayer, I introduce a measurement called *the native mental model weight* or *molef's index* ( $\mu$ ):

$$\mu_i = \chi_i - \psi(\chi_i)$$

The definition of a perfect roleplayer is an  $\alpha_\epsilon$  whose molef's index ( $\mu$ ) is 0. In such case, the function of the mental model ( $\psi$ ) given  $\chi$  would result in  $\chi$  itself. Such model implies one of the most profound truth of roleplaying<sup>6</sup>: you cannot behave as  $\chi$  but only as  $\psi(\chi)$ .

<sup>6</sup>And life.