

# A classification of video games deduced by a pragmatic approach

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The aim of this article is to present a classification of video games deduced by a pragmatic approach. The methodology consisted in indexing a significant number of video games by taking account their elementary "game bricks". At last all these combinations have been studied in a database called V.E.Ga.S

## Introduction

On the very first pages of his pioneer work, Propp<sup>1</sup> postulates: "Although there is a place for the classification as a basis of every research it must be the result of a further study. Or, we observe the opposite situation: Most of researchers start by classifying, thus introducing facts, when in fact, they should rather deduce."

Thus, in order to adhere to the "formal and abstract" study of Propp, we have chosen the approach made by the game designers Katie Salen and Eric Zimmerman<sup>2</sup> to study video games. Because their "fundamental principles" are elements you can put together in order to manage any game, they are similar to the "functions" of Propp, which are combined in order to make up any tale. We only retained in our study "the fundamental principals" being in touch with the "outside" as it defined by Winnicott<sup>3</sup>. At last as underlined by Salen and Zimmerman, we have played the video games, because the theoretical approach is not sufficient: "A game design education cannot consist of a purely theoretical approach to games. This is true in any design field." (P.11).

Following this methodology we have elaborated V.E.Ga.S. (Video Entertainment & Games Studies) tool<sup>4</sup>. It is dedicated to the morphologic study of video games in order to classify, study their very nature and corroborate hypothesis in a pragmatic approach.

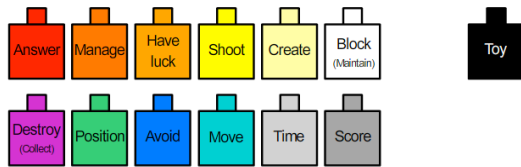
We will present in this paper the classification obtained by this way.

## The classification

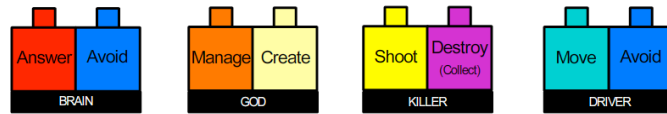
This experimental approach has done encouraging and coherent results particularly with the discovery of 12 "game" bricks called "Answer", "Avoid", "Block", "Create", "Destroy", "Have luck", "Manage", "Move", "Position", "Score", "Shoot", "Time" and a special one: "Toy" dedicated to video games which not include challenges (fig.1). We have also discovered 4 "metabricks" called "DRIVER", "KILLER", "GOD" and "BRAIN" and the 4 rules in association to them<sup>5</sup>:

- 1) Are called "metabricks", the combinations of two game bricks supplementary that make a challenge.**
- 2) To add a game brick to a metabrick will give to the challenge carried by this one, a variant which does not alter its very nature.**
- 3) If we add several game bricks to a metabrick, the second rule is right as long as the combinations of game bricks don't form another metabrick.**
- 4) Associate the metabricks lead us to associate their respective challenge.**

### Les briques games



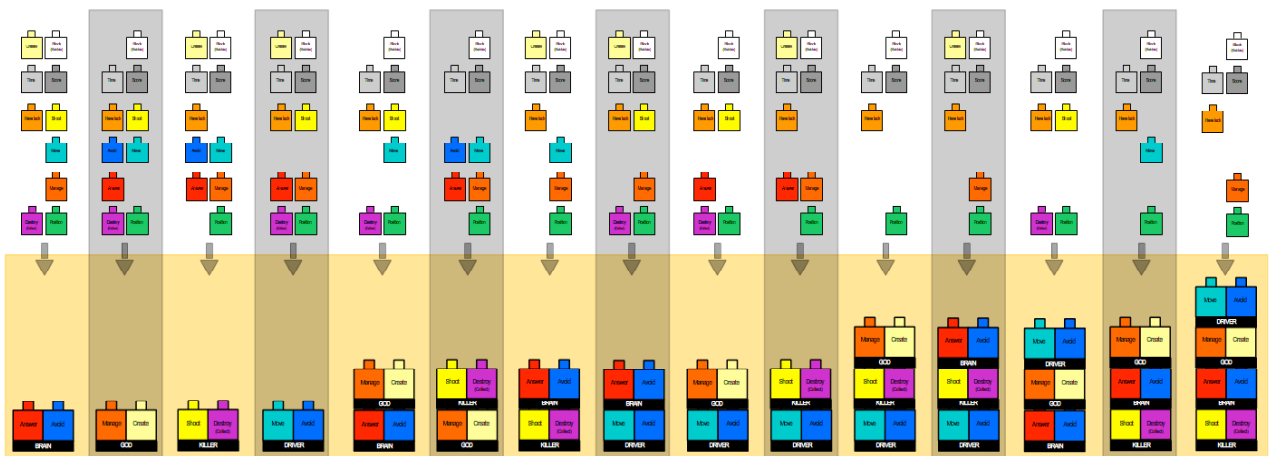
### Les métabriques games



**Figure 1: Summary of game bricks and metabricks identified at this stage**

We these elements, we can represent a first proposition of classification of the video games:

### Briques game pouvant se combiner aux métabriques pour créer des variantes



Combinaison de métabriques : Les challenges de base des différents jeux vidéo

**Figure 2: Classification of all the possible combinations of video games according to V.E.Ga.S. (Aug. 2006)**

The figure 2 shows us the 15 combinations we can make with the 4 discovered metabricks (below the arrows). That represents 15 different challenges of video games. For each of them, some game bricks can be added (above the arrows) to make variations of game.

## Conclusion

Our study requires nevertheless a refinement concerning the definitions of our game bricks. Some bricks still have too large definitions, like the "Answer" brick. We thus consider a second version of our tool V.E.Ga.S.

First the quantity of games to index (588 at this stage) must be larger to permit us maybe to discover or to confirm the existence of new metabricks. But we also must be able to obtain more formal results and evaluate our subjective part when indexing games.

V.E.Ga.S. is accessible on the following address:

<http://www.bigarobas.com/ludovia/vegas/>

## References

- 3\_ Propp, V., Morphologie du conte (1928), Seuil, (1970) (Translated from French in this paper).
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- 5\_ Winnicott, D. W., Jeu et réalité (1971), folio essais, (2002)
- 6\_ Alvarez, J., Djaouti, D., Gassempouri, R., Jessel, JP., Methel, G., V.E..Ga.S.: A tool to study morphology of the video games, Games2006 Portalegre - Portugal (Sept. 2006).
- 7\_ Alvarez, J., Djaouti, D., Gassempouri, R., Jessel, JP., Methel, G., Morphological study of the video games, CGIE2006 Perth - Aurlalia, (To appear Dec. 2006).