

Triadic Game Design workshop

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Abstract

The Triadic Game Design workshop is a flexible game-based workshop that aims to educate its participants in a playful manner about a game design approach. This design approach is based on the idea of balancing three components (or worlds) in designing games that simulate professional practices: Reality, Meaning, and Play. Additionally, the workshop can be used as a method to enable an agile game development process. In this paper we describe the theoretical background and the workshop itself.

Introduction

Although in the words of Johan Huizinga (1938/1954) “play” is inherently human, designing games is not that easy. From experience, it is observed that designing games to simulate professional practices is even harder (Hartevelde, Guimarães, Mayer, & Bidarra, forthcoming).¹ A way to possibly overcome this difficulty is to use a proper game design approach. During the Triadic Game Design Workshop one such approach is experienced. It bears the same name as the workshop: Triadic Game Design (TDG).

This approach stresses that designers need to balance three separate components (or “worlds”). They need to balance Reality, Meaning, and Play. Each is affiliated with different sciences (game design, psychology, and domain-knowledge, respectively), people (game designers, teachers, and subject-matter experts, respectively), and criteria (fun, learning, and validity, respectively). During the workshop, the participants get to know these components in a playful manner as the workshop is a game itself. The main goal of the workshop is to score as many points by designing concepts.

In this paper, we explain consecutively the theoretical background of this workshop, the function, and setup. This should give a more elaborate idea of what the TDG Workshop consists of and how it can be used.

Theory

Not one single methodology exists. It does not exist when it comes to manufacturing cars, inventing new medicines, and also not when it comes to designing games. One methodology, or rather “design philosophy” (Hartevelde, forthcoming), when it is about designing games for professional practices concerns TDG. This approach is based on the experience of designing a game to train levee inspectors called *Levee Patroller* (Hartevelde, Guimarães, Mayer, & Bidarra, forthcoming). It poses that the design of a game is a multi-objective problem where trade-offs need to be made. Making these trade-offs takes place in a design space defined by three equally important components (or worlds): 1. Play, 2. Meaning, and 3. Reality. The various

¹ From here on, unless otherwise mentioned, when we use the term “game”, we refer to those games that are developed to simulate professional practices.

tensions between these three components result in design dilemmas and trilemmas that make it difficult to balance a game.

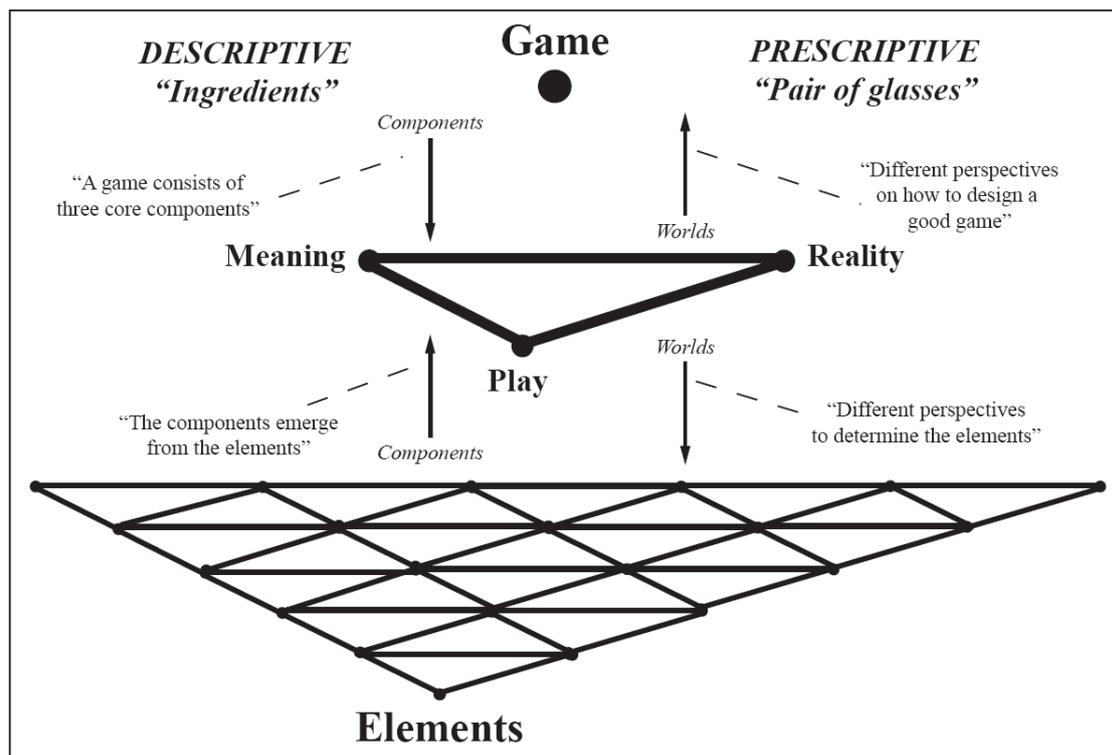
The emphasis on three components explains why the approach is called “triadic.” According to the Oxford Dictionary a “triad” is namely “a group or set of three connected people or things.” A short description of these connected “things” is given below:

- **Reality.** Games have always - how abstract they may be - a relation with the real world. If it is about serious games this connection should even be tighter, because in the end the real world needs to be affected by the game. Reality could be represented by stakeholders (with their expertise and opinions) from the real world or can be seen as a representation of the real world inside the game. The world Reality thus represents the real world and its model representation in a game. It is grounded in the disciplines related to the subject matter. For a game about the Israeli-Palestinian conflict (e.g., *Peacemaker* and *Global Conflict: Palestine*) this would be diplomacy and international relations, while for a game about managing a university (e.g., *Virtual U*) this would be public policy, management, and higher education. Aspects that are part of this world concern determinations of the subject, like factors, variables, and definitions. Criteria include fidelity, realism, and validity. People affiliated with this world are the subject-matter experts.
- **Meaning.** No game can principally be considered “meaningless”. Games, like other media (McLuhan, 1964), can have a profound effect on society at large in, for instance, our attitudes and ways of acting (Beck & Wade, 2004), and can be seen as cultural expressions in their own right (Bogost, 2006; Jones, 2008). Players will also definitely learn something in each game, whether hand-eye coordination skills, visual-spatial skills, or an idea of how ancient Rome may have looked (Gee, 2003). However, to intentionally achieve a meaningful effect beyond the game experience, something that is useful in the real world, a more elaborate consideration needs to be made of how this can be achieved. The world of Meaning is concerned with this. It is related to disciplines, such as the learning sciences, psychology, and semiotics. It incorporates aspects as communication, learning, rhetoric, and opinions, while among its criteria we can recognize reflection, transfer, and relevance. It is the world of teachers and storytellers.
- **Play.** Aside from being related to a real world and having meaning, games are foremost and first of all a specific tool (or medium). Each tool has its own specific characteristics. When we think of games, we think of highly interactive and engaging tools that immerse people into a fictive situation. To achieve this, games consist of game elements, like actors, rules, resources, challenges, and competition. Its designers strive to fulfil the criteria as engagement, fun, and immersion. The idea behind games, the game elements, and the criteria to develop a good game belong to the world of Play. This world is affiliated with disciplines as media studies, game design, and human-computer interaction. This world belongs to the game designers and media theorists.

The methodology asserts that every game that is designed to simulate a professional practice contains these core “components.” Although the components are not as easily to point out as with the components of, for example, a car, they are certainly

there. A game has always a link with “reality”, has play elements - otherwise we could not call it a game -, and should have some sort of meaning if it is applied in a professional context (i.e., training, education, marketing, and/or research). The components “emerge” so to say from the basic elements that make up a game. All of this makes up the descriptive part of TDG. It is about indicating of what *ingredients* a game is made off (see Figure 1).

Figure 1 The descriptive and prescriptive sides of TDG.



However, foremost, as what any game design methodology should propose, TDG asserts how a game needs to be developed. This prescriptive part states that to design a game for a professional practice the three components need to be taken into account. To achieve this, the designer has to look for a synthesis. This can be done by balancing the three worlds. This is a difficult task, in particular because each of the worlds has their own *Weltanschauung* on how to accomplish a “good” game, has different criteria, and is related to different disciplines. For this reason, we rather talk of “worlds” or “perspectives” instead of components when we refer to the prescriptive side of TDG.

Additionally, it explains why balancing a game in practice means that designers have to solve all kinds of *trade-offs*. If the worlds disagree on a certain design issue, the designer faces a dilemma (or even a “trilemma” if all three worlds are involved). Although certain dilemmas may relate completely to a single world (the so-called “within-worlds dilemmas”), each design choice affects the game, the overall system, in the end. The implications are that designers have to consider as many issues at the same time as possible. This makes game design complex and, therefore, difficult.

Function

A workshop was developed, in the first place and above-all to educate people about designing games by means of TDG (Harteveld & Van den Bergh, 2008). Although the

workshop is based on the ideas of this approach, we want to emphasize that the transfer of this particular methodology is not the main (learning) goal of the workshop. Essentially, we want participants to get a better feeling with what it means to design games. We, of course, think that TDG may help people in designing better games, but within the workshop it forms foremost a frame on which more elaborate thoughts on game design can prosper. As stressed before, other methodologies are possible as well, and it may well be that TDG is not the type of approach that suits every sort of game design process. Nevertheless, by participating in this workshop, the participants are obviously being educated in TDG.

Aside from the educative function, the workshop can be used as a tool for *agile game development* (Kortmann & Hartevelde, 2009). Agile approaches try to increase the quality and efficiency of projects. The workshop can contribute to this in two ways. First, it has a brainstorming function. By using the workshop for a specific cause, for example to come up with a design to facilitate a merger between two companies, the workshop ends with different design concepts about this subject. When used at the beginning of a project, this can help people to think about the possibilities and ways to continue a project in only an afternoon. Secondly, it could help to speed up the design process, because it helps project members to get a common vocabulary and understanding of each other. Game design is multi-disciplinary. The TDG workshop gives participants an opportunity to fulfil the different roles and experience what it is like to be the subject-matter expert, teacher, or game designer. This way, participants get an idea of how the different “worlds” come together and have clear expectations of what is expected during the further design process.

Setup

The workshop setup has changed dramatically over time (cf., Hartevelde & Van den Bergh, 2008). Part of the reason is that the workshop is quite flexible and may need adjustment for specific settings. The current main setup is, however, as follows. First, the participants have to form groups (3 to 5 people). Subsequently, the groups have to perform four assignments. The first assignment is a little ice-breaker, which is a metaphor of the idea of TDG. The other assignments will be focused specifically on each of the three worlds. To help participants in exploring these worlds, they are handed over worksheets that guide them in looking at what aspects need to be covered. The three other assignments are briefly described below:

- **Assignment 2 - Reality.** Groups have to randomly pick a *theme* (e.g., globalization, politics, war). The objective is to design a “model of reality.”
- **Assignment 3 - Meaning.** Groups have to randomly pick a *function* (e.g., persuasion, system knowledge, social skills). The objective is to define the function and the setting in which a game is going to be used, based on the previous assignment.
- **Assignment 4 - Play.** Groups have to randomly pick a *genre* (e.g., role-play, beat ‘em up, or shooter). The objective is to come up with a game design concept, based on the previous two assignments.

In between the above-mentioned assignments and at the end, each group has to give a short pitch to “sell” their idea to the other groups. After this, groups have to award points to each other. The overall goal of the workshop is to score as many points as

possible. The group with the most points wins. Groups can also earn points by solving the first assignment faster than the others.

By assigning points, the workshop gets a competitive element, which ensures that the participants are engaged in it. Meanwhile, they learn and discuss with the help of worksheets a systematic game design approach, share game design knowledge and experiences with each other, and experience a new possible way of incorporating a workshop into a game development process (Kortmann & Hartevelde, 2009). All of this will be elaborately discussed during the debriefing. In total the workshop lasts for 2 to 3 hours.

Conclusion

Designing games to simulate professional practices is difficult. In this paper, we described a workshop based on game design approach that may help people to assist in designing these types of games. This can be done by means of educating participants about game design or by using the workshop to instill an agile development process. The latter may occur due to the brainstorming function of the workshop or to the ability for project members to get a common vocabulary and understanding of what it means to design a game. It needs to be stressed that although the workshop has been applied a number of times with success, it is still in development. Furthermore, no scientific evidence can be provided to show that first of all TDG works and, secondly, that the workshop works.

Author information

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