Visibility and Clarity of Characters in Top-Down Strategy Games

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ABSTRACT

This work presents several aspects of design choices made in already existing works and concludes on methods on how to incorporate these ideas in future games. Results include approaches which are *Color, Shape & Size* and *Motion* to convey a clearly arranged overview of characters in the environment.

Keywords
character, design, top-down, visibility

INTRODUCTION

When developing a top-down strategy game, it is important to give the player clear information on unit positioning. With video games being more and more complex, graphically and in content, it becomes difficult to transmit that information to the player.

Top-down games feature, as the name describes, a distant top-down camera in which many detailed character designs can get lost and blend in with the environment. It is certainly unfortunate if a player forgets to act with one of his units because it was out of his/her vision or gets "ambushed" by unseen enemies. Such games need to adapt their design choices to solve this problem. There are different top-down strategy games which each try to solve the problem of loosing overview in their own way.

STATE OF THE ART

The author is not aware of any theoretic research to the specific subject. Since artistic choices can be subjective the paper only brings up objective, established design principles.

APPROACH

This paper focuses on the concept of opposing elements, contrast in short, as a visual design element to make units clearly-presented. Since there are many forms of contrast that make objects distinguishable the author decided that this paper should be focusing on three specific ones. These points were searched in existing video games and evaluated.

RESULTS

After looking up games which utilize mentioned points the author decided to focus on these contrasts: *Color Shape & Size* and *Motion*.[1].

1.) Color

Color can be used in character design to communicate emotions and personality traits. When used as a contrast however color can make characters pop from the surrounding environment. The strategy RPG series "*Fire Emblem*" (2003, Intelligent Systems/Nintendo)[3] uses color contrast to make units visible on the map as well as show their alliance. Enemy units have a red color scheme assigned to them while your units are blue and allied units are green. The game uses vibrant hues to accentuate the characters on the map.

2.)Shape & Size

Objects loose more and more detail the farther the camera is located from the object. The details character artists want to convey have to be resized accordingly. "*X-COM Enemy Unknown*" (2012, Fireaxis/2K Games)[4] features this in its character designs. The games weapons and armor all are slightly over-sized making them all readable at higher distances.

During his GDC panel *Arnold Tsang* mentioned that focus should be on the angle the character is perceived the most by the player, making a strong top-down silhouette key for said games.[2]

3.) Motion

We as humans easily focus on moving objects and as such the contrast of static and dynamic is helpful to define visible characters. In "Final Fantasy Tactics" (1997, Squaresoft)[5] characters have an exaggerated and almost unnatural walking animation, even when they stand in place, to distinguish them and keep them always at the foreground. Even characters not directly in focus are highlighted because the human eye can perceive movement at the edge of its field of view.

DISCUSSION AND CONCLUSION

This paper wants to clarify that it is important for character designs in top-down strategy games to contrast with the environment in one way or another. It is an effective way of highlighting the characters and necessary to assure a clear overview of the game. *Color* contrast helps bringing the characters to the front and while *Size & Shape* support the defined visual character traits. Finally constant *Motion* ensures that units will be visible even when they are out of focus. Combining those contrasts is commended to ensure the visibility and clarity of characters in top down strategy games.

FUTURE WORK

For future work the author could imagine extended research and testing of different character designs with comprehensive empirical studies which would support the results of this research paper and develop more methods for artists to easily design a character which fits the needs of top-down video games. The author also thought about incorporating more principles of design and focusing more on the environmental perspective.

REFERENCES

1. Bernard, Teresa "Principles of Good Design: Contrast", April 2016 [URL: http://teresabernardart.com/principles-of-good-design-contrast/]

2. Tsang, Arnold "Character Design across multiple Game Genres.", 2014 [URL: http://www.gdcvault.com/play/1020595/Character-Design-Across-Multiple-Game]

3. Intelligent Systems, "Fire Emblem", 2003

4. Fireaxis Games/2K Games, X-COM Enemy Unknown, 2012 [Image URL: http://2p.com/game/U00563/XCOM-Enemy-Unknown.htm]

5. Squaresoft/Sony, "Final Fantasy Tactics", 1997 [Image URL: https://upload.wikimedia.org/wikipedia/en/a/a8/BattleGrid.jpg]