# Creating "counterplay" in a grid-&turn-based environment

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#### Abstract:

Many ways to react to abilities are built around realtime games and will not work in a turn-based environment.

This paper will focus on the theory of how to create abilities a player can react to, within a grid-/turn-based environment and comes to the conclusion that abilities can be announced by creating the need for a setup play the turn before.

## **Subject descriptions:**

General - Games; Game Design;

## **General Terms:**

Game; Design; Theory;

## **Keywords:**

Game Design; Turn-based; Counter play; Grid-based;

## 1. Introduction:

One of the key elements of most video games and games, in general, is the possibility for the player to react to a situation the game has put the player in.

Many real-time games allow the player to react to an event before it even affects the player, an example for this would be an attack with a startup animation or a travel time (for a ranged attack) that allows the player to prepare for it and make a decision of how to react to it.

But since a turn-based game does not allow the player to react to a situation based on reaction time the players need another way to go to the same steps, which means a way for the player to understand the situation at hand and figure out a way to prepare and react to it.

## 2. State of the Art:

The author is not aware of any theoretic research to the subject asides the work of Tom Cadwell on "Counterplay and Teamplay in Multiplayer Game Design"[1], which has its main focus on real time games, in addition to that there are a number of related theories about player goals and general reactions to certain situations this paper will build upon.

Tom Cadwell shows in [4] that there are three important factors to make counterplay possible. First of all there must be a possible way to counter an ability, this way must be clear and understandable for the player and the way to counter an ability must be interesting, for example by giving the player multiple ways to react to an ability that all counter it, but still lead to different results for the player.[1]

In [5] Tom Cadwell explains how to utilize this concept for multiplayer games, since if a player is able to react to everything the other player does it creates a situation in which the players can react to the reactions of the other players, effectively countering the other players counters, which can lead to satisfying gameplay.[1]

Jesse Schell writes in "The Art of Game Design" that playing against a worthy opponent "fulfills a deep inner desire to determine our skill level related to someone else" [2] and Scott Rogers writes in "Level Up!" that showing that a player is better than other players is something many players enjoy.[3] Combining these two statements shows that players love to show that they are better than someone they respect, which results in the necessity for an ability to be easily understood and used to create a player base with many players that can respect each

other while also allowing an ability to become more powerful when mastered to allow a player to become better than another player.

## 3. Approach:

To determine how to utilize the already existing theories listed in the "2. State of the Art" section for a turn-based environment, several tests with different kinds of abilities were conducted with grid-based paper prototypes and existing games that fit the requirements of the subject.

The different abilities were tested in how they counter each other and how they are countered by basic game mechanics that are always (or often) accessible within a game.

#### 4. Results:

The test results revealed that abilities with huge payoffs "feel unfair", if they happen the turn they are revealed or if announced but the player has no way to counter them, by changing these abilities in a way that would allow the player to counter them utilizing the games core mechanics, for example walking and announcing them one turn before the powerful effect would happen they would feel more react able to the players.

Weaker abilities that influence the game to a smaller amount added depth to the game if they had an overall way to be countered. One of the abilities tested could add negative effects to opponents units based on the number of the opponents' units hit within an area. After the first time players saw that an ability like that exists they naturally countered it by keeping a small amount of distance between their units.

## 5. Conclusion:

It is important for strong abilities to be announced in some way before they come into effect. If the way to counter an ability is hard to accomplish the ability needs to be announced multiple turns before it is going to happen.

A "good" way to achieve this is through the combination of abilities: The player uses one ability (that should also be useful if used by itself) to set up another one this combination creates a

clear pattern for the opponent while also adding the possibility for the player to hide the intentions behind the move and therefore allowing to counter the counter of the opponent. Weaker abilities should also feature counter play but have no real need for an announcement an example for this would be an ability that effects multiple fields, players can counter this ability naturally by keeping a small amount of distance between their units.

#### 6. Future Work:

Extended testing of different ability components to create an ability framework to create different abilities by combining these components. The combined abilities should than be directly countered by most of the counters of their components, allowing a designer to create different abilities while already having direct counters for them in mind.

## **References:**

[1] Cadwell, Tom. 2013. Counterplay and Teamplay in Multiplayer Game Design. GDC Vault:

https://www.gdcvault.com/play/1018158/Counterplay-and-Teamplay-in-Multiplayer (Link: 2017)

- [2] Schell, Jesse. 2008. The Art of Game Design A Book of Lenses
- [3] Rogers, Scott. 2010. Level Up!: The Guide to Great Video Game Design

## **Images:**

[4] GDC Vault: [1]



## [5] GDC Vault: [1]

