

Video Evaluation of Two Different Dancing Games

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Purpose of Evaluation

In order to compare two dancing games, *Just Dance* and *Dance Central*, we use a set of variables as coding scheme to analyse the players' video. In this evaluation, we are answering the following questions:

What is the social experience of playing each game, and how do they differ? What design decisions do you think lead to these different social experiences? Why so?

Coding Scheme

We are focused on emphasizing the difference between them. As we observe, the social interactions between the spectators and the players are much different. In order to analyse it, we design 4 momentary variables to contrast the difference.

Spectators' gazes drawn from the screen to players, identified by at least 3 spectators turning their heads off the screen towards the players within 5 continuous seconds.

We record the times it happens during the game play, in order to compare the social relationships between spectators and players, by analysing how much the spectators are aware of players.

Spectators helping players, identified by spectators tell the player how to form the pose right or gives hints about the information on the screen.

We record the times it happens in order to analyse the interactions between the players and the spectators, how the spectators get agency in group play. In this sense, the group play cooperatively together, which is the purpose of having this variable.

Spectators calling out players' names, identified by spectators call the players' names or the players' avatars (e.g. "Red") directly.

We record the times it happens in order to analyse how the spectators feel excited about the players' playing and care about the results. It is also individual interaction between a player

and a spectator in group play, which is a characteristic of social experience.

Laughter or excitement together, identified by spectators and players laugh or talk loudly on a game event's happening.

We record the times it happens in order to analyse how the group enjoy games together, how the game make design decisions for group play, and specifically for spectating.

Results

Spectators' gazes drawn from the screen to players

We use the overall times of at least three spectators turn their sights from the screen to the players as our indicator towards this variable. And the data are listed as follow:

Just Dance	22
Dance Central	10

The data have shown that in Just Dance, spectators turn their sights much often than they do in Dance Central.

When we look at the design differences between these two games, one of the possible reasons leads to this phenomenon is that in Dance Central, players' behavior are much more directly projected onto the screen. For example in the Snap Mode, whether a player successfully copy the motion can be tell quickly from whether the motion picture jump to the next one. By having many of these instant player behavior projection and feedback, spectators of Dance Central need not to turn their heads frequently between the screen and the players to check the synchronization between the player's motion and the ideal motion, which is exactly the essence of dancing games.

Spectators helping players

We use the overall times of spectators helping the players by making significant verbal or motional signals as the indicator towards this variable. And the data are listed as follow:

Just Dance	5
Dance Central	11

The data have shown that in Dance Central, spectators help the players much more than they do in Just Dance.

There are two main reasons we consider as the leading factors towards this result. One of them is Dance Central is a game with pausing points, time points that the game process pauses a little bit to provide a room for the players to correct their inputs. On the other hand, Just Dance follows a totally different path while there is no pausing points at all: there is no room for the players to correct their inputs after they realize they had made a wrong one. In that case, the help from the spectators is meaningless in most of the cases. There are also some interesting designs in which the players must read the information of the screen quickly. The spectators can get involved by reading the screen and telling players. For example, the spectators tell the players the current movement's name in one mode.

The second reason is that Dance Central, from theme to winning condition to some of the game mechanics, is a game encouraging competition. Also some of the spectators are players as long as it's a team based game, so all of those create a strong competitive atmosphere between teams hence players and spectators have a strong motivation of helping the playing player. The opposite example is exactly Just Dance, while spectators in that game are never part of the players, and there is no team based mechanic to group the people.

Spectators calling out players' names

We use the overall times of spectators calling out one of the players' name as the indicator towards this variable. And the data are listed as follow:

Just Dance	10
Dance Central	19

The data have shown that in Dance Central, spectators call out players' name much more often than they do in Just Dance.

In our thoughts, the biggest reason that creates this gap is that Dance Central relatively generates more feedback information to tell the spectators the performance of an individual player, or to say, how good or how bad s/he plays. Compared with Just Dance which only has a simple interface demonstrating the performance and focus more on visual effects, Dance Central provides all kinds of feedbacks not only on UI but also on game mechanics to show the current situation of both players. That creates a clear and instant image of each player for the spectators so they can easily tell the differences between players, and that provides the basis of changing their focus from the whole group to an individual.

Another important reason is that Dance Central, from the designing perspective, has the

capacity to represent player style, while Just Dance can hardly do so. In Just Dance, all what players can do is simply follow the character's moves on the screen and there is no space for personal creativity. Yet in Dance Central, there are several game modes which take personal creativity as their fundamental basis. When there is creativity in the game, there is style, and when there is style, there is difference. Like it was mentioned in the last paragraph, difference between players will lead to the spectators' motivation of changing the focus from the whole group to an individual. So that's the second reason why Dance Central has much more calling names than Just Dance has.

Laughter or excitement together

We use the overall times of spectators' making laugh and excitement - basically the high decibel moments - as the indicator towards this variable. And the data are listed follow:

Just Dance	13
Dance Central	31

The data have shown that spectators make high decibel moments in Dance Central much more than they do in Just Dance.

The main reason that make it happens is the interaction between players. Just Dance is a very regular score attacking dancing game while all the players are following the character on the screen and try to perfectly copy its motion, and there is very few interaction between players in Just Dance. During the playtest, only one song has a big scale of players interaction and the others are just simply mimicking. When it comes to Dance Central, we can see a dancing game designed mainly base on player interaction. There is the competitive mode, which creates conflict between two player; There is the team mode, which increases the number of people being involved into the competitive conflict so that a larger scale of interaction comes into play; And there are all kinds of mechanics in each single game mode to keep the interaction level on a high level. The consistent and high level interaction is the reason why so many emotional peaks are generated by spectators and players.

Conclusion

According to the results we get, the social experience among spectators and players in *Dance Central* is richer than that in *Just Dance*. As discussed above, the games are designed differently though they are both dancing games, and thus the dynamics of games are different.

Just Dance has nice graphics, and it is quite engaging when the player plays it individually. However, it is not a great game to watch compared with *Dance Central*. The players' figures

are shown clearly in *Dance Central* while in *Just Dance* they are not. As a result, the experience of spectators are different. In *Just Dance*, the spectators have to turn head between the screen and the players, and obviously they tend to watch the beautiful screen more while in *Dance Central*, the spectators are always watching the players' performance. For the latter, it builds a good relationship between spectators and players.

A big difference is that *Dance Central* is a way more competitive game, in which spectators are concerning more about the results. The most impressive point of the design tendency is that *Dance Central* emphasizes player style so much, which makes the spectators pay attention to players or one player's performance. For example, in one mode the player can choose whatever move he/she wants to challenge the other. In *Dance Central*, there are many instances that a spectator calls a player's name, which also depends on how interesting the player's performance is. There are lots of emotional peaks made by players accidental or intentional performance.

Dance Central also make team competitions to get more players involved at the same time. Although some players are not playing and watching as a spectator, they are still into the game, which makes the interactions between players and spectators happen more easily.

In *Dance Central*, there are also many pausing points, in which the spectators can have time to help the players. In this way, the spectator could get agency in game play, and the whole group could play and enjoy the game together.

It can be seen that *Dance Central* makes design decisions specifically for group playing and watching. As a result, the social interactions in *Dance Central* are much richer than *Just Dance*.

Appendix. Variable Time Records

	Just Dance	Dance Central
At least three spectators watch players in a period of time	10:37:33, 10:37:40, 10:37:49, 10:38:00, 10:42:05, 10:43:43, 10:44:19, 10:45:04, 10:46:42, 10:46:54, 10:47:00, 10:47:10 10:47:44, 10:47:50, 10:48:44, 10:49:27, 10:50:05, 10:50:22,	11:02:02, 11:04:58, 11:13:22, 11:13:58, 11:14:12, 11:15:11, 11:17:58, 11:20:49, 11:23:20, 11:24:34,

	10:51:57, 10:53:32, 10:53:42, 10:54:42,	
Spectators help players	10:38:43, 10:38:56, 10:39:13, 10:53:35, 10:54:54,	11:08:56, 11:11:23, 11:15:29, 11:15:39, 11:17:30, 11:17:52, 11:18:18, 11:20:00, 11:20:08, 11:23:21, 11:24:54,
Spectators call players' name	10:38:37, 10:43:22, 10:46:43, 10:47:55, 10:48:11, 10:48:26, 10:48:29, 10:50:03, 10:53:42, 10:54:48,	11:02:07, 11:02:47, 11:04:17, 11:04:32, 11:04:43, 11:05:11, 11:07:32, 11:08:40, 11:11:26, 11:11:30, 11:12:10, 11:13:45, 11:14:27, 11:15:02, 11:15:05, 11:22:48, 11:22:52, 11:24:11, 11:24:12,
Excitement together	10:37:23, 10:39:43, 10:41:49, 10:45:22, 10:47:51, 10:49:27, 10:51:57, 10:52:25, 10:52:39, 10:52:53, 10:53:27, 10:54:36, 10:54:42,	11:02:47, 11:03:56, 11:05:05, 11:05:18, 11:07:36, 11:08:03, 11:08:39, 11:09:15, 11:11:37, 11:13:25, 11:13:40, 11:13:49, 11:14:01, 11:14:08, 11:14:55, 11:15:11, 11:15:23, 11:15:53, 11:17:38, 11:17:48, 11:18:18, 11:18:32, 11:21:59, 11:22:38, 11:23:15, 11:23:31, 11:24:11, 11:24:30, 11:24:46, 11:24:49, 11:25:29,