Innovation is one of the key features of successful games. It is not just video games that require a splash of creativity but even tabletop games, which led to creating wacky games like Gloom: the see-through cards, Lark lamp: where the light patterns create the board, etc. At the 2019 GDC, Jenn Sandercock speaks about innovative tabletop games and how she makes them. According to her, adding constraints is the most crucial step in innovating games. This can be financial, aesthetic, themes and story, physiological and audience, gameplay mechanics and goals, physical, or technological constraints. For all her games, her constraint is to foster friendship, curiosity, and challenge. She then illustrates how she used them in designing her "Edible game," where the core mechanic is eating.

She summarizes the steps to creating such innovative games: find the constraint, apply them to create a new game, add, remove or adjust them to make another game in the series or to finish the design, and finally use them to practice, experiment, and eventually get better at creating more out-of-the-box games. For the Edible game, the constraints she used were: the player must be able to eat the food to play, the food should not go bad, the food must be easy to make, the recipes should be explainable in the cookbook, does not need unique ingredients and tools and doesn't require saliva sharing

Constraints are not the only things that help the creative process. Our bodies are also a medium of innovation. Virtual Reality is an example where the muscle spindles help it be as effective as possible. At the 2016 VRDC, Omer Shapira, Sr VR Artist at Nvidia, speaks about his VR experience. He explains it by talking about three main things: focus handoff, proprioception, and dead reckoning. Focus handoff is the process of forming a path of recovery, creating a distraction, doing the action, and finally continuing as nothing happened. He elaborates this through his experience creating a VR world of the Merril trail. The designers used this mechanism to allow the players to turn a lot without them realizing it. They did this by creating smoke covers to make sure the visual field was gone, adding rumbling to the floor to make the player lose their orientation, and finally adding a wind machine to change the direction and allow the user to accept the new orientation. This helped them achieve a VR turn of 50 degrees, where in actuality, the player turned 180 degrees.

Proprioception or awareness of the position and movement of the body heightens the VR experience. Shapira elaborates this using Nvidia's VR funhouse, where at the programmers allow the player playing archery to access the quiver when they put their hand behind their head. Finally, dead reckoning is the process by which the designer effectively designs the virtual world by being blindfolded.

From both the talks, we see how different factors help create unique games and game experiences. It is not just the external factors that have been rigged to create such games, but we have also ingeniously leveraged the human body's features to create innovative games. A game that comes to mind when talking about innovation is Dance Dance Revolution. When it was released back in 1998, it took the whole world by surprise and paved the way for the music game genre. The game allowed the players to get on a dance platform to bust a move instead of using the traditional thumb pads. This also gave the player a more immersive experience. Creativity and innovation are essential features of game development. With the massive number of games being released each year, only unique games stand out. And without innovation of any sort, the games industry would stagnate and eventually become dull and boring.

1. Is applying constraints always the best thing to do, since it makes your market very niche. In Jenn's example, one of her games, called Veggie land, is created to make the children eat vegetables. While this may be played once or twice, I don't imagine the children would play this often because the result could seem like a punishment to them. This surely takes away the fun of the game. Is it recommended to use such constraints, especially since the market is very niche?

2. VR has been out for a long time now, and while it is fascinating, it has a large number of side effects. Is it okay innovating something that has hazardous side effects?

 