Interactive comment on “Volcanoes in video games: The portrayal of volcanoes in Commercial-Off-The-Shelf (COTS) video games and their learning potential” by Edward George McGowan and Jazmin Paris Scarlett

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The manuscript documents the appearance of volcanoes in commercial off-the-shelf video games and considers how the accuracy of their portrayal may impact the learning and perception, about volcanoes, of those playing the games. This is a very well written and interesting manuscript which raises important questions and considerations. I feel that it should be published with some minor corrections as suggested below.

The analysis seems concentrated predominantly on the styles of Role-Playing Games
(RPG) and Action-Adventure which may necessarily preclude the full suite of volcano representation across other game types. Perhaps I missed it but I could not see a justification of why these types of games were selected as oppose to others. Or, also, perhaps I am doing a disservice to the spectrum of game styles chosen as I simply don’t know them all. From my, limited experience, of commercial gaming I have noted volcanoes in several strategy and simulation games.

A recent example that could be explored is the use of natural disasters, such as volcanoes, in the simulation game by Limbic Entertainment - ‘Tropico 6’ which sees players act as the President (or dictator – depending on the style of governance chosen) of a series of small fictional Caribbean type islands. In fact, all of the Tropico franchise games contain volcanoes in the various islands/levels but, in my opinion, tropico 6 provides the most realistic representations. In the level called ‘Penultimo of the Caribbean’ the player constructs their society of an archipelago of islands of which is clearly modelled on ‘White island’ volcano in New Zealand’ (Image attached – no. 1). The island exhibits steaming fumaroles and murky coloured water offshore. The level called ‘Pirate King’ hosts what appears to be a volcano with a persistent lava lake (image attached – no. 2). The level ‘Acts of god’ is based entirely around the occurrence of natural disasters with a ‘Krakatau’ style volcano called ‘Mount Kraken’ in the centre of a series of playable islands (image attached – no. 3,4 and 5). In this ‘level’ the player must manage their island whilst consistently overcoming the destruction resulting from volcanic eruptions. This adds another dimension to the understanding or interaction of volcanoes in games being the socio-economic situation that contributes to disasters. It is an interesting parallel that depending on how well the player governs their island will ultimately dictate how disastrous the volcanic consequences are. I think this is apt since it volcanic risk is comprised both of the hazard and the vulnerability of society. The challenge in the game is then, at least partly, to build resilient communities.

Another important commercial game in the action-adventure genre that featured volcanoes, which was not discussed, was one of the first releases on the Nintendo Wii
console, namely, Disaster: Day of Crisis. It was a while since I played the game but from memory the first level and opening scenes were set on the slopes of an erupting volcano.

Of course, it is very likely that there are many more games that contain volcanoes and I wouldn’t expect the authors to discuss or play them all as there would be a significant cost involved in purchasing them all presumably, but I think some justification of why those selected were chosen and others not, and perhaps a discussion of the historical importance of volcanoes in games could be valuable. When for example did volcanoes first appear in games and has their illustration or action changed with time, and how?

Minor comment:

Paragraph 335

Please give the full names of the societies along with the abbreviations, i.e., American Geophysical Union (AGU).

Regards, John Browning

Fig. 1.
Fig. 3.
Fig. 4.