Sankofa Hunter (temporary title) **by Wolf Daddy**

Related stuff: Vibrating vests and haptic projects
https://www.youtube.com/watch?v=0KzB-GYIKsk
https://hackaday.io/project/1962-3d-haptic-vest-for-visually-impaired-and-gamers
https://www.hackster.io/hipster/hipsense-6ac353

My game is on the experimentation on haptic (sense of touch) sensations for non-verbal player-to-player communication. I became vastly interested in the topic of sensory substitution, in the absence of one sense e.g. sight, the brain can take in new data about an environment through the remaining senses and develop a new way of seeing. Many research projects have implemented some version of haptic technology to guide visually impaired persons. Sight is a critical function for trust, as the proverbial saying goes "seeing is believing". This inspired me to think of a treasure-hunt like game whereby teams of 2 have to find the treasure within a certain area.

A team is comprised of two players, player 1: time hunter and player 2: time controller. Using a series of messages that are converted into vibrations, player 2 has to lead player 1 to the right location to find the treasure. This is done through two main technologies. The first is the Time Vest, a networked vest fitted with arrays of vibration motors and an arduino microcontroller. The array of vibration motors correspond to different movements a player can make. For instance a vibration on the left side of the vest might suggest a need to move left. (SEE concept drawing in slides)

The second technology is called the Time Console. This is an interface that allows the second player to send movement instructions to the first player. The Time Console is fitted with a map that allows the second player to see where player 1 is and what movements will be necessary to get to the goal point. (SEE concept drawing in slides)

The character of the game is mobile, I would like for it to be playable in many different locations in different countries. I am especially interested for the game to become a bridging force between two opposing realities, on a player-location level whereby the players know do not know much about the area they are in and the game can be a way of playfully exploring it. Or on a player-to-player level whereby the two players (strangers) themselves have opposing differences, for instance one player may be an old person and the other a young person. People with different political views are also a potential target, especially those with far right and left political affiliations. The game can also be a bridging force between two teams, who can compete to find the treasure in the shortest time possible. In order for the game to work there are three essential layers which I will now explain.

The game is comprised of 3 essential components, namely:

1. **Narrative layer**: This describes the narrative/speculative fiction that provides the players with their initial motivation to play. For instance. "You are an elite super agent from the future, codename Bishop. Your mission is to travel back to the year 1945 to stop Donald Trump's parents from meeting. Because of the very sensitive time-space continuum you will have very little support from the agency, this is in order to stop you from changing the past too much. The only support you will get will come in the form of vibrations. Ripples across space and time sent from an ally. These vibrations are meant to guide you to find a special item that will positively alter the course of history. The time field that allows you to wander the past is only open for a short period of time. You must find the special item before time runs out. To make matters more difficult, an opposition organisation from the future called Son's of Odin have also sent one of their own agents to ensure that Trump's parent's meet by finding the special item first. You must complete your mission before the Son's of Odin". The narrative Layer is fungible, which means that different game facilitators can substitute the narrative with their own in order to make exploring the mission area more exciting.

2. **Game mechanics:** The game works like a treasure hunt game. Teams must guide each other to the special item before time runs out. In order to be effective, one team member must trust and correctly interpret the instructions sent by the second team member because they are not allowed to communicate verbally. Only the time controller knows the location of the special item since they live in the future.

3. **Technology:** The technology will be a wearable or tangible item such as a haptic vest that vibrates in different positions when worn. The vest might be made up of an array of vibration motors connected to an arduino with a gps module and a gsm/gps transmitter. The vest will send this information (position) to an interface that shows the position of the vest on a map. This information will be presented on a time console and used by a second player who will send different instructions (vibrations) to the vest to guide the vest wearer go to find the special item.

STEPS TO PLAY (FACILITATOR):

1. Select play area that is within the technical constraints of the technologies
2. Hide special item
3. Brief players on how the game works

STEPS TO PLAY (Time hunter):

1. Wear the time vest, await your instructions
2. Move according to your haptic instructions, pay attention to the different vibrations and where they are on your body

3. Find the special item before you run of time and the time field closes

STEPS TO PLAY (Time operator):

1. Find position of time hunter on the map
2. Guide player to the special item

PLAY-TEST stuff

The most critical thing I want to resolve is; what is the level of difficulty of guiding someone across a 100m2 area using only vibrations?

Another critical thing would be to determine very early what the fun parts of the experience are and to enhance those parts with the technology?

What are the range of expressions that players can discern from vibrations, how do they help with way-finding?

One way to play test this without achieving the sophisticated remote arduino-to-arduino connection is to have player 1 FaceTime player 2 while player 2 sends voices the movement instructions