Volkerwanderung: going interactive

Harper Pollock·Thursday, August 10, 2017

The reason to write this document is that we have a chance to publish the very first mission(1) in an interactive form. So at the same time I will try to address the big picture, considering this step the beginning of the huge gaming/storytelling ecosystem and describe the first mission, so we can actually make this step.

As usual, this document is intended as a seed for discussion among the team members.

The global picture

If we succeed, Volkerwanderung will become an ecosystem of storytelling games, most probably made in many different conventions and and technologies. To balance diversity and integrity, from the very beginning we need to think what is “global” and what “local”.

We are not really inventing anything new. Just applying, perhaps in a little bit more systematic way, principles already present elsewhere. Let me list the parameters I believe we should keep “global”.

- Player/character identity and continuity (whether we allow player to maintain one or more characters).
- Economic standing (artifacts, money, prizes, xp, reputation etc.)
- Communications channels
- User-provided content.

This set of parameters would be queried/updated by mission modules via an API. We will need to keep it safe, considering users’ privacy, anonymity, forward security. We need to keep users’ money (in-game cryptocoin) also secure. The “global” layer, which we luckily do not need to develop at once, will in fact become a social network system, with strong internal economy and focus on security of users. Do we know any tool/framework that we could use for that, or is it again “yet to be built”?

<table>
<tr><th colspan="3">Global level</th></tr>
<tr><td rowspan="2">Global user-specific data:
pseudonymous identity/continuity
global assets (money, reputation, content)
global communication channel</td><td colspan="2">Story level</td></tr>
<tr><td>character identity/continuity
story assets
story communications</td><td>Mission level
character status
mission status
mission assets
mission communications</td></tr>
</table>

There is a lot of specific aspects of this model to be discussed (like possible use of blockchain ledger and zero-knowledge security to keep it distributed). For now we probably need only to keep general model in mind.

Ideally, we will be able to develop a public API and a set of guidelines for independent developers so everyone would be able to tell their stories, rooted in the Volkerwanderung universe.

The local picture

Now, let's get back to here and now. The first mission that goes interactive is "Turkey to Lesvos". You will find the boardgame version described here. In brief, we have two sides here:

- Player B is driving a boat full of refugees through the stretch of sea between Turkey and the Greek island of Lesvos. Their goal is to deliver the boat to the landing spot, with at least one survivor on board.
- Player A is putting various obstacles in front of the boat, effectively trying to make all people on board die at sea (thus the boat destroyed).

The board version has two modes: two-layer mode assumes that the obstacles are put step by step, as players mutually influence their choices, trying to outguess each other. Single player mode assumes that all obstacles are located at one, randomly (and unknowingly to the player). The player then moves the boat and tries to manage through the map, loosing as little people as possible.

Going interactive

Now, if we think about interactive game, we can build on certain types that are already well established and known. On the other hand, the dynamics of the game makes us re-define the goals. The game ends when X boats gets destroyed or Y refugees land on the island, whichever comes first. Players A or B win respectively.
If the user selects "Player A", they will play an almost typical tower defense game. It is a well-known template. The important modification is that we have a multiple route map, which makes allocation of obstacles much harder. Having pre-defined amount of obstacles, each rendering certain amount of damage to the boat and to the people, they have to allocate them throughout the map to stop the migration. We may allow certain "boosters", like a "towing turtle" that can move an obstacle from one spot to another.
The algorithm running the boat will have to take care of the following parameters:

- Setting the course according to current configuration of the obstacles(2).
- Balancing between amount of people on board and amount of protection (parameter inherited from "luck" defined in the board version, can be depicted as speed – the more people on board, the slower the boat and vice-versa).
- Managing limited resources: we may to limit something. Either the overall number of refugees or a number of boats available. Or we may decide that – if run by the program – we have unlimited supply of both.

If the user selects "Player B", situation is less standard. We are in the convention similar to interactive mine sweeper, pretty much replicating he board game version (see the description). The major challenge is to find an algorithm to manage obstacles' allocation, so it will be interactive. Here, as it is in a board game, we drop the information completeness, as it would make the game way too easy for the human side.

Future Player vs. Player implementation

To implement player vs. player functionality we will need at least rudimentary global layer, allowing people to register and advertise their will to play. When we get to that point, we will be

able to run several versions of each game, as A/B test for playability. This will be the moment of truth for the whole project: will we be able to grab attention of the players and make them involved in the process of creation and improvement of the game.

---

(1) “The Balkan Trail: Turkey to Lesvos”, pre-prototyped as a boardgame. Thanks to Igor’s contribution as programmer we will have also made as the first interactive prototype.

(2) I assume the game in this configuration to be “information complete”, so all obstacles on the map and the status of all boats are known to both sides.