Designing serious games is always fundamentally challenging as they combine “serious” and “entertaining” goals: Which game mechanics are rewarding enough to motivate the players to engage in an applied game? \[1, 2\] “Stair Quest” game design process was accomplished by a small game design team at the Zürich University of the Arts (ZHdK) \[3, 4\] in collaboration with the research project „Hong Kong Stairs Archive“ (HKSA) \[5\]. In the following we will present and discuss the impact of game-mechanical, narratological and technical aspects on the game design process.

One of the goals of “Stair Quest” was to lead to an exhibition of the HKSA in May 2017 in Hong Kong \[6\], where a variety of artifacts and research insights on the stair culture topic would be displayed. Beside generating awareness for the exhibition, the game also aimed, from the “serious” game perspective, at inviting users to contribute to the research project with creative player content and research-related data for the +3000 stairs.

While the macro game mechanics would have the players repeatedly visit numerous stairs on Hong Kong island with their smartphones, the micro game mechanics were designated to be: adding stair related personal photos and stories, confirming/denying the existence of handrails, counting steps and defining the specific type of the 12 possible stair categories. To add a “fun” factor, we decided to allow the most frequent visitor to a certain stair to be its “Stair Master” who could name the stair. For all of these actions players would get points, allowing them to compare their individual progress with others in the leaderboard. While these parameters had been set quite easily, the motivational design was still unclear.

Especially, with stairs being a mere passing-by location, certainly not an exciting place to visit at first-hand: For what reasons would players actually want to do all that?

To meet these challenges, we brought in a defining mythological narrative that turned the players into “Stair Guardian”. By “reviving” stairs, they would help set free the soul of the long forgotten protective dragon of Hong Kong – which had died thousands of years ago in an epic fight. Its shattered body had rained down on the city of Hong Kong, and the pieces became stairs over time (also mentioned in the trailer \[3\]).

As a second incentive we brought in a collaborative game mechanic and connected it to the level system: Even though we kept the leaderboard and the individual ranking, several players would be needed to interact on the same stair in order to complete it. Also, points (now: Dragon Dust) had
to be accumulated by a number of players in order to progress and to level up together. The game progression was – tying together narrative and game mechanics – visualized by the image of a Dragon which got puzzled together in 8 levels (8 being a happy number in Chinese culture).

Technically, building an urban game for Hong Kong also posed a number of challenges: we initially wanted to build the game as an app, but the risks involved with the slow release process on app stores as well as most users’ inertia when it comes to downloading yet another app, led us to build this game as a browser application. This, in turn, brought about rather severe graphical limitations and complexity inherent to cross-browser development. In retrospect, we question whether it was the right decision to switch from an app- to a browser-centric approach.

Since the game was developed off-site, finding realistic test conditions was another challenge: Hong Kong, with its many skyscrapers and narrow streets, severely impacts the precision of GPS location services with precision dropping as low as 300m. Combined with a high stair density, in the play tests players could often not determine which stair they were visiting. Adding stair polygons to show the stair exact dimensions somewhat eased that issue.

All in all, the requirements of the research project in combination with the technical constraints posed a very challenging game design frame which we met as smartly and elegantly as possible.

REFERENCES


[4] For previous urban game projects of the team in Hong Kong in 2006 see: www.connectingspaces.ch/projects/lab/urban-gaming

[5] Hong Kong Stairs Archive: www.stairculture.com