Future-Ready Society Conference Series 2023: Panel Discussion on Vibrant Cities and Stronger Communities through Real-World Game Design

By Ruby Thiagarajan

The Future-Ready Society Conference Series

The Future-Ready Society Conference Series is a partnership between the Institute of Policy Studies (IPS), Lee Kuan Yew Centre for Innovative Cities and Tote Board. As part of this series, panel discussions serve to introduce novel ideas to spark dialogue across the people, private and public sectors. These discussions are a prelude to the annual flagship Future-Ready Society conference, which aims to explore future trends, emerging issues and untapped opportunities along with insightful responses and solutions to address pressing societal challenges.

On 28 September 2023, the partnership held its final panel of the year titled "Vibrant Cities and Stronger Communities Through Real-World Game Design", moderated by Dr Justin Lee, Senior Research Fellow and Head of Policy Lab at IPS. Dr Benjamin Stokes, the featured speaker, shared his expertise in real-world game design and spoke about the potential of games being used in public and social services.[1]

Introduction to Real World Games

Dr Stokes referred to his book, *Locally Played*, which describes a number of different examples that show how games can make cities and communities stronger. In his view, the tools of game design will become increasingly democratised and accessible to people who may not have advanced engineering or technical skills. He introduced his work at the Playful City Lab and the two strands to understanding stronger places: "playful tactics" (the science of game-based engagement) and "community storytelling" (communication infrastructure theory). He also introduced his organisation Games For Change, a global hub for the games social movement. Over the past 20 years, there has been a huge change in how the government, private and non-profit sectors have come to recognise games as serious tools. In his view, real world games offer opportunities for communities and social services to connect.

He argued that communities and social services should not be limited to engaging with game design through digital technology and gamer culture. He gave the example of Crown Fountain in Chicago, a public art project. To him, the fountain encourages playfulness in the public

[1] For more details on the examples shared during this panel, refer to Stokes Benjamin, *Locally Played : Real-World Games for Stronger Places and Communities* (MIT Press, 2020).

space through its use of game mechanics. For example, the fountain shoots an unpredictable amount of water out each time, creating an element of surprise. The way that the fountain was built allows for children to rush forward and get close to the water. In response to the unpredictability of its water flow, children have invented a challenge for themselves — i.e., get close to the water without getting wet — that turns interacting with the fountain into a game. Crucially, this challenge is not spelled out by adults. Instead, the design encouraged people to set their own challenges in response to the built environment.

Dr Stokes also suggested that public space projects that engage with play need not be multi-million dollar undertakings. He gave the example of Mapatón in Mexico City, a game that was made in order to help map the many informal bus services in the city. Here, one example of what games can do is to help collect data. Users were awarded points for miles taken on these bus services. This allowed the city to map 40 per cent of the informal routes in a manner of weeks. However, they also discovered that the data collected was mostly from the wealthier neighbourhoods in the city. The city addressed this asymmetry by shifting incentives to reward users for travelling routes that took them to neighbourhoods with less connectivity. This helped foster new social mixing between residents of different neighbourhoods who may not have otherwise crossed paths. The data generated from this game led to a design session for an app created by the city to map these routes.

Dr Stokes shared two principles for games like Mapatón. First, they are embedded in public space (libraries, urban furniture like bus stops and benches); second, they try to strengthen the place. These games are not a form of escape from everyday life but instead help players connect more deeply with their settings. They are not alternate reality games, but instead connect players with the existing reality more completely. This can connect players to local identities, local businesses and local histories.

He introduced one more example from Mexico City — a design project done in collaboration with the MIT Media Lab and the Laboratorio para la Ciudad (Laboratory for the City), Mexico City's experimental office for civic innovation and urban creativity. They installed pressure sensors at the fountain at the front of Plaza Tlaxcoaque. Passers-by were able to jump on these pressure pads to programme the fountain and make the jets appear in different orders. He argued that it was important that this project allowed people to engage in a larger way than just outside of their individual mobile phones. Cities have public spaces as their feedback loop and these games need not be limited to digital displays.

Game-based activities

Dr Stokes provided the audience with a definition of game-based activities structure participation through the following:

1. Playful challenges (playful with a moderate amount of difficulty)

2. Feedback loops (users see the effects of their actions immediately)

3. Uncertain outcomes (results are not always predictable)

In Dr Stokes's view, these elements are not often present in designing social services. Social services are often serious and have no elements of playfulness. He acknowledged that it is a

balancing act to engage with serious content and social connection, but he also believed there are many opportunities for social service design to introduce play. He also pointed to a problem with feedback loops in social services. For example, volunteers may not receive updates on the impact of their contributions for a long time. However, the more immediately somebody is shown the consequences of their actions, the more satisfying it is and the more likely they are to return. Lastly, he suggested sacrificing the desire for total control and predictability of outcomes to allow for more engagement in the service design. He also stated that it was not necessary for all three elements to be present in every service. A game-based activity, instead of a full game, is often sufficient to enjoy some of the benefits of play and games.

Four Roads to Community Strength

Dr Stokes explained four principles for strengthening communities and shared case studies of real-world game design that exemplified these principles:

1. Building social ties (human networks)

2. Connecting to the group (shared identity, beliefs, sense of place)

3. Amplifying organisations (group life and representation)

4. Bridging flows of news and information (digital and physical)

He turned his attention to Pokémon Go, a mobile game that uses real-world maps as the game's background using augmented reality technology. Players walk around their neighbourhoods in real life to catch Pokémon on their mobile devices, among other gameplay activities. He shared some examples of the initiatives that cities have created to harness this energy of the game. In San Jose, California, he gave the example of Viva Calle SJ, an open streets programme that had a regular audience even before the game was integrated. The city estimates that 10,000 people joined Viva Calle SJ after the introduction of Pokémon Go. The boost of players led to half a million dollars of additional economic spending in the city on that day. Economic development is one way to measure the success and impact of such programmes. Another way is looking at the meaning that players are creating in their neighbourhoods and cities. Pokémon Go encouraged players taking part in Viva Calle SJ to explore and spend time in new parts of the city. Gamification also helped to bring new demographics and diverse groups into the existing public programme. Not only were the participants on that day more representative of the ethnic makeup of the city, people travelled from out of state and overseas to participate as well.

Dr Stokes described two other city-wide projects that utilised Pokémon Go: A Boston programme that gave users the chance to write content for the game (users can add local information to landmarks using the game's interface) and a programme by the Free Library of Philadelphia that offered group walks to play the game together or "Pokécrawls". Both public programmes used Pokémon Go as a hook to get their audiences to interact with local history and architecture. They also introduced players to local organisations, like a mural preservation organisation in Philadelphia, which in turn helps to strengthen civil society bonds. He also underscored the importance of having accessible uses of games that can work across the digital divide. For example, the Philadelphia programme had paper maps on hand for

individuals who wanted to participate but did not have or could not play the game. Here, he cautioned against the temptation to develop digital-only game platforms because they can exclude people. Instead, organisations should set a goal to bring people together around feedback loops and choose the tools and infrastructure that would best achieve this engagement.

Highlights from the Question-and-Answer Segment

Question: To what extent can games deeply transform and/or create community relationships?

Dr Stokes referenced urbanist Jane Jacobs in saying that there is a need for multiple uses of public spaces.[2] A lot of cities are already investing in game infrastructure when they build infrastructure like football stadiums. Playing football in a community league can help one get to know other people in the community like parents (in children's leagues) and coaches. He argued that we are already seeing transformative engagements with play, but that the transformation is not instantaneous. People's lives are transformed only if they keep playing the game. Social capital is built when neighbours are brought into contact with people that they would not otherwise meet. Transformative social capital exists when social mixing occurs within league structures instead of people playing just within their existing social networks. From an individual's perspective, transformation can also happen through game experiences. Sometimes, exploring is transformative as well. Going on a walk and happening on a street that one has not seen before can also be a transformative experience in the way that we connect to our cities. Game design can take us a little bit out of our everyday in experiencing the built environment of the city.

Question: Sports are quite different from the games that you have given us examples of. Would you say that the key difference is the kind of social mixing that you may not see in a sports league?

Dr Stokes said that the difference is partly in the shift from an inward focus to an outward orientation. With public spaces, like public parks, there is an intention for the space to be used by everybody. That small change has profound consequences. He also mentioned an interest in bringing the digital in as a way to foster an outward focus. He suggested capitalising on technologies like location-based content and the Internet of Things (IoT) to give users access to data that could produce interesting feedback loops and create games that are more outwardly-focused than sports.

Question: Do you feel that games for change have a double pressure to be both engaging and entertaining as well as achieve social good? Does that make them doubly difficult to make?

Dr Stokes agreed that, at first glance, designing games for change might seem almost impossible. He raised the fact that making great commercial games is actually very hard and that most creators do not succeed. However, the good news is that real-world games have different distribution channels and opportunities. The kind of game that a student is excited to play (instead of reading a textbook, for example) is a success for its purpose. It does not need to be as entertaining as a console game or as polished as a digital mass-market game. This

[2] Jacobs Jane. *The Death and Life of Great American Cities*. Random House 1961.

is partly about recognising that when the content fits the situation, for example a context where games are rare, there is a real opportunity to make something that will be really appreciated.

Question: In a time where there is an over saturation of gamification, where a lot of it has very little to do with play but rather just triggers to motivate behaviour, what can game design learn from other synergies like placemaking efforts?

A lot of what is currently happening in the video game space is people learning from the real world or relearning the same lessons, said Dr Stokes. Online games that try to build communities have recognised that they have to listen to the community and that stakeholders matter. Users cannot be forced along a linear path, even with sound design choices, because communities have a sense of what they want for themselves. One of the things that urban planning has been thinking about is how to support participation, so that everyone can participate but not everybody has to all the time. Residents may want to be involved in a planning decision but that might not mean that they want to attend a slew of planning meetings. There are lessons to learn from how representative participation is carried out in urban planning.

Question: What advice do you have for people who have an interest in making real-world games but have no training in game design?

Dr Stokes recommended that interested parties get started by doing something quickly. Young people are all game designers. Children are always playing and creating challenges for themselves and each other. Research suggests that humans learn through play as it is a natural part of childhood. Play has been taken out of adulthood and part of the reason is a hesitation to share power and let people redesign their environment. Game design opens up a creative space where people get to try out different things. As adult institutions are about following directions and rules, they may not encourage uncertainty and fun. Storytellers should think about games that involve storytelling. In his view, game design is something that can be done in so many spaces; what is truly the biggest barrier is the lack of permission to try.

Ruby Thiagarajan is a Research Assistant at the Institute of Policy Studies.

*****

If you have comments or feedback, please email futureready@sutd.edu.sg. Additionally, to stay updated on the latest development of our project, we invite you to visit our website at https://futurereadysociety.sg/ and sign up for our mailing list.