Provocative Approaches to Serious Game Design and Analysis

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OVERVIEW

Small Provoking Games (SPG) are physical or digital serious games that intend to incite reflection, discussion, or a shift in attitude regarding a particular application domain. They are built upon the principles of reflective game design (Khaled 2018) to "produce cognitive and affective challenge" and "emphasise a player's sense of purpose and aim to create exo-transformation (change in attitudes and/or practice outside the game)" (Abbott et al. 2022). SPGs may be stand-alone or integrated into a more structured context such as a serious game jam, in order to provoke discussion and reflection. SPGs challenge the assumption of, and importance placed on 'fun' in serious gaming, focusing more on the 'serious experience' (Mekler et al. 2018), toward the goal of effective reflection and attitude-shifting as opposed to direct learning of content.

This 3 hour workshop intends to contribute to the DiGRA community by: disseminating the notion and design philosophy of small provoking games; inciting interdisciplinary critical discussion on relevant aspects of provoking games including: ontology, methodology and pedagogy; establishing a community of researchers and practitioners that are interested in provoking games; and establish potential avenues for research, collaborations and applications of small provoking games within this community.

PLANNED ACTIVITIES

- **SPG Play Session.** Participants will be broken into small groups and encouraged to play and discuss a provoking game. This activity will provide an affective and intellectual response which underpins the analysis in the rest of the workshop.
- **SPG Reverse-Engineering Task.** In their groups, participants will be encouraged to analyse or 'reverse engineer' the design and intended outcomes of the provoking game. They will be given a framework and appropriate materials to support and guide their analysis. This activity will take advantage of a Triadic Game Design approach (Harteveld 2011) and formal analysis tools such as gameplay loops (Guardiola 2016) and Learning / Game Mechanics cards (Arnab et al. 2015). Additional support will be provided from a domain expert on the application domain of the provoking game (in this instance cybersecurity). This activity will not only deepen partcipants' understanding of the concept of provoking games, it will grant an applied comprehension of how and why these provoking games aim to construct particular reflections in their players.

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- **Discussion.** In their groups, participants will be asked to discuss issues surrounding the design and evaluation of provoking games, using the talking points submitted alongside their application to the workshop as a starting point. The groups will then present an overview of their proposed analyses and evaluation of the example games and open the floor to the rest of the group for further questions or discussion.

OUTCOMES

A publication which summarises the discussions during the workshop, disseminating the current state of provoking games research and avenues for continuing work will be produced as an output of this workshop. Furthermore, the evaluations of the provoking game during the reverse-engineering task will directly feedback into the design of the particular game used during the workshop, as well as others in development.

CALL FOR PARTICIPANTS

Participants are encouraged to provide a short statement including: a short biography, reason(s) for wishing to attend and if possible 2-3: problems, solutions, or general points of discussion for the workshop. Participation is encouraged from individuals working in any area relevant to provoking games including, but not limited: academia, industry or education. Statements, alongside any queries or any potential accessibility issues should be emailed to j.ferguson@gsa.ac.uk.

ORGANIZER BACKGROUND

Jamie Ferguson is a post-doctoral researcher and game developer at the School of Simulation and Visualisation at The Glasgow School of Art. Their background is in Human-Computer Interaction, focusing on auditory and haptic computer interaction applied to cognitively-demanding contexts and assistive technologies. Their current project focuses on the use of game-jams as a tool for cybersecurity serious game co-design.

Daisy Abbott is an interdisciplinary researcher and research developer based in the School of Simulation and Visualisation at The Glasgow School of Art. Daisy's current research focuses on game-based learning, serious games, 3D visualisation, and issues surrounding digital interaction, documentation, preservation, and interpretation in the arts and humanities. In particular, she is investigating the use of games to teach academic and research skills in Higher Education.

Sandy Louchart PhD in computer science (2007), is the head of undergraduate studies at the School of Simulation and Visualisation at the Glasgow School of Art. His research interests are focused on the design, development and application of Serious Games and Interactive Digital Narratives (IDN). Current funded research projects include theoretical and practical applications of both IDNs and serious games to domains related to complexity and cyber-security and the design of co-creation processes in these areas.

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