Bridging the research-development gap

"I must admit I don't read academic papers on games. To be honest, I'm not sure where I'd go to find them if I did"- *Quote from an interview with a developer.* ***LSD28830.***

Keywords: dialogue, knowledge sharing

Who will find this scenario particularly interesting? Developers, Researchers

Description

Game development and social sciences research on games seem to run on parallel tracks, and rarely inform each other. Our understanding of games is weakened by the disconnect that exists between the people who study games and those who create and sell them. While a perfect alignment of priorities between industry and academia may not always be possible, or eve

n desirable, both worlds can benefit from sharing expertise and resources with each other.

In our own research, this disconnect was more acutely felt by developers, who overwhelmingly reported feeling very distant from academic social sciences research on games. They found it difficult to access findings because of unfamiliarity with both the dissemination channels (i.e. scientific papers and academic conferences) and for the technical language used in the contributions themselves. They also reported dissatisfaction with the pace of academic research, seen as too slow in the face of a constantly-changing industry. Lastly, they told us of a mismatch between their priorities and those of researchers: the kind of questions investigated by social research often focus on the educational outcomes of serious games and offer fewer insights that could be used for commercializing entertainment games. On the other hand, the developers interviewed wished for more psychological and humanities research on games, especially on the narrative aspects, and were keenly interested in the discussion of game-related findings in non-academic contexts.

In this scenario, we sketch some possibilities for fostering closer collaboration between academic researchers and entertainment game developers. These forms of collaboration should respect the differences in priorities between the different stakeholders: the goal is finding a way to adapt academic research to a particular context without compromising on its values, and possibly making it more efficient and incisive. On the other hand, the need for developers to gain clear and applicable findings should be understood and taken into consideration.

In the wake of the Open Science Movement, we propose a form of industry-academia collaboration that can generate benefits for both parties and push forward research on entertainment games by embracing the most challenging aspects of studying a widespread, rapidly-changing phenomenon.

Meet Emily, a researcher and Robert, a game developer

Emily is a social psychologist in the US, especially interested in studying factors related to discrimination of outside groups. She believes her studies have applicability to real-

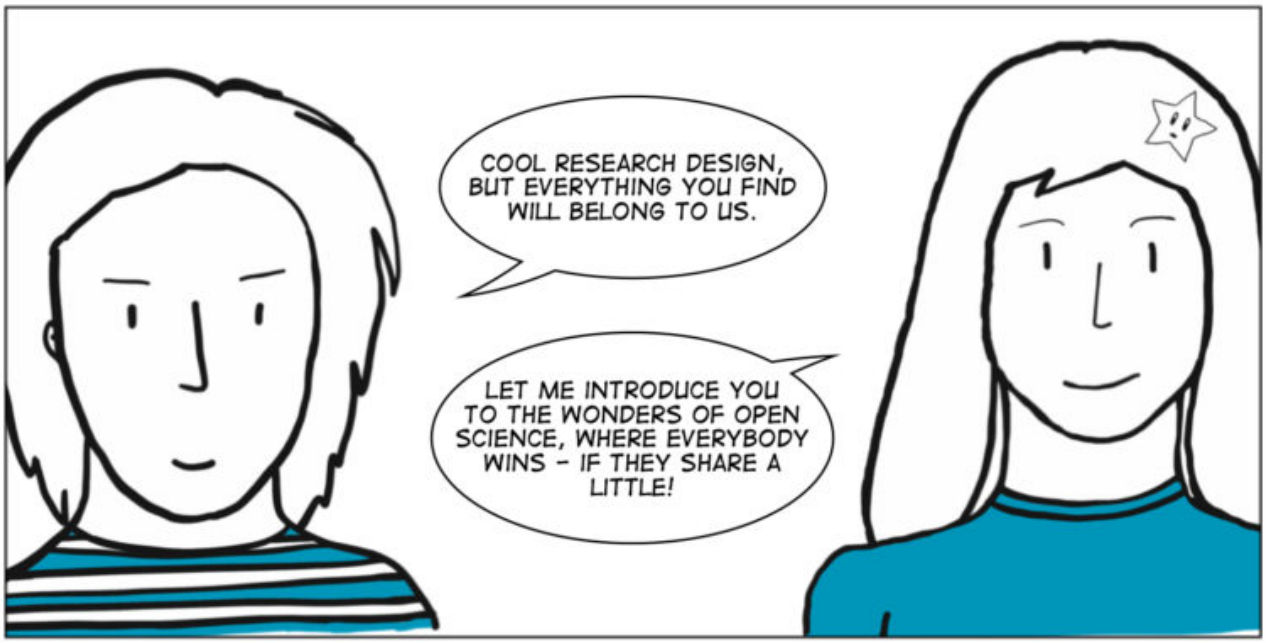
world problems, such as finding ways to dampen factors contributing to racial prejudice.

Her work is mainly based on lab experiments, in which participants are randomly assigned to groups that compete in tackling several tasks. In her studies, she explores how modifying different contextual variables (such as group size and composition, level of competition, difficulty and type of tasks to be completed) influences verbal aggression between different groups. However, she worries that the laboratory setting is negatively impacting the validity of her results. Her participants mainly comprise highly-educated psychology students, who tend to be self-conscious about their behaviour during social science experiments. Additionally, engagement in the tasks to be completed is sometimes low: some of the subjects participate as a personal favour, but find the activities boring and find it difficult to enter in a competitive mindset.

After discussing her concerns with some colleagues, Emily identifies multiplayer games as a possible way to obtain ecological data on group-based competition and discrimination. In a game, participants would be highly engaged in the activity itself. Furthermore, since many players conceptualize games as a 'free space' in which they can behave naturally, they are less likely to restrain themselves for social concerns. However, in order to obtain the data she needs, Emily has to have access to the game code itself.

Emily contacts Robert, who works for a game company that developed a Multiplayer Online Battle Arena (MOBA), proposing a partnership between the company and her university. They are a large company and have some capacity for investigating new approaches to improving their game without interrupting their core business model and production cycles, a possibility that a smaller company is unlikely to have. While discussing the proposition with the developers, however, it becomes clear to Emily that Robert expects his company to get something in return for their collaboration. One possibility would be to directly pay for access to the data, but that would take up a significant proportion of Emily's research budget . She proposes instead to offer her expertise and labour in return, by helping design a system for reducing in-game verbal aggression.

Robert is interested in her proposition, because it would help increase player retention in his game. However, he is worried about access to research results, and he informs Emily that the company will want exclusive access to findings obtained through the data. Emily's priority, in contrast, is to disseminate her findings as widely as possible, by publishing them in Open Access papers and presenting them at international conferences.



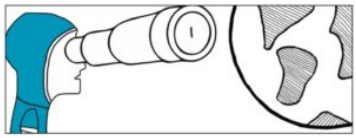
In order to make the collaboration successful, Emily writes and proposes an agreement that goes into great detail about the issues she most cares about: what kind of data should be collected, which of the data and analyses should be made publicly accessible, which kind of findings will be her own intellectual property, and how players are to be informed of the research conducted on their behaviour (and be clearly given the option to opt-out at any time). Robert and his coworkers add their clauses to the agreement, specifying what kind of analyses they expect in return, the terms of Emily's consulting tasks within the company, and what information about the game should be considered confidential.

In a nutshell

The general disconnect between academia and industry is real, and it is particularly acute between those who research video games, and those who develop and sell them.

Researchers and developers can find ways to establish meaningful and mutually beneficial industry-academia collaborations. A degree of negotiation and compromising may be needed, and the terms of the collaboration can be formalised in simple, easily drafted agreements inspired by the principles of Open Science.

Resources



- The Open Science Framework provides free and open source project management support for researchers. As suggested in the scenarios, it can assist developers and academics in establishing a common platform and collaboration.
- Several video game publishers are interested in research, but this is exclusively (narrowly) marketing research.

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