

Girton150 Anniversary Lectures

The Founders' Enterprise Lecture by Herman Narula



Tomorrow, we are all gamers?

Why do we play video games? Why are some video games incredibly successful, while other are just a blip in a fast growing industry (estimated to have generated more than USD 130 billion in 2018)?

As Herman Narula, pointed out, we don't really have the answers to those questions just yet. But the hypothesis he formulated and bet on with Improbable Worlds Limited - the firm he co-founded in 2012, and estimated to be worth USD 1 billion - is that we can find the tools for developers to tackle this huge market through trial and error.

Herman does not believe the main wave of change coming our way is IA, machine learning, or robotics. Video games, are what will change our approach to social interactions and cultural consumption. In his own words, we reached this point when video games stopped being nerdy; after hiding in plain sight for a long time, video games are now recognisably mainstream, and no longer just about kids and adolescents. The majority of us are now video game players, although with different habits and consumption approaches. Growing numbers generate their incomes from gaming, and provide services in worlds that don't exist, or perform art that only exists virtually. It will also become more and more common to pay people to play, inducing them to enrich virtual worlds sufficiently to attract other gamers. We have become over-invested in imaginary contexts, to the stage we don't need virtual reality headset or better technologies to feel physically immersed in those worlds.

The holy grail of understanding social behaviour in virtual worlds

Why are we so vested in those virtual worlds? It's hard to isolate one factor. Narula has one explanation to offer, though. What people do in life is limiting - we

have only one life, and we are naturally inclined to explore other aspects of our identity. I'm a Cambridge academic during the day, and I might well explore my talents as an exotic dancer at night... but only in a virtual world. There are certainly immense and unlimited opportunities for personal growth in online worlds. People can become someone when they feel they are no-one in their real lives. They can build friendships when they feel marginalized, they can exist in ways that are more satisfying. More generally, video games offer us an opportunity to extend our lives, and complement our real life experience, with a parallel virtual one.

Does it mean people behave differently in those online worlds? Certainly. In fact, despite the huge amount of data now available to social scientists to understand behaviours in online world, the dearth of actual research published using this data is striking. I remember seeing Magnus Thor Torfasson, a former Harvard faculty, now at the University of Iceland, presenting his work on norms and social networks, 10 years ago. This work was unique in the sense that it was one of the very first to build on the huge amount data available from online worlds - he had access to data players' interactions and behaviours in the persistent game *Eve Online*¹. This work has not been published yet, and I'm not surprised considering the push back he got: social scientists have had struggles believing anything happening in online worlds tell us something reliable about our behaviour in real life. Still, they believe in the results of psychological experiments analysing the behaviour of students being asked behaviour questions in purely hypothetical scenarios.

Understanding this gap between our online and real life behaviour would give us the opportunity to mine online games data to better understand our social life. Herman Narula, however, does not see this happening in the shorter term. As, we, social scientists, scratch our heads to answer this question, the demand for video games is growing, and the market is in demand of a short term solution to ride the momentum of this major change in cultural consumption.

The Narula hypothesis and the Improbable business model

The idea of working in the video game industry came from Narula's last computer science supervision in Cambridge, where he met Rob Whitehead with whom he

¹ <https://dash.harvard.edu/bitstream/handle/1/9502857/13-019.pdf?sequence=1&isAllowed=y>

co-founded Improbable. They wondered why all of their peers were going into the finance industry, putting computer science to the service of investment banks. Instead, they thought, why not go into the video game industry?

Since then, they have shaped the idea of a “spatial operating system”. What they still don’t know, however, is what games will meet the demands of potential users. Demand is growing at an exponential pace, while at the same time a large majority of games - even the most expensive - fail to find their public. The



incredible success of Fortnite for example, was absolutely unpredictable a priori. Games are extremely difficult to develop; most of them fail.

Developers are neither fast enough to meet demand nor knowledgeable enough to embrace the scope of that demand. Herman compared the scale of the challenge of developing video

games with that involved in the production of porn: there is immense demand, and a wide variety of niches to cater for - every little group of gamers is looking for a specific experience that will adequately satisfy their search for identity, competition, or sometimes violence.

Video games are in-between an art - a cultural product we consume without knowing why it struck a chord with us - and science - a rigorous process of engineering. Narula’s hypothesis is that by providing developers with the brush and the paint - the spatial iOS provided by Improbable, he can will expand their capability to meet the market for video games with infinite versions of virtual worlds catering for the growing and multidimensional demand for video games. Narula’s sobering observation is that virtual worlds are already eclipsing the real thing, and his mission is to enable this imagined space to grow in ways that meet emerging practical, cultural and personal needs.

Thomas Roulet, Official Fellow