Banks, John. "Conclusion: Crafting co-creative culture (in conversation with Will Wright)." *Co-creating Videogames*. London: Bloomsbury Academic, 2013. 161–170. *Bloomsbury Collections*. Web. 26 Apr. 2023. <<http://dx.doi.org/10.5040/9781472544353.0006>>.

Downloaded from Bloomsbury Collections, www.bloomsburycollections.com, 26 April 2023, 09:29 UTC.

Copyright © John Banks 2013. You may share this work for non-commercial purposes only, provided you give attribution to the copyright holder and the publisher, and provide a link to the Creative Commons licence.

Conclusion: Crafting co-creative culture (in conversation with Will Wright)

The research for this book culminated with a visit in June 2009 to Will Wright's (co-founder of Maxis and designer of hit titles such as the *Sim City* series, *The Sims* series and *Spore*) then new company Stupid Fun Club. Describing Stupid Fun Club as an R&D lab for exploring the opportunities and potential of co-creative and cross-platform media, Wright emphasized that he does not have all the answers to the challenges and opportunities of co-creative media and that he is constantly surprised by the inventiveness of the gamers participating in these relationships. This sense of generous uncertainty, an openness to playfully exploring and experimenting with the possibilities and potential of co-creative media, came to the fore in the time that I spent with Wright. He also articulates important conceptual advances that we need to carefully consider. Game designers build theory about co-creative culture just as much as they make games.

After spending some time discussing the origins of his approach to games design and enabling players' creativity through *Sim City*, *The Sims* and *Spore*, Wright commented that his design philosophy understands these games or simulations as 'tools for people to build models within'. He then connected this with the hobbyist impulse to:

You know build things as a tool of self-expression, then you know to show off the outcomes as their performance. I grew up building models as a kid: a tank, an airplane, ship models. I got into robots and then that got me into computers and games. But you know, these things become artefacts of yourself when you invest that much time into something . . . These games as simulations or models I always thought of it more as a hobby, with the diverse skills people bring to it and so on. You know movies as a metaphor for this even if you're thinking more interactive movies, like Hollywood except better, doesn't really work. Especially with the communities that build around these, it's like model trains. People come with kind of different

areas of expertise. They get together and they kind of share, collaborate, that specialisation is actually a value to the community. This is a different mindset in terms of understanding it, we're not just building a game experience, we're kind of building a community, the game is the catalyst of the activities that the community forms around.

I asked Wright what he had learnt about that process of integrating the players with the production and design process:

Well first, making the tools more accessible and more entertaining. It isn't just you know give the players the tools so they customise the game. More and more it is having the tools become just as entertaining as the game. The artefact of the tool is itself the entertainment. Then there's the social dynamics once you've created the artefact. How the content the players' make flows and gets shared and then the recognition for it and the social currency flowing from that. It's the recognition within the community that is the pay-off. For some players you know this is the game, well at some point they hardly ever play the game at all, they spend all their time on the websites dealing with the community created content, looking up the ratings. You know from stats we see for some 90% of their time is spent interacting with the community and only ten percent in the game. So the game in some sense then is about the social side, the community.

Then you know for us, the designers and the developers, we know we've been successful when these communities come alive by surprising us. When the community does something that we didn't see coming and sometimes that can be something we don't really want to happen. They're these vibrant organic things and the essence of it is that the community is outside of our control. The stuff they do is astounding.

But the really cool thing is following how this spreads through the community. Like with *Spore*, when a player comes up with a really cool exploit, like taking advantage of some little bug they find, they would tag their content with a creature creator tip and then they would explain how they did it so somebody else could replicate it. So then all you need to do is go to the *Spore* site and type in creator tip and you get back this list of cool things that you can randomly learn and has been created by the community. So the players were really into that; they would go searching and learn the tricks from each other, they were accelerating their self-learning as a system and within two months they'd discovered all these things, you know, in years of testing that we'd never discovered. And then they'd be asking us to not to you know fix these bugs. And so we listen to them and don't fix them. But what impressed me here is not only how the players

pick up the tool and learned it but accelerated this process of self-learning you know way past where we thought they would.

Then that all raises a whole series of new questions and problems for us. It is growing exponentially, so how do you feed that beast [laughs]. It's like trying to feed a black hole. So you need to turn it back on itself you know so the things they're creating they're also consuming, they're consuming the output of their endeavours as opposed to us having to feed them. And that's the only way to do it because of the asymmetry between what we as a production team of a hundred or so people can do and what millions out there can do over the course of a week. A big aspect of it is coming up with the tools to give them to do that. The output from *Spore* with this, the share scale of the content made by the players, we were way off our estimates by several million. So we're dealing with these strange exponential relationships, it's a very non-linear system.

I asked Wright to discuss the tools and models he uses to think about and understand this emergent phenomenon:

[Laughs], well it depends on what you mean by understands don't you think? Well depending on what you're looking at and where you look there are a lot of paradigms for how you understand a system like that. Complexity theory and network theory seem to be two of the paradigms that are proving useful, that kind of work best for understanding what's going on here. These complex adaptive systems are inherently non-linear because they have a lot of internal feedback cycles you know, like the self-learning, then you get these run away snowball effects. And because they're adaptive, it makes them very difficult to design for because you're not quite sure what the adaptive feedback loops are going to be, you know they can go in a lot of different directions.

I then had a fascinating half hour or so discussion with Wright about how to understand and research these kinds of dynamics. He briefly mentioned the multi-agent modelling and simulation approach developed at the Santa Fe Institute for complex systems research:

The problem is that the nature of these systems resists predictive analysis. You can do descriptive analysis, you know, trying to describe the agents in these systems and sometimes from there get to know something about the dynamics, but predicting the behaviours and knowing what really is going on with the behaviours, you know that is extremely difficult. But we've done you know these simple little simulations of our community and the way its behaving, So in terms of what we're discussing we're then

modeling the community [laughs], you know using the kind of prototype models that we use when designing the game.

I asked Wright what value they got from these tools and modelling techniques:

Well, good question. For a start, as I said they're not predictive. They do help you to develop an intuition for the non-linear dynamics within that system. It gives you a way of looking at it as some rough guiding techniques and they can make you more responsive when something starts reaching that tipping point. It is kind of also about trying to figure out how to build into these systems trackers, chaotic trackers, I don't know . . . There are quite a few different approaches we can take here. I mean you have information theory that started with Shannon and you can analyse it from that perspective. Then there's a system dynamics point of view or a memetics point of view, network theory and so on. They help you capture some aspect of reality and some are more useful in certain situations but really these are all part of your toolkit and when you're doing an analysis on a complex system you kind of pull out the tools and look at it through the various lenses and every now and then one might all of a sudden give you a neat perspective, oh wait a second, I see this thing or we're about to maybe experience a snowball, runaway thing here. They're just different diagnostic instruments.

I asked Wright why he was so interested in these approaches and models:

Well for me if the games themselves are simulations or models of emerging systems that's the really interesting thing because then you need to think about how these systems start responding to layer behaviours and you get these loops happening between the system and how the player is interacting with it. That's the interesting direction as games as entertainment evolves because games are in the process of rapid diversification right now. This is the area though that really excites me, which I'm planning to pursue. One of the things that has come to define games as a form of interactive media and that I think will increasingly be the defining feature of interactive entertainment more generally is that well we have the ability to capture a lot of metrics about the players' behaviours. You know about their interests, their skills and their experiences with the game. We can then feed that back into the game and change the experience under the hood as they're playing, so in some sense the game can be evolved to fit the player. And that isn't yet in any other form of media and I think that will be the direction of interactive entertainment you know going into the future. Learning how to harness that, we're just kind of scratching the surface right now.

Some of the project's that we're working on right now here are about that but taking it out of this box we still call games and seeing what it might look like across the broader field of entertainment with films, television, social network sites, this [gesturing at his iPhone] and so on. This needs a lot of experimenting with though.

I asked Wright for his view on the proposition that by drawing so extensively on user-created content and user-metrics companies such as Maxis and EA were taking advantage of a form of free labour as an outsourcing and cost-reduction exercise:

Well all of this is optional and if it were onerous on the player they wouldn't bother doing it. Games are a discretionary form of entertainment so describing this as labour, well I really don't get it, I don't see it that way. We're giving them things they enjoy doing and they're paying us money for that. There's also the factor of all this content they're enjoying, the huge amounts of it, there's no way we could fund producing that in a viable way and they're also enjoying creating and sharing it. So it's hard for me to take that proposition seriously. The other aspect of your question, the cost savings. I think I mentioned that in interviews I've given before as you said. But there again does what we're doing here with the players creating and sharing all that content really make sense in these terms of cost savings and free labour? Realistically and economically there's no way we could supply that amount of content. But the other thing you asked about the privacy and surveillance issues associated with the player data that is generated, there's something there for sure. You know we need to think hard about how to give players themselves more control over that. The ownership of that information and the content the players are making is also a thornier issue. This is also about the whole DRM [Digital Rights Management] issue, you know a player can just take that cool creature, add a couple of little minor changes and then say that's my creature now and re-upload it. At the moment we have very little control over those what would you call them, editing rights? We do try to embed within the creatures, the content, a lineage of creators who have touched it or modified it in some way, so you can kind of track this.

I asked Wright to expand a little more on the DRM question as it had been particularly controversial in the case of *Spore*.

You know it's a thorny issue and there's a lot of grey between the two sides. And the grey zone is kind of challenging as well, there's not a smoothly descending ramp from those people that should in a sense enjoy the fruits of their labour and should have their intellectual property

protected over to where it is a totally remix culture and being able to take digital content and remix it however I want then send it back out into the world. It's where these views intersect that it gets really tricky. As players create more content and it becomes increasingly important to interactive entertainment that all starts interesting legal issues. Also do we owe them anything for creating the content that we are now distributing?

I responded, 'What do you think?'

I'm not sure, I think it is a give and take. If we're in a system like *Spore* where everybody has free access to everything. You know we're not charging every time you download a creature and keeping that money even though someone else made it. At the same time we are reaping the benefit of hundreds of millions of pieces of content. But then there is a cost of all that to us as well – the development costs and so on. And you know the entire player community also reaps the benefit from all that content.

You know my inclination on a lot of this is wait and see what emerges from the community self-learning dynamics I was talking about earlier. With *The Sims* we did see some players emerge who established these sites for aggregating content and monetising it. We kept out of that. The players then kind of self-policed it around issues and problems such as people taking and packaging content without permission of the creator and so on. This community learning is extraordinary – when you have these tens of thousands of people working through all this and how they're going to get attention for this, some of them are going to be very creative and very effective because it's this huge parallel exploration. When issues like these come up you know it might be around the economy, intellectual property rights, it might be political, well having ten thousand people freely trying ten thousand different things is far more likely to get results than relying on you know existing structures and institutions that are perhaps a little too rigid for handling these emerging dynamics. It's basically a kind of hive mind [laughs] and it can be used in a creative sense like *Spore*, many people making billions of things and also in terms of how they respond to a problem. It's amazing, it really is in some sense our first exposure to you know a meta-intelligence made up of thousands of people with all these tools and the information flows. Computers in this sense are not providing AI, they're not fundamentally recreating human intelligence, all they're doing is they're amplifying and connecting existing human intelligences. But what emerges from that is different so in some sense it is kind of like AIs, you know AIs made up of ten thousand people able to communicate and share information and ideas. We're starting to see the sorts of possibilities that opens. Computers are fundamentally really good

at collecting and harvesting human intelligence not recreating it. So with *Spore* the program and the technology in some ways isn't creative at all, it's harvesting the creativity of millions of players and reflecting it back to them. But then how do you enable people to use that at scale you know. That's now the challenge with *Spore*. In some ways the game is about half-done, we've got this huge amount of content. I think it might be the biggest database of 3D content in the world right now. The amount of content we ended up dealing with was really much larger than anticipated by quite a few orders of magnitude [laughs]. It's to the point, the scale of it I mean, that well I'm almost at a loss on how to utilise it. It has almost no indexing, you know we have rough categories and that's about it. Getting in there and indexing and finding different ways to access that data and present it in interesting ways – that would be a start. One of the things we did was open up the API with the database so anyone can actually request data and use it for different things. We're hoping the players will start showing some cool things they can do with that presenting that data and such. But you know it is still very much an experimental process.

Growing knowledge and co-creativity

Approached as an evolutionary process of adaptive change, co-creativity involves people originating and adopting new ideas by learning how to do new things and creatively experimenting with variations (Hartley 2009; Potts et al. 2008; Potts and Cunningham 2008). Co-creativity matters not simply as a source of creative content or even new ideas, but from its role in how the emerging identities and roles associated with these practices are adopted, adapted and retained (such as the transforming relationships between professional experts and amateurs). Social network markets and multiple-games model and describe co-creativity as social-learning dynamics and not just as the output of cultural products or the shifting of costs associated with these activities. This perspective then does not focus on co-creativity as a resource allocation problem. Instead, it asks us to consider the challenge of coordinating knowledge in the context of open and self-organizing systems in which adaptive learning behaviours and practices are crucial.

This is the fascination and excitement we see in the game developers' accounts of *how* the co-creative players are going about the activity of generating and sharing content and ideas. For example, how they are gaining attention for their content or how they lobby the developers for changes or how they share and extend their discoveries and learnings with other players. All of this may be part of a fundamental and profound evolution in how we grow knowledge.

In their study of YouTube, Jean Burgess and Joshua Green (2009a: 69–74) argue that the value of YouTube and why it matters is not measured just by the enormous repository of content but perhaps more significantly by the skills and competencies acquired and shared through participation in the YouTube co-creative culture. In Will Wright's terms this is emergent self-learning. Burgess and Green argue that approaching YouTube as a peer-learning platform involves how users share the technological and cultural competencies needed to navigate and innovate within this social network. These values and norms 'are collectively constructed, taught and learned as part of how the social network develops' (73–4). My earlier account of the P10 steam locomotive is fundamentally about how that digital object mediated such processes. Also, as we saw in that case and in the case of *Spore*, this process of collective action and learning is not simply about amateurs replacing media professionals, but how these identities and practices are co-evolving and re-coordinating. This is about the growth of knowledge and how we grow knowledge.

This is not a panglossian view of the changes and transformations associated with user-created content and user-led innovation. We need to pay close attention to the potential costs and risks associated with these changes, including the job losses and employment precarity that critics such as Andrew Ross draw to our attention. This dynamic understanding acknowledges the creative destruction and unintended consequences that flow from these changes.

We need to craft rigorous and robust understandings and models of how economic and cultural co-evolution shapes these co-creative relationships. As we have seen these processes are associated with much uncertainty, especially surrounding the rapidly changing relationships between professionals and amateurs. We can expect that established identities and institutions will be unsettled. Cultural and economic change interacts to generate new identities, ways of being, business models and learning practices. In the context of such irreducible uncertainty neither extravagant claims about the democratizing potential of co-creative culture nor critical dismissals get us all that far. We need analytical tools and models that combine the rich hermeneutic traditions of the humanities with evolutionary theory, and complex, adaptive system models to better understand the phenomena of co-creative culture and the associated practices of emergent social learning. As I put the finishing touches to this manuscript I read economist Tim Harford's (2011) latest popular work, *Adapt: Why Success Always Starts with Failure*. Harford's core premise is that as we confront increasingly unpredictable and complex problems that seem somewhat intractable to traditional models of expert opinion and analysis we must adapt. And Harford means adapt in a rigorously evolutionary sense. Like Arthur (2009), Harford adopts an evolutionary sciences perspective to suggest that in tackling such complex problems we must abandon our search for grand designs that provide comprehensive and centralized plans of action.

Our task as researchers is to describe and model and analyse the various institutional arrangements and norms that emerge to tackle and solve the various social dilemmas and problems associated with co-creative media production. Here we can learn from the work of Elinor Ostrom who was jointly awarded (with Oliver Williamson) the Nobel Prize in Economics in 2009. Her work on governance problems in the context of common-pool resources, the classic 'tragedy of the commons' problem expounded by Garrett Hardin (1968), establishes that institutions of coordination can evolve from bottom-up collective interactions and norms negotiated locally among the participants. As Potts and Earl (2010) note in their survey of Ostrom's work, 'Ostrom uses case studies and experiments to show how the governance problems of collective resources can be resolved through *ad hoc* bottom-up institutions of rule formulation' (2). In effect this is a self-organizing and emergent system of rules and norms that can resolve the social dilemmas associated with collective property (16). Co-creative relations involve both common-pool resources and proprietary, commercial interests. The dilemmas of how to coordinate across these differences may also be negotiated, if not resolved, through such bottom-up interactions rather than by the imposition of controls by top-down managerial or governance systems.

Adopting Ostrom's (2005) formulation, the challenge is to identify how these rules, understood as forms of 'collective action', develop through the various interactions among participants. We need to describe and analyse the forms of collective action that enable participants to negotiate the various dilemmas characterizing these situations. Understood as patterns of interactions and their outcomes, what are the 'action situations' through which 'individuals interact, exchange goods and services, solve problems, dominate one another, or fight (among the many things that individuals do)' (Poteete et al. 2010: 40). Ostrom (2005; also see Ostrom and Hess 2006) provides a general analytic framework of institutional analysis and development by combining the strengths of field-based comparative qualitative research case studies (including ethnographic) with the tools of micro-behavioural analysis such as game theory and agent-based modelling simulations and experiments to understand and analyse such 'action situations'.

The multiple game model offers propositions and hypothesis about how participants, especially at the micro-behavioural level, may be negotiating the dilemmas characterizing these situations. This model now needs to be tested and refined through further comparative research. But the driving problems or questions for me remain: how is it possible for participants (both professional and amateur) to act collectively through these forms of co-creative practice and organization for sustainable mutual benefit? How can we understand and identify the factors that contribute to creating situations where such forms of collaboration and cooperation are sustainable and successful? What are the conditions and relationships that influence the prospects for such successful

collective action? In what contexts and situations do the participants behave cooperatively to negotiate the dilemmas (which we call multiple games) that they confront? We need better tools and theories to help us ask and explore these questions about the social-ecological systems of co-creative culture.

This book does not present a finished general theory of collective action in the context of co-creative media production. But I think we have taken some steps in that direction. In all of this I am not proposing that co-creative relationships will necessarily be democratizing or empowering for the consumer participants or indeed for the professionals. Sometimes they are and sometimes they are not. The aim is to understand how the participants are negotiating and coordinating these emerging modes of collective action. Any optimism about the nature of these relationships must be tested through rigorous research. We need to unpack the specific mechanisms and processes, especially the micro-institutional variables, which shape these collective actions. But as the multiple-games approach suggests, we have to remain open on the questions of what these variables, behaviours and incentives are. We should not assume that our explanations can confidently rest on an understanding of the individual calculating their options and actions based on a particular type of pay-off function (be that intrinsic or extrinsic). The theoretical and empirical challenge of grappling with and explaining such phenomenon is far more uncertain and complex (Poteete et al. 2010: 220–21). Nevertheless, any approach that seeks to take up this challenge needs to be based on dynamics of distributed social learning and norm adoption. The task ahead is to advance our understanding of these forms of collective action by offering tools that simplify and allow general principles to be elucidated and tested (this is the theoretical endeavour) *while at the same time* allowing for complexity and contingency. As Poteete et al. (2010: 222) suggest, ‘The weight of an explanation for cooperation in social dilemmas must lie both in general theory of human behavior *and* in specific characteristics of the microinstitutions they are in as they are embedded in a broader context.’ This is the kind of dissonant research agenda that Stark (2009) also proposes, for example, by adopting a multiple methods and collaborative research initiative that combines ethnographic case study with social network analytics.

This book offers some initial steps in this direction of disciplinary and methodological cross-fertilization, especially through the collaborative work with evolutionary economist Jason Potts that informs the final chapter, but there is much work to be done to grow and share our knowledge about co-creative practices that may be in the process of evolving how we grow and share knowledge. It is very early days in this exciting endeavour and my hope is that we can craft a rigorous and generous, even playful, model of co-creative enquiry that will contribute to the making of our co-creative media cultures.