Issue 18 (2023)

articles

Silence, Distance and Disclosure. The Bleed Between the Far-Right and Gaming by Imo Kaufman, 1

The White Peril. Colonial Expressions in Digital Games by Haryo Pambuko Jiwandono, 38

reports

Gaming the Nation. A Research Report by Kathrin Trattner, 75

interviews

Interview with Per Backlund, Professor of Informatics, in the Division of Game Development at the University of Skövde, Sweden by Lissa Holloway-Attaway, 92

reviews

Returning to My Appalachia. The Resurgence of *Fallout 76*. A Game Review by Nicholas Bowman, 110

Interview with Per Backlund, Professor of Informatics in the Division of Game Development at the University of Skövde, Sweden

Lissa Holloway-Attaway

Abstract

In this interview, Professor Per Backlund shares his experience working for more than 20 years as a researcher and teacher in videogames. He outlines his initial interest in games, in the early 2000s, while completing a Ph.D. at Stockholm University and teaching part-time at the University of Skövde in Sweden. He shares how he moved from more general research in computer science and IT to a more specific focus on games, particularly on serious games and game-based learning issues. He also discusses his role as a teacher and Program Director in the very large games education (600+ students) at the University of Skövde, sharing the challenges of supporting interdisciplinary research. As founder and chair of the new Council for Swedish Games Researchers, he also describes the aims of the organization: to bring greater understanding to the specific needs of creating a sustainable Swedish ecosystem for game development. He explains the primary objectives of the Sweden Game Arena consortium, meant to promote Swedish game development in Skövde and beyond, and its newest initiative, via the recently-funded Level Up Swedish Game Industry (or Level Up) project, where he serves as university coordinator in the project management team. Finally, he speculates about the future needs for games and game research in rapidly developing and shifting technological and socio-cultural contexts for game-making and game research.

Keywords: Game Development, Serious Games, Game-Based Learning, Game Research, Game Education, Swedish Game Industry, gamevironments

To cite this article: Holloway-Attaway, L., 2023. Interview with Per Backlund, Professor of Informatics in the Division of Game Development at the University of Skövde, Sweden. *Gamevironments* 18, 92-109. Available at https://journals.suub.uni-bremen.de/.

Can you give some background about how you got into the Games Education here at University of Skövde? For example, what is your educational background and how does it suit your role as a Professor in Informatics working in games?

I started to work with research projects in games and to develop research in games in 2005. This was shortly having defended my doctoral thesis at Stockholm University in the Department of Computer Science. My thesis was much more focused on issues in regular IT, such as management and business information systems. I was asked to help focus a research program by both Henrik Engström and Lars Niklasson. We had just started our study programs in games (in 2002), and the aim was to begin to develop research around the educational programs. We did not have a very organized research profile at the time, although we did have a few faculty who were doing some research in games, like Ulf Wilhelmsson. But at the university, there was no real focus and organized way to consider research in games.

It was actually good timing for me because I was interested in doing something new after my thesis defense. I had been already working at the University of Skövde since 2000 while completing my Ph.D. thesis at Stockholm University. I was working as a combination of a Ph.D. student and teacher, so I was somewhat familiar with the academic context. At that time, I didn't really have any experience in games as a research area, other than the fact I had two children born in 1990 and 1992, who played video games, and I sometimes played with them. But I wouldn't say even then I was a hardcore gamer, and games were definitely not research topics for me. But I was eager to develop some new research interests in my post-doctoral phase. And as I started to think of my connections and context for research and education in games, it did actually make sense, given my background in thinking about information systems and management, but also because I have a background as a teacher working at the elementary school level. So, it seemed like an interesting way to

network night profit to the second of the se

consider how to combine an interest with IT and information management systems with teaching and education. And further, serious games (SG) and issues around game-based learning (G-BL) then seemed like a good possible logical extension.



Figure 1. Testing a serious game for the ambulance service made at the University of Skövde.

Photograph © Carl Johan Hjerpe.

When researching the fields of SG and G-BL, we also discovered that SG was an area that was receiving a lot of interest for funding, and therefore it might be then an even more likely and easier area in which to start research. And in fact, our earliest projects in G-BL received funding from a Swedish Insurance company (Länsförsäkningar in Swedish) to do research around driving education. We also had a funded project together with the Swedish Rescue Service to use G-BL tactics for firefighters. This was perfect timing really to consider SG research because at the time, early 2000s, there was a very big interest to consider how G-BL could be used in lots of different organizations. SG has remained a foundation for us, even though we have widened our areas of interest since the games educations, at bachelor's level in particular, but also now at Advanced (master's level) have grown so much.ⁱⁱⁱ The SG program here

et Les Pla most nord met les Pla most nord m

started in 2008 and was the first program in games we had at master's level here in Skövde. But in fact, I believe we were the first SG master's in Europe and possibly globally. There were some game-focused programs in the US, for example in game design, but none, or at least very few, in SG. Either way, we were very early.

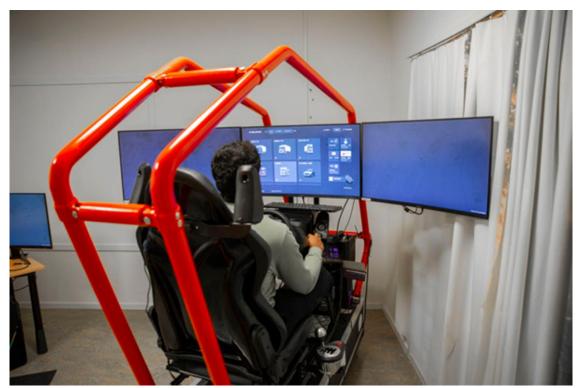


Figure 2. Testing a serious game for the ambulance service made at the University of Skövde. Photograph © Carl Johan Hjerpe.

Even though currently I'm not directly involved as much in the bachelor's level education, I think it still offers an opportunity for competence development in research, given the wide range of areas to study. We can focus on games as business, for example, but also on the game development industry and the many other subjects addressed in our study programs (arts, writing, sound, etc.). So, although I remain focused in SG, as a whole, I think our researchers here in Skövde should be, and are, broadly focused and very inclusive. For example, games as a cultural phenomenon have many dimensions to consider, and so we must be expansive in our interests. Games are everywhere and come in many shapes and forms. Good research has to come from personal interests, and even though one might have to tweak their

network right common of the service of the service

interests to fit a topic, our faculty is wide-ranging, and we have many opportunities to expand our interests beyond that early foundation in SG. Inclusive approaches are key.



Figure 3. Game student project demo at the University of Skövde. Photograph © Rebecka Thor.

We have two primary subjects in our Division of Game Development here in Skövde, *Informatics* and *Media, Aesthetics and Narration*.

Both are technical subjects, but the second also includes intradisciplinary arts and humanities research, focused on games and beyond. Researchers in these two fields are also widely represented in our GAME Research Group, where the acronym GAME stands for "Games, Art, Media, Experience" to showcase games as complex media objects and varied parts of socio-technical networks.

Do you think this is another way to demonstrate the inclusive

The control of the co

approach you perceive as important for considering a basis for conducting games research?

Yes, research needs to be somewhat independent and particular to individual interests. We have to support that, as we do in our research group profile. So, you have to be inclusive, and faculty needs to decide what they are interested in. At the same time, I understand from a university management perspective, particularly from a small university such as ours, that we need to narrow our focus to a degree to help build a profile. Unlike larger universities, it then makes sense to develop research extending from our educational needs and influences. We don't have internal funding to do much beyond our educational interests, so it makes sense to articulate connections between our various study programs and to the bulk of our students and our research.



Figure 4. Game student experiment at a sound workshop. Photograph © Rebecka Thor.

Given that consideration, can you share more about your main teaching responsibilities and shared research interests?

I am the Program Director for the 1-year Master's in Serious Games and recently I was appointed as the Program Director for the 1-year Master's program in Games User Experience, although I don't teach much in that program. The main part of my teaching is in the Serious Games education and in the two-year Master's program in Game Development, which includes and extends components from the Serious Games program. I am also involved in a bachelor's level course called Game Production. We started that course two years ago. That course actually came out of a research project where the aim was to make/study games more from an entrepreneurial perspective. We already know that many of our students are interested in starting their own studios, and so we wanted to support them to do that. We actually pitch the course as one that is everything about game development, except game design. So that means the focus is on business models and managerial aspects. We actually do that course also with our School of Business. And in Fall 2024, we will start a new study program in collaboration with the School of Business. It will be a 1-year Master in Business Entrepreneurship. Here we will focus even more on the combination of business, entrepreneurship and game design and development. I believe this can be a great international success, not only for our game division, but it can also be a way to cooperate more fully with the School of Business, so they can build their interests in entrepreneurship based on our successes in games.

You recently helped to start the new Council of Swedish Games Researchers. Can you discuss the aims and purpose of this group and why you think it's necessary? Who are its members and who can join?

We address the aims in our program statement, but our mission is primarily to

<u>98</u>

into ntag contage who e well to SPD most normal of the PD normal normal normal of the PD normal normal of the PD normal norm

support education and research about games in Sweden to support growth and development.^{iv} Several researchers in Sweden came together in meetings in August 2022, and before, to begin to formulate the idea for the council and articulate our interests and purposes. We know there are many researchers in Sweden interested in games, but there is no clear starting point to inform what we can and want to do. In fact, game research is scattered in so many places in Sweden, in sociology departments, in computer science departments, and in media departments, and more. Even though we are so dispersed, we know there is 'something' that unites us, and that core would be interesting to identify.



Figure 5. Materials developed by game writing students in a workshop at the University of Skövde.

Photograph © Rebecka Thor.

Again, I think in our council we need to be inclusive, and we don't want to find one, single common goal, but it would be helpful to work together. The aim of the council is really to try to identify and collect all our researchers and start talking among ourselves as we try to find a common voice for games research. That might be further down the road, but it's our starting point: talking and sharing. Right now we have 50

members, but we are growing. We are trying to find a clearer picture of who does what and where – a mapping of game research in Sweden. And this is a good start to identify what might be our core. This will be of interest and value to all researchers, but possibly most particularly for Ph.D. students who may have similar interests, but come from different disciplines and departments. This may support them to not only target where games research is, but help them to approach games from other subject areas and to share insights and research as they develop their Ph.D. projects. That is what seems achievable in future.

Another aim, beyond the inventory and mapping, is to help support funding and contacting potential funders to help them to understand what research is possible. That is actually a very practical problem for us. Games can be in IT and informatics, but not only there. Games can include cultural and business issues, as we've discussed. Games is a huge business in Sweden, and a growing one as it is globally, yet we still struggle with where to find games funding because many people still don't understand where and how games research, not just development, is relevant. Games can and should be the actual core for research, not just as an add-on for other identified fields or subjects in a funding call, as is the situation now. We want games to be researched in their own right. For example, I am in an EU Horizon application now about healthy living, and they do mention games as a possibility to conduct research in the call, but it's not very clear how to identify and connect them, and not central to the call. These are typical challenges then when looking for funding. It would be much better to see games as the primary focus area, not a secondary interest in funding calls. We deserve research in Sweden on games as the primary field. And if we as the Council of Swedish Games Researchers can start to talk with funders, politicians and others, maybe we can achieve that future goal.

Do you think, then, that there are unique issues, problems, and challenges within the Swedish game development community, as opposed to other countries, for example? What makes it special, or not?

My impression is that in Sweden, and also globally, the game industry is very diverse. And that diversity is significant. So, we have very large studios with thousands of people employed around the world, as we do here in Sweden. But I think the bulk of the Swedish industry is composed of smaller studios with 10 to 40 people, for example, working. What has happened in Skövde is exceptional in that in 2002, when the first games study program began, there were no game studios in Skövde. But since the first one started in 2005, at least 20 to 30 studios are here now, and several more starting every year. Not all survive, of course, but that increase has created a rich and diverse local and regional eco-system here, definitely primarily composed of small studios. However, even then it is currently changing, most notably with Embracer Group coming in and buying many studios. But at the core, the ecosystem is still about small teams and about creativity and some sort of entrepreneurial

success stories.

101

Importantly, the studios are dominated by Swedish developers, even if we have expanded in our international connections, sometimes through studio hires, but also because our own students start their studios here. And as they grow, they often recruit internationally, especially from Europe. So, in that way games in Skövde are international, which is quite remarkable, but the Swedish presence is strong. The big successes are those like Coffee Stain Studio, Iron Gate Studio, Stunlock Studios, which have been around for many years, but have had recent commercial successes. But even the smaller studios have successes in business here, as they make games on a regular basis and have stayed in business a long time, Flamebait Games, Pieces Interactive, Ludosity, Piktiv. They expand and hire people and many of them include

our students. Those who don't succeed with their own startups, often get involved in other constellations, through other studios.



Figure 6. Entrance to the Sweden Game Conference 2019, sponsored by Sweden Game Arena, held at a local sports arena, Arena Skövde. Photograph © Rebecka Thor.

So, in that way Skövde has also become a local safe space to fail. That's important. You can try to start a studio, but if it doesn't work, you can maybe succeed in another capacity with another studio. Skövde, then, is an open and safe context to try. There is a multi-tiered support system here, and by developing a real *community* around games, people are more aware about what can happen within game development contexts. Although we can't neglect the inspiration generated by the big success stories, you can be successful on many levels in game development, and we don't have to measure only multi-million-dollar success stories. I don't think everyone strives for that. You can come to Skövde and feel that if you are interested and interactive, there is a place for you, a community. We start that support when students begin to study when, for example, we form them into interdisciplinary teams for game development that simulate real teams in the commercial sphere. So, in the

beginning, they work to learn together about what it takes to be part of an inclusive community. There is a tradition that if you come to Skövde to study games, you will meet the people that you need to know.

One definite community constellation for support has been Sweden Game Arena (SGA) a consortium for game development and research among the University, a local science park and with regional and local authorities. You've been involved with SGA since it was established. Can you discuss its purpose? How has it changed or developed since inception and why was it founded?

There were several initiatives going on, but the actual foundation was with conversations on the management level at the university here and at Science Park Skövde (then called Gothia Science Park). But several others were involved in discussions too, and I was part of that. SGA started as a project with regional funding (from Västra Götalands region) to strategically build the community around game development and to create a consortium with the primary partners, along with the region, being the University of Skövde, the Science Park, and the local municipality (Skövde Municipality). But also, it was important to make sure the university prioritized games, as our educations were so successful. So even though occasionally we feel frustrated trying to incorporate academic interests in the work on game development at SGA, which is more business-oriented, overall, there has been much engagement from the university in the consortium. And also, the Skövde Municipality has been part of the funding. They even co-funded two of our Ph.D. students working on games and learning (Anna Sofia Alkind Taylor and Björn Berg Marklund) at the university. They probably understood very early on that games could be something special for Skövde, and now they even market Skövde as Spelstaden ("The Game City" in English). There is a sense of pride at the Municipality about the game studios that

network night randbank. While we are go Let s Pla inord indead with the first and the property of the second of th

have started here.

We hosted the first conference that would become the Sweden Game Conference (SGC) on a small scale in 2010. We had just a couple of invited speakers with a focus on educational games and SG, but 2015 was when there was a tipping point for the SGC. Then we arranged this conference and another international research conference (VS Games). At that time, we stayed on campus, but we co-organized the conferences. We had, for example, Raph Kostar, as the keynote speaker. But then we couldn't fit properly in our spaces on campus, and we made the decision to move to the local sports arena in Skövde for the conference space. In 2016, we held it at the sports arena and that was a huge expansion. That was a much, much larger space, and I worried that we wouldn't actually be able to fill it, but we did. We had 900+ attendees and that was true in the following years. We held it there consistently until the pandemic, and we are still considering options for new conferences in new spaces, but we've been very successful overall.



Figure 7. Overview of the Sweden Game Conference 2019 Expo. Photograph © Rebecka Thor.



Figure 8. Student games shown at the Sweden Game Conference Expo. Photograph © Rebecka Thor.

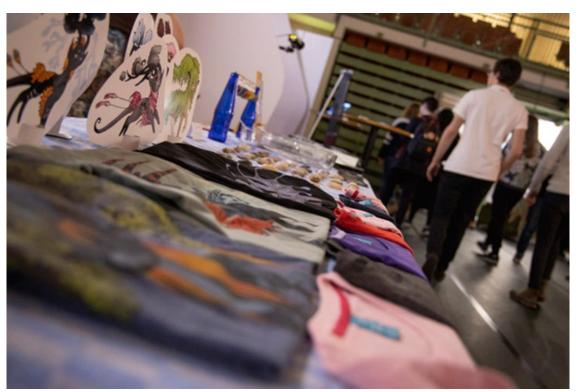


Figure 9. Student games shown at the Sweden Game Conference Expo. Photograph © Rebecka Thor.

<u>105</u>

I think one challenge for SGC though is how to incorporate academic perspectives. We've had academic tracks in all conferences, and some speakers on academic topics, but development and commercial and business spheres have definitely been the bigger focus. I think that's okay, but there are many academic conferences that focus on games, and instead, we should try to attract them here to Skövde, rather than trying to start our own academic tracks and incorporate them fully into SGC. We need to become better at organizing globally established game conferences, or related areas, and hosting them here. Last year, for example, we held a teacher symposium at SGC, sponsored by the Council of Swedish Game Researchers, with about 30 international attendees. So that was a start, and it shows we can still attract others and build expertise to consider academic topics and research more fully.

Recently, the Level Up project, a large project focused on games in Sweden, has been funded.^{vi} Can you discuss its aims and objectives and your role in the project?

<u>106</u>

This is a clear spin-off project from SGA. It moves beyond the initial aim of SGA to understand and build the local game community. With this new initiative now, we have really broadened our perspective from local games in Skövde to much more regional interests, but also, we now have additional funding from Tillväxtverket and so now we truly have a national goal. We really do need to strengthen our understanding of the game business and game research on a national level. In this way, with Level Up as an extension from SGA, maybe now it can become really a *Sweden* Game Arena. We have always really been focused on building a local environment even if we included Sweden in the name – this was partially because nobody can pronounce Skövde. But now we have a bigger national focus. The aim is to coordinate and strengthen the Swedish Game Business, as well as research and education to make a Swedish ecosystem visible. My role is as the university

coordinator, with our Head of School, Henrik Svensson, and to be part of the project group. But my main focus, as we've discussed, is to create at the university more opportunities for game-focused research. Even now, we still need to do that. That includes political lobbying, but also helping to make us more active in funding activities and applications and creating a general awareness about the main area of games business and what that means. How do games and play affect community? What are the business models for the future? How can we strengthen a community of Swedish game developers? All of these are key questions in Level Up.

You mention a future focus for Level Up. In that context, what do you think personally are the developing questions for future research in games in general, or in Sweden in particular? Are these based on business models, technologies, player groups? Where are we going?

107

Probably we're headed in all of these areas and more! But in my personal research interests, G-BL, simulation, vocational training, all the work I've been involved in over the years, I think the next important step is moving from concept demonstrators to studying actual organizational views and values and figuring out how we actually make this is a sustainable of way of training in real organizations. How does this actually affect organizations? How can our specific research from demonstrators be applied to organizations? For research overall, what I would really like is to find out what is meaningful for small- and medium-sized game companies. Big companies like Electronic Arts already have research departments. I don't think academia then needs to focus on that, but rather we can address other challenges. Then I would also like to see independent game research. I don't think all research should be motivated by commercial success, but for us at a small university, it is a challenge, but we can, and do, work to be close to actual practice.

And finally, just because it's the *buzzword* of the time, what do you think about artificial intelligence (AI) and its potential impact on games?

I definitely think a lot will happen there. I'm not well informed of all details as AI is not my area, but I can already see a growing interest in our student thesis projects. That's important as we are preparing future researchers. My master's students are asking many questions about how AI tools affect game development. We have several projects focused on understanding the role of AI for graphic artists in the future, for example. And I'm sure AI will drive tool development too. Studios, big ones, in particular, already use a lot of AI, for data mining and analysis of play behavior to name a few areas. They are very advanced, so possibly a context to study. One student that I am examining is making historical connections to other technological revolutions before AI, such as how photography revolutionized painting and other visual arts. But also, of course, we can think about how AI will change jobs and job markets. I don't think we have to worry about how AI tools will take over our jobs, but we need to consider how they may transform certain jobs and practices and create new jobs we didn't even know could exist. All new technologies create as many jobs as they eradicate. I don't think anyone was that concerned about how the job market for portrait painters was eliminated because of photographers, but it certainly changed many cultural practices, nonetheless. So, we can be forward-thinking in all of these considerations.

108

References

Sweden Game Arena, n.d. *Sweden Game Arena*. Available at https://swedengamearena.com, accessed 27 June 2023.

The Council of Swedish Games Researchers, n.d. *Svenska Spelforskarrådet*. Available at https://spelforskarradet.se/, accessed 27 June 2023.

network new contact with the series of the s

University of Skövde, n.d. Game Development Education. Available at

https://www.his.se/en/education/game-development/, accessed 27 June 2023.

¹ Henrik Engström was then a Senior Lecturer in Informatics working in games. He is currently a Professor of Informatics in the Division of Game Development at University of Skövde. Lars Niklasson was a Professor of Informatics. He went on to become vice-chancellor of the University of Skövde.

ⁱⁱ Ulf Wilhemsson was then a Senior Lecturer in games and is currently an Associate Professor at the University of Skövde in Media, Arts, Aesthetic and Narration teaching in games. He is also former head of the Division of Game Development.

iii University of Skövde offers one of the largest educations for games in the world with over 600 students across 12 different programs at bachelor's and master's level. At the bachelor's level, educational programs include 2D Graphics, 3D Graphics, Animation, Design, Game Writing, Sound, Music, and Programming. At the master's level, 1-year programs are offered in Digital Narration: Cultural Heritage and Game Technology, Games User Experience, and Serious Games and there is a 2-year program in Game Development (University of Skövde, n.d.).

^{iv} The Council of Swedish Games Researchers (in Swedish named *Svenska Spelforskarrådet* or SSFR) was founded in August 2022 (The Council of Swedish Games Researchers, n.d.). The two primary aims as stated in the mission statement are to: "1) Develop a meeting place to exchange ideas and knowledge; and 2) Develop a united front for communication of what we do and why game research matters." Currently, Per Backlund is the chair of the Council Board.

^v Sweden Game Arena is a platform to support local and regional game development in Skövde and in Västra Götaland. It includes over 200 professional game developers and has released more than 100 games through 20+ teams in startup initiatives (Sweden Game Arena, n.d.).

vi The Level Up Swedish Game Games Industry (Level Up) project runs from May 2023 to August 2026, with total funding of approximately SEK 27 million, including new funding of SEK 10.5 million and earlier funding of SEK 16.5 million. The funders for this project have strong local, regional and national interests and include Tillväxtverket (The Swedish Agency for Economic and Regional Growth) Europeiska Regionalfonden Västsverige Sweden, Västra Götalandsregionen, Skövde Municipality, Lindholmen Science Park, and Science Park Skövde. The project partners include Science Park Skövde, together with the University of Skövde and RISE (The Research Institute of Sweden). The project is under the brand of the Sweden Game Arena.