The Gamification of Digital Gaming
– Video Game Competitions and High Score Tables as a Prehistory of E-Sports in Finland in the 1980s and Early 1990s

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Abstract: The aim of this paper is to examine the "prehistory" of E-sports from the Finnish perspective. In the context of the GamiFIN conference, we approach E-sports as a gamified form of video gaming. In particular, we study the early Finnish game championships of the 1980s and the early 1990s as well as the high score lists of Finnish computer and video game magazines. We ask the question: how did these publications and activities construct video gaming as a socially-experienced competitive practice? In addition, we seek answers to the following questions: Who were the early video game contestants? How was competitive gaming presented in media? What kind of rules were defined for the contests? How was cheating dealt with?

1. Introduction

Academic research on E-sports has focused on competitive game playing as a contemporary popular cultural phenomenon. The studies have touched upon, for instance, questions on game playing and tactics, comparisons between E-sports and traditional sports consumers' behavior, as well as other activities revolving around E-sports. (Hamari & Sjöblom 2017.) The studies often briefly mention the history of competitive gaming and typically date its roots back to the activities from the mid or late 1990s that took place in the US, South Korea, UK, and other countries, in relation to different online game genres and the rising interest towards competitive gaming (e.g. Wagner 2006; Lee & Schoenstedt 2011).

However, competitive gaming has a longer history than that and, for example, the Wikipedia article on E-sports lists video game tournaments – in particular American ones – starting from the late 1980s, and mentions popular arcade video games, such as *Space Invaders* (1978), as platforms for gaming competitions. It is also said that *Space Invaders* was the first – or at least one of the first – video game that featured a high score, although not yet a leaderboard (Herman 2016, 51). According to Clemens Reisner (2016, 3–4):

> Space Invaders stood at the beginning of a technical evolution of scoring and record-keeping in videogames. It led to the implementation of a permanent leaderboard into games where the best players could enlist themselves with a three-letter entry next to the score they had achieved.

The first video game with a leaderboard was probably *Asteroids* (1979) (Dillon 2011, 58–59).

Furthermore, other game competitions, such as those held on pinball machines, preceded video game competitions (see Manning & Campbell 1973). Since the early 1980s, various competitions had already gained wide popularity and media coverage, especially in the US; a fact occasionally noted in American game studies (Taylor 2012, 2–6; Borowy & Jin 2013; Kokureck 2015; See also Wikipedia: https://en.wikipedia.org/wiki/ESports#Early_history_.281972.E2.80.931989.29).

The roots of E-sports have received relatively little scholarly attention until very recently; Reisner (2016) has studied the history of video game high score tables – also from a gamification perspective, but with a focus on high scores as a part of gaming practice as well as game design. Likewise, Taylor (2012) and Kocurek (2015) have written on early arcade game competitions in the US, and Stuckey (2014) touches upon questions of high score tables and video game championships from an Australian perspective on the *Playing Again* project blog.

However, the history of these contests outside the US remains practically untouched by scholars. Thus, the aim of this paper is to examine the "prehistory" of E-sports from a Finnish perspective. In the context of the GamiFIN conference, we approach E-sports as a gamified form of video gaming. We study, in particular, the early Finnish game championships in the 1980s and the early 1990s as well as the high score lists of Finnish computer and video game magazines. One reason for the focus is that leaderboards and scoreboards have been recognized as the most typical elements of gamification in addition to points and badges (Hamari, Koivisto & Sarsa 2014; see also Stott & Neustaedter 2013). Thus, we would like to trace the historical roots of the elements that are so common in gamification today. We ask the question: how did hobbyist publications and early contests construct video gaming as *socially experienced competitive practice*? In addition, we seek answers to the following questions: who were the early video game contestants; How was competitive gaming presented in media? What kind of rules were defined for the contests? How was cheating dealt with?

2. Early Video Game Championships of the 1980s and the Early 1990s

Game competitions are founded on gamer communities, and they are, first and foremost, social activities. According to Stenros et al. (2011), there are many forms of social play. Scholars argue that single-player games themselves are social in various ways, starting with the fact that the player is aware of others' existence, even though they are not at the same place. Of course, there are much more direct notions of social play in single player contexts as well. Stenros et al. add that early high score tables and game competitions provided possibilities for players to gain status and social capital. Social capital did not only arise from high scores, but also from the ability to share hints on how to improve one's play. Likewise, arcade gaming especially emphasized the performative elements of playing video games, because there almost always was an audience watching the play, and these performative elements have also been present in home computer and console games, where people have been watching others play and have taken turns playing (cf. Lin & Sun 2011).

Reisner (2016) notes the interaction between early competitive video gaming in the early 1980s, and media that included the publication of game strategy guidebooks, magazine articles, Guinness World Records, and even TV shows. This interplay led to a certain institutionalization and standardization of playing practices, and the formalization of highscoring due to the need for better comparability.

Borowy and Jin (2013, 2255), for their part, interestingly state that the early rise of competitive gaming in the 1980s was not only caused by the rapid emergence of digital games. In the larger picture, it was also the period when "the concept of an experience economy was gaining momentum as an economic development, being discussed in both scholarly writings and business." They add that "these initial e-sport contests took place during a time when the hands-on, calculated adoption and consolidation of event marketing as a vehicle for corporate promotional growth began to take center stage." All of this can be seen in the US examples, but how were these developments taking place elsewhere?

In Finland, video game championships started a couple of years later than in the countries where arcade and console games had already earlier gained mass popularity. So far, the earliest example of a notable public video game playing competition we have found is from 1983, "The Finnish championships" of *Pac-Man* (1980),which was most likely organized by the Finnish Atari distributor Musiikki-Fazer, in collaboration with the Magazine *Katso,* which was geared towards TV viewers,. The qualifying rounds were organized in towns across Finland (Lappeenranta, Oulu, Jyväskylä, Tampere, Seinäjoki, and Helsinki), and the finals were held at the Linnanmäki amusement park in Helsinki on May 27 of that year. (*Micropost* 2/1983, 40–41; *Katso* 17/1983.) At the same time, popular *Pac-Man* clones were actively played in competitions arranged by computer clubs. *Pac-Man* was introduced in the *Vikki* magazine as the "the world's most popular micro computer game." (*Vikki* 4/1983, 1, 6; *Vikki* 1/1984, 16.)

The *Pac-Man* competition took place at an event whose main purpose was to introduce and market Atari consoles and computers to the audience. As part of the marketing efforts, the hit American song, *Pac-Man Fever* (1981), was translated into Finnish as *Pac-Man kuume*, and performed by the aspiring Finnish singer Tuijamaria; a Swedish-speaking robot called "Kalle" was also one of the main attractions that was noted in articles about the event. The editor of the *Micropost* hobbyist magazine described the competition system where the first round took 5 minutes, and whoever survived the longest, won. In the semifinals, the round took 7 minutes, and then the score decided the winner. He also mentioned that similar competitions were already held in Stockholm in autumn 1982, and that in Finland, in one semifinal, there had "even been one girl" among the contestants, which was – in his opinion – proof of the claim that *Pac-Man* was also popular among female players. (*Micropost* 2/1983, 40.)

Two years later, in 1985, the Atari distributor organized a new competition in the same vein. In that case, the game played was a racing game called *Pole Position* (1982), which fit well with the Finnish Formula 1 boom, fueled by Keijo "Keke" Rosberg's successful career and his victory in the 1982 Formula One World Championship. Notwithstanding, in 1985, championships were still held using the aging Atari 2600 console. The winner of the competition came from the municipality of Iisalmi, where Rosberg himself had lived in his youth, and all of the seven finalists were male. (*Printti* 1/1985.)

Atari's main rival, Commodore, was the dominant player in the Finnish home computer market throughout the 1980s. As part of their marketing efforts, the local representative, PCI-Data, organized a nation-wide competition called "Info-Commodore-Porsche Race" in collaboration with Info, a large bookstore chain that also sold computers, and the *Printti* magazine. At least according to the ads, there were to be as many as 50 qualification rounds all around Finland in June 1986, although it remains unknown if that was the final number. The game selected for the qualification, *Pitstop* (1983), was likewise a Formula 1 racing game. In the finals, six competitors faced off in "On Road Racing" (no such game exists, likely *On Track Racing*), *Scalextric* slot car racing and *Pitstop II* (1984). Mimicking a real-world race, the contestants – mostly young men – were dressed in caps and overalls for the prizegiving. (*Printti* 10/1986; 15/1986.) This emphasis on racing games might have been a Finnish specialty because of the national F1 fever, but we would need international comparative research to prove this preliminary hypothesis. Still in the late 1990s, in Finnish computer game championships, the most typical games were rally or Formula simulators, and ice hockey games.

In addition to such rare high-profile events, clubs held their own less formal competitions at their meetings in the early and mid-1980s. One of the best documented recurring events was the game competition of Commodore-mikroharrastajat ("Commodore Hobbyists"), which continued the tradition of the former VIC-20 club ("Helsinki Region VIC-20 Club"). Taking place at their annual and monthly meetings, where there was also an educational program and hardware demonstrations, the competition grew rather instutionalized over time. The club also had close connections to PCI-data, and the company occasionally sponsored competition prizes or participated in the club events. (*Printti* 11/1986; 20/1986.)

Game competitions and the accompanying high scores clearly had their roots in sports culture and youth club activity. Competitions (as in the above examples) also worked as advertisements: computer clubs wanted to recruit new members, and computer importers were trying to promote their new products. Competitions did not include only games; for example, programming competitions were common, especially after 1985. The home computer magazine *MikroBitti* regularly organized competitions in its issues during the 1980s and early 1990s. The subjects may have been, for example, programming, electronics, or computer games. Sometimes the readers had to even solve crosswords. There were pecuniary rewards, T-shirts, games, and even computers available for the winners. The competitions of magazines and clubs were at times – especially if the prizes were valuable – sponsored by computer and game companies (e.g. *Printti* 20/1985; 20/1986; *MikroBitti* 2/1986, 6). Less competitive were the frequent reader competitions, where one could participate by sending a postcard or a cutout from the magazine.

Even though computer gaming dominated Finland in the 1980s, some sort of console gaming boom started to emerge in the late 1980s, especially due to the Nintendo NES and Sega Master System consoles' international success (Suominen 2015). This turn changed competitive gaming's main focus toward new platforms, probably because that was where the marketing battle was the toughest and was clearly game-oriented.

Nintendo started its "World Championships" in the US in 1990, but it seems that in the first year, the competition was merely national and only became truly international the next year. Nintendo's Finnish distributor Funente started to organize Nintendo's Finnish Championships in 1991, and most of the participants were, again, young boys. Typically, the contests were held in two or three age-grouped series. Likewise, Nintendo's main rival Sega started to organize its own competitions from which, for example in 1993, there was the possibility to proceed to the European Championship. (*MikroBitti* 10/1991, 11; *MikroBitti* 12/1993, 10; *Sega klubilehti* 6 [fall 1993].) The difference between these and the early 1980s' contests was their global scale, but the competitions were still mainly marketing tools for hardware manufactures as well as their national representatives.

3. High Score Tables and "the Gaming Den" (1983–1993)

Reisner (2016, 7–9) has pointed out that the highscoring was also involved in fostering a culture of comparability and doability in a broader sense. Reisner refers to the "high score culture" of the 1980s. He claims that the elements of highscoring can also be found in other social domains: for example, in fitness and financial economy. Kirkpatrick (2013) argues that the term high score culture hints at the connection between videogames and the social imagery of the 1980s that emerged in the wake of personal computing.

There are certain differences as to how this phenomenon evolved in different countries. Finland did not experience a big boom in arcade games or video game consoles in the early 1980s (Saarikoski & Suominen 2009). Therefore, the Finnish high score practice was strongly connected to the emergence of home computer culture during 1983–1984. The first mass-produced microcomputers, often simply classified as home computers, entered the Finnish consumer market in 1982 and 1983. The Commodore VIC-20 was the first substantial commercial hit (Saarikoski 2004).

So far, the earliest known Finnish examples of published high score tables are from 1983. Tables were published in computer club leaflets and computer magazines. Gaming became more popular in the early 1980s when new, young enthusiasts joined computer clubs, and new clubs were founded. For example, Helsingin seudun VIC-kerho (Helsinki Region VIC-20 Club) published its own high score table from the club's aforementioned competitions in the *Vikki* magazine. Usually the games played were the most popular titles available (for example *Pac-Man* clones). (*Vikki* 4/1983; *Vikki* 4/1984.) During 1983–1984, news from the competitions and high score tables were also published in magazines owned by the importers of home computers. The most important of which was *Poke & Peek* – a bulletin-like computer magazine (1983–1986) published by PET Commodore Inc. (later PCI-Data). The high score table was accompanied by the slogan "Tulin, pelasin, voitin" ("I came, I played, I won"), a reference to Commodore's advertising slogan for the VIC-20 – which itself was a pun on Julius Caesar's "Veni, Vidi, Vici." (*Poke & Peek* 2/1983; 1/1984; 6/1984.)

Early on, magazines wanted some form of proof that new top scores were not fabricated. Usually this was done by having the player take a photograph of the game screen. Alternatively, the player's high score could be confirmed by two witnesses. A clear influence behind this was found in the highscore tables published in foreign computer magazines. (*Vikki* 7/1983; *Vikki* 1/1984; *Poke & Peek* 2/1983; *Poke & Peek* 1/1984.) Highscore tables were also published in the first purely console-focused magazines, for example the Nintendo club magazine in the early 1990s. The club magazine also wanted clear evidence of records and gave instructions on how to take photos of screens (*Nintendo-lehti* 1/1990; 2/1990; 1/1991.)

By far the best-known and longest-running high score table was published in *MikroBitti's* Peliluola ("The Gaming Den") column maintained by Risto Hieta under the pseudonym "Nordic the Incurable." *MikroBitti* was the best-selling Finnish home computer magazine of the 1980s and became one of the key players in Finnish computer hobbyist and game circles (Saarikoski 2004). Thus, we use The Gaming Den here as a major case that captures several kinds of interaction between game journalism and players. Most of the column consisted of short game reviews, news, and game hints, tips, and maps as well. The column usually started with a short fantasy story as an introduction, followed by a more typical discussion of games. Hieta's style was typically free-ranging and humorous. The length of a column was typically two pages, sometimes even three.

The first Peliluola column was published in *MikroBitti* 3/1985. Peliluola's high score table was called *Mestarien marmoritaulu* (wall of honor), and it was published regularly for almost nine years, until late 1993. The format was very simple: any reader could send a postcard to the editor and announce how many points he/she had earned in any given game. In addition, the player had to mention which platform they had played on. The records were then "carved in marble" and published in the next issue. Generally, only the latest games were taken into account. No in-house competitions were ever arranged, and the best players did not receive any prizes.

From 1985–1987, the most published high scores were for the Commodore 64, the most popular home computer of the 1980s. The VIC-20 was also important in the early issues. Nevertheless, less successful home computers were also taken into account: the Sinclair Spectrum, Spectravideo MSX, Dragon, Amstrad, and Commodore 16. Results for the Commodore 64 were published more or less regularly until the end of 1993. For example, in Australia, where high scores were published in the *PC Game* magazine's column "Challenge Chamber," they followed a similar policy regarding the most popular platforms (Stuckey 2014).

During 1987–1993, new computer platforms became commonplace: the results for the Commodore Amiga, Atari ST, and PC games appeared in the Gaming Den, and some game consoles were mentioned as well (for example Nintendo and Atari Lynx). Therefore, one could even study the approximate popularity and public "living space" of different platforms based on the high score tables. Interestingly, Hieta did not require any proof (for example a photo) of the record like most other publishers, but relied on the honesty of the players instead. There were no prizes, so the only possible reward was fame. Most of the readers of the Gaming Den were teenage boys, and it was not surprising that problems started to emerge. In *MikroBitti* issue 10/1985, Risto Hieta wrote – slightly sarcastically – that some of the scores were "absurdly high." Meanwhile, some of the readers wrote letters where they strongly criticized the results that appeared on the wall of honor, making accusations that some of the scores were fraudulent. They claimed that "an average player" could not achieve game points anywhere near the high scores. (*MikroBitti* 12/1985; 1/1986.)

Despite the criticism, the editorial policy was not changed for some time. It was not until the summer of 1986, when some serious doubts began to arise. For example, one reader mentioned that the high score for *Impossible Mission* (1984) was clearly a "forgery," because the result was higher than the maximum points that could be gained by fully completing the game (*MikroBitti* 6–7/1986). After that point, Hieta started to check for dubious highscores, and stressed that postcards and letters should always include contact information for background checks.

The number of letters continued to grow steadily and, therefore, more high scores were also published. Hieta constantly complained that many of the postcards lacked documentation and that he had no other choice than to scrap them. (*MikroBitti* 12/1986; 1/1987; 4/1987.) When one reader, who had sent him several impressive scores, was got caught using cheats, Hieta stated that he was not going to publish any more high scores "for a while," and asked readers for feedback for renewing the Gaming Den (*MikroBitti* 8/1987.) He carried out a reader survey, and according to the results, the readers clearly wanted more game hints and maps, and some even questioned the necessity of a high score table. Hieta stated that he was not going to discard the high score table altogether, but as a result of the survey, the "hints and tips" section was expanded, and the size of the high score table was downgraded. (*MikroBitti* 9/1987, 10/1987.)

The Gaming Den was an early example of a game community forum, and there was a clear social demand for its kind of journalism. For many readers, it was exciting to see that Hieta actually answered their questions, their names were mentioned in the column, and their high scores appeared on the wall of honor – even if by cheating. He also frequently wrote personal letters to his readers. We argue that the high score tables did not only serve as a competition forum for the players, but that the Gaming Den was in fact an early social medium of game culture. The Gaming Den had the same kind of social and interactive function as the "letters to the editor" sections seen in Finnish computer and game magazines during the 1980s and 1990s, before the emergence of BBSs and the Internet (Saarikoski 2012).

In the larger picture, high score tables and competitions were examples of the shared and codified social activity that was emerging among gamers throughout the 1980s (see Reisner 2016, 7; Raczowski, 2014, 148.) In Finland, much like in other countries, gamers gradually became a distinctive

community that started to, for instance, exchange tips and strategies. High scores, especially those published in the Gaming Den, functioned as a comparison point for their own achievements, and were also an informal exercise on source criticism.

4. Conclusion

Our paper shows that there were already various forms of competitive video gaming in existence in 1980s' Finland, most of them heavily male-dominated. Even if the 1980s' computer culture may appear nostalgic and innocent from today's perspective, there was nothing altruistic about the high-profile game competitions, such as the Finnish *Pac-Man* championships or the Info-Commodore-Porsche Race: they were, by and large, marketing campaigns run by big international companies and their local resellers. To ensure publicity in the pre-Internet age, a media partner, such as a popular magazine, was needed as well. Comparisons to today's E-sports are not far-fetched at all, as the game industry and hardware companies are still at least as actively involved in the contemporary, much more institutionalized and professional events.

One can justifiably claim that in the 1990s, popular game genres and the mainstream of digital gaming changed in a way that also heavily affected competitive gaming. There was no longer a similar need – or even the possibility – to compare high scores as before, and cheating additionally made such comparisons more difficult. Thus, competitive gaming, too, changed its form. Much like in the 1980s, the more general cultural, societal, and economic trends were already driving forces behind the change. New trends in ICT production, sponsoring and marketing, as well as event production and cultural industries, required novel courses of action and the development of fresh practices within competitive gaming, which started to gravitate toward new multiplayer online game genres, gaming events, and caused the rise of professional E-sports. However, such evolution, as shown in this paper, has its global and local roots in the developments of previous decades.

Acknowledgements

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