

## CHAPTER II

### THE STAGE OF NORM EMERGENCE

This Undergraduate thesis aim to give explanation of the process of the recognition of Electronic Sport is based on the norm of video game as a competition. As explained in the table of The Life Cycle of International Norm, the steps are diverse in to three steps with the first focused on the Norm Emergence.

This chapter will explain about the condition of the video game in the beginning. The condition will not only include the norm but also started by the explanation of the development of the video game production and then followed with the explanation of the emergence of the norm of video game as competition.

#### A. The History of Video Game

The history of game making begins with the development of the first video games, although which video game is the first depends on the definition of video game. The first games created had little entertainment value, and their development focus was separate from user experience—in fact, these games required mainframe computers to play them. OXO, written by Alexander S. Douglas in 1952, was the first computer game to use a digital display. In 1958, a game called Tennis for Two, which displayed its output on an oscilloscope, was made by Willy Higinbotham, a physicist working at the Brookhaven National Laboratory. In 1961, a mainframe computer game called Spacewar! was developed by a group of Massachusetts Institute of Technology students led by Steve Russell.

True commercial design and development of games began in the 1970s, when arcade video games and first-generation consoles were marketed. In 1971, Computer Space was the first commercially sold, coin-operated video game. It used a black-and-white television for its display, and the computer system was made of 74 series TTL chips. In 1972, the first home console system was released called Magnavox Odyssey, developed by Ralph H. Baer. That same year, Atari released Pong, an arcade game that increased video game popularity. The commercial success of Pong led other companies to develop Pong clones, spawning the video game industry.

Programmers worked within the big companies to produce games for these devices. The industry did not see huge innovation in game design and a large number of consoles had very similar games. Many of these early games were often Pong clones. Some games were different, however, such as Gun Fight, which was significant for several reasons: an early 1975 on-foot, multi-directional shooter, which depicted game characters, game violence, and human-to-human combat. Tomohiro Nishikado's original version was based on discrete logic, which Dave Nutting adapted using the Intel 8080, making it the first video game to use a microprocessor. Console manufacturers soon started to produce consoles that were able to play independently developed games, and ran on microprocessors, marking the beginning of second-generation consoles, beginning with the release of the Fairchild Channel F in 1976.

At the very least, competitive gaming can trace its near progenitors back to pinball, slot machines and novelty games in the arcades. Think of a pistol game which you

might now see at an old amusement park. Coin operated games predate video games and were big business long before pixels and power ups were involved.

With a bit more ambition, we can also bring games such as chess into the conversation about competitive gaming's roots. After all, in the early 1950s, chess became one of the first interactive games programmed onto a "regular" computer of the time as opposed to a machine dedicated entirely to playing chess which dates back to the early 1920s. Major computer scientists of the time such as Alan Turing and Claude Shannon believed that having a computer beat a human at chess would signal a milestone in computing, the ultimate goal being artificial intelligence.

Following were games such as Nim (a math-heavy parlor game developed in Britain on the aptly named NIMROD computer in 1951) and OXO (that's Tic-Tac-Toe or Noughts and Crosses, written in Cambridge in 1952).

Nim was called "the electric brain". Although the games were functional (albeit the player only competes against the computer, i.e. the designers) and fun, their popularity was limited by the fact that they could not be played except on their enormous, unwieldy machines of origin. These games were to be found in no homes, only universities, labs and select technical work spaces.

In 1958, American physicist William Higinbotham developed Tennis for Two, a simple two-player tennis game. Unlike its predecessors, Tennis for Two was created specifically to entertain, to cure the boredom of visitors to the Brookhaven National Laboratory, a nuclear research facility in Long Island, New York where Higinbotham

worked. Higinbotham died regretting that he'd be remembered for his invention of a game rather than for his work in the nuclear non-proliferation movement

Unlike the much later Pong, Tennis for Two used a side perspective instead of a top-down one. It had a net and was able to recognize the velocity-decreasing effect that net had when the ball hit it. The lights of the ball, net and court pulsed an eerie bright white, characteristic of the game's display monitor dubbed the oscilloscope, a tool which observes signal voltages and was normally used to maintain electronics and assist in laboratory work.

Tennis for Two, a milestone in that it allowed direct competition between two players, faded forgotten into the background for decades. The game was played only twice in its original run, on two consecutive Visitor's Days at the lab to cure the lucky tourist's boredom. On those days, it was reported that hundreds of curious would-be gamers lined up for a chance to hit the ball back and forth, back and forth.

In 1960, computers began to speed forward. Simultaneously, they became more powerful, smaller, able to store more data, do it more efficiently and display it all more clearly than ever before.

The world spun into the 1960s unaware that in the early years of the decade, the computing universe would be caught in the considerable gravity of a particularly dense star in the middle of the screen on their PDP-1 computers

In 1962, the first shooter burst into existence. Spacewar! was created at MIT by a team of four (led by Steve Russell, one of the great patriarchs of video games) from the Tech Model Railroad Club (TMRC), one of the earliest hot spots of hacker culture

Here's how Steward Brand of Rolling Stone described the game in 1972: "Rudimentary Spacewar consists of two humans, two sets of control buttons or joysticks, one TV-like display and one computer. Two spaceships are displayed in motion on the screen, controllable for thrust, yaw, pitch and the firing of torpedoes. Whenever a spaceship and torpedo meet, they disappear in an attractive explosion."

The lup.com staff summed the game's significance up in this way: "A far cry from Pong's primitive take on ping-pong, Spacewar was complex and detailed, and had much more in common with Asteroids and even Descent than with Pong. Granted, it was a monochromatic space adventure with stark graphics and no sound -- a mere shadow of the detailed 3D worlds of contemporary first-person shooters -- but it introduced concepts which guide the game developers and fans alike even 40 years later. For such an early foray into interactive gaming, it was an amazing feat."

The game featured an accurate star map in the background, a "realistic physics model governed by gravity and inertia," wrote the lup team, and responsive units which made the player's tactical decisions and quick reflexes truly important

Also impressive were its cultural firsts. Spacewar was an active collaboration, continuously being updated and improved by anyone with the will and know how to do so. It was the world's first open source game.

Eventually, it was included as a diagnostic in every PDP-1 computer, a relatively prolific machine about the size of a car. Spacewar, which pioneered deathmatch gameplay (a term not coined until the 90s with Doom) as well as free-for-all (FFA) and team play as the game expanded, was found in front of the smiling faces of

hundreds and thousands of players, mainly students, computer scientists, technicians and gamers of similarly specialized occupations.

In labs across the country, such as Stanford's Artificial Intelligence Laboratory in 1972, Spacewar competitions were organized. The Spacewar Olympics, a mixed competition (including five player FFAs, 2v2s and 1v1s) was chronicled in Rolling Stone. There were no particularly grand prizes here, only pride and pizza, besting your rival and beer. and a year's subscription to Rolling Stone in its heyday.

These gamers, mostly brilliant computer heads unknowingly leading the way toward modernity, were doing something as old as games themselves: bonding over competition, not to mention profound innovation.

Reporting on the International Spacewar Olympics Brand continued in Rolling Stone, "Reliably, at any time moment (i.e. non-business hours) in North America hundreds of computer technicians are effectively out of their bodies, locked in life or death space combat computer projected onto cathode ray tube display screens, for hours at a time, ruining their eyes, numbing their fingers in frenzied mashing of control buttons, joyously slaying their friend and wasting their employers valuable computer time."

Continued the article: "The hackers are the technicians of this science - 'It's a term of derision and also the ultimate compliment.' They are the ones who translate human demands into code that the machines can understand and act on. They are legion. Fanatics with a potent new toy. A mobile new-found elite, with its own apparatus, language and character, its own legends and humour. Those magnificent men with their

flying machines, scouting a leading edge of technology which has an odd softness to it; outlaw country, where rules are not decree or routine so much as the starker demands of what's possible.”

Although computers remained the domain of government, academics and industry for most of Spacewar’s natural lifespan, the game became exceedingly popular wherever it went. Spacewar spread to other academic research centers within weeks. Other schools began to put their own twists on the game such as score keeping, anchored invisibility, team games and much more. Meanwhile, MIT kept updating their baby as well.

The game appeared in a college coffee shop for .25 cents per play under the name Galaxy Game and then elsewhere as Computer Space. It was the first coin-operated video game thus beginning the story which would lead to the arcade explosion in the coming decades. These games were well received by those familiar with computers but were deemed too complicated for the general public. It showed up on the internet precursor ARPA-net. The first makeshift joysticks were constructed for this game at MIT according to The Dot Eaters, a video game historical website.

Spacewar is one of, if not the single most important video game of all time. It was not the first video game but it was the first which began to resemble its progeny in significant ways. The gameplay, visuals, innovative conceptualization, a multiplayer experience with depth and replayability, open culture and every bit in between marks this as a milestone in video games, eSports, technology and science. Big picture or small, Spacewar is monumentally significant.

As soon as the opportunity to compete was there, gamers played deep into the night. The game was intermittently banned at various university research centers and major companies such as IBM before inevitably being allowed re-entry. Things were dull without it. Complaints from workers pushed management to allow play. Official work was not being done while the game was played but minds were at work nonetheless

In May 1972, the first home video game console was released: The Magnavox Odyssey. Ralph Baer, called “the father of video games” by IGN, designed the console by starting from a solid idea he had had as early as 1951 while working with televisions. He realized that user interactivity with the machine was possible, desirable and marketable.

The Odyssey sold approximately 330,000 units before it was discontinued in 1975, an end generally credited to somewhat poor and confusing marketing of the system and its capabilities as well as prohibitively high prices. However, the Odyssey continued to make money for Magnavox as it won court cases and settlements against major companies such as Nintendo, Mattel, Activision and, most famously, Atari for their creation of Pong

David Winter at Pong-Story.com explains: “After founding Atari on 27th June 1972, [Nolan] Bushnell [the President of Atari] and Alan Alcorn (his first employee) designed the famous prototype of their PONG arcade machine. Once finished a couple months later, it was placed on trial in a local bar called Andy Capp's Cavern in Sunnyvale [California]. Later in 1974, the arcade video game business having



flourished, Magnavox filed a lawsuit for patent infringement against Seeburg, Bally-Midway and Atari. Although Bushnell insisted that he didn't copy the Ping-Pong (Tennis) game of the Odyssey, Federal District Court judge John F. Grady was not convinced that Bushnell had designed PONG before attending the [public] Odyssey demonstration [much earlier].”

The flood of Pong clones led to the video game crash of 1977, which eventually came to an end with the mainstream success of Taito's 1978 arcade shooter game Space Invaders, marking the beginning of the golden age of arcade video games and inspiring dozens of manufacturers to enter the market. Its creator Nishikado not only designed and programmed the game, but also did the artwork, engineered the arcade hardware, and put together a microcomputer from scratch. It was soon ported to the Atari 2600, becoming the first "killer app" and quadrupling the console's sales. At the same time, home computers appeared on the market, allowing individual programmers and hobbyists to develop games. This allowed hardware manufacturer and software manufacturers to act separately. A very large amount of games could be produced by single individuals, as games were easy to make because graphical and memory limitation did not allow for much content. Larger companies developed, who focused selected teams to work on a title. The developers of many early home video games, such as Zork, Baseball, Air Warrior, and Adventure, later transitioned their work as products of the early video game industry.

## **B. The Beginning of The Video Game Competition**

The earliest known video game competition took place on October 19, 1972 at Stanford University for the game Spacewar. Stanford students were invited to an

"Intergalactic spacewar olympics" whose grand prize was a year's subscription for Rolling Stone, with Bruce Baumgart winning the five-man-free-for-all tournament and Tovar and Robert E. Maas winning the Team Competition. The Space Invaders Championship held by Atari in 1980 was the earliest large scale video game competition, attracting more than 10,000 participants across the United States, establishing competitive gaming as a mainstream hobby.

In the summer of 1981, Walter Day founded a high score record keeping organization called Twin Galaxies. The organization went on to help promote video games and publicize its records through publications such as the Guinness Book of World Records, and in 1983 it created the U.S. National Video Game Team. The team was involved in competitions, such as running the Video Game Masters Tournament for Guinness World Records and sponsoring the North American Video Game Challenge tournament.

During the 1970s and 1980s, video game players and tournaments begun being featured in popular newspapers and magazines including Life and Time. One of the most well known classic arcade game players is Billy Mitchell, for his listing as holding the records for high scores in six games including Pac-Man and Donkey Kong in the 1985 issue of the Guinness Book of World Records. Televised eSports events aired during this period included the American show Starcade which ran between 1982 and 1984 airing a total of 133 episodes, on which contestants would attempt to beat each other's high scores on an arcade game. A video game tournament was included as part of TV show That's Incredible!, and tournaments were also featured as part of the plot of various films, including 1982's Tron.

### **C. The Struggle for Video Game Competition**

One of the documented struggle for establishing the video game competition as well as establishing an organizational platform, happened in March 2007, where a seventeen-year-old Michigan native Zach Wigal had spent three months planning and organizing a Halo 2 tournament for his fellow peers and classmates at Saline High School. The teenager, along with a group of friends, had received permission from administrators to host a video game tournament in his high school's cafeteria. Nearly three hundred individuals had registered to take part in one of the area's first-ever competitive gaming tournaments.

Three days before the tournament was scheduled to take place, a local police officer (who belonged to a media censorship organization called the Parents Television Council) heard news of the teenager's tournament, and adamantly protested the event be allowed to take place within the high school. According to a voicemail left for the school district's superintendent, it was the opinion of the public safety officer that Halo 2 was "corrupting the minds of America's youth" and that the gaming tournament was a hazard to the public safety of the community. Comparing the game to other M rated titles such as Grand Theft Auto and 25 to Life, the officer strongly suggested the event not take place on school property. The high school's superintendent, convinced by the officer's voicemail, quickly cancelled the permit that had been given to Zach and his friends months earlier; citing public safety concerns as reason for cancellation.

Still determined to host a Halo tournament, Zach and his friends began putting together a new event with the hopes of raising money for charity to instead illustrate the positive impact people can make when they come together to play video games.

The high school students set out to seek redemption, refuting the negative stereotypes and misconceptions they had experienced first hand that are often associated with video games.

Over the next few months, Gamers for Giving was born, an event that aimed to benefit a local chapter of the Autism Society of America. In the process of planning this new event, Gamers Outreach Foundation was created. Though the organization was originally established to help encourage and facilitate donations for the event, the foundation quickly began taking on a life of its own, maturing eventually into an organization with a clear vision and a simple goal – help people through video games.

Gamers for Giving went on to be a great success. Teaming with a local LAN party, the 2008 event featured a Halo 3 tournament alongside an MPCon BYOC LAN. Over 500 participants and spectators attended, generating \$4,000.00 for the Autism Society of America.

In 2009, Gamers for Giving became the annual fund-raising event of Gamers Outreach Foundation, and the organization itself experienced a re-launch, merging with two other well-established gaming charities: Fun For Our Troops and Gaming4Others. The organization currently works to develop and sustain initiatives that actually use video games in ways that help others.