

TEN PENCE ARCADE SPECIAL: TOAPLAN

Toaplan Intro.

Toaplan were a Tokyo based arcade game development company renowned for their shooters (or STGs in Japan) with difficult gameplay, long levels, huge bosses, great graphics and rousing music. They were in business from 1984 to early 1994. Most of the 'inside information' in this special comes from interviews with the two main early musicians / designers / programmers Tatsuya Uemura and Masahiro Yuge from around 1989 - 2012. I've found bits and pieces from other Toaplan employees and included them where relevant. They'll be links in the show notes to all the interviews and information I've found.

Uemura quotes in *black italics*

Yuge quotes in *red italics*

Yuge or Uemura talking (unknown which) in *blue italics*.

Other quotes in *purple italics*

Orca & Crux.

Toaplan formed from the ashes of two related companies: Orca and Crux.

Orca manufactured PCBs (no cabs) and made arcade games from 1981 - 1983, including Espial, River Patrol, Springer, Sky Lancer, Changes.

Orca went bankrupt in 1983, whilst making Vastar, and released it under 'Sesame' alias, probably for legal reasons.

Orca members formed Crux and made Gyrodine (July 1984 helicopter vsu for Taito) and Repulse (June 1985 3D vsu for Sega). You may know repulse as Son of Phoenix or '99 The Last War.

Crux went bust while Repulse was in production (it was finished under another name of Kyugo) A company called Toakikaku was looking for a software division, which was formed by Crux employees.

Did Toakikaku exist before Crux people turned up? I think so.

Toakikaku originally just rented out PCBs, then decided to make games and changed its name to Toaplan. 'Kikaku' is 'plan' in Japanese, and Toaplan name translates as "East Asia Ambition" or "East Asia Project".

The Original Team.

1984 - Yoshiyuki Kiyomoto - President (Retires 1992).

1984 - Kenichi Takano - Founder. Also Cave Founder & President

1984 - Masahiro Yuge - Musician / Designer / Programmer

1984 - Toshiaki Ohta - Music

1984 - Yuichirou Nozawa - Graphics

1985 - Tatsuya Uemura - Musician / Designer / Programmer (he turned up after finishing Repulse for Crux)

We're now going to run through the games in chronological order, and reveal the story behind the rise and fall of Toaplan along the way...

The Games.

The first two games were Mahjong games (most likely Japan only), about which I can find very little, except that they did exist.

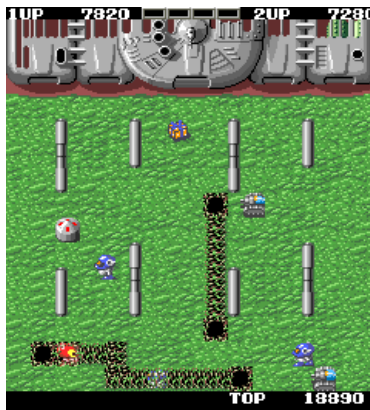
Mahjong King / Jong-Ou, 1984

Licensed to SNK. A copy of someone else's Mahjong game code with original pictures.

Mahjong Mania / Jong-Kyuo, 1985

Licensed to Data East. A copy of someone else's Mahjong game code with original pictures.

Performan, Apr 1985



Licensed to Data East. Side-on single screen shmup. Robots descend from top of screen. Shoot them or detonate mines near them. Standard gameplay given extra dimension by ability to burrow underground to get out of trouble. Uemura wrote the music while at Crux, Yuge converted it to data. Data East wouldn't allow Toaplan credit for this game until many years later, so Tiger-Heli believed by some to be first official Toa game. Core Toa team finalised around completion of this game. Whole team worked out of 1 room apartment in Yoyogi (Tokyo).

Tiger-Heli, Oct 1985.



Licensed to Taito. The first Toaplan vertical shooter, featuring a helicopter flying over land and seascape, destroying boats, ships, tanks and aircraft. First game to use a 'megabomb', which was intended to be used aggressively, but instead became a life saver. Uemura considered other Shmup makers sloppy (throw loads of bullets on the screen), and made this to be a 'memorizer' game to be learned. Deliberately slow

helicopter movement and enemy bullets meant players had to play more carefully and strategically to get through.

I think the term "memorizer" is used today somewhat negatively, but I emphasized it and wanted players to do well by playing through and discovering all the strategic patterns.

The strange polygonal graphics explained: *Actually, around that time we were doing research for a flight simulator program we might develop. The designer used a sample image from that simulator in Tiger Heli. As for the simulator itself, we continued working on it up till the very end of Toaplan, but we never announced it publicly.*

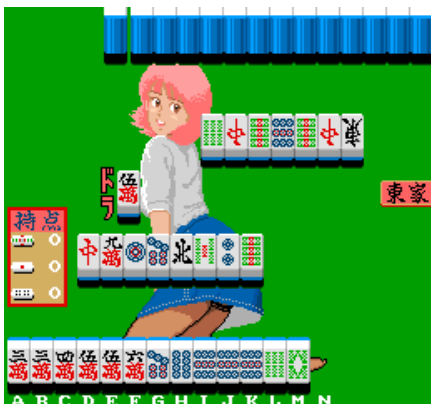
Guardian / Get Star, Mar 1986.



Licensed to Taito / KitKorp. H-beu. Kind of like Kung-Fu Master. Can pause scrolling when ducking. Punch & kick powerup. 6 different planets. Varied graphics. Was a commercial flop.

Koetsu Iwabuchi (artist on Guardian): I love STG. But I really liked Get Star... I was disappointed it didn't do well.

Mahjong Sisters, May 1986.



Self published Japan only strip mahjong game. I had no idea that winning at Mahjong would make ladies take their clothes off! Code based on (but not ripped from) previous 2 Mahjong games.

Alcon / Slap Fight, Dec 1986.



Licensed to Taito. ALCON = Allied League of Cosmic Nations. V-seu with Gradius style weapon system (if Konami were upset, they didn't mention it). Ship power-ups can quadruple its width. Kind of a semi-futuristic theme set in the year 2059. Loads of hidden features and secrets, but designed to be played without knowing any of them.

We were very particular about the details of our games. We had this concept for a game that featured the idea of "secrets," so we put many secrets in Slap Fight. We even put in the "space invader" secret as an homage to Taito.

We aimed for a kind of game in which, when a player died and wondered what killed him, he would be able to say to himself "Next time I should do this." In that regard I think we learned a lot from Xevious. In Xevious the speed of the game was designed such that players had to devise all these plans, like moving their ship to a certain point when the screen had scrolled just so far. Things like that really taught us a lot. But we also thought of ways to get rid of the impatience inherent to the slow pacing of that game. What livened things up for us was when we added bombs, rather than making everything be about precise aimed shots.

Although the game was hard, it was fair. A feature implemented in this and carried on in a few of the other games was that the ground enemies would not shoot at you if you were close to them, emphasising the fair-play ethic.

Flying Shark / Sky Shark (US) / Hishouzame, Mar 1987.



Licensed to Taito. Competent biplane WW2 shooter with weapon powerups and megabomb. Flying over land and sea installations - lots of boats. Theme inspired by *Apocalypse Now* and company trip to Thailand. Hardware upgrade to in-house shooter-specific 16bit MC68000 CPU and FM sound meant more sprites and better music.

Because we could now put more sprites on screen, we suddenly had a lot more possibilities regarding the game system and what we could express. Whenever hardware was going to be upgraded, Toaplan would ask the opinion of the programmers, and we noted that most of our games were vertical shooters, so we chose the hardware on that premise. Having more elements on screen really opened things up for

us.

Toa were a relatively small company and didn't have as much free capital as others so:

We always wanted to use new things (hardware) as quickly as possible, but due to budget and other business considerations, we didn't make any demands about it. But we also realized that if we fell behind other companies too far, that would be bad for Toaplan in its own way. So our timing was such that when we finally couldn't wait any longer, we'd switch to the new hardware, though a little later than other companies.

Toaplan produced its own hardware, so if there were chips left in stock, we had to use them all up before getting the OK to switch to new chips. This happened with sound chips on V-V, which we'll get on to later.

Twin Cobra / Kyuukyoku Tiger, Oct 1987.



Toa liked to use Kanji in their game titles. (Japanese pronunciation - the adopted logographic Chinese characters (hànzì) that are used in the modern Japanese writing system along with hiragana and katakana in their names)

"Kyuukyoku", yeah, at the time it wasn't that popular of a word yet. It came from the Japanese translation of the Yes album "Going for the One," which I was determined to use somewhere. When we first presented the title Kyuukyoku Tiger, the president rejected it. "What the hell is that?" was his reaction. (laughs) We explained to him that "Ultimate means you pilot a ship with firepower that's never been seen before in a STG, so it's the 'ultimate' tiger." We only cared that it sounded tough.

Licensed to Taito / Romstar. Best selling Toa game (despite the bootlegs, as copy protection was easily broken). Inspired by Taito's 'invigorating' Halley's Comet. Polished shooter. 4 colour-coded weps. Helicopter theme (again - they liked the slow movement and hovering capabilities of helicopters).

You know the way the items in Kyuukyoku Tiger swirl around the screen? One day when I was on lunch break, I saw the zigzag pattern in my donburi ramen and thought, "this is it!", and hurried back to the office to code that pattern in for the items.

(Slow movement in the early games) was my idea. Well, you could say the shooting games I like to make are closer to puzzle games: games that require a strategy. They're made so you can't just go where you want but are required to take a specific route or can't continue. At the time, shooting games were a genre that salarymen could enjoy without putting too much thought into,

but for the diehards, they were memorizers. I wanted to make something that only people that memorized a certain path could play.

Uemura on **recovery patterns**.

*During development I played the games a lot, especially for **recovery patterns**, since you can't make something you can't recover from. I'd play it over and over myself and finally move on when I realized a recovery was possible. The shooting game I envisioned is over when you don't return to a checkpoint after a miss because you are no longer creating a pattern.*

2P simultaneous games were a big hit with western players, so Taito asked them to add 2P simultaneous mode.

Taito requested 2-player simultaneous play. Originally in the overseas versions you didn't return to a checkpoint when you died, and simultaneous play was a must. The players at that time in America were always playing in a somewhat drunken fashion, not making strategies or plans. We couldn't ignore them (Western gamers), but as developers we focused more on games in Japan. The players in Japan and the players overseas had completely different ways of playing, and what they looked for in games was different as well. Taito America would give us ideas about the overseas market which we made use of.

CONTRADICTION:

Overseas audiences had been a target ever since we began making arcade games. 70% of our sales were from overseas.

Wardner / Pyros (US) / Wardner No Mori, Dec 1987.



Licensed to Taito. H-platform beu. Similarities to Ghosts N Goblins. Level map like GnG. More platforming elements. Magic shop for swords. Fairies and cloaks. Nice gfx again. 2nd level industrial factory thing, rest medieval. Polished gfx again.

We thought we couldn't make just shooting games... that we had to make something else.

Wardner: That one was fun. The guy that made it, [Etsuhiro] Wada-kun, liked Wizardry so it has that essence.

Fighting Hawk, 1988.



V-seu. Faster craft than before. Powerups increase bullets from 2 to 5 (maybe more). It's your (by now) standard land / sea / boats / tanks / aircraft setup.

Licensed to Taito yet again (a relationship that started with Gyrodine).

After a while our relationship with Taito became fixed to a degree. There was a time when having Taito handle the distribution was pretty much a known premise of the development.

It was pretty normal stuff. Someone from Taito would show up one day, we'd take them out to dinner, and so forth.

Taito didn't do quality / bug checks, they just trusted Toa.

They (Taito) only handled the distribution. We used our own money for the development. Yeah, they almost never did that (told us what to do). And when (they did and) one of us objected to their requests, we just didn't do it!

Rally Bike / Dash Yarou, May 1988.



Licensed to Taito. Overhead motorbike racer. Qualify at certain positions to continue. Periodic refuelling at gas stations required. Vertical shooter and dodger without the bullets! Like Traverse USA, Road Fighter, Battle Lane etc.

Truxton / Tatsujin, Oct 1988.



Licensed to Taito. Golden Age Toaplan started here, imho. Sold well in Japan, not so in other places. The dream team of Yuge and Uemura split up for Truxton. Yuge did Truxton, Uemura did Hellfire. This was their first true sci-fi game, and back to single player only, as they felt simultaneous 2 player would ruin the 'one man army' design of the game. A brilliant space-themed shooter. This addresses some fans' complaints about starting with a weedy weapon. You also have ship speed-ups for the first time, allowing for more variation in enemy speed of attacks.

Naoki Ogiwara (graphics) - his designs gave us a lot of inspiration. He was just coming up with all these enemy character designs, and we'd see them and get ideas like "oh, he should move like this," or "this guy is round, so when he stops let's make him spin around once." It was really inspiring.

I wanted to make a game where the more you remembered, the better you would become. I focused on adding a lot of sections where you needed a specific weapon to deal with certain attacks. One day, when I was half-asleep, I bumped my head and woke up from a dream I was having with this Laser in it... so I really wanted to add that too. (laughs) We succeeded in bringing that laser to life, and players were surprised by it. When we started making the game, the laser was the first thing I created. I added it thinking it would be the main weapon in the game. With cocktail arcade cabinets at the time, a player sort of had to peer down into the screen while he played. When a player would unleash the fully charged Tatsujin laser, the people next to him would look at the player's face and see it fully aglow with reflected blue light. (laughs) It sounds creepy but it was somehow really cool.

The skull bomb Ogiwara designed was also very cool and impressive. The truth is, we were thinking about redesigning all the enemy placement for the second loop, but the idea was never realized. Its too bad.

We were trying to pursue the simple thrill of shooting and dodging, so we settled on the shot+bomb system. When you fire that bomb, I think it helps relieve stress. For Tatsujin, at first we were going to try a bunch of different things like in Slap Fight. But we thought if the main selling point was to be the "Tatsujin Laser", then it was probably best not to jam the game with too many other things.

Anyone who has played Truxton will tell you that it was difficult. Here's what Toa say about **game difficulty**.

In order to make the games more and more exciting and wild, we had to start inflating the weapons as well. I think that did create a more "user friendly" game, but to keep the game balanced we also had to make the enemies tougher.

The games turned out to be quite difficult, but we didn't design them with the intention of "Hah, see if you can clear THIS!" The foundation of our design was to make a game that wasn't overly complex, that anyone could clear... I always thought of it as a genre that even a busy salaryman could just pick up and enjoy. Though gradually everything started to be made more and more difficult for the hardcore players (laughs). In the end we sort of hung ourselves with our own rope.

Actually, we wanted to make our vertical shooters easier, so we'd initially make them quite easy for our location tests (which were all in Midori Game Center in Meguro, Tokyo), but then someone would 1cc them in one day and we'd end up dramatically raising the difficulty level.

Balancing the difficulty started to get more and more difficult, and players were getting better and better.

Adjusting the difficulty level took more time than anything else during development, and management told them to increase difficulty to increase operator profits.

There was a lot of pressure to make games that would bring in a lot of income for arcade operators. We were told to make our games "One credit for 3 minutes", but we said you can't make an interesting game like that. We fought about that a lot. We had to accommodate our work to this sales / business perspective, and we were forced to make a game that would, in the short term, build a lot of income. I regret it (talking about Fire Shark there).

They also said that they made their games didn't end when completed, they looped back to level 2 as a kind of reward to the players who had spent so much time and money mastering them. Why level 2? Level 1 was boring and too easy!

Hellfire, Apr 1989.



First game that Taito allowed the 'Toaplan' name on title screen.

I think it was around Hellfire where Taito first recognized our "Toaplan Shooting" reputation.

Uemura was doing this as Yuge was making Truxton.

With Hellfire I was specifically told to "make something like Gradius." But actually, other than making it horizontal, we didn't use the Gradius model at all. Horizontal shooting is totally different from vertical, and I had no idea how to make the game fun, so I asked that there be an underlying puzzle element added.

I think horizontal STG requires a different kind of appeal. You need the technical know-how for dealing with terrain, and various other different game design ideas to make it interesting. We were inexperienced with everything and it was a real struggle, but we did our best and finished it.

Uemura didn't really like h-seu but came up with something original in the bullet direction change option in the game.

Twin Hawk / Daisenpu, Jun 1989.



Licensed Taito. Another nice polished airplane (spitfire?) shooter. Bomb button gives a fleet of 6 companion fighters which stay with you until they get hit. Tanks, boats, planes, copters.

Toa asked by Taito to use system X hardware - first and only time Taito had specified hardware, and the one game Taito actually asked them to develop. All the rest Toa just took to Taito.

Zero Wing, Sep 1989.



H-seu with a space theme.

The frequency of Toa releases increases. Previous dev times were about 6 months per game, but now more games are getting released by different teams within the company.

Zero Wing was based on the Hellfire engine. This title was created as a training project for our new hires. At that time we didn't have any plans to release it commercially. But the decision to release it commercially made it a much more practical learning experience for the new developers, I think. On the other hand, the stage design and characters were rather cobbled together, so the world of the game was kind of a mess.

We stopped doing horis (horizontal shooters) after that. I think we realized we just didn't know how to make a horizontal shooter interesting. Later we were told by many users that they really liked Zero Wing, but to be honest, I don't know what they liked about it.

Pipiru, Toa mascot, appears in this game.

Our designer Naoki Ogiwara created him, but I don't think he was planned in advance. He was just playing around. He's in Zero Wing, Truxton II, and OutZone.

The MD port of Zero Wing is famous for it's very bad Engrish, and the phrase 'ALL YOUR BASE ARE BELONG TO US', which became a meme, and warning screen 'Violator and subject to severe penalties and will be prosecuted to the full extent of the jam.'

Who's responsible?

It may have been this guy who was in charge of our exports at the time. He was always having business meetings with people from overseas, and I went to a few of them myself, and his English was really terrible.

Talking of porting games, Toa did the MD ones themselves.

The only console Toaplan developed for was the Mega Drive. With the Mega Drive, the CPU was the same 68000 hardware, so we thought we could make them in our spare time. You just moved the screen over and cut it so it would fit on a horizontal display which is, of course, why there's less space than with a vertical display. To put it simply, there was no technique to just make the screen smaller. Since it was only our spare time, that was the best we could do.

The console ports weren't a part of Toaplan's business plan and weren't focused on at all. First off, the special allure we were aiming for in a shooting game couldn't be achieved without the arcade hardware.

Toa did consider developing for the Super Famicom at one point, but eventually never did.

Here's a list of console ports.

Tiger Heli: NES, PlayStation (shooting Battle)

Flying Shark: Amiga, Commodore 64, ZX Spectrum, Amstrad CPC, Atari ST, IBM PC, FM Towns

Twin Cobra: NES, Genesis, PC Engine, X68000, FM Towns, PlayStation (shooting Battle)

Snow Bros: Famicom, GB (Snow Bros. Jr - 10 more levels), MD

Fire Shark: MD

Grind Stormer: MD

Hellfire: MD, PCE Turbo CD

Slap Fight: MD (also with enhanced version), Amstrad CPC, Commodore 64, ZX Spectrum, TV Game

Truxton: MD (brilliant cover), PCE

Twin Cobra: MD

Twin Hawk: MD, PCE

Wardner: MD
Zero Wing: MD, TGCD
Batsugun: Sat
Tatsujin Oh: FM Towns

They also took on the role as publisher for Compile's famous Musha Aleste MD shooter in Japan in 1990.

Fire Shark / Same! Same! Same! Nov 1989.



Biplane shooter. Memorable for huge flame weapon.

Yes, the flamethrower is the successor to the Tatsujin laser. To be honest, we were really stressed out making Same! Same! Same!. We were trying to find that special "it" factor that would sell the game, and we thought if we added the flame like that, it would be too similar to Tatsujin's laser. So we made the flamethrower's movements sway to the left and right instead.

Demon's World / Horror Story, Jan 1990.



Licensed to Taito. Toa trying something different again. *This was polarising!* Forced h-scroll run n gun. Horror theme. With platform elements. Gfx lacked the flash of previous games.

Snow Bros. - Nick & Tom, Apr 1990.



Licensed to Romstar (US). Probably their biggest non-shooter success. Like Bubble Bobble but with enough cool touches to stand as an original game in its own right. Nice animations and graphical touches. Was released as a Famicom port very late in the console's life.

Out Zone, Aug 1990.



Awesome game. 2 wps. Commando style. v-seu run n gun.

Outzone doesn't have forced scrolling, so it didn't require the kind of special skills you need in a normal vertical scrolling game. In that regard I think we achieved an easier game.

For the first time Toa thought about the backstory before designing the game, rather than tacking the story on at the end of game development.

They had a very different approach to game development in general.

For better or for worse, we were really a "development-centric" company. Everyone, including management, really showed the developers a lot of consideration.

*We didn't have any sales division, and our relationship with Taito had been good ever since Gyrodine. We (almost) never made a game because they asked us to make it a certain way. Normally planning documents are made by the developers to get permission from the company to make the game, right? But we didn't have to do that. We simply made what we wanted ourselves, so there was no need to present anything beforehand. The people selling our games wouldn't see them until we were done, so their opinions didn't factor in. It was a good time. And till the end, it was just all of us submitting our various development ideas. It was kind of like a competition. **More than planning docs, we'd usually bring some prototype of the game** (to the meetings). There was never any systematic, organized method for it. It was always totally*

disorganized. (laughs). It was all left up to the individuals (laughs). We always knew what each of us was working on because the teams were small and we were seeing it all come together in real time.

We'd generally have 2-3 programmers and 2-3 designers, then we might add other people individually, even in the latter half of development.

We did follow the "right person for the right place" style of planning. When doing sequels to our vertical STGs, we found it more efficient to use the same people, and they'd be able to bring their ideas and knowledge to the table.

Originally, we didn't make any (planning and design docs). Kyuukyoku Tiger was the first game that actually had planning documents. We'd usually just write down the ideas for the game, in text, on a single A4 sheet of paper. We'd read it out at a meeting and say "This is what we want to make. Is it ok?"... and that was it. (laughs)

We worked on both (system design and level design) simultaneously. We never even really thought of dividing it up like that. Of course the game system was roughed in first, but so were the enemies and your ship's weapons as well. It wasn't that we thought consistency and balance would lead to an interesting game... it was more like we were trying to discover those moments in the game that make you go "yes! this is cool!" Once we found that, we'd expand upon it and refine it.

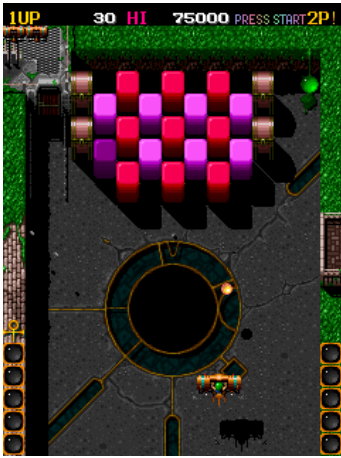
Ogiwara: One thing that's different is that we don't clearly divide up the backgrounds, enemy designs, and other artwork among individual people. Its more like everybody does a little bit of everything, and then we assemble it properly later. At Toaplan the programmers are the planners, but they don't give many detailed instructions to us regarding the art. To a certain degree we're free to draw what we want. Though this lack of communication sometimes causes us to make characters that shouldn't be there, or put guns and cannons on enemies that will never fire. Then they're very quick about asking us to fix it. It all might sound kind of disorganized compared with other companies, but its been working for us.

I don't think our system would work in a game company today. But we had a small staff, and development model that allowed us to finish games in a short period, so we had that extra time for experimentation.

At the time we knew other game companies would do their planning beforehand and separately, but we thought "our games are interesting because we DON'T do that." We prided ourselves on our way.

There wasn't really any one person who had such powers (to finalise the game). (laughs) We worked on it until everyone thought it was done.

Ghox, 1990.



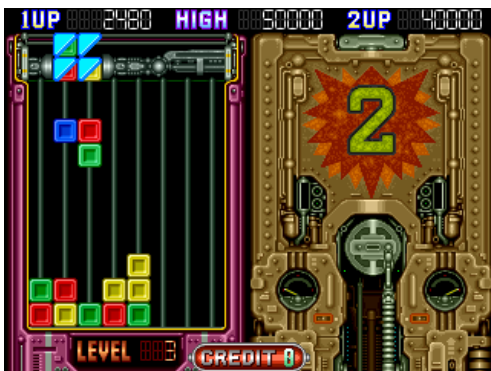
Licensed to Romstar and many others. Arkanoid with more character and a medieval dungeon theme. This game typifies for me the Toa attitude to game design. You take a genre like paddle-and-ball and give it unusual graphics, enhanced gameplay, insane powerups and lots of extra flourishes. A cool little Arkanoid game which was available in spinner or joystick modes (at least on MAME).

Vimana, May 1991.



Licensed to Tecmo / Romstar. Cool shooter with charge shot and novel bomb system. I really like this game and will get into it more when I get the time.

Teki Paki - Sennou Game (Brainwashing Game), Jun 1991.



Puyo Puyo-style falling block colour match puzzle game. Match 5 colours to clear them. Various power-ups. It was actually intended to be more shooter based, and have the screen in covered in bullets, but was changed during development.

Teki Paki was a big favorite among employees, and it's a little sad that it didn't sell that well. Toward the end of Toaplan's run when we moved to Ogikubo, we had a lot of space and even a show room. We had Teki Paki running on a cab in there, and someone (employees) was always playing it.

Toaplan were not always in nice offices. Started in 1 room apartment in Yoyogi, then moved to a tiny smelly building in Shinjuku, which they shared with a restaurant.

When they were in that office they had many ads to hire people, but I assume quite a few took one look at the building and turned back (laughs).

They ended in spacious offices in Ogikubo where the game dev was done, with the main office at Hachioji, where the president was.

Pipi & Bibis / Whoopee!! Mar 1992.



Saw this described as Elevator Action meets Bonanza Bros. Set bombs in a building and get out. Anime girl gets undressed every 4 levels. Guys are full of character. A decent game.

Another game licensed to Romstar for US distribution. Others include Out Zone, Snow Bros, Fire Shark, Vimana, and Ghox. I suspect it was Taito that sub-contracted this out, as their name still appears on some of the flyers. Romstar also licensed games from Capcom and SNK.

FixEight, Figuzeito - Legend of Hell's Hero, Jul 1992.



Sequel to Out Zone. First thing you notice is that it doesn't have the deep rich colours or detailed gfx of OZ. 8 playable characters. One of the rare games where Toa fleshed-out a story for the game beforehand, instead of tacking it on the end. Doesn't seem to have the impact of OZ. I'm going to reserve final judgement on this though, as I haven't played it much.

Truxton II / Tatsujin Oh, Oct 1992.



An awesome shooter. Had 3 weapons of varying power, a bomb, a speed-up and AUTOFIRE! OutZone before it had autofire on one weapon, but this I think highlights the growing trend at the time among Japanese gamers for a preference for autofire.

I didn't program Tatsujin Ou, but I apologize if it is too difficult. (laughs).

The level one music on this game is my favourite of all Toa music.

Music.

Uemura and Yuge wrote most of the game music. Uemura's style was to play the level and get the feel of the thing, and then write a track based on that. Yuge tried to match the music with the action more precisely, and often thinking of the music as he was designing the game levels.

I wrote all my music at the very end, though I'd write one or two songs earlier, for the location test.

I didn't write my music to be synced up so precisely. Getting the right feel was more important for me. Depending on the placement of certain enemies, though, I would try to get the chorus or hook of the song to generally align with the stage progression.

If there's 5 stages in a game, you want the music to bring out each stage's personality and character. It was easiest to make the music with that image of the stage in mind. There were also times when I'd write a certain melody or rhythm, and then program the enemies to move according to it.

Amazingly:

Toaplan as a company didn't really put much emphasis on sound design, so it felt like something we had to do in our spare time. (laughs) We were working on older hardware than other companies, and from a cost perspective sound was an afterthought.

Uemura firstly composed on guitar, and Yuge on piano / guitar. The early sound chips (up to Alcon) were PSGs, programmable sound generators (General Instruments AY-3-8910). The music had to be programmed, not written, and the drivers had to be modified if you needed to create certain effects like echoes. Flying Shark introduced FM sound chips (Yamaha YM3812), and you can immediately tell the increased richness of the sound. FM chip power increased with 1992's Fixeight (Yamaha YM2151). Also with Fixeight Toa introduced PCM sound to their games, which includes digitised samples of real instruments (OKI 6295). I think that you can tell PCM sound because the percussion sounds are more realistic than FM sound.

Toa were behind on sound technology:

Twin Hawk, on Taito HW, uses the YM2151 chip in 1989. Atari had used the OKI chip on Pit Fighter in 1990. Grind Stormer from Dec 1992 does not use PCM as Toa needed to use up an excess stock of FM chips!

Yuge talks about what people recognise as the 'Toaplan Sound' (simple basslines):

For me, it was simply that our hardware didn't have much memory for music, so I couldn't really do complex phrases. (laughs) Though it is true that when you hear the same rhythm over and over you sort of get brainwashed by it. That might be the core of the "Toaplan Style" right there. To be honest I still don't really know what that means.

After 1991 I (just) wanted to focus on sound. I started to think doing sound and programming together was becoming too difficult. The hardware was getting better and better and I just couldn't keep up with both. So I created a sound studio room and sort of holed up in there.

On sound effects:

The sound driver has to control how the sound effects and the music are layered, so I would write both at the same time. I have the same affection for the sound effects that I do for the songs. And thanks to the sounds being on CD, they can be used in other formats, you know. Even today some of Toaplan's sound effects are used for TV shows, which makes me really proud.

With the 2011 release of the 6 cd music box set Shooting Chronicle, Yuge was pleased that fans got a chance to hear tracks from later levels in games that they had not previously reached. The box set also contained a 700 page pdf containing notes and images and design plans of many games.

Other musicians included Osamu Ohta (Twin Hawk), Toshiaki Tomizawa (Zero Wing, Vimana) and Yoshitatsu Sakai (Batsugun).

Dogyuun, Oct 1992.



This game illustrates the way Toa increasingly inflated the ship weapons and power. There are some visually impressive bullets here. Purple and red homing lasers, Giant green lightning beam and large blue bullets. They were at the height of their powers in terms of presentation here: great music and brilliantly drawn 2d graphics with huge, detailed bosses. This is the first game that Joker Jun Inoue worked on (Cave legend involved with DoDonPachi and Deathsmiles).

For this title, our goal was to make a game with the best graphics we had ever done in Toaplan (from a design, not technical,

standpoint). People had pointed out that our past games were a little weak in graphics presentation. The stage 2 boss in Dogyuun is representative of our efforts; we spent a lot of time animating big bosses like that, and I think we succeeded in making something with a lot of visual impact. However, because we made graphics the top priority, the actual gameplay was kind of unimaginative. It was a shame we couldn't balance both.

Title 'Dogyuun' is Kanji for the sound the giant robot makes in the games bonus stage. Originally we had planned to make a game with that giant robot as the main character. We wanted players to experience the thrill of destroying everything in a giant robot, but it didn't work at all as a game when we tried it. We didn't want all our work to be wasted so we thought we'd put it in that final scene at least (laughs).

Grind Stormer / V-Five / V-V, Dec 1992.



Designed by the last new team to enter the company, Grind Stormer and V-Five (Japan) play differently. V-Five has a Gradius-style weapon power up system along the bottom of the screen, and Grind Stormer replaces this with a bomb count bar. So GS is easier because it has bombs, and I prefer it. Cave Legend Tsuneki Ikeda worked on this (Akai Katana, DDP, Deathsmiles, Espgaluda II etc). He says he learned a lot from this experience as his first game.

On the gradual move towards bullet hell (1993 interview):

Ikeda: It has autofire. (laughs) Also, until now Toaplan STGs have had fast enemy bullets, but this time we slowed down the bullet speed but increased the onscreen bullet count. So you can enjoy the thrill of dodging and the sensation of rapid fire.

Iwabuchi: We plan to continue to release arcade STG games that both preserve Toaplan's signature style while also bringing something new to the genre. For both new and old players, I think the way people enjoy STGs is changing. We want to pursue those changes, and while we don't intend to stick only to vertical shooting, we want to continue making truly fun games that can fairly be called top tier STG.

Incidentally, while we used FM and PCM sound for Tatsujin Ou, the reason we went back to FM only for V-V was because we wanted to clear out the FM sound chips from our inventory. The decision was completely based on business circumstances. Since V-V was done by a team of new hires, there was a feeling that it didn't matter whether it sold well or not, so when the pcb was printed they tried to cut costs as much as possible. But V-V exceeded our expectations and

turned out to be a really great game, and then we wished we could have done it entirely in PCM... later we felt we had sort of screwed over the new developers.

Knuckle Bash, May? 1993.



Not sure whether this or Batsugun is final game released. Sources differ. This is a wacky brawler where you can play as an Elvis impersonator, a boxer, a ninja, a wrestler or a football player. It has varied stages and a lot of love on Youtube!

“This has got to be one of campest brawlers I've ever seen!” Quote from YouTube.

When the company told us to make a fighting game, we tried making one and created Knuckle Bash. I wasn't involved personally, but we had no idea what we were doing. (laughs) I thought we had better stop. (laughs). It was supposed to be like Street Fighter II and turned out nothing like it.

Well, I guess we knew deep down we had to make more than just shooting games. Anyone could tell from our titles that we were craftsmen of shooting games, but there got to be such a mania about it that the games just got harder and harder until you hit Tatsujin-Ou (laughs).

There was a bootleg of this game released in 1999 known as 'Knuckle Bash 2'.

Batsugun, Feb? 1993.



BULLET HELL IS BORN! The first non-endless game from Toa. A beautiful game. Excellent weps. Great music. Both Ikeda and Inoue worked on this.

FROM HG101: “Batsugun is arguably the earliest manic shooter, and is one of the first games to introduce and define many of the sub genre's core elements. The biggest aspects they introduced are the practice of filling screen with over a hundred bullets at once, as well as shrinking the hit box to accommodate for the massive amount of fire. It also uses human characters as pilots, which has become standard practice in many shooters at this time. Batsugun contains an experience point system where each enemy is worth a set amount of experience, with

bosses worth 100 points while smaller enemies are only worth around 3. Once enough experience is collected, your ship levels up. There are three power levels, and once you level up at maximum power, you instead get a screen-clearing bomb.”

Snow Bros. 2 - With New Elves / Otenki Paradise, (Weather Paradise) Apr 1994.



Final game developed by Toa to completion. They went bankrupt sometime before release, so Hanafram picked it up. This retains the same gameplay style as its popular predecessor and adds 4 selectable characters with different looking weapons instead of just the snowballs.

Enma Daio. 1993.



An oddity to finish the game list with.

From Gamengai forums:

“Enma Daiou is a comedic "lie-detector" game in a dedicated cab, where you answer a bunch of yes or no questions and in the end the machine dispenses a strange business card.

The business card sets actually show up on Yahoo pretty often, and the Japanese site you link to says the standard version cab has appeared in auction as well”.

Bankruptcy.

Toaplan were known to be exhibiting Batsugun Special Edition at the 1994 Tokyo AOU (Amusement Operators' Union) Show, which I think was in February. (Batsugun SE was a revamped, easier version with a smaller hitbox). It must have shortly after that they filed for bankruptcy. Reasons cited / speculated for the collapse are:

1. The failure of non-shooting games:
If you put the Toaplan name on a shooting game it would sell, but we also put out weird stuff like Knuckle Bash and Enma Daiou (laughs). Enma Daiou actually cost a lot of money. All of those non-shooting titles failed.
2. The decline of the arcade scene in general, and the fact that only the fighters seemed to be making money.
3. The company's focus on making exactly what they wanted to make, rather than doing any market research and developing games relevant to current trends.
Since it was a development company from the start, we were able to make the games we wanted. In that sense it was incredibly fun. Though it might be why we went bankrupt. Unlike now, back then we didn't do things like market research, and we didn't really try to appeal to what fans wanted. It was a good time.
4. The difficulty level of the games may have turned-off casual gamers. See "we hung ourselves with our own rope" quote from earlier.
5. Unfinished games and projects which took up a lot of time and capital.
There were many (unreleased games), but almost none were games I worked on. At the beginning when we were making Get Star, we were also making an action game on Sega's Pitfall [System 1] board but it was scrapped. There were many like that at the end, which seemed to have caused the bankruptcy.
6. The informal party atmosphere at the company, which was a culture carried over from Orca.
*In those early Toaplan days it was the kind of company where someone was needing bandages almost everyday. That kind of vigour had probably been there since Orca. (The meetings were) out of control. We were more like a fan club than a company. **We had too many wild hotheads.** At a company trip all the men were jumping into the river stark naked... **That kind of thing was an everyday occurrence. At Toaplan everyone had to be restrained. When Toaplan was making a profit we'd go out drinking 6 nights a week (laughs). I only got about two hours of sleep a night for about a year. Its true, we really drank a lot. It was always like, "Well, let's go have a drink." (laughs). When we were stuck, it was good to rest our brains and do something else. It might be hard for people working at companies nowadays, but back then we'd often go to billiards or bowling, or go see a movie or something, all during work hours.***

That being said, the culture of the company may be precisely *why* they made games as good as they did:

*Inoue: The general atmosphere at Toaplan was pretty much "anything is possible," symbolizing the booming economy in Japan at the time. We often did crazy things. New staff would have to perform some party trick during a year-end party each year, but if the trick was boring, older staff would use a fire extinguisher on them... A bunch of us would go to a restaurant, and compete with each other to see who would be the first to finish all the almond jello. The winner would throw up the almond jello, and leave the restaurant... I have to admit that we behaved pretty badly whenever alcohol was involved. *laughs**

We set out deadlines ourselves, but if we gave ourselves too much time it would be embarrassing to us as programmers. Everyone felt that way. Also, whether we were screwing around, eating, or sleeping, all we thought about was games.

Each person did their work with amazing attention to detail and was responsible for completing their own work, so they let us get away with a lot. It was a lot of fun. I think the Toaplan Era was awesome.

The relationship between junior and senior employees was also great. There was no one who didn't want to go on drinking parties or company trips. There was a sense of harmony and it was a really pleasant environment. Its really a shame it had to end. At a typical company your stress just builds and builds (laughs), and you feel like everyone is just looking out for themselves.

Unfinished Games.

I think that there were many along the way, but the ones I can find are:

Taichi: *Some crazy shooting game where two kids were walking around, shooting bullets out of their heads (laughs). It was something I made at Orca during my new recruit research and remade at Crux. There wasn't even a loke test, so it's unfortunately one of those games that never saw the light of day.*

An action game on a Sega board, as mentioned above.

DT7 (Dynamic Trial 7):



An 8-player simultaneous network game. We really pushed it at shows, but it didn't do so well, so it was never released.

It was a multiplayer joystick controlled top-down racer.

Genkai Chousen Distopia



...And around that time, we were making Genkai Chousen Distopia. It was nearly completed and then never released. It was a Horror Story-style action game.

Teki Paki 2 - a sequel to the popular (in house anyway) puzzle game was rumoured to be in early development.

Power Kick, November 1994 by Sunwise is a football penalty redemption game, and was maybe programmed (in part) by Toa. It's dumped in MAME and runs off the toa hardware. Mentioned as Toa on a couple of sites.

What Happened Next?

Toaplan personnel helped found four new shooter-centric game development companies.

Gazelle

Takumi

Eighting / Raizing

Cave

Gazelle

Tatsuya Uemura, Junya Inoue, Mikio Yamaguchi, Kaneyo Oohira, and Yoshitatsu Sakai formed Gazelle and released Air Gallet and Pretty Soldier Sailor Moon for Banpresto before that company crashed.

Inoue: A couple of us Toaplan staff (most of them were from the BATSUGUN team) were selected by our boss to be transferred to another company, which turned out to be Gazelle. We weren't able to quite get along with Gazelle staff, so we eventually left the company one by one.

Takumi

Masahiro Yuge and Sanae Nito, along with several new hires, created Kyukyoku Tiger II and released it through Taito as Takumi. Masahiro Yuge also worked on Giga Wing and Mars Matrix before leaving Takumi.

Eighting (sales & dist) / Raizing (development).

When Uemura left Gazelle he did sound programming for Battle Bakraid and assisted on Great Mahou Daisakusen.

After Yuge left Takumi he contributed to Great Mahou Daisakusen at Eighting and more recently designed Kuru Kuru Kururin, also for Eighting.

Raizing continued to use Toaplan version 2 hardware in making their games, starting with Mahou Daisekusen (Sorcer Striker), along with Battle Garegga, Armed Police Batrider, right up to Battle Bakraid, released in 1999.

Cave

Kenichi Takano, Tsuneki Ikeda, Naoki Ogiwara, Toshiaki Tomizawa, and a few other Toaplan guys founded Cave and created Donpachi with some new staff. Satoshi Kohyama lent a hand on Donpachi and later joined Cave. After the collapse of Gazelle, Junya Inoue was also hired by Cave. Cave went on to produce the DoDonPachi series, EspRaDe, Fever SOS, Progear, Ketsui, Ibara, Deathsmiles, Musihimesama, Espgaluda, Akai Katana.

One of the most iconic tributes to Toaplan is the inclusion of Pipiru at the end of the first Donpachi game. Shortly after clearing the final boss of the second loop, Hibachi, the ships from Donpachi fly through the sky to celebrate their victory. Pipiru had somehow attached itself to the red ship and falls off, screaming.

Toshiaki Ohta, Hiroaki Furukawa, Etsuhiro Wada and Shintaro Nakaoka worked at Tamsoft to create the Toshinden series among other games.

Yusuke Naora, artist for V-V, joined Square and has worked on the Final Fantasy series and other projects as an art director.

Lee Ohta and Saori Hiratsuka teamed up with Taito to bring us Gekirindan. Ohta disappeared afterward, but Hiratsuka was an artist for one of the Puzzle Bobble games before also disappearing.

What happened to Toaplan's copyrights when it went under?

It's a gray area, even now. It seems the CEO made a couple of gentlemen's agreements... He said they were sold to Gazelle and Eighting, but it's unknown whether they went through the legal procedures or not. After Toaplan I did some work with a magazine. It was quite a while afterward when questions about the copyrights started coming in. I did some research but found nothing on paper that specifically states who owns what. I thought that Gazelle and Eighting, the company that manufactured the custom chip, had them all.

The game industry was a different beast back then.

The game industry was very generous. Toaplan didn't even own the trademarks, so when Takumi put out Kyuukyoku Tiger II, they bought the Kyuukyoku Tiger trademark. I think they might have acquired Tatsujin as well.

Final Words.

What was Toaplan to me... what was it indeed? It was my second youth. Maybe so, it was truly a fun time in my life, working there. The other employees all say the same thing, about how fun it was then. It was a rare thing for a game development company, I think. I can't really express in words what Toaplan was to me, though. It has a special place in our memory.

We are simply very grateful. We're unbelievably lucky as developers, to have been able to do the things we wanted, and have people enjoy them so long after. I think it's usually the reverse, that as time goes on, you see how stale and uninspired your work was. So to see there's a space where people are talking about our games even today, is practically unbelievable for me. I can really only express my gratefulness. Thank you very much.

I feel exactly the same way, and it really makes me happy. At the time we had no idea our games would turn out like this, we were just doing what we loved. I'm happy we were able to do that, and to the people who still remember our work today, I bow my head in thanks.

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