Putting the demoscene in a context

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1 Introduction

A couple of months ago, there were a couple of interesting attempts at introducing the demoscene to art-oriented audiences.

After the Alternative Party 2008, I wrote about the demoscene seminar held in the premises of the Finnish Academy of Fine Arts.[10] Many of the participants (mostly the presenters themselves) then ended up writing articles which were published in the December 2008 issue of Mustekala, a Finnish art webzine.[1]

One of the articles – that is, elfh/inward's text about the development of the Spectrum demoscene in Russia[2] – was also later partially republished on a new and promising "8-bit" website called 8bittoday.com[3]. Some of the articles have also been recently quoted in Finnish Ministry of Education study on the current state and future possibilities of new media art in Finland, which, among all, discusses the demoscene as a separate branch of new media art.[9]

Another related thing that seized my attention in December was Rosa Menkman's summary of Anders "Goto80" Carlsson's presentation he held at the HAIP Festival in Slovenia about the chip music scene and the 8-bit demoscene.[7] A great deal of things in this summary seems to have been "lost in translation", i.e. mutated into somewhat hilarious misconceptions and inaccuracies. Fortunately, after finding Goto80's own summary[8] and having a correspondence with him I think I have been able to catch the message he wished to deliver.

In all, there was a lot of material to digest in all these texts, and the digestion process produced quite many thoughts, so be aware that this article will be quite long and covers a multitude of topics.

2 Which box does this stuff belong in?

Arguably the most difficult task in introducing the demoscene to any audience is, due to the relative self-sufficiency of the community, the task of fitting it in some pre-existing framework. I have noticed that there are basically four different "boxes" for trying to fit the scene into:

1. The "digital underground box", along with the mainstream hacker culture, open-source movement, political pirates and many Internet-based creative communities.
2. The "artistic movements box", in the same corner as experimental film and video art.
3. The "youth subcultures box", just between the punks, the graffiti painters and the LAN gamers.
4. The "trash box", which contains all the various clueless views that do not tolerate a deeper analysis, such as ones with obvious causality errors ("demos are primarily made for gaining employment in the video game industry').

Of the material I previously mentioned, Anders Carlsson's presentation represents the "first-box approach", whereas the Mustekala articles mostly go for the "second box". The "third box" was quite dominant in the nineties, especially prior to the mainstream penetration of the Internet and the cultural forms therein, and it still quite often used when discussing big "computer lifestyle" parties which originated as demoparties (i.e. Assembly).

I think each one of these "boxes" (or at least the first three of them) represents a valid approach, but none of them alone is enough. Thus, all of them need to be considered in order to build a complete picture of how the demoscene relates to everything else. Each "box" also has its own traps which can be hard to avoid.

It is also possible to talk about demo art without binding it inseparably to the scene. Computer programs that resemble demoscene demos can indeed be found outside of the demoscene context, and some even predate mass-produced microcomputers for several decades (i.e. the display hacks in the academic hacker culture).

3 Is it open-source?

The demoscene (along with the early software piracy/cracking scene where it comes from) pioneered quite many things which are nowadays seen as integral to the modern "digital subcultures". Let me list the ones I consider the most important:

- global unrestricted peer-to-peer sharing of digital data (albeit originally primarily with snailmail instead of electronic telecommunications)

- creating music and other types of art primarily or even exclusively for free non-commercial digital sharing (I think this is quite obvious)
- using elements taken from video games and other creative digital works in one's own creations (ripped game music in demos was commonplace in the early years, as was sample-ripping slightly later)

Anders Carlsson dubs it "the first digital global subculture", which I consider quite accurate.[7]

It is far too easy to extrapolate from the known facts, however. Outsiders, having done such an extrapolation in their minds, are particularly eager to associate the concept of "open source" to the demoscene. Rosa Menkman, when referring to Anders Carlsson's presentation, writes: "Because most products are open source, remixing is very easy".[7] This mistake shows how careful "outreachers" need to be when talking about this fashionable concept – especially at an event like HAIP Festival, which is centered around artistic expression in open-source media.

Also Jarkko Räsänen mentions this tendency of finding "open-source" connections in his Mustekala article[4], and both Räsänen and Carlsson use tracker music as a prime example of an "open source" approach on the scene: you can load a song to a tracker and have the same editing capabilities as the original author had. Carlsson even extends this concept to anything made with a machine code monitor or an assembler: the disassembly you're reading is the same code the original author worked on.

My own stance in this matter is still more or less the same as in one of my 2007 articles.[11] In the early days, crackers were quite accustomed to reading and modifying other people's machine code, so practically all software was "open-source" to them, and similar forms of hacking could be applied. This is still quite far from today's open-source culture, however, and binary-hacking of other people's code is quite rare on today's demoscene.

Those who know about various "hacking" subcultures may very well assume that an open-source ideology and a total freedom of "remixing" are the logical conclusion of anything that grows out of free digital sharing. The demoscene, however, is an example of a digital subculture that took a totally different route – one that emphasizes the author's own vision and talent – resulting in a radical do-it-yourself attitude to which many "open-source" ideas (such as derivative works) are alien. Rosa Menkman refers to this attitude as "originality dogma".

The freedom of distribution is embraced on the demoscene mainly for the maximization of one's own (group's) fame via the maximization of the potential audience. Even many of the outreach efforts (such as presentations, lectures and articles about the scene) can be explained as part of this "quest for fame". If you spread the word about the demoscene to other people and make the productions more accessible to them, you are also more likely to get your own work appreciated.

Still, I disagree with Räsänen's view that the source code is usually hidden because of "jealousy". In my opinion, the main reason for this is the do-it-yourself attitude (or "originality dogma") itself: most sceners simply do not need or even want the source

code, as they think it is “cooler” to do all the stuff on their own (or, alternatively, think it is “lame” to use a piece of code whose inner workings they don’t understand perfectly).

Source code, whenever it is available, is supposed to be handled with respect, primarily for technical inspiration and learning material. Whenever something is copied, the original author must always be credited. This differs quite radically from the culture of unrestricted use, remixing and bastardization one can find in the open source culture as well as today’s Internet culture, including popular websites such as Wikipedia, YouTube and 4chan.

4 Does it fit in the art world?

The question whether demos are art is an old one, but it still continues to divide people. Anders Carlsson, for example, has chosen to present the demoscene as craftmanship rather than art. Indeed, the “crafty” aspect is still quite strong, and many sceners dislike their works being referred to as “art”. However, there’s also a big portion of sceners who have “true” artistic ambitions and sometimes even a willingness to receive appreciation from the “mainstream” art world. Quite many sceners have even studied in art schools, which has lead them to a position from which to compare the two worlds.

Jarkko Räsänen (whom I remember as having been in wAmmA but whose handle I can’t recollect) is one of the demoscene-affiliated people who have been studying in the Finnish Academy of Fine Arts in the recent years. In his article in Mustekala, he mostly compares the demoscene and some areas of the art world, based on his studies and first-hand experiences.[4]

As for social aspects, Räsänen finds similarities between the demoscene and the various audiovisual technology hobbyist groups he learned about when studying the history of experimental film and video art. These hobbyists had their own happenings, competitions and workshops, and especially the stories about dedicated club activity of Finnish narrow-film hobbyists of the seventies brought the demoscene and demoparties in mind.

A strong common denominator between these art groups and the demoscene, according to the article, can be found in the self-sufficient attitude: the creators and the audience are the same. The esthetic criteria are those of the creators themselves, not anyone else’s. Sometimes, a work “leaks” out of the community, and these leaked works are labelled as “underground”.

As for outward appearances, Räsänen has found similarities between demos and the works of certain video artists. He describes the demo-likeness of the works of a video art group called *Pink Twins* as “baffling”, and also Kari Yli-Annala, who reviewed their recent Helsinki exhibition, describes their esthetic as very similar to that of the demoscene.[6] However, I wouldn’t regard this similarity as a mere coincidence. Given that the guys are two brothers in their thirties living in Helsinki, formed their

group in the late nineties and create their art on computers via programming, it would be quite improbable that they were not at least aware of demos.

Still, astounding outwards similarity to demos can be found in some art films that predate the demoscene by several decades. In 2007, when I found a video of Whitney's Catalog on YouTube, for example, I was baffled by its demo-likeness (which probably stems from the procedural basis of the animation).[12] Also, some very early experimental films by Oskar Fischinger were screened at the Breakpoint demoparty in 2004 because some scener thought it would be nice to enlighten the participants about "the first demos ever". In this case, the apparent similarity probably comes from the use of abstract music-synchronized visuals.

So, common grounds between the demoscene and film/video-based art can be found in the areas of social structures and outward esthetics. The biggest differences, according to Räsänen, seem to be in the conventions of distribution: while the demoscene has grown within a culture of unrestricted digital distribution, the art world has its legacy of galleries and expensive artifacts. Even art videos presented in galleries, despite being shown from materially cheap and easily duplicable DVDs, may cost "tens of thousands of euros", which is somewhat difficult for someone grown in the "pirate generation" to understand.

5 Modernism and medium-specificity

The modernist movement(s) have been referred to by both Jarkko Räsänen and Kari Yli-Annala in their articles. Relating the demoscene to something that saw its golden age in the early 20th century, in very different cultural and technological conditions, may sound far-fetched, but I personally find this comparison quite intriguing.

Modernist thought, if I've interpreted my art history correctly, is characterized by a certain kind of "engineer's idealism": the artist is like an engineer who avoids the old, outdated and inefficient "traditional" way of thinking and constantly tries to innovate something better, more efficient and more optimal. This kind of progressivism can also be found on the demoscene, where it has been important to reach new technical standards in code optimality and an ever-deeper understanding of the platform of choice.

The modernist principle of *medium-specificity* holds that each art form has its own unique "essence", and artists should try to find this essence in the medium they're working on. A film-maker, for example, should not try to imitate staged theatre on film but create something that is only possible on film.

According to Räsänen, the demoscene has been able to get closer to the "essence" of computer-based art than most of the "true" artists who explore the medium, and this is why these artists should look into demos for an important lesson. Video art, for example, often neglects the role of the actual technological platform: if loudspeakers or computers are present in the gallery space, a mainstream artist may just ignore them, while a demoscener would find them essential to the experience.

To me it seems that the medium is explored on the demoscene particularly on the lowest level of abstraction, in the form of "platform-specificity": traditional demos, especially ones written for more restricted platforms, use highly platform-specific tricks in order to implement their effects. Sometimes, the features of a specific platform lead the author to use a specific, "platform-optimal" means of representation (for instance, preferring vertical scrolling direction on the Atari 2600, or using simple and inexpensive copper tricks for transitions on the Amiga 500). In this way, each demoscene platform builds its own platform-specific audiovisual "dialect". Similarly, size-restricted categories and software platforms also build their own 'dialects".

Still, there are some areas where the demoscene has done relatively little in regards to finding the medium-specific essence. Räsänen brings up the rareness of generativity (productions that are different on each run and maybe even interactive) as well as the tendency of sticking to the basic structure of a music video. This leads me to my next topic –

6 The forgotten levels of content

The general unwillingness to question the traditional demo structure is, in my opinion, connected to the demoscene's overwhelming focus on the lowest levels of abstraction. The higher the level, the less important it is considered to be, and the very highest levels are simply out of the scope where variation, exploration and innovation are generally considered to be "allowed". It's a pity, since, in my opinion, the core creative ideals of the demoscene can very well be extrapolated to higher levels (for example, think about the idea of *Homo Sapiens* as a demo platform).

It has always been important for demos to be technically solid. Another important element has been the superficial esthetics (looking good, sounding good, flowing good). Esthetic experimentation has also been taking place in the form of different styles and moods. For most demos, however, there's nothing beyond technique and esthetics. No message, no story, no underlying philosophy, no point. These demos are, from a conceptual point of view, hollow works of craft.

Of course, there are also demos with a stronger focus on content, but even they are usually defined by their technical and esthetical choices rather than the content itself; bottom-to-top instead of top-to-bottom. The concept in a "high-concept demo" or the story in a "storydemo" is far too often just an additional spice, just another element that pleases the crowd, increases the entertainment value and adds to the perceived coherence.

It is a regrettably common view that the low-level craftwork is what the demoscene has always been and should always be all about, and all attempts to extend the experimentation to higher levels are futile. I always hate hearing closed-minded opinions like this, as I see so much untapped potential within the immediate reach of most demoscene artists.

Interactivity is an example of a dimension that has always been within an easy reach

for demoscene artists but has still remained nearly untouched. While demos experiment very deeply on the audiovisual nature of various technological platforms, they have barely managed to scratch the surface of what I consider part of the very essence of the real-time computer art medium itself.

When sticking to static non-interactive works, a demo artist is not really doing anything that couldn't be achieved by non-realtime means. However, when experimenting with interactivity, the artist steps into a territory where the concept of real-time calculation gains actual meaning. This territory is totally unreachable by traditional non-realtime mediums such as motion picture.

I've understood that interactivity is an idea where both the demoscene and the traditional art world have encountered "compatibility problems". Video games, however, have always been interactive to their very core, so I think they are the form of art where everyone willing to create interactive art should take a look at. "The Realtime Art Manifesto", coming from a group of artistic video game developers, is, in my opinion, worth reading by anyone interested in interactive art, despite having been written from the point of view of a specific kind of narrative games, and despite having some silly misconceptions (like its references to "modern art").[13]

Of course, there are also video games released in the demoscene context, but they rarely commit deep excursions into the essence of interactivity. Instead, they tend to focus on the technical issues where the existing strengths of existing demoscene methods can be applied.

7 The role of humor

It is difficult for the demoscene to explore the higher levels of abstraction, as the community primarily observes the lower levels. One always needs to consider the technical and esthetical standards of excellence in order to receive the praise and encouragement from the community, and this burden often leaves "groundbreaking conceptual ideas" in a secondary position.

"Non-serious" productions, however, are a totally different issue. Even though they are often regarded as mere "comic relief" productions, they have, in my opinion, a vast amount of experimental potential that is often overlooked. When working on a "joke" production, especially under a "fake" pseudonym, a demoscener is much freer to experiment on some higher-level aspects than with a "serious" approach.

Well-established "jokegroups" often have very distinctive styles and attitudes. I would particularly like to praise a well-established Finnish group, *ISO*, for being an example of a true "avant-garde" approach by turning nearly every traditional demoscene value upside down. For me, ISO is the punk and dadaism of the Finnish demoscene, especially as it often goes quite deep into consciousness-streamed absurdism.

I would also like to mention my own group, *PWP*, which originated as a pseudo-jokegroup with a focus on humorous character-driven stories. I still carry something

from the original PWP style and mindset even in my "serious" demos, so I think the "silly jokes" definitely served a greater purpose than being short-lived crowd-pleasers at various events.

The role of humor in some experimental demoscene-originating games, such as *Sumotori Dreams* and *Porrasturvat*, shouldn't be neglected either, especially regarding that they are interactive works that have gained praise far beyond the demoscene, e.g. in the indie gaming community.

8 Do they have any critical potential?

When looking at the Mustekala articles which analyze the demoscene[1], it is possible to notice the abstraction-level problem I discussed earlier: there's a lot of text on the technical and esthetical aspects of demos, but the only article that considers the conceptual aspects is the one written by the non-demoscener (new media artist and researcher Kari Yli-Annala).[5]

I find this article, titled *Demoscene as immanent critique of computer culture*, quite interesting for various reasons. First, the use of demos as commentary is a rather "new" thing and not very popular at that. Second, in spite of this "newness", my own work on the demoscene has had a critical aspect from the very beginning. And third, Yli-Annala uses yours truly as an example of the critical dimension of the demoscene.

Personally, I see that there are basically two separate approaches of making critical statements in demos: technical and conceptual. The technical approach stems from the choice of technology and restrictions (something that is at the very core of the artform), while the conceptual approach is based on the things which are actually seen and heard.

The use of very restricted or "obsolete" platforms or doing something with a very limited file size is often considered to require a certain attitude, and the statements inherent to such technological choices are related to this attitude. Personally, I like my 8-bit demos seen as having an inherent statement directed against the "wasteful" aspects of mainstream computing – not only the wasteful use of computing resources but also to the ecological wastefulness of consumerism and high-tech snobbery.

The conceptual approach, on the other hand, can be used to deliver nearly any message (just like motion pictures). Since the early days, there have been demos containing political statements (such as Fairlight's anti-communist sentiments) as well as productions that comment aspects of the scene itself. My own work has had both of these among the multitude of topics it has covered.

What Yli-Annala talks about the most is immanent critique. That is, critique coming from the within. In my opinion, this is not something that works very well within the usual demoscene context, especially these days, when demos are seldom actively watched by people outside the scene itself. However, whenever a demoscener dares to take effort of bringing something into "other scenes", there may be a lot of critical

potential.

The video game *.kkrieger* is a prime example of such an "inter-subcultural" intervention: instead of creating just another size-limited demo, the demoscene group *.theprodukkt* decided to make a size-limited video game instead. By simply choosing another format that is more accessible to video gaming audience, .theprodukkt managed to critique aspects of the video game culture from inside the video game culture itself. The mere use of demoscene techniques and a tight size limitation served as a statement.

There are many possible ways for a demoscener to do interventions like this, however some of them don't have anything to do with the demoscene or even with skills relevant to demomaking. I, for example, have been doing on-line interventions (using things such as fake textfiles, trolling, fake websites, parodies, etc.) since the early 1990s, that is, longer than I have even been involved with demos. I've never regarded it as anything artistic, so, I found it quite amusing that Kari Yli-Annala, when discussing the critical potential of the demoscene, draws examples from some of my web projects. What about avant-garde?

In his article, Yli-Annala has noticed that demos have a lot of recognizable cultural imagery that is used and combined in unusual ways. Similarly, "cultural technologies" (such as hardware platforms) are often used in novel means. This kind of recognition and recombination of cultural elements is considered typical of postmodernism.

While I find most points of the discussion relevant, there are some parts I disagree with. To begin with, here follows my translation of the final summary of the article: *The demoscene is underground and avant-garde of new media art, as it is based on cultural technologies and imagery by refining raw material and concretely biting into the code level. Its traditions of representation and making are, in the manner of artists' radical avant-garde movements, based on an introvert potential of renewal and on a collectivity created from this hermeneutics.*

It is true that there is a lot of cultural imagery used even in mainstream demos. Even the most unimaginative mid-1990s demos tend to have graphical elements such as dragons, swords and half-naked warrior girls, which quite clearly stem from a pop-cultural background (i.e. film posters, graphic novels, book covers, musical record illustrations, etc.) However, in the traditional demo design, this material merely serves the technical and esthetical levels of abstraction. It does not really matter what the pictures depict or where they come from, as long as they look good (technically and esthetically) and cause the desired reaction in the viewer.

It is also true that hardware platforms (such as 8-bit computers) are cultural artifacts, and thus, using them for novel purposes (such as new demo effects) could be regarded as ' postmodern" reuse of pre-existing elements. In my opinion, however, this idea sounds quite far-fetched. To me, technological devices, when used as demo platforms, get rid of their cultural and historical value altogether, and the only thing that matters is the plain technological structure and what possibilities and challenges it offers to the artist. I assume this is quite close to how most musicians relate to their

instruments, for example.

What about the conclusion, then? I don't think there's much doubt that demoscene is "underground", but is it an avant-garde movement?

Avant-garde, in short, is about "pushing the boundaries", which is also an important principle on the demoscene. Although the mainstream demoscene only applies this idea to certain key areas, there are "rebel" movements, such as "joke" or "fake" groups, that supplement the mainstream by questioning the traditions and expanding the range where the boundary-pushing attitude can be applied.

Quite often, a single demoscene artist has two "faces" – one for "traditional" productions and another for ones that may clash against the tradition. The different faces usually manifest themselves via separate group labels; most of the members of *HiRMU* and *Jumalauta*, for example, are also members of "serious" groups and use different pseudonyms there.

Based on my personal experiences, I would say that there is an avant-garde branch within the demoscene, but when combining all the aspects of the demoscene and asking whether it is "avant-garde" as a whole, I'm not so sure anymore. I would perhaps rather see it as a bipolar system in this matter.

9 Conclusion

After all this discussion, it seems that doing generalizations about the demoscene and putting it in a single context is very difficult. There are all kinds of approaches and disciplines within the subculture: traditionalist and avantgarde, fame-seeking and underground, technical and conceptual, crafty and artistic, competitive and self-expressive. Each artist is different, and choosing a single-minded definition doesn't really do justice to all the variety.

Why can't we just ignore the variety to make things easier, then? Because it is exactly this variety that has managed to keep the scene alive for so many years. On one hand, groups that embrace their own vision instead of looking for maximum appeal within the community have been able to extend the horizon every now and then, sometimes even recruiting some new blood in the process. And on the other hand, without all the stubborn and conservative attitudes, the scene would have lost its distinctiveness – the shell that protects it from being blended into the mainstream of digital subcultures.

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