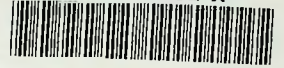


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The National College of Art and Design

CRACKER DEMOS
A Digital Graffiti

A thesis submitted to :

The faculty of History of Art and Design and Complementary Studies
and
In Candidacy for the Degree

Faculty of Design

Department of Visual Communication

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March 1990

CONTENTS

INTRODUCTION p 3

CHAPTER 1 p 5

Origination :

Abrief history

CHAPTER 2 p 9

Present Status :

Style

Content

CHAPTER 3 p 13

Evaluation :

Aesthetic and technical merit

Opinions

CHAPTER 4 p 17

Future

CONCLUSION p 20

DEMO LIST, To accompany video. p 21

BIBLIOGRAPHY p 23

INTRODUCTION

The object of this thesis will be to explore the origination and implications of a digital graffiti. They are Cracker Demos, a very new and interesting development in the personal computer network. I will be comparing it throughout to the rise and fall of Graffiti art in the states because it is a useful comparison to bring out certain important points about the demos. The thesis will be structured in four chapters.

Origination :

In this section I try to explain exactly what a cracker demo is by first talking about crackers, and how they differ from hackers. Then by giving a short history of how the two have developed, and how their media image has changed. Then more specifically I talk about the reasons why the crackers came about and the machines that made it possible for them to create the demos. Leading on from that, the crew system in which they work, and how the network of crackers has grown.

Present Status :

A definition of the demos in two sections, (i) Style and, (ii) Content.

Under Style there are four sub headings,

- (ia) Visual influences.
- (ib) What the demos are trying to do.
- (ic) Inner capabilities of the machine.
- (id) Creativity.

Under content I discuss the fairly basic messages that the crackers are passing to one another and why I think they have stayed at a trivia level.

Evaluation :

This chapter is split into two sections :

- (i) A discussion on the aesthetic and technical merit of the demos and how they are admired for their innovation by the software houses.
- (ii) In the second half of this chapter I discuss the differing opinions about crackers and their demos across the board from the young computer user community, to the software houses and the agencies set up to combat computer crime.

CHAPTER 1

Future :

With the developments in communications technology, and computer equipment being available to more people, what could happen to the crackers. Will they move into the software industry, or the galleries, or will the network expand still more. If so what will our relationship with the cracker and the new technology develop into.

In the early 1970s, the capabilities of computer equipment were being demonstrated and advanced at high speed, the network were providing the kind of personal address. Without specifications, they would be used for writing, work and play. They will be the common graphics, the film and programming, the first computer games, the first time sharing. If you could not talk with your brother, you could have an artificial person. They were the researchers who spent their time hacking away at a keyboard. Gradually they were the name of the developing technology. Marvin Minsky, co-founder of the Artificial Intelligence Lab and a professor at the MIT, said of them, "The hackers had a deep conviction that it was their right to know how things work and to improve them. They were not just playing around, they were serious about the problems. They are, I say."

This could give us a clue as to why the network is important to us. It has changed the way we think about the world. The possibilities of what the technology is developed and how it is used were expanded and extended, now they were there, as the network factor has been moved into the private or personal realm. In a sense, we have broken, with a powerful personal computer and a large set of writings of large computer systems, the barrier between the public and the private.

It is not just a matter of people being able to do things, it is the whole social structure. It is not just the fact that we have some government, or some kind of social structure, but the fact that we have some kind of social structure. It is not just the fact that we have some kind of social structure, but the fact that we have some kind of social structure. It is not just the fact that we have some kind of social structure, but the fact that we have some kind of social structure.

CHAPTER 1

ORIGINATION

Before I explain what a cracker demo is, I will first explain what a cracker is and how they differ from hackers.

In the sixties, when the capabilities of computer technology was being discovered and advanced at high speed, the hackers were 'creating the front of computer science. Without specifications they would just start programming, quick and dirty. They did the first computer graphics, the first word processing, the first computer games, the first time sharing. If you tried to tell them what to do, you got nowhere at all'(S.Papert, 1 p56). They were the enthusiasts who spent all their time 'hacking away' at a keyboard. Basically they were the core of the developing technology. Marvin Minsky, co-founder of the Artificial Intelligence Lab and a professor at M.I.T. said of them, "the hackers had to drop out (of M.I.T.) in the early 60's because they knew more than the professors. Now they don't necessarily know more than the professors."(M.M , 1 p57)

This could give us a clue as to why the mediated image of the hacker has changed so much over the years. The establishments where the technology is developed now are much more controlled and systematic than they were then, so the renegade hacker has now moved into the private or personal sector. So is born the home hacker, with a powerful personal computer and a love for the workings of large computer systems, the hacker is out of sight to the establishment.

In any group of people there are some that do wrong, so it is with the hacker community. So when some hackers started to access government secrets and introduce viruses into systems of governments and educational facilities, with fears of hospital and military 'infiltrations' to follow, despite the efforts of hackers developing the best virus protection software, already paranoid establishment started to use the all encompassing phrase of the 'hacker' as a computer criminal or technopath.

Crackers are different from hackers in that they do not deal with large computer systems and their hardware, but instead deal with breaking the copy protection on software (computer programs and games).

This can be done for any number of reasons, primarily the price of the game, up to 30 pounds is fairly steep for a game that has no guarantee of quality and could end up on your shelf within a week. So the idea of swapping with friends or acquaintances in your local computer club comes naturally, but it is illegal, just as taping a record for a friend is wrong in the eyes of the law but not in the eye of the public.

This want was filled before 'crackers' by 'spreaders'. They would buy one copy of a game, make several replicas and sell them to users for enough to cover their costs. Like most crackers today, they were not in it for the money, but to build up their own collection of games and to be part of the computer community.

The next and most major step towards the production of the first cracker 'demo' came in 1986 when the Atari ST and Commodore Amiga were put on the market, the Amiga especially as it is considered to be 'the best graphics music micro-computer'. (T.Weir , 14 p15)

So this computer, which was perfect for playing and creating computer games as well as other complex graphic and music sequences, and cheap enough for the home user, was the tool that made it not only possible, but feasible for the public to start cracking games and producing demos.

This clashing of talent and knowledge, cracker against software protector, is treated, at least on the cracker side, very much as a sport in which victory is not enough, everybody must know that you won and won easily. So when the protection is taken away, a demo is created to precede the game every time it is played. It looks like a mixture between a pop video and a computer game with great emphasis being put on the scrolling text which contains the slagging and bragging.

But not only does the competition exist between the cracker and software protector but it also exists between cracker crews themselves, who are trying to get known as the best demo makers, the number one. So, like a graffiti artist trying to get up his handle in as many places as possible, the crackers have started to send out disks with nothing but demos on them just to get the crews known. (see Demo 10 The cracker rarely works alone, for taking away the protection from a game and producing a demo takes a lot of time, so crackers like the graffiti artist generally form groups or 'crews'.(see Demo 4a)

'The individual members of a group have their own aliases. Oracle, a fairly major group consists of: The General, Vertigo, Arcade Master, Annihilator, Chameleon, ADJ, Rom Chip, Puppet Master, Mr.Dos, Major Havoc and Freelancer. Usually the members all have set roles, for example in the Wild Copper Crew, a group based in Metz, France, the four members break the job down: Seb and RV handle all of the programming with RV taking care of the 3D graphic design, ze Kiko takes care of graphics generally and writes the very witty scrolltext, and the extraordinary Yello ripoff soundtrack is done by Pat le Bon who is also credited as the `Diskbuster!'. So while Pat is initially the cracker they all collaborate on the production of the intro.' (T.Weir , 14 p15)

The cracker network is huge at the moment covering the whole 'developed world' and mainly centred in Europe. As computing is the fastest growing leisure activity in the world, so the network of crackers is growing. Disks are swapped and given to friends and other people within the network ignoring, as the digital world does, political boundaries and borders.

'In the messages that scroll across the screen we can see just how widespread and active this network of contacts is. The same names occur in many different groups disks. Dutch groups say hello to English groups who greet American groups who swap with German groups who send stuff to Australian groups who write to Norwegian groups.... Groups complement other groups intros, the DOC (Germany) and Wild Copper (France) intros are regarded as

standards. They also leave, brazenly, their phone numbers, PO Box numbers, and other ways of contacting them.' (T.Weir , 14 p15)

Through the demos, by post and down phone lines different crackers and crews arrange to get together to swap disks, talk about copy protection and software, the same as any club meeting. There are called copy parties and 'can range from a few kids in a bedroom in Drumcondra to the equivalent of an international meeting' (T.Weir , 14 p15). The main event of the evening would be when the different crews reveal their latest demos for the judging. Producing the demo, as well as cracking the copy protection, is a highly skilled job. Like the hackers before them, these crackers are pushing their systems to the limits in a purely experimental way and are discovering and creating things that the software houses did not think possible. Their triumphs are starting to grab the attention of the computer press,

'Some hackers could become gifted programmers. The skills of the elite game crackers are extraordinary, and often they are idolised by their less talented brethren. If directed properly they could produce wonders for the software companies. There is a story doing the rounds of a lad who hacked into Oceans 'Operation Wolf', which in ST format comes on three disks, removed a bug on level five which caused the game to crash when a particular object is shot and compressed all the code to fit on one disk. Disks aren't cheap - Ocean would have been extremely happy to have left two disks out.' (S.Cogan , 13 p26)

So it would seem that the crackers are developing parallel with, and in some cases faster than, the software companies themselves. They are the underground part of the new technology and because they are active users as opposed to passive consumers, which is expected. They are respected by a lot of the computer enthusiast fraternity.

CHAPTER TWO

PRESENT STATUS

This chapter is a definition of the demos under two main sub- headings, Style and Content.

1 STYLE

The style of the demos in turn can be attributed to four main factors.

1a Visual Influences

The strongest and most obvious influencing factor has to be the computer games themselves. The demos do not only look similar because they happen to be created through the same medium, but have similar soundtracks, although the music on the demos is usually more sophisticated, frequently being reworked pieces of recognisable music from bands like Yello (see Demo 4b) who use computers to compose their pieces. The characters that take part in part in games and demos, be they aliens or earthlings, are also similar and seem to be very heavily influenced in turn by characters taken from role playing games (Dungeons and Dragons), comics and graphic novels (Judge Dredd or the Watchmen), and films through a whole range from the Conan/Ninja Warrior/Predator sword wielding type(see Demo 1) to the Blade Runner/Brazil/Robocop and even a mystical horror element such as 'Hellraiser'.

The recurring theme in the games and demos, like in those films, comics and games is the fantasy mythical element, the story or character of truly biblical proportions. You would be unlikely to find a computer game or demo whose character is Joe Soap or whose story is a 'A day in the life of..'

So with these elements in the demo as well as the typeface being designed

in-house and more often than not reminiscent of heavy metal (see Demo 2e & others), the names of the crews also smacking heavily of metal like; Nukebusters, DEFJAM, Mutant, Death Star, BitKillerSoft. The overall image is one of the machismo and myth which certainly contradicts the old image of the computer programmer as an unimaginative 'specky geek' or 'nerd'.

1b What the demos are trying to do

Communication through the scrolling messages and showing off their technical wizardry through the use of elaborate graphic sequences, being the best at it, is what the demos are made for. Just like the graffiti artist who developed from using one colour 'tags' (logos or handles of their pseudonym) to using many colours and attention grabbing effects like metallic strips, bubble lettering, sunspots, repeat of logo, background painted whole cars, etc. The demo maker developed from just leaving their handle on the game somewhere, to using the scrolling text with their own complex graphic sequences added to produce an elaborate demo before the game.

So all the demos are fast moving, garish and noisy (visually as well as aurally), and this hard sell aspect seems to have become the basic aesthetic by which all the cracker crews are working. No doubt as the age and numbers of the crews increase the variety of styles will also increase.

1c Inner capabilities of the machine

The limitations of the computer have a strong effect on the style of the demos, as the limitations of any medium has on the finished piece. The crackers do know how to get the most of the machines, frequently more than even the makers thought possible, but still the limitations are reflected in areas like colour manipulation and animation capabilities. We can expect these demos in the future to demonstrate to us what is really possible from the affordable new technology.

1d Creativity

The individual creativity of the cracker is the creativity that everybody has but in this case it has found a way of expressing itself. They have taken the leap from being a passive consumer to being an active user and as we will see in the future it is this side of technology using as opposed to consuming that it is vital to develop, if the relationship between the public and the technology (man and machine) is to be a healthy, useful and creative one.

2 CONTENT

The content of the demos, both literary and aesthetic, is very much geared towards the audience that they are aimed at. They are computer literate, they are part of the digital community, more specific than that, they are crackers or users of the Commodore Amiga or the Atari ST. The rest of the computer literate public and anybody else, such as myself or yourself, are inactive bystanders.

The content is there for specific conversations between an elite group and has not got a public conscience. They say 'Hi' to each other, they organise copy parties, they apologise for a poor quality demo ("the real one is coming soon"), they slag off the computer illiterate as 'Lamers' (see Demo 10d), a bit of a turn around from the days of the 'nerd' or 'geek'. They swap stories and news as well as info on new software, and they rap and bullshit quite a bit. But they do not mention politics, social commentary, poverty, world peace, war or even subjects closer to their hearts like the political bandwagon that was the computer virus, the condemnation of crackers by F.A.S.T. (the industry group Federation Against Software Theft), or the new Copyright, Design and Patents Bill which is another measure brought by the British government to try and combat 'software theft'.

Compared to Graffiti art which has comments on everything from love, peace, war, death, the community, urban blight, poverty, sex through to Mayor Koch's

scuffing campaign and the M.T.A. (Metropolitan Train Authority) using new anti-paint chemicals.

So what is the reason for the lack of social conscience amongst crackers, or more realistically, why is it not mentioned in the demos. It is true that the demo-maker is generally very young, most would be at school and virtually all would be under twenty, but this would not be a reason, for a conscience does not come with age and most graffiti artists were also of this age group. Is it a class thing, for I imagine that the cracker, being able to afford expensive computer equipment, is not on the breadline or living amongst serious urban blight, most would be middle class. Is it that they are politically naive? The fact that some crackers perpetrated the virus epidemic in 1988-1989, which was politically for them, a very bad move. It brought to the public's mind the previously mentioned media image of the technopath. This would indeed suggest that they are politically naive. It could be a mixture of all of these things, but the strongest point to explain the lack of conscience, I think, is that they are not the general public.

They are an insular group both making and viewing the demos. It is not like putting a message on a train that tens of thousands of people will see every day. The fact that you must have access to a computer means that the audience is relatively small, but growing. In the future when the Personal Computer is in every house the situation will change dramatically.

CHAPTER THREE

This chapter is an evaluation of the demos split into two sections;
Merit and Opinions

MERIT

2a Aesthetic Merit

Judging the aesthetic merit of a demo is something you can do yourselves when you see the video. It is very hard to judge computer graphics in this way as it must be to judge holograms as an art form, you might not like them aesthetically but it is hard not to admire them technically.

The demos are very loud and garish to look at, as far as getting their message across they do that well but all the time using gimmicks which sometimes make it difficult to read.

I think that in the future it will be easier for people to judge graphics of this sort because we will be in contact with it on a regular basis and if the crackers develop with the technology and we all become computer literate, the aesthetic merit of demos may well be the subject of future dissertations; "Early Wild Copper and DOC demos in the 90's and their influence on todays media graffiti", for example.

2b Technical Merit

The technical merit of the demos and the ability of the crackers is widely respected throughout the industry. In cases, like the previously quoted story about the cracker who was able to compact a three disk game onto one disk, the software industry is constantly surprised by the crackers talent. Some manufacturers actively seek to employ crackers, having realised the resource of talent, that 'if directed properly, could produce wonders for the software

companies'(S.Cogan , 13 p26). The attitude of these companies is to get the crackers working for them before they start producing their own games as the German group TEX and the Dutch group United Graphic Artists have started doing. Does this trend suggest that the cracker will move into legitimate areas within the software industry, just as many Graffiti Artists moved into the galleries ?

OPINIONS

For the people who are not directly involved in computer software, most of the general public, when we are asked about computer hackers, we only know what the media have told us. The virus epidemic is something that struck a chord with most people, whether they had already come to rely heavily on computers or they were concerned about too much information being controlled by them. It affected large companies, organizations and governments, threatening to cripple them overnight. The media latched onto this and it became the inevitable political bandwagon, they developed the image of the 'hacker' as a subversive computer criminal.

The opinions of the software houses stems out of a Catch 22 situation where they say that they must keep the prices of the games high because cracking and piracy take away so much of their trade. On the other hand the crackers say that nobody would buy software when it is that expensive.

Both have a fair point, but the software houses do not make a distinction between crackers and pirates. This means that the cracker who copies relatively low amounts of the game for no financial gain are in the same category as the pirate who copies thousands of times for financial gain. 'Pirates definately loses the software industry money; the case against cracker isn't proven.'(T.W,14 p14)

The job of enforcing the laws is not an easy one for the technology is developing so fast that as soon as a grey area is filled with a new law another grey area

appears. 'The case against the Glasgow pirates raided by Strathclyde CID in August 1988 was dropped by the Office of the Scottish Procurator, because the case was deemed too complicated.' (S.Cogan , 13 p26)

F.A.S.T. is an organisation which is trying to tackle the attitudes of the computer community that regard cracking, like taping a record, as only technically illegal, not actually wrong. F.A.S.T. has the opinion that 'if a programmer loses sales through piracy, they may well think twice before starting another game. The exodus of programmers from the leisure industry could get much worse unless peoples attitudes towards copying games changes.' (B.Hay , 13 p25)

But like the constant reminders of the record industry, F.A.S.T.'s statements, in general, fall on deaf ears. In this interview with a young computer user, the opinioins that F.A.S.T. and other anti-cracking organisations are up against are clear.

'David Crothley is a typical 12-year old (owning both an ST and an Amiga) who adores the hacking fraternity.

How many games do you buy a month ?

None! My Dad sometimes buys me some - but very rarely. He's tight. Mostly I get games from my mate Mic. Mic's fantastic,he knows a hacker. And this hacker gets all the latest games which he passes on to us. Some of the games aren't even available in the shops. Mic reckons the guy knows people at software houses.

Why do you worship hackers when you know perfectly well what they do is wrong ?

Well they are great, aren't they. I mean, look what they can do to games. Put messages in the title screen, add infinite lives and remove protection so everyone can have copies of games. They aren't doing anything wrong ,



PIRACY

It's no game any more.
For every game you copy you
are depriving programmers of
their livelihood.

Placed on behalf of FAST (Federation Against Software Theft)

everyone tapes from the radion and TV and that's supposed to be wrong. If everyone does it then it can't be wrong. Even me Dad tapes stuff from Radio 3 and he goes to church every Sunday. He's the one that does the worshipping.

But don't you realise software houses and programmers are losing money because of hackers' activities ?

Naff off ! Software houses have got loads of money, everyone knows that. Anyhow, most of the games that I get are such rubbish I wouldn't buy them even if I had as much money as the software companies. They're really boring.

So why do you continue to accept cracked games if you think they are rubbish?

Have you seen the scrolling messages and digitised music that most hackers put in title screens ? They are brilliant. Better than the games even. And what they say in them is excellent too. Some of the stuff that they put in them is dead funny. They use words which would make Dad go mental if he saw them. Mind you, he probably wouldn't know what they meant even if he did.'

(Intrv. 13 p27)

CHAPTER FOUR

FUTURE

The final section is looking into the future of the developing digital world and trying to assess what will happen to the PC. Also what will happen to the crackers, what role will they be playing, and what our relationship with the new technology could lead to.

The digital revolution is expected to be the third stage in the evolution of communications, Oral Culture led to Printed Culture and now we progress to Digital Culture. This is a fairly hefty claim, so what reasons are there for expecting this change. Basically, it is possible that new technology, a lot of which has already been developed, could take over all forms of communication, apart from actual face to face conversation.

The big change will come about when everyone has individual multi-channel communications in the form of your own P.C., although they would bear little resemblance to today's machines. Through this you will be able to speak to and see your friends, you could log on to a mail system which works in realtime, they get it as you send it. You could do all your shopping and get any form of information you want, from a traffic report, the latest Jackie Collins novel, advice on what to do with your shares, *Gone with the Wind* (again), a degree in Law, a date for Friday night and a new programme of exercises for your personal celluloid problem. It could take your messages, arrange business meetings, watch all TV channels, 24 hours a day and record, on disk, exactly what it knows you are interested in or like.

What makes this possible is Fibre Optic Cable because it offers virtually infinite 'bandwidth'. A traditional wire can only carry one channel at a time, your phone or TV, this is a bottleneck in transmitting information. Fibre Optic Cable can carry multichannel communications while using only a fraction of its 'bandwidth'.

So what can develop out of this when the world is wired with Fibre Optic Cable ? A kind of Global Village, assuming the developing countries can be helped to skip the intermediate stages and get straight to digital communications. This inter-connectedness could facilitate the developing of new communities and groups based on similar interests or humour and not on colour, sex or class. With the growing of these communities, it will, of course, include fanatics on all sides and minorities of all descriptions. It will, in theory, break down country barriers but strengthen individual cultures.

Cracking is a perfect example of this cultural clubbing, where you get a group of enthusiasts speaking to each other freely through this new medium.

So what will happen to the cracker in the future. Will they, as the software houses are hoping, grow out of this phase and move into the more legitimate areas of programming or computer graphics ? Will these demos become an art form and go the way of the New York graffiti artist, into some future digital galleries? Will they keep producing demos and as some move into different areas will a second generation move in to take their place ?

The crackers cannot be stopped, unlike the graffiti artists who could not counteract the anti-spraypaint surfaces and scuffing of Mayor Koch's anti-graffiti campaign. The crackers are developing parallel with the new technology and not separate from it. The establishment will have to rethink their methods if they want to stop cracking. One head of a software house said 'the only cure for hacking is a twelve-bore shotgun.' (14 p28)

So assuming the crackers will be around, what will they be cracking and what will their demos be prefacing. This is an area of pure speculation. It is conceivable that the cracker will be able to crack into any digital information, and all information will eventually be digital or have a digital form. This means you could find demos or digital graffiti prefacing your mail, changing the end of *Gone With the Wind*, or coming on before your new programme of exercises and telling some tasteless 'fat' jokes.

CONCLUSION

Our relationship with the crackers and the new technology depends very much on how we let it develop. The Global Village would make it easy to communicate with, and see how other people live, thus taking away blinkers. It could be used for good or bad.

The development and evolution of the computer is happening so fast that it is frequently leaving even the scientists behind. Computers are now designing their successors with only human supervision. It cannot really be stopped, the process self-accelerates and self-branches, there's no reason to expect a new stability any time soon.' Its what the Arms Race specialists called 'technology creep.

When asked in an interview with S. Brand, how long the development process would take, Marvin Minsky said, 'Between 100 and 200 years. Intelligent evolution is unprecedented. Nobody's ever seen one. So in a few hundred years it could do trillions of years of ordinary slow evolution'. S. Brand : 'And make enormous mistakes'. M. Minsky : 'Thats the trouble. Theres no time to iron out the bugs. It might fill up the universe with styrofoam or something because it had some wrong theory about how the cosmos needs a shock absorber'.(Intrv. 1 p106)

CONCLUSION

In this thesis I have described to you the history, style, content' aesthetic and technical merit, not to mention the attitudes both for and against cracker demos. The most important thing, and the reason it interested me, is that it is a digital graffiti, an indigenous street style. It is the first time , to my knowledge, that the users of new technology have communicated illegally and creatively purley for cultural reasons. This is important because it shows that the developing technology is not perfect and clinical, but is infact as open to subversion as any system before it.

There are two main advantages of realizing this. It will break down peoples initial paranoia of a '1984' type world developing, with faceless leaders, controlled by machines . When people see the technology, that baffled them, being used by kids to poke fun at the establishment, it proves that the technology cannot kill individuality. This is importent because it leads onto the second advantage of realizing that the technology is corruptable, that we have to be very carefull how we let it continue to develop. Computers can be incredibly powerfull and like huge systems from government to multinationals, They can breed corruption.

I think that what crackers and their demos are showing us is that computers will revolutionize the way that the world works, but not the way that it thinks, that is up to us.

LIST OF DEMOS

1) Bar Brian Demo, by Donovan and Kellog.

This demo is a ripoff of a game called 'Barbarian'. It uses the same scenery sampled from the game. 'Winner gets Maria' refers to a topless model who was on the cover of the original game. It is a good example of cracker 'naughty' wit.

2) Alcatraz Mega Demo 3 , headed by Metaltype.

This is a good example of how tacky demos can be. They are a very young crew and although have a very good grasp of how the computer works, the demos are seriously lacking in aesthetic merit. There are five short clips.

2a) Tin, (scenery taken from game with animated ghosts.)

2b) Mickey Mouse, (done by members aged about 15-16)

2c) Claude in space, (plain silly)

2d) The Alcatraz handle.

2e) Megatypes Demo, (welcoming all future Alcatraz members)

3) Doc Demo,

This demo has advice on where to store your disk, how having the volume too loud can damage your ears and how you shouldn't drive and use a computer at the same time.

4) A Wild Copper Crew Demo,

Two examples of this crew's demos.

4a) Technically very clever with the crew members handles, a hello to Archlight (another crew), and some abuse sent to Firesoft.

4b) Good crew breakdown, (RV, SEB, ZIKIKO, PAT, LAURENT) with a soundtrack ripped off Yello.

5) Acid Demo, by Piranas

A good example of how the demos are strongly influenced by pop culture.

6) The Silents Music Demo, coded by Tanic and music by Blaizer.

Purley music orientated demo with thanks to Capone and Animal for lift to 'locale burger bar'.

7) TSK crew, Pan Demo 2.

Unusual demo, interactive because you can explode and put back main characters head with mouse.

8) Kefrens Phychoball Demo, by Promax crew.

9) Escape Demo, by Chrome and Cube.

Both 8 and 9 are good examples of how some crews try to cram as much information onto demos as possible.

10) Q.V.G. Compilation Disk.

Q.V.G. are two people from Clontarf who tried to join a crew but were refused because they were not good enough. Now they just copile other peoples demos for distribution. The start shows the selection panel where you chose which demo you want to see next. It is in four sections.

10a) Subway, A Vandal & Static Production

Music ripoffs and a very obvious graffiti link. Graffitied trains pass by in the foreground as King Kong and buildings dance in the background.

10b) Vector Balls, by Thomas Landsburg.

This is a totally interactive competition set up, whereby you can (after reading the comprehensive instructions) create your own 3d shape out of the given balls and send it back to T.L. for judgement.

10c) Complex, by Thomas Landsburg.

Technical wizardry in which you have 150 animated 'bobs' which you can manipulate any waythat you want

10d) Vectors Again, by Thomas Landsburg.

Technical wizardry, verging towards the aesthetic. Mentions software which he uses and admires, credits Wild Copper for inspiration. He gives his full name and adress (unusual) and then condemns illegal cracking.

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ACKNOWLEDGEMENTS;

Eternal thanks to Tommy Weir and anybody elsewho helped steer me on a
righteous path.

'Me and my boys, turn on the toys
when we seek the trains
they go insane
thats what it is
the name of the game
is graffiti fame'

Seen 1987

FIN