

VAGUE



I'm paranoid
but am I paranoid
ennneughhh....

Control DATA MANUAL

#18/19: PROGRAMMING PHENOMENA AND CONSPIRACY THEORY

•NONE DARE CALL IT PLAGIARISM•VIDEODROME TEXT:THE THING IN ROOM 101•RIOT CONTROL•SPECTACULAR TIMES•IS THERE A WAY OUT:WE ARE ALL PRO-SITUS•NONE DARE CALL IT CONSPIRACY•WORLDWIDE ALIENATION INC:MULTINATIONALS THE DEFINITIVE STORY OF ORGANISED CRIME•THE GLOBAL MANIPULATORS:BILDERBERGERS/TRILATERAL COMMISSION/CFR/ROCKEFELLER•NONE DARE CALL IT DEMOCRACY•P2:POPE PLOT•HANDSHAKE TENDANCY: FREEMASONS/JACK THE RIPPER VAGUE MIX•WEIRD SHIT•ILLUMINATI PAPERS:ROBERT ANTON WILSON•OCCULT ROOTS OF NAZISM•RIGHT-WING CONSPIRACY THEORIES•CONTROL ADDICTS•NIXON•JFK•NEOISM:SMILE IT'S THE END OF STOKE NEWINGTON•SUB-GENIUS•ALIENS AND ALIENATION•SCIENTOLOGY•PSYCHEDELIC FASCISM:MANSON/SOLAR LODGE/PROCESS•GREAT CHURCH/STATE SCAM•BEAST 666•TECHNO-FAIR•THE PRISONER•DATA-PANIC•HACKING•ZAPPING•ADVERTISING•SUBLIMINALS•HERE ALSO BATTLES ARE FOUGHT,IMAGINATIONS EXPRESSED,DIFFERENCES CONFRONTED AND IT IS ALSO SPACE IN WHICH ALL KINDS OF MOVEMENTS CAN DEVELOP...EXCEPT ROCK'N'ROLL.....

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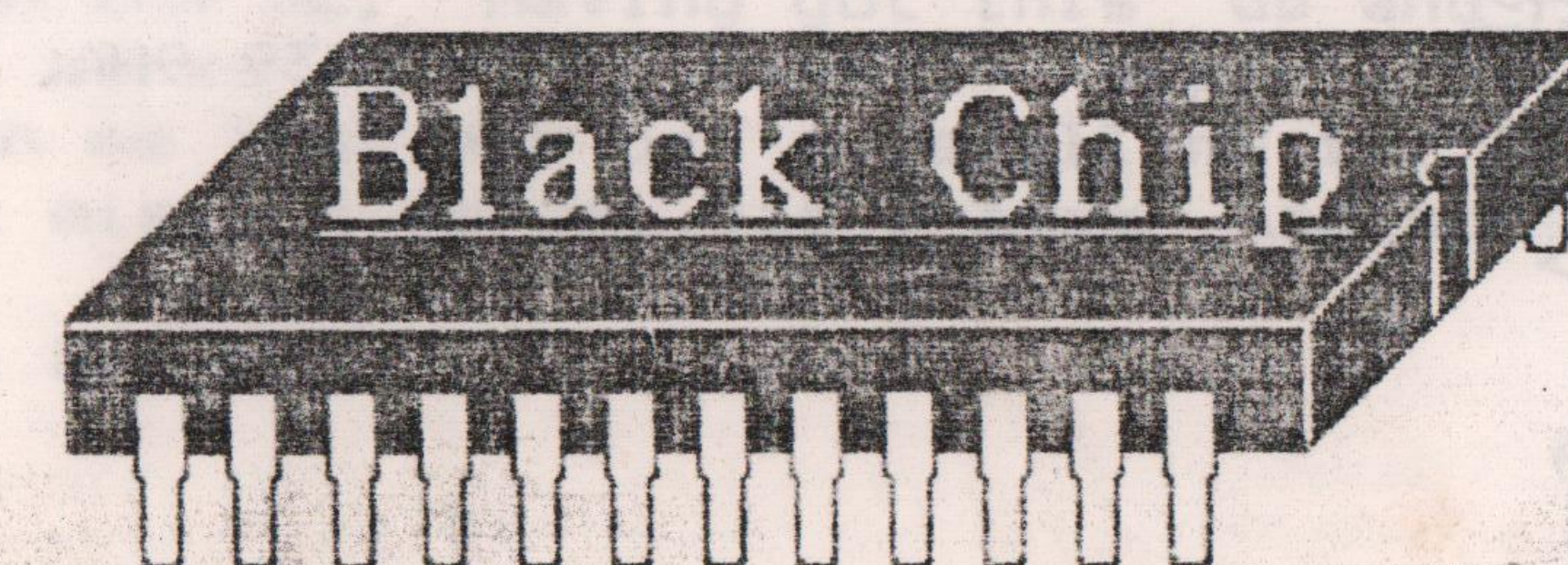
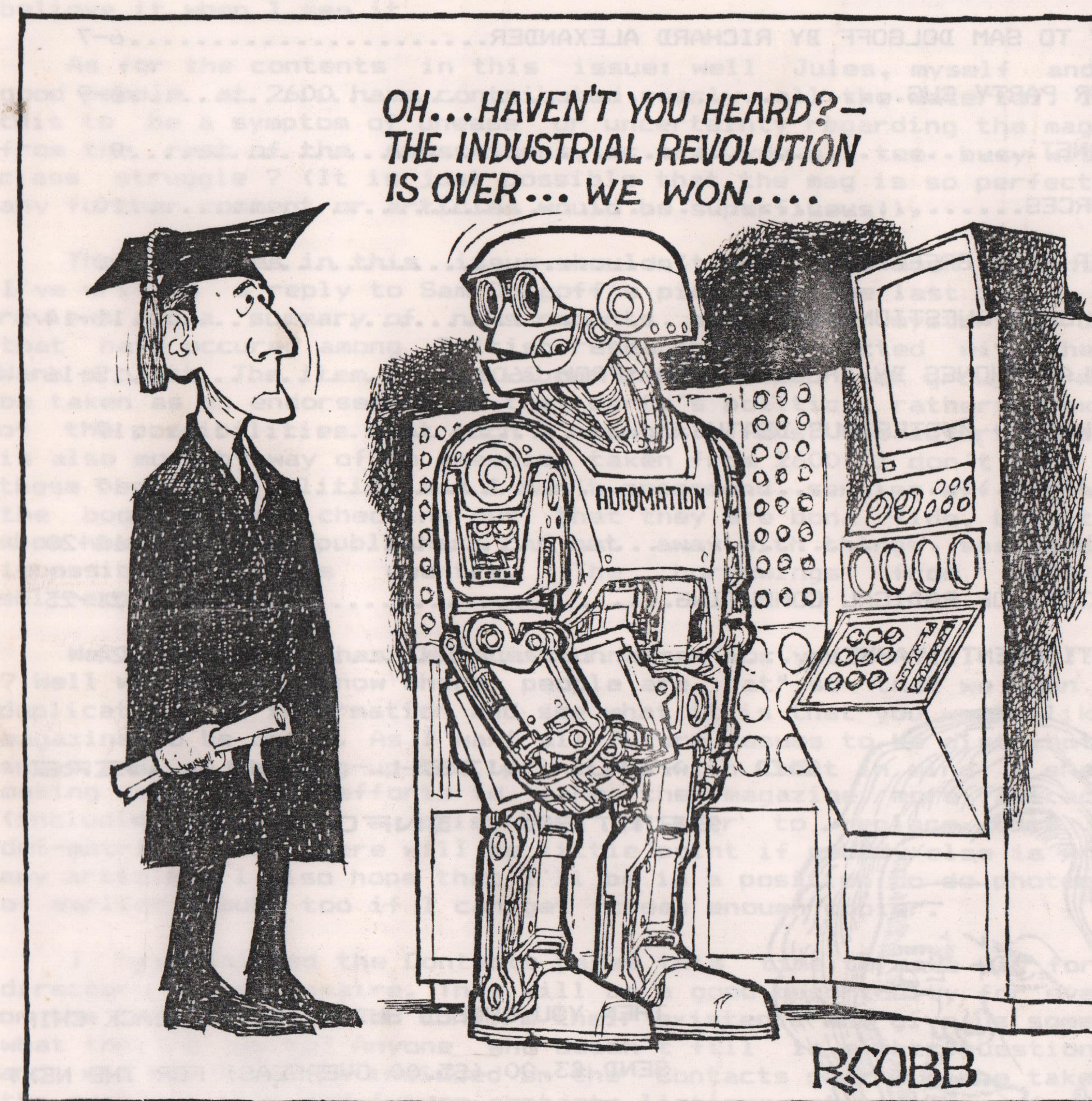
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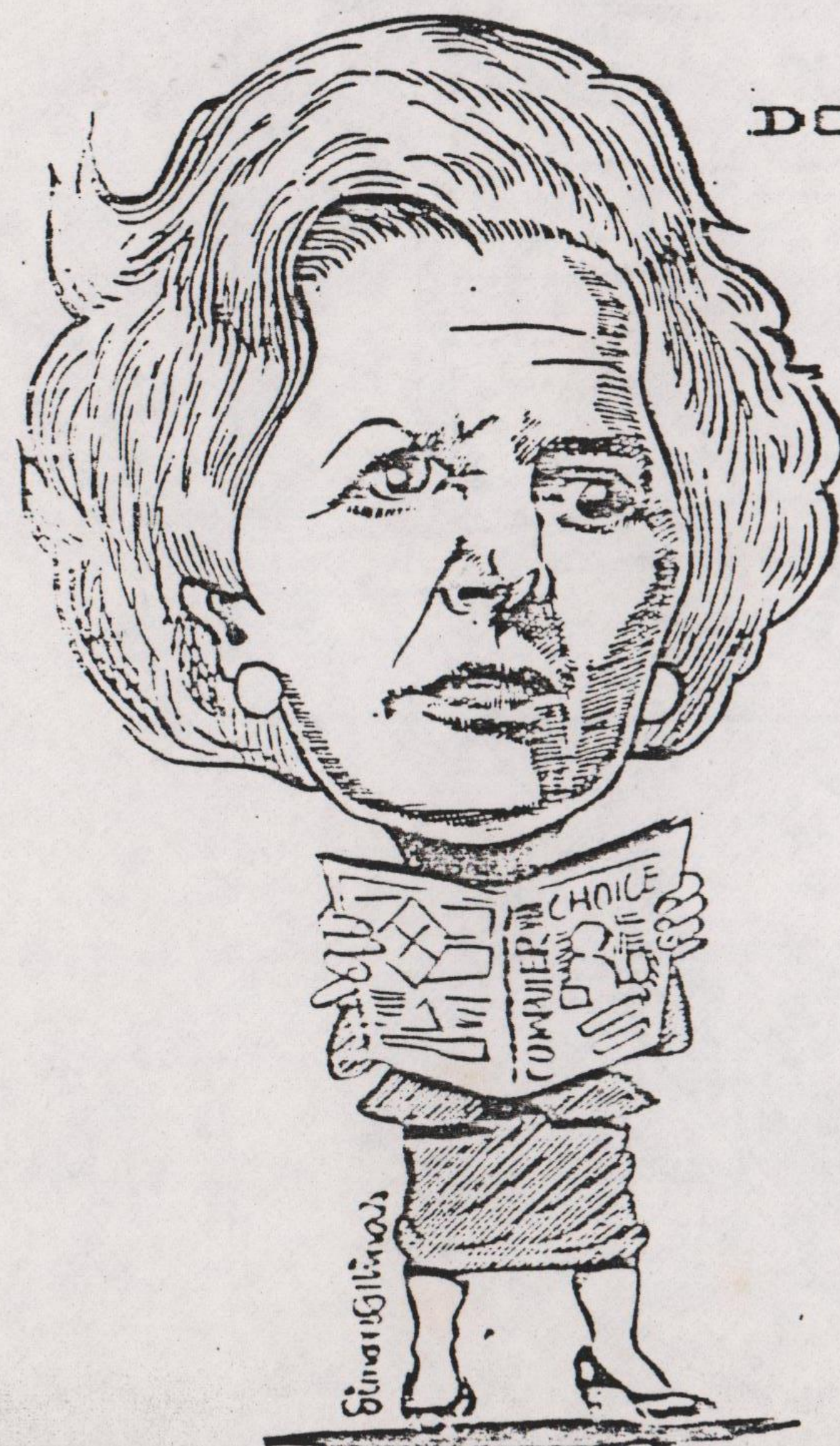
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Spring 1987



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editorial

Oh well, another Black Chip has finally wriggled its way into the daylight, the last of the London issues. The next issue will be put together in Wales and should, all things being equal, be a much more professionally produced consumable. Well that's the intention and you'll all be far too familiar with the distance between intent and reality as far as this magazine goes! Along with everyone else - I'll believe it when I see it.

As for the contents in this issue: well Jules, myself and the good people at 2600 have contributed nearly all the material. I take this to be a symptom of unease or uncertainty regarding the magazine from the rest of the subscribers, or are you all too busy with the class struggle ? (It is just possible that the mag is so perfect that any further comment or articles would be superfluous!).

The articles in this issue shouldn't need too much commentary, I've written a reply to Sam Dolgoff's piece in the last issue, a few reviews and a summary of news reports about some mysterious deaths that have occurred among British researchers connected with the Star Wars project. The item on the Labour Party closed user group is not to be taken as an endorsement of that party's politics, rather an example of the possibilities that such a network offers. The advert on page 7 is also more by way of an example, taken from 2600. I don't know about these people's politics and I don't recommend sending off for any of the books without checking out that they are bona fide, but it does show how American publishers can get away with things that would be impossible in this country. The borrowings from 2600 are self-explanatory.

Well this issue has TWO questionnaires for you to fill in !!! Why ? Well we need to know where people are "at" so that we can avoid duplication of information and see what it is that you would like the magazine to be doing. As I want all future issues to be distributed in shops and am gearing-up the print run with that in mind I shall be making considerable efforts to make the magazine more attractive, (including getting a daisywheel printer to replace this awful dot-matrix) but there will be little point if nobody else is writing any articles. I also hope that I'll be in a position to do photocopies of earlier issues too if I can get cheap enough copier.

I have omitted the Contacts pages this time to make way for the directory questionnaire. This will be a good opportunity for everyone on the Contacts pages to confirm their existence and give us some idea what they're up to! Anyone who doesn't fill in either questionnaire and who has formerly included on the Contacts page will be taken off the exchange list and future contacts listings until we hear from you.

One final point, in this issue nearly every article that I've typed in has been "spell-checked" by the QSpell program by Eidersoft, available only on the QL. Having got this up and running on disc I must say that it works very efficiently (especially with the expanded memory) and shown me just how bad my spelling is. All I need now is a programme to spot missing words, bad grammar and nonsense !!!

See you soon, Richard.

AN INTERVIEW WITH HUGO CORNWALL

by John Drake

Where did you get your alias from?

It was actually derived over a rather drunken lunch with the publisher, all that I had decided that it was to be a pseudonym, but I will explain genesis. Originally it was going to be Hugo Cornwell with an "E" rather than an "A" because David Cornwell is the real name of John LeCarre, a spy writer who I rather admire—he has also got a number of talented brothers and sisters. So the original thought was that it was going to be, in order to mislead the public, yet another member of a very talented family.

But at the time a number of the Elite hackers were operating under the name Pensanze, a SIG called Pensanze which had originally been called The Pirates of Pensanze for fairly obvious reasons. So Pensanze is in Cornwall, so that's how I came about. So we decided to call it Cornwall with an "A" and Hugo was chosen as a Christian name simply because I think it is one of the less likely names I could possibly have.

How did you start off as a hacker?

Not very deliberately. I got into communicating computers probably very early round about '78 and I just got very curious about what was going on in big computers and liked to drop in and eavesdrop and no one particularly seemed to mind and I never thought of it particularly as naughty or illegal but if I picked up a phone number or a password then I simply carried on collecting it. I ended up with a few sheets full of these things and I would pass them around to friends out of curiosity and it wasn't probably until '82 or '83 that I became aware that there were not just other people collecting [in a] similar sort of way but there was a proper culture outlet called Hacking and I said, "OK, well I suppose I am a hacker."

What did you do previous to hacking—did you have any other interests that were along the same line?

I guess I have been interested in what I call in the book the larger area of tech phreaking. In other words, making technology misbehave in the nicest possible way. I got interested in that when I was an undergraduate at Oxford and everyone I knew was interested in Phone Phreaking and that in fact one of the best phone phreakers was one of the dons and in the primitive sort of phone system that operated there you could really do a lot. So I was interested in that.

I certainly got interested in what we over here in England called bunker hunting. In other words, trying to find out secret sites used by the government and also by the U.S. government. There was partly a political motive in that but it was really rather a lot of fun.

I got interested also in the brief illegal citizen band radio thing that was going on in this country. I got a radio amateur license and I got also very interested in those parts of the radio spectrum that are not terribly well advertised. In most countries in the world, western world, you can buy books that tell you where all the various services lie. You can't in this country or you couldn't until very recently and I say [it] was great fun trying to work out the pattern of the allocation of the frequency bands and then using radio scanners [to] actually eavesdrop on them. You know although some of the stuff is now more widely known, there is a lot of the stuff that isn't known. There are a handful of people in this country who are really rather good at it.

How do the laws in the U.K. versus the U.S. encourage this type of investigation?

How do they encourage it? Well they discourage it really. It is done in two ways. First of all there is a lot less published in this country. We have got much tougher about what we publish. We don't have a

a British hacker/author

Freedom of Information act. Anything that is generated by the government is deemed to be secret unless [it] has been specifically released for publication so there is a hell of a lot less information that is openly available. So there is that one aspect. The other aspect is that a lot of our laws are all enveloping in theory though they're widely ignored in practice. There is a contrast to the United States in particular. I know less about Canada and that is if you look specifically at hacking there is no specific anti-hacking legislation. You can be done for stealing telephone time if you look at telephone hacking, stealing electricity sometimes. You can be done for stealing CPU time on a computer and recently they have done to people for forgery which is basically using passwords to which they are not entitled and that case is going to appeal.

What was your motivation for writing "The Hacker's Handbook"?

The motivation was that I was asked to do it and it was very very easy. The way it happened was a man who was a hacker by interest and a publisher by profession wrote/scrawled a note on a bulletin board saying does anyone want to write a book on hacking and I wrote back not very seriously, in effect saying [you] cannot be serious, it can't be done. He wrote back, said I don't know, call me back and we will have a chat about it. I rang up, said/listed all the obvious things, why all the obvious reasons shouldn't be published and he sort of had a debate with me and at the end of it I felt maybe it could be done. I wrote him a synopsis within 24 hours. 24 hours afterwards he said it was terrific, would I mind waiting two or three days till he had his editorial meeting, but he wanted to do the book and at the end of all of that, you know within one week, beginning of the week I hadn't thought of writing the book, I hadn't thought of writing any book in fact and at the end of the week I actually had a contract.

So I would have never written a synopsis for the book, I would have never hawked it around publishers but since there was the opportunity and I had already thought about the synopsis, I thought, well why not and I did. There was no great burning desire, there was an opportunity...so I went ahead and did it. What has been the public/business and media response to your book?

There was a great deal of interest, the book was for several weeks on the Sunday Times Best Seller List so it was competing with some pretty popular items. I think it got popular interest largely because a reporter on the Sunday Times rang up the head of The Computer Security Squad at Scotland Yard [and] asked his comments. The man hadn't read the book but said sufficient for her to be able to headline a story "Yard Condemns Hacker Book". This immediately made the book appear very very important and very very serious and after that it took on a life of its own and I was from my amenity the whole thing with a great degree of amusement.

Those people who knew anything about hacking decided that it was not a very interesting book and I never thought that it would do but it obviously excited a lot of other interest. I think people created the book for themselves—they badly wanted a book about hacking, they wanted to make hackers into some sort of modern myth and my book happened to be around to capture all of that interest. Though there was a great deal of luck in it.

One of the effects of the Scotland Yard condemnation is that the books that hadn't been very widely distributed up till then, the original print run was

very small, disappeared very rapidly from the bookshops and it created a further myth that the book had been banned in some way so everyone was rushing around like mad to get hold of them until about a few weeks when the book trade had recovered, copies were there, people grabbed it like crazy for fear that it [was] really going to disappear.

About two weeks after the book was published, a couple of guys were arrested for hacking the Prestel system and the newspaper reporters decided that one of those people was me, so there were headlines saying "Hacker Author Arrested" and things like that and again it wasn't true but it all helped sales.

It was really quite a phenomena and I do say to all hackers the attention that the book got was somewhat undeserved and I feel a little bit apologetic among serious hackers for sort of getting lucky. In the first book you had a schematic for the Black Box. In the sequel it wasn't there. What was British Telecom's response to the book and how did it influence you in a sequel?

Well, the decision to take it out wasn't mine, it was the publishers, in fact it went in three stages. It was in the first edition the schematic was there complete with values for the various components and then gradually everything disappeared. I don't know that British Telecom did anything very much other than to condemn [the book] and what the publishers decided not unreasonably that things were getting a little bit hot and they [anticipated] trouble and removed the stuff so that they could show that they were being responsible. I think that is the way it happened. British Telecom said that they didn't approve of that sort of thing, that you know there are hackers on British Telecom's staff as you might expect so you know I think to answer to my certain knowledge a lot of people within British Telecom found it amusing and I also have reason to believe that some of the British Telecom Security people were not displeased about the book because it made everyone a lot more alert about the use of passwords.

There is some evidence also to show that quite a few of the books were actually sold either to computer security people or sold by them to, if you like, their customers in essence to say, "Look how easy it all is, read this book and be aware."

How would you say that U.K. hackers would be different from U.S. hackers?

I think that the difference is of subtlety rather than of essence. I think there are two areas of difference. First of all my guess is that the majority of U.K. people, U.K. computer enthusiasts, that have modems probably acquired them about two or three years after the majority of U.S. equivalents.

That's really a question of how modems are sold. When I first got interested in computers, the only modems that were available were from British Telecom. You couldn't buy them over the counter in the shop and you had to buy them on rental and they were very expensive. If you had them, you either had fairly illicit ones, ones that had been modified from U.S. use and that was only of limited use or you had these very expensive ones which were registered with British Telecom.

So you got this two or three year gap. The second way I think is that again although it wasn't the case for me, most British enthusiasts, their first database they called into was going to be Prestel which is a video text system 75/1200 baud. The communication software that they had was for that as well. It meant that a lot of

their lacking was either into Prestel or into systems which looked like it. Of course there was the university situation in the states where people would tend to be looking at microl clue de grass teletype services 300/300. I suppose that American hobbyists would call into The Source or into a BBS. After Prestel had been going for a bit then in the early eighties you started to get the BBS which people used 300/300. I also think that because there were so many video text services, Prestel and type U H services to look at that on the whole British hackers weren't so much interested in big computer networks so it took them a bit longer to discover PSS and the various university networks like JANET (Joint Academic Network) and things like that.

In essence there is very little difference in the culture but a slight difference of preoccupation in terms of what they are looking for.

As a system, what do you think of Prestel?

You could go on and on and on about that. Prestel is extremely interesting as a matter of history. It had enormous ambitions, but its ambitions were all formed about the year 1975 which was eons before anyone visualized the home computer as being possible, so Prestel visualizes and suffers from it. People accessing computers via their television sets. Which is why you got a 40 by 24 character display, these rather curious graphics which was a function of the belief that memory was going to be unbelievably expensive and that 1k of display memory was really as far as you could go.

Also that the ordinary untrained person could never be expected to actually type words into a machine, you had to have all your commands being sole numbers. So you got this curious electronic card file type of structure and everything is available via pages or very simple numeric routing commands. Because Prestel is stuck with all of this sort of thing and if you like human knowledge about computers moved on fast, Prestel has to become more sophisticated, remain compatible with its 1975 format and a lot of the things you would want to be doing on a public access database, unbelievably clumsy. For example, you can order things, all the shopping and what have you, but you have to do it via a system called a gateway which is essentially, the way it works is that the gateway opens to receive a command string from you and it closes, the command string is processed in the remote computer, the gateway opens to give you the answer and closes again so on and so forth. Any more slightly more complicated interaction is unbelievably slow.

You could run an online service with view data as the front end processor, but it looks ridiculous, it behaves in a ridiculous format, so for certain types of services I suppose it's not too bad, it's like retaining a horse and buggy type of system when everyone is going around in gas driven internal combustion engines.

Can you see Prestel evolving from what it is now?

I don't think it will do, they're trying to make it evolve but I think it is going to remain as a historic curiosity. It's fairly [acceptable] in one or two industries, particularly the travel trade; it's quite useful for fast moving financial data. It will make very, very small movements but it will be relying on its installed user base. The way people are using it now is via emulators on personal computers. On my personal computer I obviously got video text, Prestel in other words type software and it's no effort to call into Prestel or any of the other online services.

I just can't see any electronic publisher saying, "Christ Almighty, we're really going to have to use this thing, this is wonderful." In fact, most electronic publishers nowadays publish in a variety of formats, they publish in an online format, they publish in a videotext format, and of course if their material is suitable they would also be thinking about publishing

CORNWALL

in a CD ROM type format and anything else that becomes available. It's merely a format and the decision to publish in it is "well, are there going to be enough people out there to make it worth my while?" Electronic publishing in the form that you mentioned, how does it work over here, everything is online?

Well, you have a variety of systems, electronic publishing for the financial community, which is obviously the most lucrative area, is still very hardware bound in that if you want to get the service then the way the supplier wants to let you have it is that you have to buy his hardware and feed it down the leased line as well as getting the service.

That's the case with Reuters, they are under a lot of pressure to get rid of that and that is applied to most other services. You can hack into them because there is always exhibition/demonstration lines, dial-up lines available and then if you can fiddle with a personal computer system cleverly, you can get the services. Other forms are basically available online and you get it via PSS which is the British Telecom equivalent to Telenet or Tymnet.

"...this idea that the hacker can somehow fight back, that's the reason why non-hackers admire them so much."

There are also data-nets that use a Prestel like format but are not Prestel and you can get a number of services that way as well for example the equivalent to TRW for credit checking data is called CNN, that's available in the video text format. That doesn't come out via postal, it comes out via its own data network and there are other data networks with other services on them as well. So that's basically how it works. Have you planned any future books on computer crime?

Well, I am writing a much more serious book at the moment called "Data Theft" which is intended for the chief executive officer of the CDO market and that is encouraging those people to the belief that they can't leave data security to a mere technical functionary. Though it is much more preoccupied with industrial espionage and fraud. It is not going to be in any way a tongue and cheek book. "Out of the Inner Circle" was alleged to be a book on computer security, but is manifested for hackers. This is a book on computer security and it is intended for chief executive officers and I don't think hackers would find it of any direct interest though I hope they are going to read it.

One of the things I do want to get over is this notion that most computer crime is committed by insiders, computer criminals are normally employed by their victims. I want to talk alot about police training or rather the lack of it and lack of responsive criminal code to cope with it. I still see that there is a lot of room for frolicking with technology and I really like to promote hacking to what I believe is its rightful place—something for a tiny, tiny minority to amuse themselves with, without actually causing any serious harm to anybody.

In the book "The Rise of the Computer State" the author put forward the premise that there is no defense against computer bureaucracy and having files built up on pretty well everybody, everything, and every move. Could you see hackers as a possible defense?

I have been asked this question in a slightly different form before. Not really, I think the mode of defense is that although these files can be built up, the files themselves are not necessarily terribly reliable.

One of the great problems with interpretive data is that they collect together so much information and so much gossip that although they can have it all on the screen in front of them they don't know whether it's terribly reliable. The value of the hacker I think is [a] somewhat dubious one in all of this. One of the reasons why I think there is so much room in people's hearts for the hacker is that they believe the hacker is going to provide that sort of defense which you were describing.

I actually wrote a piece for one of the papers about it [about] folk heroes arising, for example King Arthur is a very potent figure, Robin Hood is a very potent figure, and the potency of these things is that King Arthur is going to be [the] one and future king. Robin Hood, you know not a great deal is known about Robin Hood, but the great thing was that he stole from the rich to give to the poor and that probably is why he is remembered.

I think it is this idea that the hacker can somehow fight back, that's the reason why non-hackers admire them so much. I am afraid I don't believe that hackers are sufficiently good or sufficiently powerful or sufficiently able to combat that. I do think that every now and then though what a hacker can do is if he is very lucky, expose the stupidity [of] some of the power that is held on computers and maybe just enough that there is that element of defense that you're looking for.

But on the whole I would say the outlook for people/individuals in the computer age is not terribly good.

Another Tomahawk cruise missile misses

An unarmed Tomahawk cruise missile malfunctioned and landed unexpectedly during a test launch at Eglin AFB on 2 August, 1986. The missile, launched from the battleship Iowa at 10:15 a.m. CDT, flew successfully for 69 minutes before deploying its recovery parachute for reasons not yet determined. The missile made a soft landing in an uninhabited area 16 miles west of Monroeville, Alabama. No injuries or property damage were reported.

The cause of the failure is not yet known. The missile, which suffered no apparent external damage, was recovered and returned to the General Dynamics works in San Diego for investigation. The missile was the second in four launches to land outside the 800-square Eglin reservation. Last December 8, the first Tomahawk launched at Eglin landed near Freeport, Florida. The cause of that failure was a procedural problem which caused portions of the missiles flight control program to be erased during loading.

[Playground Daily News, Fort Walton Beach, Florida, 4 August, 1986]

MODERN TECHNOLOGY AND ANARCHISM

A REPLY

The text published in the last Black Chip came from a new American anarcho-syndicalist publication "Libertarian Labor Review". On first glance the text looked quite interesting, Dolgoff being a well-respected activist and writer and the subject matter was spot-on. At last, I thought, an anarchist getting to grips with new technology (honourable exceptions being previous writers published in Black Chip, of course).

Personally I found it a muddled text, both in terms of intellectual coherence and political argument. To paraphrase David Coleman, it's an article of many halves. Firstly I was never sure quite where Dolgoff stood in relation to the professional middle-classes. On the one hand he insists that we must win them over as they are the new majority of the "working people" and because of the frustrations they feel they are sympathetic to ideas of self-realisation. Later, however, Dolgoff launches into a tirade against these same people calling them one of the obstacles on "the road to freedom".

Equally problematic is Dolgoff's view of the poor or the under-class. We are asked to see them purely as victims of the system, excluded from the work-place or at best marginalised within it. There is little sense of them having any demands or needs that can serve as focii for resistance. I get the feeling that Dolgoff is more interested in winning over the "Professional Middle Classes" and higher echelons of the skilled working class, than those people worse-off and more powerless. In a way this can be compatible with a syndicalist approach, wherein industrial power should be given to those with the greatest stake in the enterprises, a form of Reichian "work-democracy", but this will merely replicate hierarchies of power, skill and knowledge, it cannot form the sole basis for an egalitarian society. Dolgoff's apparent approach is however useful in reminding us that without the support of technocrats, modern industrial society cannot be transformed from within, only destroyed from without. The problem can be transposed onto the problem of modern industrial society, and one's view of that will help determine the relative importance one accords technocrats and the marginalised.

Dolgoff has troubles with other socio-economic problems. Bureaucracy is a self-evident evil apparently, yet Dolgoff quite happily quotes from bureaucrats when it suits him. Indeed his whole thesis that capital's own experts are arguing towards anarchist solutions to capitalist problems is very suspect. What these experts want is a more efficient capitalism, not an anarchist society. For them bureaucracy is also an evil, as in capitalist terms, many layers of management and administration are "unproductive". What could be more natural for capitalist experts than to advocate strategies for replacing these well-paid hierarchs with self-managed, decentralised work units, and using the relatively cheap, reliable new technologies where possible, provided these work units stay within the capitalist economy and ethos. Not forgetting that these work units will have their primary economic orientation given them by the market place and their place within the the global capitalist economy. There is also the point that by implementing new technologies, especially expert systems and robotics, one does not necessarily remove questions of power from the workplace, one tends instead to mystify them, giving the technologies (i.e. the materialisation of human knowledge/power relations) authority which appears "neutral" as the human mediation is not present in human form. I have seen little evidence that such will be the route to a libertarian communist society!

On other levels I found the text unsatisfactory: the use of mechanical and biological metaphors for social systems conceal more than they reveal; the continual quotation from "experts" to illustrate the argument (especially when such quotations are not explicitly located) served little purpose except, perhaps, providing yet more evidence that American professors can relied on to say virtually anything - I'm sure views quite the opposite can be cited, and without any supporting evidence, I'm afraid there views count for little in advancing Dolgoff's argument.

Dolgoff also repeatedly uses the phrase "the free society" as if it were either existing or immanent, without even defining what he means by it, assuming perhaps that its iconic value to anarchists will obviate the need for further discussion or elucidation.

MODERN TECHNOLOGY AND ANARCHISM

Dolgoff also seems certain what this "free society" will (not may) be like and how it will function. He also seems to share Kropotkin's faith in voluntary associations when he talks about the scientific-technical federations etc. As a member of a similar association I would like to disabuse him of a few misconceptions: they not all voluntary - if I don't pay an annual sub of £60 I stand to lose my qualifications and thus my ability to work within my chosen profession; the associations are not democratic - in my association we (well 20% of us) vote for self-selected councillors to constitute the Council which runs the Association and which need take no further interest in what the members say, even at Annual Conferences; any contact internationally is either on a personal basis or arranged by and for the bureaucrats who get themselves elected to Council; the workers who run the association on a day-to-day basis are frustrated by the conditions under which they work and most members couldn't give a monkey's anyway as the only "association" which goes half way to representing their interests is their trade union as at least it negotiates wage rises and maintains their wage differentials over the unqualified staff. Yes bureaucrats are frustrated by their position and often are against capitalism as it seems such a disorganised way of doing things but that don't make them potential anarchists - far from it - most want more power over others to exercise their knowledge and expertise and they want more money for doing so (extra responsibility!!).

Finally Dolgoff says next to nothing about the specific nature of the new technologies and what he does say is contradictory: e.g. in one place he says, after listing various new technical advances that "this adds up to a workable preview of a free society"; in another he states that the new technology increases the power of the State, whilst in a further place states that the changes make no difference to the validity of his case. In fact, despite the title of the essay new technology has bugger-all to do with it, a similar position to Murray Bookchin's essay on New Technology and Self-Management which whilst an interesting discussion on ancient Greek history says nothing about new technology.

I have been asked why this journal does not confine itself to a purely anarchist perspective. The answer is that most anarchists have yet to come to grips with either (post-)modern society or the new technologies. Instead of trying to confine our understandings of these within nineteenth century concepts and world-views, Black Chip positively welcomes new ways of looking at new technology and society, not just for their novelty value or to shock, but simply to forge new conceptual tools for handling new realities.

Richard Alexander

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- () CREDIT CARD SCAMS (Many Credit Card Rip-Offs) (\$6)
- () DISK SERVICE MANUAL II (Repair, Maintain Floppies) (\$22)
- () DISK DRIVE TUTORIAL II (Theory, Facts, Many Tips) (\$17)
- () PRINTER & PLOTTER MANUAL II (Interfacing, Repairs) (\$17)
- () SUPER RE-INKING METHOD (Re-ink Ribbons - Cheap!) (\$6)
- () IRON GONADS (Free Electricity - Outside Magnetic Ways) (\$8)
- () STOPPING POWER METERS (Free Elec. - Inside Load Ways) (\$8)
- () KW-HR METERS (How Electric Meters Work, Error Modes) (\$12)
- () LIBERATE GAS & WATER (Free Natural Gas; Free Water) (\$7)
- () GAS FOR ALL! (Free Gasoline; Free Diesel Fuel) (\$12)
- () VORTEX GENERATOR (Cool, Heat - No Fuel/Moving Parts) (\$6)
- () TV DECODERS & CONVERTERS (Decoder, Converter Plans) (\$6)
- () VOICE DISGUISE (Totally Disguise Your Phone Voice!) (\$6)
- () ELECTROMAGNETIC BRAINBLASTER (EM Super-Weapons) (\$20)
- () HEAL THYSELF II (Proven EM Healing Methods) (\$8)
- () POLYGRAPH DEFEATS (How They Work; Defeat Methods) (\$10)
- () HIGH VOLTAGE DEVICES (Stunners; Zappers; Blasters) (\$10)
- () SURVIVAL GUNS & AMMO (Full-Auto Conversions; Tips) (\$10)
- () SILENCE IS GOLDEN (Silencers - Cheap & Easy) (\$6)
- () MUGGER, RAPIST - DIE! (Slime Eliminator Plans) (\$6)
- () ULTIMATE JUSTICE (Timer, Detonator, Igniter Plans) (\$6)
- () SECRET & ALTERNATE IDENTITIES (Fake but Legal IDs) (\$6)
- () RENTAL EQUIPMENT (Defeat Timers, Mileage Devices) (\$6)
- () STEALTH TECHNOLOGY (Stealth Your Vehicle or Plane) (\$10)
- () SHOPLIFTER (Many Shocking Methods) (\$5)
- () AUTO INSURANCE RIP-OFFS! (How to Beat the System) (\$7)
- () THE "GOLDFINGER" (Non-Ferrous Metal Detectors) (\$6)
- () THE "SILKWOOD" (Cheap, Simple, Effective Rad. Detector) (\$6)
- () SUPER-SURVIVAL CATALOG (Free with all orders \$20+) (\$1)

By John J. Williams, MSEE (former NMSU CS Professor), CBS "60 MINUTES", ABC Talkshows Stardom. 10% OFF all orders over \$50. Please add 5% ship/hndl (\$1 min). No credit cards. Sold for Educational Purposes Only.

Consumertronics Co. 2011 CRESCENT DR., ALAMOGORDO, NM 88310

LABOUR PARTY CLOSED USER GROUP ON TELECOM GOLD

The Labour Party operates a forum for people interested in politics and computers called the Computer Advisory Group (CAG). One of their more interesting activities is the administration of a "closed user group" (CUG) on British Telecom's "Gold" electronic mail service. "CUG" is newspeak for a private party - you have to be known to get in. The information below is a summary of a set of handouts from the CAG administrator:

"The LP CAG is an organisation of party members which aims to promote and support the use of computers in the party. Its activities include... software development and distribution, exhibitions, day schools, etc". Membership costs £10 p.a. for postal membership or £20 p.a. for online membership. - This provides the same rights and benefits as postal membership, plus a mailbox on Gold.

Membership of this CUG is "open to constituency LP's, LP branches, affiliated organisations, etc as well as to individual party members". Members pay only for the time used on Gold, (3.5p/min off-peak; 11.5p/min peak, plus 2.5p/min outside London) not the joining fee or standing charges. They also receive free training and documentation. [NOTE: This may sound expensive, but its a lot less than the standard charge].

The CUG exists mainly to link CLP's, regions and party head office. It contains, as well as a noticeboard: CAG info; regional info; software service; directory of contacts; head office sales/marketing info; party events diary; party info; party news. [NOTE: No data on the number of users was available at the time of writing].

Further information and copies of the following CAG fact sheets:

- 1) About the CAG
- 2) The Software Service
- 3) ELPACK - Election Management Software (Reading System)
- 4) MEMLIST - Membership Records System
- 5) MACHEN - As 3)
- 6) Telecom Gold
- 7) Guidelines to CLP's 1 - Uses of a computer
(under preparation)
- 8) Guidelines to CLP's 2 - Getting a computer (ditto)
- 9) Guidelines to CLP's 3 - Forming a local computer group
(ditto)
- 10) Guidelines to CLP's 4 - The Data Protection Act

- can be obtained from the people listed overleaf:

CAG Administration or
Carolyn Morgan
97 London Road
Hertford Heath
Herts SG13 7RJ

Jean Davis
Computer Dept
The Labour Party
150 Walworth Road
London SE17 1JT

[Julian Todd, 07/JAN/87]

AlterNET goes on-line!

by Al Rycroft

In order to enhance the ability of those building a better society to communicate more effectively with one another "AlterNET Computer Communications Association" was incorporated this fall as a non-profit organization. [See INPUT/OUTPUT No. 5]

Even before incorporating AlterNET had purchased an IBM PC "clone" and set up a computer-assisted conferencing system for the Ottawa area.

Communications take the form of electronic meetings, document exchange, document co-authorship, computer-mediated conferences and electronic mail. AlterNET also offers a small library of public domain (free) software available on-line.

AlterNET hopes to soon offer long-distance electronic messaging to be additionally billed at-cost (substantially cheaper than long-distance phonecalls), and a conferencing system available from anywhere in Canada.

In Toronto, the Ontario Environmental Network, Energy Probe and Connexions have begun discussions on setting up a similar system.

Other centres that have expressed an interest in the concept

are Winnipeg, Victoria, Edmonton and Vancouver.

The "Fido" software AlterNET is using (available to non-profits for \$7.50 from AlterNET), is capable of managing computer conferencing and electronic mail, both locally and long-distance. There are presently over 1000 "FidoNet" sites around the world, mostly in the U.S. and Canada, but also in Europe, Asia and the Pacific Rim. The number of FidoNets is growing rapidly.

AlterNET charges \$15 per year for users to communicate locally. [AlterNET subscriptions can be purchased through INPUT: see coupon below.]

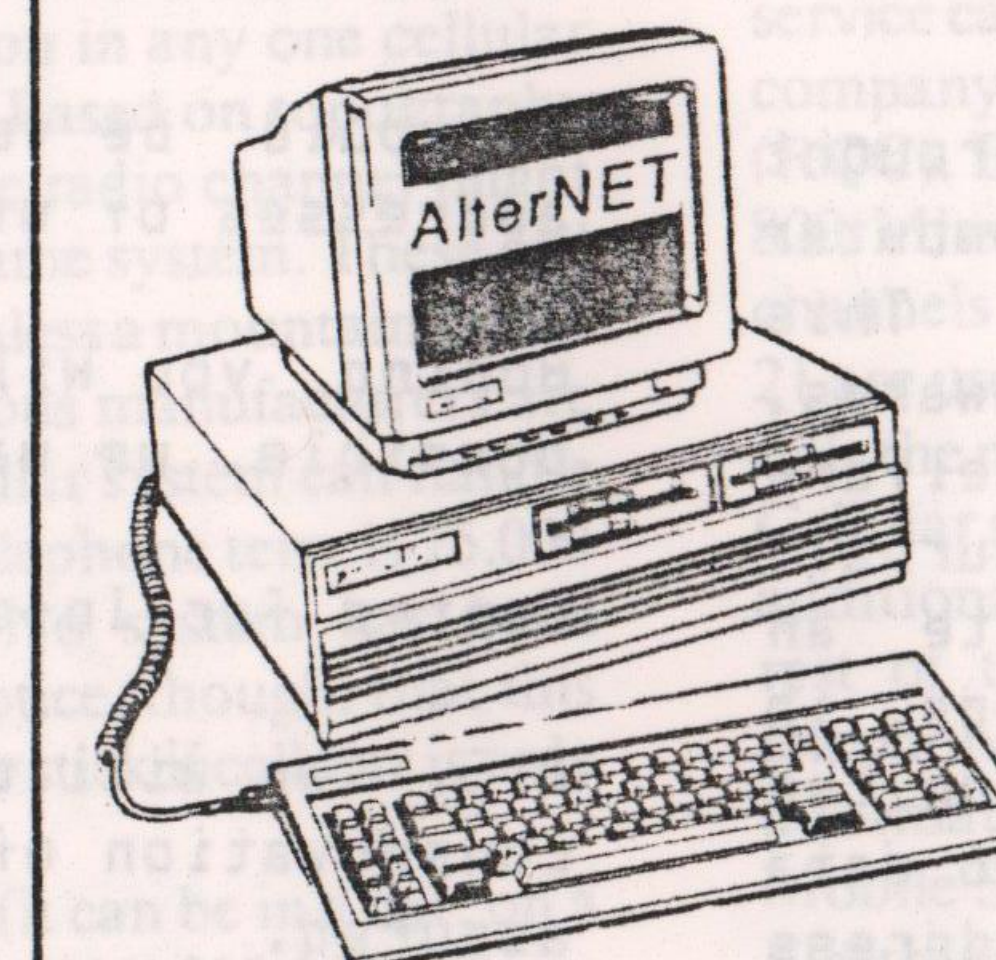
If you are interested in more information or are interested in setting up a local computer communications centre please write AlterNET at Box 2206, Station D; OTTAWA, CANADA; K1P 5K0; or phone (voice) 613-231-2997 or 613-224-8588. AlterNET can be reached electronically at 613-230-9519.

In Toronto contact Arnie Michaelson of the Ontario Environmental Network (416-588-3843, voice).

We're published electronically!

Starting with this issue (No. 6), INPUT/OUTPUT is published electronically on the AlterNET computer conferencing system. Both electronic and printed editions are public domain.

AlterNET accounts cost \$15 per year, and are available through INPUT. AlterNET runs Fido bulletin board software and can be dialed directly at 613-230-9519 (data). Communication parameters are 300 or 1200 baud, 8 bits, no parity, 1 stop bit, and XON enabled. Messages may be left for "INPUT/OUTPUT".



RESOURCES

The first plug has to be for the latest issue of Vague, the brilliant magazine edited by Tom Vague. This has graduated from being a punk fanzine into the 80's equivalent of OZ (for those who remember the 60's and early 70's!). This issue, see the back page for details on how to get hold of a copy and a list of contents, focuses on conspiracies. The reference to OZ, above, refers to the practice of under/over-laying the text with graphics of differing colours. This is usually very effective, doubling the information capacity of each page, but, as with OZ, the occasional clash resulting in total, or at least partial, illegibility. Tom has very kindly reprinted the Videodrome text, if you have difficulty reading his version, I still have copies left. Other highlights include items on the Illuminati and Robert Anton Wilson, the Church of SubGenius, the occult roots of nazism etc. Loads of good stuff. Get it!

The second plug is for Micro Computer Mart. I often get letters asking where is the best place to get cheap computer gear. Without any doubt M.C.M. is the business. Not only do you get the chance of getting cheapo goodies, you get to meet some very useful people, which can lead to years of cheapo gear. Nuff said! Not only does the mag have sales ads, you can also place wanted ads. Best of all, for short private deals it's free! The editorial can be naff, the cartoons are usually sexist, and the product reviews are mainly business orientated but it's miles better than the weekly column in either Popular Computing Weekly or Exchange and Mart. Buy the mag, 50p a fortnight from your newsagents, tell them the distributors are Diamond Europress Sales & Distribution, Unit 1, Burgess Road, Ivyhouse Lane, Hastings, East Sussex, TN35 4NR (0424-430422).

The third publication that has brought itself to my attention is called "Computer Use in Social Services Network". This appears to be very much orientated towards medical educational and welfare professionals and is a Yankee journal. Besides the journal they also operate an electronic network. They have a node in Wales on 222-704739 and is operated on the Fidonet. Comms are at 300-2400 baud, 8 data bits, 1 stop bit and no parity. The address for the publication in the U.K. is c/o Lawrence Mosley, Computer Science Dept., University College, Singleton Park, Swansea, SA2 8PP.

LETTER FROM GREECE

Friends Hello.

We are a group of anarchists, from Athens, who have decided to create a cultural centre. The purpose of this centre will be the collection and dissemination of information about anarchist conceptions of life and, as a consequence, of anarchist activity. The absence of a centre like this in Greece and the importance we give its foundation are the reasons that lead us to this decision.

Naturally we do not ignore the anarchist movement action in Greece, although it was fragmentary and continues so to be. This action was not connected to the rich experience of the past, the assimilation of which would lead us to a continuance, guaranteeing the existence of the anarchist movement in Greece.

To realize our purpose, we are going to create a library, consisting of books, newspapers, magazines and generally of all kinds of published material, as is possible, referring to anarchism in Greece and abroad. Among the centre's activities, film projections are very important. It is obvious we are interested in every material: slides, photographs, cassettes, audio-visuals, etc. concerning our purpose.

One of the most important activities is the organisation of conversations and conferences. We intend to invite comrades from abroad and wish to contact them. Finally in order to realize our purposes, we are asking your essential contribution. We want to know if you have any films, and if it is possible to send them to us.

It would be very useful to us to get the addresses of other groups in your country.

Hoping you will answer our call as soon as possible, we wait for further collaboration.

Centre for information on Anarchism

P.S. We will pay your postage expenses. The conservation of materials in a good state is assured.

Address: Center of Information for Anarchism. T.Q. 31405, GR-10035. Athens.

A LOOK AT THE FUTURE PHREAKING WORLD Cellular Telephones—How They Work

by Bruce Alston

This is a non-technical explanation of the newest in mobile telephone communications, the cellular telephone. For some background let's review the mobile telephone as we knew it prior to late 1983 when cellular systems began operating in Chicago and Washington/Baltimore. Improved Mobile Telephone Service (IMTS) allows calls to be made from a car to a land telephone or vice-versa. Car-to-car service is also available. Based on radio transmission characteristics any city or town can have a maximum of 12 radio channels in the 150 Mhz band for mobile telephone service. The transmitter power for the base station (telephone company) can go as high as 200 watts Effective Radiated Power (ERP). This may cover an area of 20 to 25 miles depending upon terrain. The mobile radio is limited to 15, 25, possibly 50 watts ERP, keeping in mind the power consumption from the automobile battery. To receive the signal from the mobile radio the telephone company encircles the transmitter with receivers, so wherever the mobile unit might be, it can be heard, as it also must hear the base station transmitter. With IMTS in New York City, Los Angeles, or Madison, Wisconsin, or any city, only 12 mobile telephone conversations can work at one time, assuming the FCC allocated these cities all 12 channels.

The FCC has allocated 666 channels in the 800 Mhz band for cellular telephone service. The maximum power for the base station is 100 watts ERP, for the mobile radio 7 watts ERP. (That is not a misprint—7 watts!) Based on transmission characteristics, a cellular radio system can have up to 333 channels in a given geographic area. Each area can have two cellular systems, each with its own 333 channels in a given geographic area. Each area can have two cellular systems, each with its own 333 channels for the total 666. Picture the IMTS system with its receivers encircling one powerful transmitter. Change the receivers to combined transmitter/receiver/control equipment located throughout the geographic area. These are called cell sites. Where the one powerful transmitter base station was located, cellular has an MTSO—Mobile Telephone Switching Office, that channels telephone calls from the land lines to the cell site nearest the mobile radio. The MTSO can also switch mobile-to-mobile calls. As the mobile unit travels from one cell site toward another, where a more powerful signal can be transmitted between mobile radio and cell site, the MTSO switches the connection to the best cell site. It now looks as if a maximum of 333 calls could go on in any one cellular system at any given time. This is not so. Based on topography and radio interference patterns, the same radio channel might be used in two or more cell sites in the same system. These cell sites are probably 10 to 15 miles apart, unless a mountain or hill is in the way. In the United States, various manufacturers are claiming that a properly engineered cellular system can handle up to 75,000 calls at a given time. (The telephone term is 75,000 BHCA—Busy Hour Call Attempts). No system has been installed that approaches this figure. Notice, though, that this beats the 12 BHCA of IMTS with a heavy stick if cellular is only capable of half its proposed capacity.

Let's suppose your cellular telephone (it can be in a car, on a boat, or carried with you) has the number (516) 555-2600. I'm in

Red Lodge, Montana and want to call you. Using my friend's telephone, of course, I dial 5165552600 and wait while the call goes through the regular telephone system. It will end up at the (516) 555 MTSO where it is sent to all the (516) 555 cell sites and transmitted. If your mobile telephone is turned on it will recognize the call, inform the MTSO that it is in service, and the MTSO will assign its most powerful cell site a voice channel for the conversation. The MTSO will also transmit information to your radio advising of the channel number on which you will be talking to me. Your radio will ring, I'll hear ringing, when you answer we talk. You push no buttons, turn no knobs. When the call is over, we both hang up. Should you wish to call me, pick up your handset, dial my number, push the SEND button, and wait until you get a busy, I answer, or you have a "ring-don't-answer" condition.

Yes, you can use your modem...but cellular telephony is in its infancy; results may not always be all that you hoped for. Right now voice communication is the principal commitment of cellular systems.

In review, cellular telephones have opened a whole new area of usage availability. Having an older mobile telephone means that you might receive a call if one of twelve circuits were open, and you might be able to make a call under the same conditions. With cellular systems, when you are in the coverage area and your telephone is turned on, you will receive calls and you can make calls and expect to have the ability to talk until you are finished. The city of Sacramento, California has 7 cell sites. Anywhere you drive in that area you have cellular service. If you drive toward San Francisco, as soon as you get within range of cell sites, service is again available. The mobile radio has a "no service" light that is on when you are not in cellular range. If you have a "transportable" cellular radio, pack it with you into the dentist office, or bank, or whatever, and use your telephone, both to send and receive calls. Cellular telephones can be equipped with every type of regular telephone feature: speed dialing, last number redial, call forwarding, three-way calling, call waiting, and eventually cellular service will be available in every community and along the highway between towns.

Prior to deregulation and divestiture, IMTS service was provided only by the local telephone company, called "wireline" companies. Now, each city or town with cellular service can have two companies, the "wireline" (local telephone company) and "non-wireline", a Radio Common Carrier (RCC). Each company has a total of 333 radio channels in the 800 Mhz range devoted to cellular telephones. Actually, 312 channels in each group are for the voice communications and 21 are used for control data transmission (the information that tells the mobile radio which voice channel to use, for example). Cellular service is already so popular that the FCC is allocating additional channels for the service. Since cellular radio in the rest of the world uses up to 1000 channels, most cellular telephones are designed to cover these channels. For detailed information on cellular radio, consult "EIA Interim Standards, Mobile Station to Land Station, CIS-3-A", available from the Electronic Industries Association.

How Cellular Phones Came About and What You Can Expect

Cellular communications derives its name from the radiotelephone signal being transmitted by a series of low-powered microwave antennas or cells.

History

First proposed by Bell Laboratories' creative thinkers in the late 1940s, the advanced computer technology to actually make cellular work was developed in the 1960s.

The FCC, after a 13-year discussion, formulated its "final" rules on implementing the technology in 1981. (Other countries, such as Japan, Saudi Arabia, and Scandinavia acted more quickly and began operating cellular systems in 1979-1981.) Chicago was chosen as the city for an experimental system in 1979, and a second experiment was built in Washington/Baltimore, going on air in late 1981. Both experiments proved that the cellular systems functioned perfectly and that cellular communications is a valuable service.

The FCC then issued an order licensing cellular systems for the country's 305 largest population centers; to date, the 100 largest markets are either on line or soon will be. Each market is served by two cellular companies: a "wireline company", a subsidiary of the local existing phone company after the historic breakup, and a "non-wireline company", one that is not associated with the phone company. Two providers of service, according to the FCC, would prevent a monopolistic marketplace and foster competition.

How a Cellular System Works

The FCC designated the 800 Mhz band for cellular communications. Of the total 999 thirty-Khz-wide channels in the band, 333 channels are reserved for the wireline cellular company, 333 are reserved for the non-wireline company, and the last 333 are held in reserve for future cellular (or other mobile) service.

When a cellular call is initiated, it is received by the closest low-power microwave antenna in the cellular area. From there, the call is routed completely over the microwave system if it is going to another cellular phone, or if it is going to a landline (regular phone), the call is then routed through a highly sophisticated computer switch and connected through to regular landline phones. As a vehicle moves throughout the cellular area (the geographic area in which the cellular company operates), the signal is automatically "handed off" from one cell to the next, so that the signal stays strong and clear. Just as an FM broadcast channel can be used in many cities across the country, a cellular channel can be used in different parts of the coverage area. This geographic sharing permits a cellular system to use radio channels more efficiently than existing mobile phone systems. A number of phone conversations can take place throughout a cellular area, at the same time, on the same channel without interfering with each other.

Cost

Cellular hardware varies according to the area of the country, and features of the model. Generally speaking, perhaps \$995 to \$1,800 or so for a vehicle-mounted unit, and \$2,000 to \$3,000 for portable and transportable units. Leasing and rentals are available in some areas. For the usage of the unit, the phone company charges a monthly fee, and a small charge per call.

things we're not supposed to know about

by Sir William

In addition to the Captain Midnight episode, there have been people recently throwing static at HBO's satellite from their backyard dishes/transmitters. While there's no real imagination in that, it's pretty impressive that all dishes can be made to work both ways.

Captain Midnight did more, though. He sent a signal with a message and actually bumped the HBO signal off of their own satellite. What's more, he apparently sent it with the same scrambling technique used by HBO so that it would come out on the viewers' sets normally. Very impressive.

All of this has been leading up to the more serious stuff: what is available for hunting someone like Captain Midnight down. I know of radio transmission direction finders that can find a source in less than 15 milliseconds. This, too, is impressive.

This equipment is only available to law enforcement agencies and the like so you or I can't get it (even if we could afford it). As a matter of fact, we can't even get a catalog from these people to see just what they make unless we happen to work for one of "those" agencies.

"Why is that?" you may well ask. It's probably because they don't want you to know what else they make and sell to "law enforcement agencies". Not wanting the general public to know about things like wallet transmitters makes sense. Any crook that watches TV knows that an undercover cop might be wired under his shirt like on TV. But how many would think to check the guy's wallet?

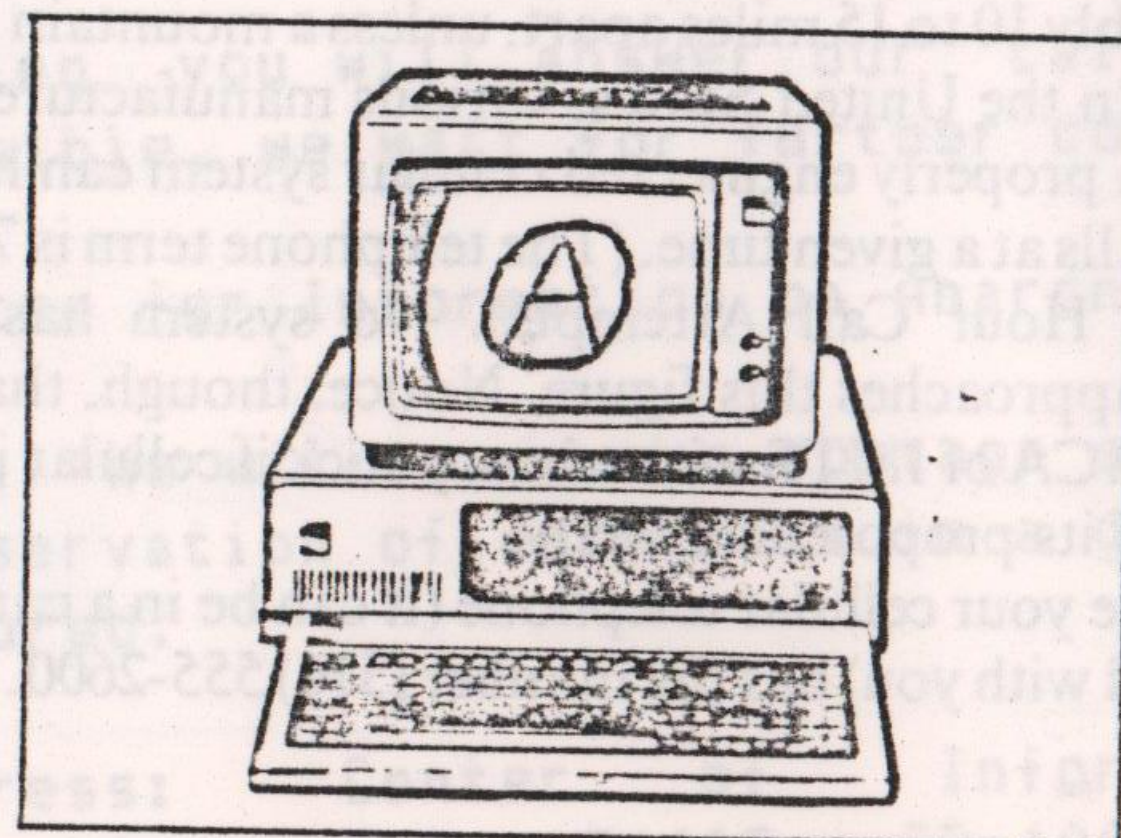
This is all interesting, but what gets me is all the equipment available for bugging people. Phone transmitters that draw their power from the line itself and use the wires for its antenna. Guaranteed to look identical to the microphone part in a regular telephone. It only puts out two milliwatts of power, but they have loads of re-transmitters available to boost the signal.

There are "parasitic" taps that work on the same principle but don't require access to the phone to be tapped, just to the lines going to it.

So just what are "they" doing with these things? If there's a good reason to tap a phone, then a court order is gotten and a recorder put on the line at the central office, all nice and legal. So just what do "they" do with all of this equipment that is actually illegal to use?

Perhaps you would like to ask them for yourselves. They can be contacted at: Audio Intelligence Devices, 1400 NW 62nd St., Fort Lauderdale, FL 33309. (305) 776-5000.

And I bet you thought "they" were there to protect you from the kind of people that would use this kind of stuff.



STAR WARS — MYSTERIOUS DEATHS

A recent issue of Morning Star (9/3/87), itself not one of many favourite papers, reported on two deaths, which, it claims, are lined to Star Wars research.

Both deaths were of computer programmers with Marconi, a division of GEC. The first death was of Vimal Dajibhai who was found dead under Clifton Suspension Bridge in August last year. Vimal was not depressed and had no known links with Bristol. The later death was of Ashad Sharif who was found dead near Bristol last October. It was claimed that he had tied a rope around his neck, tied the other end of the rope to a tree and then driven away in his car. Ashad came from East London and was not reported to be suffering from depression. Again no links with Bristol were known.

Both men were working on simulators of an advanced type which have major implications for Star Wars research, and which are three years in advance of similar US research. Marconi have in the past won three feasibility studies for Star Wars contracts, and it is suggested in the report that millions of dollars would be at stake in the work with which these two men were connected.

STAR WARS: THE PLOT THICKENS

There has been another linked death in the "Star Wars" case it has recently revealed. Writing in the London Daily News (19/3/87) Paul Charman revealed that a third scientist is feared to have died in mysterious circumstances. He has been named as Avtar Singh-Gida who was researching in underwater acoustics, apparently linked to the Star Wars project. Avtar was also a friend of Vimal Dajinhai who died in mysterious circumstances in Bristol. Unlike Vimal and Ashad, Avtar did not die in Bristol but disappeared "on a remote Derbyshire reservoir". This report claims that all three were researching underwater defence projects and that Vimal Dajinhai was "a defence specialist".

The cases have been taken up by Eric Deakin M.P. who is quoted as saying, "One wonders what on earth could be the motive for these disappearances. If they were indeed involved in secret work then one would expect the Russians to try and bribe or blackmail them. It just doesn't add up." Obviously Mr Deakin doesn't read the Morning Star - I'll leave to Black Chip readers to work out who are the most likely culprits.

A final quote from John Cartwright M.P., "I think at first glance it sounds like a plot of some television thriller but on the basis of the evidence presented it requires some explanation. It stretches coincidence too far. That all these things are unrelated defies belief."

Without disrespect to the families and friends of those who have died, it is as well to consider other possibilities for the motive. One might be that Marconi's have a psychopath on their staff or that three were victims of rival companies or even... wasn't Marconi's where the Zircon satellite was being built?

HELPLINE

Running a magazine like this I occasionally get letters asking for assistance with a variety of new technology problems. This can take the form of information regarding particular technologies: robotics or satellite TV; queries regarding machines: using the Amstrad PCW; or languages: DBaseII. Unfortunately I'm not an expert in all matters new technology, my experience is limited to using Spectrums and QIs with just a nod at WordStar. But I'm certain that among the readership of the journal there are many readers who would be only too happy to help with such enquiries. For this reason future issues of Black Chip will run a helpline service, so I would be grateful if anyone who has problems, or can offer advice, or who would simply like to be put in touch with others facing the same problems could send their details to Black Chip. Confidentiality can be maintained by making your address c/o Black Chip, in which case don't forget to enclose an s.a.e.!!!

So far I've had one letter offering assistance, from a comrade in Wales. He is offering help with:

Languages: BASIC, FORTRAN, PASCAL, RPG III, PL/I

Computers: IBM PC, IBM System 38 (a super mini) and some IBM mainframes. May be able to help with PDP 11 and BBC Micros

Software: Spreadsheet package (Lotus 123) Applications: industrial, including CAD/CAM and MRP and other three-letter acronyms.

Can also give guidance as to meaning of the above!!!

Review: Theodore Roszak "The Cult of Information: the folklore of computers and the true art of thinking". Lutterworth Press. Cambridge. 1987. 238pp. £12.95. (originally published in the USA by Pantheon Books. 1986)

Older readers will remember Theodore Roszak for his "Making of a Counter-Culture". Younger ones may be more familiar with the recent horror stories, which will give some indication of where he is likely to stand on Computers and Information Technology generally and quite an accurate indication it is too. Roszak is a humanist and a professor of history. he is a thinker and if there is one thing that he is certain of, it is that computers cannot and will never be able to think and that those investigations into artificial intelligence are misconceived due to their fallacious attempt to equate data/information/knowledge/understanding.

Roszak is particularly concerned by the way that computers are being intruded into educational domains without any thought being given to the exact nature this introduction is supposed to serve. He is worried that children will be encouraged to think of all thought processes/patterns as being capable of being simulated, to lesser or greater extent, by computer hardware/software combinations, thus depriving them of the uniquely human experiences of direct creative and emotional activities, having at best to mediate them through computers.

Roszak, as is standard for commentators in this area, spends quite a bit of time worrying away at the military uses of computers, in particular the prospect of expert systems being responsible for decisions regarding the initiating of nuclear war, taking responsibility out of human hands. A case of terminal stupidity. But the problem isn't due to the necessarily due to computer malfunctions, either hard or software, but what human assumptions have been programmed into such expert systems. There seems little likelihood of an expert system designed for "fighting" a nuclear war will have any moral values assigned to mass destruction, nor will it be programmed to refuse to initiate (or even respond to) a nuclear attack. None of which argument means a lot if one doesn't agree with the production and deployment of nuclear weapons in the first place - but we can use it as another string to our metaphorical bows.

Roszak, like many other commentators, makes use of the de-humanising argument when dealing with zapping and wargaming software, though strangely there seems to be little commentary about the overall violence orientation of male toys. In this respect software follows and reinforces, to an extent, existing sexist stereotypes. Indeed Roszak almost concedes that violent and fantastic toys and games are endemic to (western) childhood, their form reflecting the culture. Strangely, also, he praises the Iliad, that epic blood-thirsty series of tales, as being uplifting and morally splendid, but doubtless put into a game and he'd complain.

Strange as it may sound, humanists seem to have a mystical approach to the human mind and its development and seem to fear that it will cease to function if people take computers as the metaphor for brains. Indeed humanists need a certain "unknowingness" about the mind as their key position against the claims of the rationalists and neo-positivists. The arguments are weak on both sides. For sure the complexity of the mind far exceeds that of computers, and computers have yet to be developed that can create an original thought or concept or paradigm and it surely wrong to attempt to reduce the workings of the mind, even at a metaphorical level, to that of the computer. Yet it would seem that the humanist argument almost inevitably leads to the postulate of some mysterious force that works within the human mind that cannot be replicated, and further mustn't be for fear of losing our uniqueness as humans.

To end on a positive note. My disagreement with Roszak is more of a philosophical, even stylistic one. His discussion of the role of computers in the decaying counter-culture is concise; his advocacy of free public access to on-line databanks in public libraries within an integrated information network is excellent - alas in practice too many libraries are run by technophobes, not to mention the cost of subscribing to a great many databanks: the pearls of wisdom and apparent social concern and dismay at the applications of the ideas of the founding "fathers" of computerdom are almost touching if somewhat naive.

Now the bottom line. To buy ? No not at this price. To beg/steal/borrow ? Yes worth utilising whatever library resources you still have to obtain a copy as it is a well-written and entertaining piece. Nothing startlingly original for those well versed in the subject area but as good an introduction as you're likely to get. It does assume a degree of familiarity with the jargon and there is no attempt to discuss technicalities. As Roszak claims continually in his book: Ideas come before facts.

Richard

Review: Winston. Brian. "Misunderstanding Media". Routledge and Kegan Paul. 1986. 419pp. £20.00. 0-7102-002-1

In an earlier Black Chip I somewhat facetiously suggested that this tome might best be suited to hand-to-hand combat. I shall now take this opportunity to correct that impression. Certainly this isn't a text for the faint-hearted as it is an attempt to interpret the creation of what we now consider "new technologies" within both a detailed historical narrative and an ambitious theoretical framework. Again I must confess to having been defeated by the sheer size of the text, although it doesn't need any detailed technical understandings of the technologies to read it.

Winston covers four major areas of technology: those that have culminated in television, computer, satellite and telephone technologies, with a "digression" into microprocessors. Within each area he interweaves the historical narrative with his theoretical perspective, so that it becomes impossible to see the narrative without the framework, to create a very plausible account of the development of each technology.

The basic framework, which works better in three dimensions than two, starts with the sphere of scientific competence. This then undergoes its first transformation, that of ideation, from this comes the second phase, that of prototypes which is, in turn transformed by "supervening necessity". The next phase is invention. This is followed by Winston's theoretical "invention", that of the "Law of the suppression of radical potential" which determines the relatively final outcome, that of production, spin-offs and redundancies. Needless to say, you need to read at least one of the book's chapters to see this framework employed in its full glory and I simply don't have the space to even condense one for you!

The point is, does this new theoretical invention, whatever its "supervening necessity", actually give us useful theoretical tools for analysis, or will it end up as an interesting curiosity, redundant. Obviously it's difficult to tell at this stage, it is possible, indeed probable, that equally persuasive frameworks could be employed around the same narrative. Equally one would need to see whether the framework could handle different cases - if anyone has the time it could make an interesting thesis for some graduate to research! Historically theoretical frameworks only work to the extent that they are employed and achieve dominance in their field of application. Certainly it has an appealing simplicity.

For those with plenty of time on their hands it would also be an interesting exercise to try to run Winston's perspective alongside Blackburn et al's to see if there is any correspondence between the timing of the transformations and waves and cycles in the capitalist economy. I would not want to give the impression that Winston's is a technologically determinist perspective as each of the transformations of which he speaks is clearly of a social-political-economic nature.

Summary: Like Blackburn et al, this text is clearly aimed at the academic audience, both by nature of its price and content. Activists requiring an easy introduction to the media/new technology nexus will not find this text helpful, but people requiring a well-reasoned and historically informed account within a novel framework will get a lot out of this thought-provoking book.

Review: Blackburn. Phil and others. "Technology. Economic growth and the Labour Process". MacMillan. 1985. 239pp. £25.00 0-333-37496-7

Due to time pressures I was unable to read all of this book, but on a cursory look-through it seems quite an interesting, if academic text. As you may gather from the title it looks at the relationship between technology, economic growth (in particular the long waves of global capitalism) and the labour process theories. The approach is both historical and theoretical, making for a quite dense and at times technical text and I wouldn't recommend this to readers unfamiliar with economic theory.

REVIEW

The text looks at a wide range of work practices, but concentrates on "Fordism" and "Neo-Fordism". It provides a theoretical justification to Capital's use (or non-use) of new technologies both in production, there is an excellent chapter on "Neo-Fordism in Small-Batch Engineering", and in consumption. It is complimented by a very good, 13 page, bibliography, which I would recommend to anyone looking at this area. The price is, of course, designed to signal it as an academic text, but the book is available through the library services.

The book concludes with 7 theses which summarise their findings. As they are quite straight-forward, I've reproduced them below, although the actual wording may be slightly altered as I'm working from notes.

- 1) Technology develops as a progression of overlapping phases of primary, secondary and tertiary mechanisation, linked with long waves in capitalist economic growth.
- 2) The technological basis of the post-World War 2 boom lies in the generalisation of secondary mechanisation with the emergence, in a small number of industries, of tertiary mechanisation.
- 3) Fordism can be seen as the dominant labour/production process paradigm of the boom period.
- 4) The depression of the 80's is a crisis of a specific form of capital accumulation, based on particular Fordist production methods, products and consumption patterns.
- 5) The limits of Fordism are being overcome by using new technologies and emerging new forms of labour process organisation, giving rise to a new production process paradigm - "Neo-Fordism".
- 6) In particular the authors look at the emergence of "Neo-Fordism" in Small Batch production and the service sector and how new technologies offer new ways to organise both production processes themselves and make products available for mass consumption.
- 7) The resolution of the present crisis, which maintains the viability of capitalist economies, thus restoring accumulation and producing a new upswing in the economy, must (for Capital) involve further radical changes in production methods and consumption patterns.

This book is a most valuable attempt at giving us an explanation for the introduction of new technologies within specifically capitalist economies. The debate with the labour process theorists, such as Braverman, runs throughout the text, showing that whilst the labour process approach is useful within limited parameters, it can lead to too simplistic analyses. Blackburn et al., especially in their discussion on small-batch production, show that the "de-skilling" thesis, central to Braverman's approach, cannot be sustained as a global result, rather different existing work cultures and labour process organisations within particular capitals, will give rise to differential results, often influenced by long-term economic trends.

Summary: Definitely worth asking your local or college library to get a copy. A text to struggle with, certainly, and even if you don't read or understand every word, you should get something worthwhile out of it.

Richard

Wrong resistor destroys air launch

White Sands Missile Range NM: A rocket carrying a scientific payload for NASA was destroyed 50 seconds after launch because its guidance system failed... The loss of the \$1.5 million rocket was caused by a mistake in the installations of a... resistor of the wrong size in the guidance system. (This flight was the 27th since the first Aries was launched in 1973, but only the third failure.)

[San Francisco Chronicle wire services, 28 August, 1986]

Q: Why did the splashdown of the Gemini V orbiter miss its landing point by 100 miles?

A: Because its guidance program ignored the motion of the earth around the sun.

[Joseph Fox, "Software and its Development", Prentice Hall, 1982, pages 187-188]

PROPOSED UK/EURO DIRECTORY OF RADICAL COMPUTING

INTRODUCTION

What might be called the "radical computing movement" actually comprises many initiatives and strands. For practical and historical reasons these strands have, so far, been essentially separate. Each group, organisation, publication, or individual has concentrated on their own geographic or specialist area.

There is now sufficient momentum and variety in radical computing to justify and require the publication of a directory. The main aim is to increase awareness of alternatives to commercial, military and recreational uses for computers - both among the general public and among computer users who may be too busy to find out for themselves who is doing what.

To encourage people to participate in radical computing, the directory would appear (in paper form) as a supplement to a sourcebook containing information of interest to "beginners" and "experts" alike.

THE DIRECTORY/SOURCEBOOK AIMS TO:

- * increase awareness of alternatives to commercial, military and recreational uses for computers
- * increase the sharing of news, expertise and resources within the radical computing community
- * improve coordination between different strands of the radical computing movement

FUNDING

Through a combination of voluntary work and a small financial risk by the organisers, it is hoped that the directory can be published in the Summer/Autumn of 1987. However, grants will be sought from appropriate organisations, and limited advertising may be considered. This approach should result in rapid publication and a low cover price.

DISTRIBUTION

The directory will be published in two forms - a paper version with sourcebook, and an electronic version, which would contain the directory section only and be regularly updated. The paper-based directory would only be updated if demand was high enough. The sourcebook/directory would be distributed via mail order; book shops; trade shows; and libraries. The electronic version would be maintained as a database file and distributed as machine-readable (ASCII) text via as many electronic networks as possible.

ACTION

If you've read this far and find the idea interesting enough to want to help, please read the draft sourcebook contents and record format below. Then send your comments, suggestions, references and publishable material to the project coordinator (address below). But, most important of all, please complete a record for whoever you think should be included. Even if you only have a name and a telephone number, - send it. IF IN DOUBT - SEND IT! (NOTE: All potential entries in the directory will be mailed early this year to verify the data and to ensure that they want that data published. Also, all members of CCN, Netreach, and Geonet subscribers will be approached as a matter of course).

COORDINATOR

For the time being, please send all material to:

Julian Todd
37 Thomas Street
St. Agnes
Bristol BS2 9LJ

0272 559249 (home); 0225 826826 ext.5909 (work).
GEONET ID: JULIAN.TODD

POSSIBLE TOPICS FOR THE SOURCEBOOK

- * Microcomputers for Beginners
- * Data Communications for Beginners
- * Community Computing Case Studies
- * Critiques of Military, State, and Commercial Computing
- * The Law - Copyright; Data Protection; Hacking; Export Restrictions
- * Reviews - Publications; Shows; Data Networks; Hardware; Software
- * On-line Services and Databases
- * Training Opportunities
- * Bibliography
- * Radical Software Directory

[PTO for draft record format].

DIRECTORY OF RADICAL COMPUTING - DRAFT RECORD FORMAT

NAME: Organisation &/or individual.
ADDRESS:
POSTCODE:
COUNTRY:
TEL:
NETWORKS: Network and I.D.

TYPE: Individual; Local group; Regional group; National organisation; International org.

MEMBERSHIP: Numbers; Fee; Services (eg newsletter; concessions).

OTHER PUBLICATIONS:
OPEN MEETINGS: Yes/No; Frequency.

ACTIVITIES: User support; Specialist n/w; Special interest group; H/W sales; S/W sales; Research; Services; Training.

SPECIAL CONSTITUENCY: eg People with Disabilities.

FUNDING: Subs; Grant; Earned income; Charity.

SOLIDARITY: Help given or requested.

FREE TEXT: Approx. 500 words on aims; organisation; plans; "message".

[NOTE: Entries for individuals would not contain irrelevant fields].

ALTERNATIVES TO PRESTEL

Libertel	01-733 7730
(Alternative politics, new technology and education)	
Communitel	01-968 7402
Cyclops	0908 643298
(Open University)	
Think-Link	01-247 0043
(For shop stewards, unions, tenants, community & labour movement)	
The Gnome at Home	01-888 8894
OwlTel	01-927 5820
(Information for BBC Micro owners)	
Metrotel	01-941 4285
Health Data	01-986 4360
Swafax	0622 850440
Swafax 2	0440 820002

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BLACK CHIP QUESTIONNAIRE (PT4)

O.K. This last page is more concerned with what you can do for the other readers of Black Chip. But first a little space for fantasy -

What is/are the most important change(s) in Black Chip that you would make?

.....

Now for the most difficult section:

These are the ways in which I can help Black Chip become an even more triff magazine:.....

.....

When Black Chip becomes a more professionally produced magazine, I would like to take copies for selling to my friends/colleagues/customers/worst enemies in the area/college/etc.

Finally I'd like to who to whom I should reply/contact/thank for completing and returning this questionnaire.....

.....

Thanking you for your co-operation, Richard Alexander.

Please send to the address given on the inside front cover of the magazine.

BLACK CHIP QUESTIONNAIRE

As you may have read, I am hoping that this will be the last Black Chip that is produced by photocopying dot-matrix output. The two main reasons are my loss of photocopying facilities consequent to my moving to Wales, and my purchasing a daisywheel printer as soon as I've settled in. Black Chip has become sufficiently popular to warrant a longer print-run than I can cope with on a photocopier, which explains why the last two issues have not been available in shops. I hope to have future issues offset printed, with a print-run of about 500. I shall also be taking this opportunity to improve the quality of the material in the magazine. To do this I need a better idea of what people are interested in reading and what they are capable of contributing. Part of the reason why most issues are late is that too often I simply don't have enough original material to put in the magazine. Also although I exchange with several other mags that have articles of interest, I don't wish to simply reprint other people's material if this is widely available. On the other hand if only one or two readers have access to the range of papers that I have then Black Chip will be serving a useful purpose by reprinting articles. So, with all that in mind I've devised a questionnaire for you to fill in. I hope you'll all take this opportunity to let me know how you'd like to see Black Chip develop. Failing which it'll be more of the same.

To avoid unnecessary duplication of your reading matter, please tick which of the following papers you regularly read:

2600	Personal Computer World	New Socialist
Input	Popular Computing Weekly	Black Flag
Electronics for Peace	Micro Computer Mart	Guardian
Science for People	Practical Computing	Spare Rib
Community Computing Net	Computer Weekly	Sanity
Processed World	New Scientist	New Internationalist
Women and Computing News		

other relevant papers.....

To get a better view of how you'd like Black Chip to improve, please indicate which of the following options you prefer:

(Please note that the following are interdependent, i.e. the number of pages will determine the price, the frequency will depend on the number of pages of material that are available.)

Please circle your choice.

Frequency (times a year):	12	6	4	3	2	1	(irregular)
Price (per issue, maximum):	60p	75p	90p	£1.00	£1.20	£1.50	
Pages (per issue):	16pp	20pp	24pp	28pp	32pp	36pp	

BLACK CHIP QUESTIONNAIRE (PT2)

This section of the questionnaire deals with the actual content of the magazine. Please note again that although as the editor and publisher I am responsible for the selection of material to go into Black Chip, I am not responsible for the lack of material submitted. I make a lot of effort to persuade people to write reviews and articles but the success rate is depressingly low! Also as I am not someone who has any formal training with new technology, I cannot write technical articles on programming or hardware reviews outside of my limited experience. Also as an outsider I am not party to information circulating the computer industries or indeed the arcane world of hacking. Therefore I need input from the readers if the coverage in these areas is to improve. I also lack artistic skills, even with computer-assisted drawing packages, so if you want the graphic quality improved then I need input here too! My skills (if they can be so described) are in the realms of reviewing books and software, political analysis and getting this mag out. The rest is up to you.

Below are some general headings covering the contents of Black Chip. As this questionnaire isn't designed to be analysed by computer I've chosen to make this section "free-text", so that you can write your own comments.

Please write, in the space provided your overall feelings regarding each of the sections of Black Chip, either generalising from all the issues you've seen, or highlighting items you disliked or liked.

Cover.....

Contents Listing.....

Editorials.....

Feature articles (Political).....

Feature articles (Technical).....

Feature articles (Commercial).....

Feature articles (Reviews).....

BLACK CHIP QUESTIONNAIRE (PT3)

Reviews (Books).....

Reviews (Software).....

Reviews (Hardware).....

Letters.....

Bits and Pieces.....

Contacts Pages (Front End).....

Help-line.....

Adverts.....

Graphics.....

Future directions.

What subjects would you like Black Chip to cover more?

What subjects do you think we've done enough or are outside the scope of the magazine?

What do you think of the current political position (or lack of it) of the magazine? Do you want a more explicit viewpoint, if so which?.....

What do you think of the overall balance of the magazine? Are there areas you'd like to see more emphasised?.....

Are there areas you'd like to see less emphasised?