



TIMESHIFT

on video culture

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Sean Cubitt

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Comedia

Series editor: David Morley

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London and New York

A Comedia book first published 1991
by Routledge
11 New Fetter Lane, London EC4P 4EE

Simultaneously published in the USA and Canada
by Routledge
a division of Routledge, Chapman and Hall, Inc.
29 West 35th Street, New York, NY 10001

Routledge is an imprint of the Taylor & Francis Group

This edition published in the Taylor & Francis e-Library, 2004.

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British Library Cataloguing in Publication Data

Cubitt, Sean,
Timeshift: on video culture.
1. Videorecordings
I. Title
778.599

Library of Congress Cataloging in Publication Data

Cubitt, Sean,
Timeshift: on video culture/Sean Cubitt.
p. cm.
"A Comedia book."
1. Video recordings. 2. Video art. 3. Mass media. 4. Popular culture. I. Title. II. Title: Timeshift.
PN1992.935.C84 1991
700'.9'04-dc20 90-8440

ISBN 0-203-35895-3 Master e-book ISBN

ISBN 0-203-37151-8 (Adobe eReader Format)
ISBN 0-415-05548-2 (Print Edition)
ISBN 0-415-01678-9 (pbk)

This book is gratefully
dedicated to my Mother
and in memory of Pat Sweeney
and
Steve Herman

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Raids on video culture

This book is a collection of approaches to a protean area of cultural practice, each of them less an essay than, in a term I borrow from Hans Magnus Enzensberger, a raid. Raiding video culture means hurtling in with malice aforethought, pillaging from the shiny emporia of images and activities, threading a way back out again, leaving a trail of anarchy and disappointment. It is a mode of attack that of necessity does violence to the matter in hand; the one thing it does not offer is justice. Suddenly, since the late 1960s, a new cultural continent has emerged from who knows what chthonic forces, uncharted, largely unformed. I have not wanted to map its contours, or to anthropologise its denizens, not even to colonise it in the name of some other, better established disciplinary island like film or media or cultural studies. These raids do not explain or contain. In all probability, they will be at best distractions and at worst unwarranted incursions into a pre-colonial Other. But they have been undertaken in the best spirit of the corsairs of old: desperate, arrogant but, I hope, completely involved, intellectually and emotionally, with the lie of the land, the strategies of its inhabitants and the rich pickings to be dragged back into the bazaars and pawnshops in the back alleys of dominant culture.

This is my first book, and there is a temptation to thank everybody I've ever known. However, I owe a debt of gratitude to my friends and colleagues in several organisations, one already defunct: the Society for Education in Film and Television, the Independent Film, Video and Photography Association, London Video Arts, Black Audio Film Collective, Albany Video, Circles

Feminist Film and Video Distribution, Electronic Arts Intermix, the *Good Video Guide* and *Independent Media*. In addition I owe a special debt to colleagues and students at the Open University, Middlesex Polytechnic, Central School of Art and Design, St Martin's School of Art and the West Surrey College of Art and Design. Earlier drafts of some sections of the first part of the book have appeared in *Screen* and *Undercut*, and I would like to thank the editors for their permission to reuse some of this material.

There are many individuals whose conversations and commitment gave me the idea for this book, helped me through it, or read sections: George Barber, Renny Bartlett, Jennifer Batchelor, Simon Biggs, Steven Bode, Steve Brockbank, Penny Dedman, John Dovey, Anne-Marie Duguet, Jean Marie Duhard, Kate Elwes, Terry Flaxton, Connie Genaris, John Goff, Dick Hebdige, Gavin Hodge, Nik Houghton, Tina Keane, Barry King, Karen Liebreich, Jean McClements, Jill McGreal, Mandy Merck, Tim Morrison, Peter Osborne, Atalia Shaw, Valerie Walkerdine, Jez Welsh, John Wyver. Thanks to Sarah Conibear for her painstaking correction of the manuscript. Over the last few years I have met many other activists in the video field, and though I may not have included everyone, I owe the inspiration for this book to them all: I hope they will enjoy it. My especial thanks to Alison Ripley for putting up with me during the process of composition, and to Dave Morley, than whom there can be no more meticulous and inspiring editor. Needless to say, the vagaries and mistakes that remain are entirely my own.

The discontinuity announcer

The future is the becoming of possibilities. The present is the moment in which what has been and is disappearing crosses swords with what is on the brink of becoming. At its heart, this book is about video in its relation to the building of a democratic media culture. Video, with its instant playback and its ability to record sound and image simultaneously, thrusts the instability of the present in your face and shouts in your ear: 'It doesn't have to be this way.' Hence its option on democracy.

Video, it is already almost a truism to say, is not essentially any one thing at all. At root, 'video' might be held to be a recording medium, using the magnetic alignment of particles of oxides as a means of storing sound and images electronically. What I want to argue in this book is that this description is not merely inadequate, but that it is seriously misleading, even disabling. What is at stake is what I like to think of as video *culture*, that is to say, a set of relations around the uses of videotape, a set of practices and a set of possibilities concerning what these relations, uses and practices may become.

This step, towards thinking 'video' in terms of relationships, is itself fraught with perils. There is a serious problem in the description of culture in terms of relations, as the discipline of cultural studies has developed in academic disciplines over the last twenty-five years. In some senses this might be seen as a product of the double history of the emergence of cultural studies in academia and cultural journalism. On the one hand, sociological studies of the media and other cultural activities have stressed the institutional powers and organisation of cultural life. On the other hand, crudely put, semiotic approaches largely generated in the English literature schools, often in reaction to the influence of

F.R. Leavis and New Criticism, have stressed the inner workings of texts and models of their impact on readers—a general term used to cover all audiences for all forms of cultural life. Contemporary researchers and theoreticians have begun the enormous work of tracing the activities of the ‘social reader’, that is to say the actual living people who read, watch, listen to and partake in various cultural forms (Gray 1987b is a good overview of recent work). The move to deepen and challenge abstract sociological and textual models of what readers do is an enormous challenge, and will undoubtedly occupy researchers for a good time to come. This book draws heavily on the research undertaken so far. In particular it tries to look at the myriad ways in which people relate to each other and to themselves via video.

Any attempt to establish the democratic credentials of the medium has to begin by pressing the claims to equal privilege of all those involved in making meaning. The traditions sketched above, the sociological and the literary, privilege the producer and the text. I want to argue that the roles of many others are also in play: distributors, reviewers, exhibitors, traders, censors, technicians, engineers and, crucially, readers.

In English-language cultures, for many years, the privilege given to the text in literary studies demonstrated some of the worst aspects of western tradition. What was required of the act of reading among the major critics of literature this century was a demonstration that you had successfully given yourself over to the text. The mysteries surrounding the literary text still reek of *The Book* at the heart of western culture, the Bible: creation, inspiration, genius (a Roman local deity), being faithful to the text. The mysticism of this position has several adverse effects. It encourages a belief in the poverty and insignificance of the reader as opposed to the infinite richness and profundities of the text. In the same motion, the reader is reduced to a ‘merely’ subjective relation to the text, a secondary role subordinate to the text or, as the semioticians have it, ‘subjected’ to it. From such a position it is clear that the reader is inevitably incompetent to judge, alter or renew: a position with enormous consequences in the constitution of an individual reader’s self-image: alone, limited, subordinate, alienated from others and, as psychoanalytic approaches stress, from large areas of her/himself. A visual expression of this is the practice of teaching young people to read silently. Reading aloud asserts the reader’s active participation in the production of the

text and affirms its social ownership: silent reading is more like prayer, head bowed in silent and lonely subjugation.

This sense of the relative weakness of the reader's position underpins the ideologies of censorship addressed later in Chapter 8: qualities of good and bad are allocated—usually through the medium of an institutional discourse like Literature or Tradition—to texts which are presumed to affect more or less receptive readers. Readers are rarely credited with having effects on texts. When they do, for example in the writing of marginal notes, it is usually thought of as desecration—a blasphemy against The Book, for which the playwright Joe Orton suffered. I know only of one favourable reference to marginal jottings: Charles Lamb's recollections in the *Essays of Elia* of getting books back, very belatedly, from Coleridge, covered in the poet's philosophical musings. Though certain marginalia make their way into scholarly editions of writers' works, it is usually only when the authors of marginalia are as central—or more so—to the institution of Tradition than the texts on which they practice their palimpsests.

Although we learn to speak at home, we learn to read in institutions, either physical ones like schools or more abstract ones like the national language (received pronunciation, the Queen's English). Those institutions, though often staffed by genuinely committed people, still bear the scars of their histories in the structures and practices they have today, often despite the best efforts of teachers and students. The kind of media education I was involved with in the late 1980s with my colleagues in the Society for Education in Film and Television is a challenge to these constraints, because it begins with students' existing enthusiasms, pleasures and abilities, rather than a criticism of them. To a great extent, this shift has been made possible by beginning to unpack the notion that all reading—whether of books, plays, films or clothing—is the same. By privileging the reader's pleasures, it is possible to move away from the stranglehold of 'value', that mysterious core of the literary text. Instead this investigation will focus on what it is that people do when they use video.

Video's readers are already intensely 'literate'. The codes and conventions of moving-image media, now almost a hundred years old, are dense and complex. I would argue that there is a kind of Chinese Box effect in the history of twentieth-century media, TV subsuming film, video subsuming TV. Video viewers are already consumers of television, and through TV of film, pop, news,

photography.... Even very young viewers can tell the difference, say, between an action narrative and the news. Other viewers have little difficulty distinguishing a rented feature from an off-air recording. The major part of the population of the industrialised countries have grown up with moving pictures; many have grown up with TV and, throughout the industrialised and newly industrialising world, are increasingly familiar with the video deck and, to a lesser but growing extent, with video production equipment, especially portapaks, camcorders and computer graphics.

The domestic video cassette recorder (VCR) is itself a kind of production device, as it can be used for seizing moments from TV's incessant flow, compiling, crash editing. For example, while researching this book I've compiled several tapes of video work from the output of UK television stations, tapes which, were the laws of copyright less strict, I might be using as sources for lectures or backdrops for parties. However small my input, this kind of activity does seem to me to be adding value to the material which, unselected, remains just another blade of grass on the pampas of television output.

It's always easier to see a direct physical activity like domestic editing as an engagement in the processes of production. It is less in our cultural make up to recognise video viewing as a serious practice. By contrast, some of this book has been written on notepaper in public places—pubs, trains, cafés, waiting for a film or a meeting to start. Sometimes someone—a fellow passenger, the bartender—asks what you're writing. The same thing happens with video, the same question, what are you watching, but rarely with the same sense that you might be engaged in genuine emotional, intellectual or political activity. Writing is a visibly active process, and is respected as such, video viewing not so. On the other hand, in my experience, people are far more likely to take a few minutes to look at the tape you're viewing than they are to ask to read the notes you're writing. The silence that surrounds writing, as it surrounds reading, gives it a solitary air: video is noisier, more sociable, more open to intervention at this straightforward social level.

As I tried to indicate above, writing has an aura of privilege which has, certainly in English culture, been its own worst enemy. Isolated in silence, the writer's activity seems aloof and alien. Conversely, the very ubiquity and sheer noisiness of video delivers it over to judgement—you don't need a degree to be bored,

offended or bewildered by a tape. The viewer, remote control in hand, assumes a position of dominance over the flow of the screen.

Or is that the case? Is the video culture one in which viewer power dominates? Or are we potential victims of ideologies conveyed through video, and video itself just another mass medium? That question haunts this book, as it haunts the politics of media legislation in country after country. I am in two minds. Part of me wants to reject the trivialising impostures of broadcasting, low-grade features and talentless pop. Much of the culture I live in—metropolitan London under Thatcher in the 1980s and early 1990s—is ugly, violent, oppressive and hypocritical. I know that I watch tapes sometimes from a wish to forget the daily grind. But part of me also respects my own engagement in deciphering these messages from cultures I have never known in other forms—wildlife documentaries, aerobics, Hong Kong features.... I know too that my enjoyment of *Sergeant Bilko* or *EastEnders* is based in what I have learnt about moving images and the techniques for their remembrance. I have become competent.

The word 'competence' has a technical definition in linguistics:

the possibility of constructing and recognising the infinite number of grammatically correct sentences; of interpreting those among them, likewise infinite, which have meaning; deciphering ambiguous sentences; discerning that certain sentences, effectively very different in their sounds, nonetheless have a very strong grammatical similarity... the finite number of actual performances [of acts of speaking] does not forbid us speaking of theoretically infinite competence.

(Ducrot and Todorov 1972:158)

In language, a competence is the ability to cope with the nuances and possibilities of a language or a dialect. In video, a competence is that set of acquired skills, so deeply embedded we scarcely know we have them and rarely stop to value them, which allow us to distinguish between a newscast and an advert in a split second, or to follow complex narrative structures of flashbacks and fantasy sequences, relating them back to the fictional present of the narrative.

These complex modes of storytelling in video—spatial orientation, time orientation, knowing who to believe and who to disbelieve—demand equally complex work on the part of the

viewers, whose competence in the practice of the medium, gleaned perhaps from older media but honed still further, in ways which I want to explore in this book, through video, is brought into active play as an interaction with the video text in the production (and critique) of meaning. This is not to belittle the skills of videomakers but to insist that audiences keep up with them, that the role of the audience is much more than simply paying for the cycle of production, distribution and consumption.

However, the production of meaning, in which the viewer is so active, is not necessarily a field of consensus. Cultural activity is not only intensively policed (as I've tried to argue below, pp. 157–64) on the macro scale of society at large, but also fought through at the micro level of the individual viewer and the domestic viewing situation so effectively analysed by, among others, Brunsdon (1982), Gray (1986; 1987a) and Morley (1986). The concept of democracy with which I began this chapter is also already the concept of struggle. By the word 'struggle' I intend a focus on the instability of meaning, and the impossibility of avoiding change. In a way the concept of struggle gives me an alibi—what I write now is only a moment of the struggle, a moment to be superseded, an intervention which may or may not be important here and now but which can only be one element of a larger historical process. But simultaneously, 'struggle' describes the way in which, under monopoly capital, cultural activity is undertaken in relations of dominance and subordination, but also of resistance, distrust and the active misreading of texts.

It is not that a given video is incapable of defining its own meaning. What I would like to argue is that any given cultural practice involves a range of cultural relations, many of which will act against or in different directions to the meaning which a particular tape seems to want to convey. The teacher setting up a classroom exercise on visual literacy, or the rental shop owner selecting titles to hire in a specific geographical community, have different ideas of meaning and knowledge which they bring to bear on their uses of the medium. At the same time, some meanings are heavily foregrounded in the processes both of production and of ancillary levels of meaning generated through reviewing, marketing and advertising. There is, as it were, a hierarchy of meanings, in which the intentions of the producing institutions may be dominant. At the same time, however, producers' intentions are never the only determining factors.

My VCR is playing back a drama production. During an advertising break something catches my eye, a heavily treated visual which looks like the amateur/art film format Super 8, advertising a bottled lager. I might have perked up here because I fancied the lead actor, enjoy billiards, like the product or, in this case, because a videomaker friend has been talking about this as an example of agencies raiding the avant-garde for techniques. But what also impresses me are the production values: deliberately cheapened and downgraded, apparently breaking the guidelines on engineering standards operating in Britain. In the hierarchy of meanings intended by the advertised product's manufacturers, product differentiation, giving their beer a special identity, reigns supreme. At the advertising agency, let's say for the sake of argument, this was perceived as a prestige account, allowing the 'creatives' a stab at recognition by their peers. That recognition heads their criteria for a successful advert, followed by the need to keep the client sweet. For the producers, then, recognition of their creative skills is the reading which they would prefer to be made of the text of the advert: its 'preferred reading'. But in my living room, I might be aware of these intentions while putting, for a moment, homoerotic desire and an interest in institutions of creativity in the front rank of my concerns. I haven't escaped the hierarchy—these possibilities inhere in the practice of advertising. Instead, I have privileged a subtext over the main message, anchoring my meaning there, while still absorbing the glamour and the product identity which the makers were after.

Such hierarchies are not autonomous entities which descend from the sky. Video practice, whether producing, viewing, distributing or whatever, takes place in a world where struggles over meaning rub shoulders with struggles over many other forms of control. The ownership of tapes and routes for their circulation, battles over standards and formats, struggles over the hard- and software between competing companies have damaged the development of the medium and threaten its future growth. Capitalism operates through a system of fragmentation, dividing one process away from another in the factory system, one form of knowledge from another, one skill from another and, in contemporary machine technology, dividing the skills away from the workers in order to invest them in machines. But this process, though in many ways strengthening economic development, is also a dangerous route to take since it divides capitalists from each other.

This is good for capitalism, in that it forces companies to increase the rate of exploitation of workers, but it is bad if it fragments the market so badly that the free flow of commodities and consequent economies of scale are impeded. Though the cinema managed, through the establishment of the Academy of Motion Picture Arts and Sciences, to set up a cartel to adjudicate on common standards (for example in the shape of frames or the system of sound reproduction), the same cannot be said of the electronic industries, who have produced a welter of different, mutually incompatible formats and the demise of some—like Phillips V-2000 domestic VCR format—which in certain respects were more attractive than the more successful VHS format.

There is no reason why domestic formats should not deliver far higher quality than the standard Betamax or VHS playback. These have been developed as the lowest common denominator and delivered in sufficient bulk, and therefore at low cost, to saturate the market and remove the possibility of other standards ‘competing’ for an improved commodity. Capitalism does not, cannot understand the delivery of quality as a central motivation: the profit motive alone provides its drive. In consequence, most domestic playback is poor, and the sound in particular execrable. We have paid for domestic convenience with a major drop in standards from the clarity and scale of sound and image in the heyday of the cinema.

Likewise we have lost the social experience of cinema-going, along with many aspects of the culture of the crowd which characterised the first half of this century. Audiences are not so much fragmented as atomised. Contemporary experience of the media is one centred on the individual, most vividly in the form of the personal stereo, and only then on the individual within a slightly larger group, family or peers. Video has contributed greatly to that movement, as McGrath (1985) notes. If video intervenes in the flow of television, and interferes in the here-and-nowness it seems to radiate, one effect of that is that people don’t even see the same programmes at the same time, cutting off much of the possibility of gossip and chat based on a particular broadcast item. This is one of the serious discontinuities for which video is responsible.

At the same time, however, this fragmentation is also a multiplication of the number of sites in which the cultural struggle goes on, and to that extent opens new possibilities for a democratic model of communication and culture. Specifically, the increasing number of production sites, in the form of domestic editing and

domestic-format cameras, posits a democracy of antagonism, rather than one of consensus. At present, 'public opinion' can be identified with the extremely narrow range of interests represented by the press. But if it is possible that the 'public', no longer identifiable as a coherent market but taking on the role of producers of meanings themselves, is moving away from consensus broadcasting to diffused and intensely local practices, the meanings of the words 'opinion' and 'public' are also shifting as cultural practices.

The video is not restricted, like the television set, to the centre-out model of broadcasting which has become dominant throughout the industrialised world. The potential, as yet to be fully developed, for video to become a channel for all sorts of cultural work, is enormous, largely because it is so widespread and so accessible. On the other hand, the discontinuity currently experienced by *television* viewers between themselves and the sources of production frees them from responsibility for what is on TV. But that discontinuity also provides the possibility for a refusal of the consensus which broadcasting is so determined to create. Repeated experiences of refusal bring eventually a qualitative shift: alienation. This combination of an audience alienated from consensus broadcasting with the same audience empowered with the machinery for making their own work has led to a crop of new legislation aimed at controlling the flow of tapes. Likewise, if recent debates in parliament are to be believed, there has been a flowering of underground cultures—porn enthusiasts, sports fans, amateur vidéastes—circulating their own images.

It is in this context, a context of struggle and perhaps of the emergence of the terms for a new democracy, that I want to turn to the actual machinery involved in video culture: the technological relation. The key problem for technological analysis is the uneven distribution of access and control. This unevenness can be theorised globally as the concentration of access and power in what Paul Gilroy (1987) calls the overdeveloped nations. Locally, the appropriation of cultural, economic, technical and political skills and control over video in particular can be differentiated between individuals according to gender, class, race, physical ability.... The institutional settings in which people find themselves also have an enormous bearing on access and power.

The MacBride Report, a key document of the United Nations 'New World Information Order' policy in the 1980s, quotes 1977 figures that

In most developed countries, the number of [television] sets approaches that of households. In the developing countries, however, only a small minority of households can afford a television set—in some 40 countries, only 10 per cent of household units have a receiver—and programmes are available chiefly in cities.

(UNESCO 1980:76)

The concentration of ownership may be even more intense than first appearances suggest when you take account of variations in the definition of 'household', since the number of individuals making up a household is likely to be larger in the southern hemisphere. The situation does not seem to have improved over the decade since MacBride.

Figures from 1987 indicate some interesting shifts: the UK is no longer market leader in ownership of VCRs, trailing decisively, not behind industrial nations of the northern hemisphere, but the countries surrounding the Gulf and the newly industrialising nations of the Pacific basin. The Japanese stranglehold on hardware manufacture is no longer based on domestic but on 'offshore' plants in nations with lower wage rates than their own. In a distinctive shift of policy, some Japanese concerns have begun to license Korean manufacturers, not only to assemble parts, but to manufacture them too (*Screen Digest*, December 1987). Hardware piracy—the fake Rolex syndrome taken across into electronic consumer goods—thrives in Pacific and African markets, in an uneasy relation with domestic software production, since the imitation sells generally well below the cost of the original, freed of the burden of footing the research and development bill. More recently, US protectionism is impacting on the cost of chip-based video equipment, starving East Asian hardware manufacturers of the vast North American market.

National politics continue to play a role in the development of media and related technologies. For example, a measure enacted by the Mitterrand government in France routed all imports of VCRs through a small bonded warehouse in Poitou for several years in an effort to stimulate a domestic VCR manufacturing industry by excluding cheaper foreign imports. However, whether consolidation of existing industrial bases or attempts to develop them are in question, these industries rely to an increasing extent on the labour of underdeveloped nations. Hundreds of thousands

of young women are employed in 'offshore' assembly plants at wages varying 'from about 5% of the US norm in Indonesia to nearly 25% in Hong Kong' (Siegel 1979, cited in Larsen and Rogers 1984:194). Hispanic Americans and Filipino and Vietnamese immigrant workers are crucial within the American industry. Yet despite the importance of Third World and migrant peoples in the production of decks and cameras, the distribution of VCRs and computers in underdeveloped nations is even more sluggish than that of TVs. One reason may well be that the sites selected for offshore plants are chosen for the 'stability' of their governments and their friendliness towards the aims of transnational—a situation paralleled by the absence of trades unions from North American plants.

Software—TV programmes, recorded music, films, computer programmes—is even more notably concentrated in the industrial north. Even major industries such as the Shanghai, Bombay and Hong Kong cinema studios have extreme difficulty matching the global penetration of Hollywood and the UK in software markets for broadcast and cassette distribution. On the other hand, it is worth bearing in mind Dave Laing's observation concerning the dominance of western musical forms in the recorded music markets of the world that 'while rock'n roll was undoubtedly a moment in the expansion and technological development of the entertainment industry, it was also an instance of the *use* of foreign music by a generation as a means to distance themselves from a parental "national" culture' (Laing 1986:338). The traffic in cultural uses which Laing singles out for attention here needs to be stressed. It can offer the beginnings of an understanding of the growth of local uses of media technologies—Jamaican dub techniques are a familiar example (see Hebdige 1986)—in which exported technologies are turned into the means for a new mode of cultural production at odds with the ideologies ostensibly intrinsic to the technology as such.

Turning to more local parameters, Cynthia Cockburn's trenchant observations of technological change and its gendered effects on workforces demonstrate in meticulous detail the scale and mode of operation of women's exclusion from technical education and employment. At 16 years of age in the UK, she notes,

girls still had only 43.6 per cent of the passes in maths, 27.9 in physics, 27.3 per cent in the relatively new subject of computer studies, and 4.6 per cent in technical drawing in 1983. The

disadvantage is confirmed and deepened by 18 years of age. At A-level these percentages fall to 31.1, 21.0, 19.6 and 2.9 per cent respectively.

(Cockburn 1985:18)

These findings are backed up by reports from, among others, Cockburn (1983), Linn (1985), Moy-Thomas (1985) and Turkle (1984). The division of labour and consequent proletarianisation of the working class noted by Marx in *Capital* (Marx 1976:455–91) continues apace, and one of its contemporary avatars is the specifically capitalist exploitation of women and workers from underdeveloped nations. These unequal developments have their counterparts also in the more explicitly cultural practices of video, as we shall see.

The removal of skills from workers and their installation into the fixed capital of the workplace in the form, for example, of robot programmes, is a specific form of this exploitation: it takes the form, as Paul Virilio notes, of ‘a paradoxical *miniaturisation of action*, which others prefer to baptise *automation*’ (1986:140). The division of labour and Taylorist principles in factory management has reached a point at which the extraction of the maximum amount of surplus value from a labour force entails a removal of skills from live workers and their placement in machines which, through electronics, are increasingly small: smaller because it takes less time for a signal to travel through a shorter circuit. A parallel activity is under way in the atomisation of elements of professional work and their displacement by video, in particular in the areas of training and personnel management. There is nothing intrinsically wrong with these shifts: they certainly have the potential for freeing people from repetitive tasks like health and safety lectures. What is disturbing is their production not in order to encourage the best use of personnel, but to make workers redundant and to increase the level of central managerial control over the content of instruction and staff relations. The Luddite position of resistance to technical change becomes more than understandable in these contexts.

Harry Braverman’s study of the reorganisation of work in the office and retail trades is a case in point (Braverman 1974). Managers in industry justify automation in financial terms: automation produces redundancies, lessening the number of workers who have to be paid and adding to the reserve army of labour, the unemployed, to further depress wages. In the

construction of information and media devices, this tendency is backed up by the threat to move production from overdeveloped to underdeveloped countries. Yet automation actually threatens even this mode of neo-colonialism, by reducing the need for any kind of labour. Such developments, despite the rhetoric of 'global villages' and international networks for information flow, will undoubtedly widen the gap between rich and poor nations, and work to create technical elites within developing nations. Processes of design will remain in the power centres, while manufacture continues to divide labour tasks into ever more minimal, and therefore more machine-manageable, elements.

Clearly this bears out Marx's thesis that it is the factory system as such—not the individual items of machinery—which needs to be placed at the centre of analyses of technological change in industry. But it must be borne in mind that the specific nature of the technologies developed to perform these functions of capital is itself a product of capitalist relations, and that it is these relations which, for a materialist analysis, precede logically as well as historically the machinery in which they are fixed. Such technologies, especially in the productive sphere, are designed to extract the maximum surplus value from the labour power of the workforce, especially through removing skills from workers and rebuilding them as miniaturised gestures in the design of machines.

It is only by refusing to take the existing or predominant forms of technologies as absolute givens that we can offer explanations as to how people are able to use, manipulate or sabotage the technologies with which they come into contact. The growing challenge for the Left is not merely to appropriate the necessary skills to utilise the new technologies, but to create new modes of collective working around them, to bring social and cultural requirements to bear on the processes of manufacture. This in turn demands a political and intellectual act, the understanding of technologies not through what they are, but through what human purposes they might serve.

But what are the relations within which technology is talked about? If we want to break out from the stranglehold of actually existing states of affairs, in order to think about how new and better conditions can be attained, we have to disrupt the givenness of the terms. We have to think of the term 'technology' as a centrifugal net of interacting discourses, and as a function of them: educational, legal, aesthetic, socio-cultural, scientific. We are constrained by the

language we know to speak about technology as if it were a thing, solid, discrete, simply there. But existing definitions of technology not only exclude or marginalise some technical skills—for example, women’s skills with sewing and knitting machines—they also give the impression of inevitability, since, as definitions, they *define* what is or is not possible. The first break is to rid ourselves of the prescriptive power of definition, and to think instead in terms of process and relations.

Marx writes in the ‘Results of the Immediate Process of Production’:

It is not just the objective conditions of the process of production that appear as its result. The same thing is true also of its specific social character. The social relations and therefore the social position of the agents of production in relation to each other, i.e. the relations of production, are themselves produced: they are also the constantly renewed result of the process.

(Marx 1976:1065)

Capitalism, like other forms of social relation, has to replicate its patterns of dominance and subordination as part of the production process. The same is true of every moment of the circulation of commodities. And a characteristic of our epoch is that these relations should appear as objects, things which are simply and conclusively *here*, facts against which there is no arguing. Thus it is common, when employees rebel against new working practices, to suggest that they are reacting against the means of production, not against the relations of production which set up the new practices and machines initially. This was the burden of much of the UK press coverage of the Wapping dispute, in which print and distribution workers in Rupert Murdoch’s News International operation refused new working conditions imposed on them without negotiation, while scab labour provided by the electricians’ union ‘proved’ that old skills were no longer needed. The situation has emerged again in the dispute at TV-am, in which sacked technicians are accused of failing to live up to the working practices ‘demanded’ by new technologies.

Machines are often pitched in a binary opposition with the human (occasionally animal) body. The hinterland between human and machine is an abiding image in modern narratives from

Frankenstein to *Bladerunner*, a fearful space where the truly human is lost to the machine, while the machine takes on the terrifying attributes of the darker side of humanity. This nightmare seems to play in fascinating ways with perceived relations between people and technology. The machine can act in the place of all that we like to think we have displaced from psychic life—brutality, murder, revenge, torture (like the fantastic machines of Kafka)—or become the site of illicit desire, as in narratives of female androids from *Metropolis* to *The Stepford Wives*. Here the frailty of the human body is foregrounded, almost as a kind of biologically inbuilt generosity, which the machine can only violate.

The obverse of this appears in policy documents such as current legislation in the UK concerning the establishment of a national curriculum, in which art and physical education escape the strictures of testing, and are to be assessed only according to 'guidelines' (Department of Education and Science 1987:10). While, on the one hand, a lingering gesture towards liberal education, this exception marks a barrier between the technical subjects and skills which will be tested, and the 'body and soul' which remain beyond it. Here the issue of control is raised in terms of a relation between a 'real' world of machines and an unreal, unstable and fearful area marked out as the world of the body. The play between these two positions—machine as embodiment of the rational, the precise, the organised or as the manifestation of passions unbridled by morality—suggest the complexity of the technological relation.

However, it only touches on one aspect of the relation, that between individuals and technologies. As I tried to stress before, technology is present to us only as the phenomenal form of a relation with other people. What we see in the conveyor belt is not a machine: it is a relation of power and exploitation between people. Like all meanings, the meaning of machinery is produced not individually, one man or one woman faced with a factory: it is created collectively. But this should not be read as a consensual view of the production of meaning. The relations into which we enter under capital are antagonistic: this much is clear from the brutality with which strikers and pickets are attacked, and from the the violence visited on women, gay men and Black people. The polite fiction of parliamentary democracy, that agreement can be reached through a process of argument and compromise, is simply inadequate to the process of living. The conditions of the production of meaning are that populations ostensibly sharing a

language are divided by gender, class, region, sexuality and so on, and that these differences are expressed in hierarchies of knowledge and power. It is also clear that those who have power will fight to keep it and that those without are capable of taking action to redress their wrongs.

The fragmentation of communities into segments and factions is continued in the individual psyche. There is a great deal more work to be done in the area of interactions and continuities between psyche and the relations of production and reproduction first indicated by Metz (1977:7), especially the new interweaving made possible in video viewing. Psychoanalytic approaches to television, for example, have yet to move far beyond the confines of Lacanian analyses of cinema, as Sandy Flitterman-Lewis has recently suggested (1987). Yet work on the 'liveness' of television, in particular Jane Feuer's work on segmented flow and Morley's work on the distracted gaze (Feuer 1983; Morley 1986), seems to indicate a play between institutional and intra-psychoic in the viewing process which exceeds the relation evoked in cinematic identification. Our familial and social relations are very much in play in the uses to which we bend media technologies, as are the vagaries through which they become elements of psychic life. What is required is a conception of a relation, within which media technologies are constituted as such, which is simultaneously individual and collective, internal and external: a 'technological' relation which is both social and psychic.

Materialist study of video must begin with a questioning of the status of the object of knowledge. Semiotics in particular specifies that representation is a crucial factor in the constitution of the object. The givenness of the term 'technology' in the study of the technical dimension of human relations is part of the problem: in what historical motions has technology achieved the status of object? More particularly, why has 'Video' now taken on an identity as, by and large, the least respectable of all the media? What steps link the identification of a body of practices as an object to its valorisation or marginalisation? If initially technology as the object of technicist discourse is at stake, ultimately the status of knowledge—of assumptions, norms, ideologemes, sememes—and finally of Truth is in play.

These are not postmodernist arguments. Postmodernism, in one of its more persuasive guises, problematises the organisation of knowledge, the modes in which truth can be reached. For a

materialist, what is in play is the status of truth itself: is a true knowledge of any kind possible? Thus I would argue that materialist philosophy—too easily cast aside by proponents of postmodernism as a notional *grand récit* of Marxism—is actually a far more radical enterprise than postmodernism's questioning of the 'master narrative', just as its politics is far more radical than to 'give the public free access to the memory and data banks' as advocated by Lyotard (1984:67).

Yet Lyotard's formulation does raise the crucial issue of copyright, central to the politics of contemporary culture. The wars developing between hardware and software manufacturers—notoriously over the issue of digital audio tape-cassette (DAT) players, twin-deck VCRs and compact discs which can record as well as play back—indicate that capital is again entering a phase of intense internal contradiction. Bill Nichols (1988) suggests that the age of electronic reproduction also ushers in new subjective relations to media images and sounds. The copying hardware now in widespread domestic use—personal computers, tape recorders, VCRs—alters subtly but irrevocably the intensely personal relationships we develop with the sounds and images that form the lexicon of our audio-visual competences. At the same time both commerce and the state are involved in policing the electronic re-appropriation of sounds and images. We might well want to reserve the possibility of sympathising with the technicians, writers, musicians, performers and others whose stake in their product should be paid for as should any labour under capital. Yet we also know that it is copyright holders—by and large corporations—who receive remuneration for secondary use of material, and that, finally, the technology has outstripped the capacity of the current economic regime to cope with it. These sounds and pictures are our vocabulary, as necessary to us as words in spoken language. Structures of ownership and laws of copyright designed to deal with print piracy in the days of the bookshop publisher are simply unworkable in the electronic era (cf. Frow 1988).

Likewise it is clear that capital is incapable of providing software for its new machines. In an unpublished essay, Steve Brockbank charts the chequered history of computer software, concluding that only after over forty years of development has software design begun to be perceived as sharing with the building of machines themselves a major claim to research and development spending (Brockbank 1987). A visit to any video retailer will demonstrate

that much the same is true of the market for video software: scarcely an item on the shelves offers any sense of an understanding that video might move beyond the same range of feature films which the cinema has developed as a form for itself over the last seventy years. Public libraries in the UK are somewhat more adventurous: the DIY and aerobics tapes they stock show some understanding of the possibilities of the pause and rewind functions of domestic playback. Yet the market share of these kinds of tapes is, with the occasional title to break the norm, negligible. Again, the structures of contemporary capital militate against the development of video culture by concentrating on market consolidation based on homogenised product—principally in the form of the 90-minute feature film. So much so that the entire medium can now be considered as largely devoted to the distribution of Hollywood cinema films.

There is undoubtedly a movement within capital towards increasing centralisation and increasingly intensive capitalisation of distribution media. Since the 'Paramount Decrees' of the late 1940s and early 1950s, Hollywood has been disbarred from controlling vertically-integrated companies, controlling production, distribution and point-of-sale in the cinema business (Borneman 1976; Conant 1976). Vertical integration returns in control over electronic distribution, for example in Ted Turner's purchase of MGM or Murdoch's purchase of Fox, in which TV networks' ownership of studios' back catalogues allows them enormous power over releasing, pricing and marketing strategies. This consolidation of the US industry, allying film, TV and video distribution in single companies, works to maintain a stolidly homogeneous market, even while the technical opportunities for multiplying the number of genuinely different inputs into the system increase. In the UK a combination of deregulation of ownership with a manifesto pledge to control representations of sexuality and violence threatens a similar closure of heterogeneity. In the video retail trade, five major distributors established in 1987 a joint advertising scheme in which lead titles from Warner, MGM/UA, CIC, RCA/Columbia and CBS/Fox feature. Warner were explicit about one function of the campaign: to squeeze out the independent distributors, who might otherwise take a share of the market, by spending sums in advertising the Big Five's output which cannot possibly be matched even by companies of the size of Palace Pictures (*Screen Digest*, December 1987:284).

Yet the saturation of continent-wide markets with homogeneous programming via cassette distribution and satellite broadcasting is as likely to create the conditions for increasingly local media and language forms as to swamp them. With each new wave of capitalisation, the previous area is opened up for alternative uses. Photocopying, video cameras and edit suites, computing and computer imaging are available for community use already. But those who try to appropriate each newly available technology for new purposes seem constrained to reproduce the patterns of textual production which the medium seems to demand (cf. Ang 1987). Something of the 'technological' relation is deeply embedded, not simply as peer pressure, but as something far more deeply entrenched.

Class and gender relations re-emerge as professionalism, as new users find themselves lured by the glamour of the medium to reproduce not only similar programmes, but the same structures of decision-making and the same financial operations as their industrial and commercial predecessors. Reformist politics re-emerge as struggles for access clash with an emergent sense of what is 'good' video (and considerations of survival), while funding agencies in the late 1980s reassess their commitments to community-oriented, loss-making projects. The tyranny of 'good taste', of professional standards, of chasing festivals, prizes and reviews, become necessary attributes in the new mixed economy model of video production. But in a far more sinister twist, those relations also become thoroughly internalised. Relations to the cultural production of oppressed groups lose their liberality, and the work of women, Black groups or sexual minorities is commonly either dismissed or, now more commonly, patronised. Notions of what constitutes good practice are considered in the light of competition in the market-place: how closely can this piece of work approximate to the commonly held beliefs as to what such things should look like. Yet such a position entails a move towards the centres of power—of patriarchy, of neo-colonialism, of capital—not only in working practices but within the psyche at a fundamental level. Technological struggles demand personal politics. But those politics are linked inextricably with broader social questions: how are technological developments and psychic life to be thought through in relation to one another?

The video camera converts photons—elementary wave-particles in the visual wavelengths—into electrons—wave-particles in

electromagnetic wavelengths. Tape lays these down by relying on the predictability of the effect of electrons on the magnetic orientation of ferrochrome oxides. in turn read back as electrons. and converted via electron gun and the fluorescent screen back into photons, to be perceived by the human eye. But there is a scientific crux here: while we confidently expect an electron gun in a cathode ray tube to produce a foreseeable visual effect, the physicists are confounded. Quantum mechanics has no principle to explain why an electron or photon observed to be travelling at a certain speed in a certain direction with a certain charge should arrive at a given point at a given time. We have no accurate intellectual mechanism for predicting the activity of the major components of video, only the maths of probability.

According to Jean-Pierre Changeux (1986), the physical operations of the brain are even more obscure than the physics of quantum particles. The relationships we enter into with the VCR depend upon processes of which our culture is radically unsure. We cannot deal in essential characteristics and determinate truths, only in probabilities and processes. Such profound uncertainty, perceived in scientific discourse as part of the very fabric of the universe, could only emerge in a cultural context in which similar uncertainties circulate concerning the nature of meaning. But if science, culture and psyche alike, in the confrontation with technological aesthetics, stand at the brink of meaning, we also are freed from the constraints of a universe in which meaning is an absolute given: we have the choice to make our own meanings, though perhaps not under conditions of our own choosing. The remainder of this book attempts to understand the ramifications of this position, which I take to be the grounds for a democratic culture.

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