

Chapter 6

Planets

The Net of the World Market

Whoever today says 'capital' says 'globalisation.' For nothing has been more central to the current restructuring of corporate power than nomadic range of manoeuvre, deterritorialisation from old centres, systematic subversion of national sovereignty, and planetary political planning. And whoever today says 'globalisation' says also 'communication,' for the emergence of this new world order would be unthinkable without the telecommunications and computer networks that now form the electronic pathways for the circulation of money, commodities and power.

Despite the breathlessness of so much contemporary commentary, these developments represent the culmination of an old logic. Marx in his time saw clearly how capitalism's compulsion to expand production and circulation drove it to successive geographic enlargements of a circuit whose circumference would eventually encircle the whole earth, leading to "the entanglement of all peoples in the net of the world market."¹ Observing the telegraphs, railways and steamships of his age, he observed how capital "by its nature drives beyond every spatial barrier" so that "the creation of the physical conditions of exchange--of the means of communication and transport--the annihilation of space by time--becomes an extraordinary necessity for it."²

Marx believed this creation of "intercourse in every direction, universal inter-dependence of all nations" had both exploitative and emancipatory aspects.³ On the one hand, the "immensely facilitated means of communication" provided the means by which capital imposed its logic worldwide. It

compels all nations, on pain of extinction, to adopt the bourgeois mode of production; compels them to introduce what it calls civilisation into their midst, i.e. to become bourgeois themselves.⁴

But simultaneously, this process created the conditions for the success of revolutionary proletarian movements, movements that depended on the “ever-expanding union of the workers”;

This union is helped by the improved means of communication that are created by modern industry and that place workers of different localities in contact with one another. It was just this contact that was needed to centralise the numerous local struggles, all of the same character, into one national struggle between classes.⁵

Today the net of the world market is made of fibre optic cables and satellite links. Yet few see in its weaving the dialectical possibilities Marx perceived. Mainstream theorists of ‘globalisation’ of course simply celebrate the market-driven march of what they call “civilisation” across the face the planet. But while there have recently been several important critical analyses from a broadly Marxian perspective, nearly all see the recent intensifications in the transnational organisation of production, exchange and finance, and the accompanying developments in new media and communications technologies, only as massively enhancing the power of transnational corporations.⁶

This chapter takes a different tack. It proposes that globalisation, rather than simply representing an inexorable deepening of capitalist control, constitutes a defensive corporate response to series of interweaving challenges that in the 1960s and 70s plunged the international structure of accumulation into crisis. Moreover, while the immediate impact of this riposte was to profoundly disarray oppositional forces, it has also opened unforeseen opportunities for their new co-operation and alliance. Not the least of these is the use of global capital's own means of communication and transport to connect a proliferating array of counter-movements whose own world-encircling activities of resistance and reconstruction I term 'the other globalisation'.⁷

Three Worlds Into One

Capitalism's global expansion has constantly been spurred on by the rebellions of its labouring subjects. Historically, these struggles have spiralled across a succession of expanding territorial spaces: the national space, where capital was first challenged by emergent proletarian movements; the imperial space, where these challenges were partly defused by capital's capacity to raise domestic living standards on the basis of colonial super-exploitation; the socialist space, where Bolshevism, in the midst of inter-imperial war seized a terrain within which it was then fatally contained. By the mid-point of the twentieth century, however, the catastrophes of inter-imperial war, the threat of state socialism and the mounting pressures of anti-colonial liberation propelled capital towards its first exercises in truly international planning.

These took shape at the end of World War II. Under the leadership of a newly pre-eminent US industry, whose most advanced corporations were rapidly transcending the limits of the domestic market to acquire multinational form, the management of the

capitalist world economy began for the first time to be directed and orchestrated by an array of consciously global institutions. Trading arrangements were codified in the Bretton Woods treaties; significant financial controls delegated to the World Bank and IMF; monetary stability assured by the dollar's role in regulating exchange rates; and the whole system held in place militarily by the Pentagon's nuclear might, relayed through various local authorities and regional alliances. The Fordist golden age of capital thus rested not only on the domestic planning of national economies, but also on an unprecedented level of international organisation.

The famous tripartite division of First, Second and Third World describes the success of this international order in segregating the global proletariat into zones of differential control. For the inhabitants of the First World, there was an historic experiment in welfare state reformism. For the populace of the socialist bloc, the Second World, there was Cold War encirclement and forced industrialisation. And for the Third World, there was a transition from colonial subordination to European capital to neocolonial penetration by US based multinationals, with modernisation programs courtesy of the Rockefeller Foundation, counter-insurgency from the CIA, and ongoing mass immiseration. The workers of the world were in effect segregated and exiled to three separate planets with drastically different levels of development and radically incommensurable experiences of work, exploitation, and struggle.

Over the next twenty-five years, however, the stability of this international order was shaken by rebellions converging from different directions. In the Third World, the arrangement was in trouble from the start, as successive revolutionary movements--in China, Algeria, Cuba, Vietnam --fought and won against the sentence of dependency.

Ironically, at the same time as Third World movements were establishing state socialist regimes, in the Soviet-bloc Second World the initial rapid growth produced by forced labour stagnated, leading to bread riots and rebellion against police control. Finally, in the First World metropolis, the Keynesian deal started to come apart in the 1960s and 70s. Supposedly affluent workers, instead of being pacified by higher living standards, used these as resources to pursue new levels of struggle, that rolled from inner city ghettos to industrial shop floors to university campuses setting off a sequence of mutually reinforcing reverberations.⁸

As Harry Cleaver points out, struggles arising in the different zones of the world system started to circulate.⁹ Metropolitan capital had relied on cheap resources from colonial and neo-colonial dominions to finance its deals with the mass worker. As anti-colonial wars ruptured this control, this domestic latitude of manoeuvre was diminished. The inflationary effects of the Vietnam conflict, in particular, set in chain a whole series of wage and social wage struggles. Moreover, struggles across the planet began to support one another. Third World revolutions inspired social activists in the metropolis, and were supported in turn by international solidarity movements.¹⁰ In the US, and to a lesser degree in Europe, opposition to the Vietnam war movement brought on massive internal turmoil.

By the early 1970s, it became clear that, from capital's point of view, the old 'triplanetary' division of the world wasn't working.¹¹ With profit rates in the old centres of accumulation tumbling, the search for a reorganisation of capital's global circuits that would allow it to escape world-wide pressures of social unrest was on, both in the probes and experiments of individual corporations and banks, and in the consultations of high-level capitalist planning agencies such as the Trilateral Commission. The US government's

abrogation of the Bretton Woods currency agreement in 1971 was a first signal of the abandonment of the post-war international settlement, a departure deepened a few years later with the dramatic redirection of finances and investment occasioned by the first oil shock.¹²

In 1975, Mario Montano argued that what was taking shape was a restructuring that would render previous theories of 'development' and 'underdevelopment' obsolete. As general capitalist strategies, both underdevelopment and development had failed. For multinational capital, the question now was "how to directly oppose development and underdevelopment against each other, how to make underdevelopment work completely inside development."¹³

What was unfolding, Montano suggested, was an undoing of the traditional demarcations by "two opposing dynamics": on the one hand, the "underdevelopment of development"--with the "Latin Americanisation" of the US and Europe--and, on the other a "development of underdevelopment," with the industrialisation of portions of the former Third World.¹⁴ The aim of this restructuring was to pit "the starvation of underdevelopment . . . against the living standards of the working class of the metropolis."¹⁵

While Montano's analysis was necessarily preliminary, it accurately defines the main thrust of the process that is today known as 'globalisation.' To destroy the multiplying threats to its international command, capital has broken out from its old entrenchments, overrun the previous divisions of its world system, and, empowered by its new digital technologies, opened up the whole planet as a field for manoeuvre. In doing so, it has imploded the Three Worlds into one another. Corporate flight from the demands of the mass worker in Europe and North America has led to the partially Third-Worlding of the

First World--deindustrialising manufacturing centres, cancelling the Keynesian deal, inaugurating mass unemployment, lowering wages, intensifying work. This has introduced into the metropolis levels of insecurity and destitution previously thought of as relegated to the peripheries of capitalist world economy.

The other side of this coin, the selective First-Worlding of the Third World, has equally taken its impetus from the urgent need--mediated through a variety of authoritarian local regimes--to modernise out of existence the threat of revolutionary insurgency. Thus the turbulent energies of immiserated labour of the periphery have been harnessed to the creation of various growth sites--the Newly Industrialising Countries and other development zones--whose appearance controverts cruder models of perpetual dependency. The drive to eliminate the twin nemesis of the industrial wildcatter and the peasant guerrilla links the deindustrialised rustbelts of the North and the new shantytowns of the South in a complementary logic.

At the same time the one supposed alternative to capitalist development and underdevelopment --the Second World of state socialism--has blown apart and its residues been allocated between the two poles. Retrospectively, it is clear that the capitalist restructuring of the 1970s sounded a death knell for the command economies of the Soviet bloc. The rigidities of their internal controls proved altogether unable to adapt to the flexibilities requisite for microelectronic, post-Fordist production. When these converging pressures exploded in a series of popular uprisings across Eastern Europe and the USSR in 1989, neoliberalism's market managers rode the wave, channelling movements characterised by an immense diversity of aspirations into marketisation and economic shock therapy. Where state socialist regimes have survived, as in China, it is only by

bringing to bloom their already present tendencies to act simply as versions of authoritarian capitalism.

The result is the creation of an increasingly smooth and planar world-space of accumulation. The polarities of 'development' and 'underdevelopment' of course still exist --indeed are massively intensified. And, it is important to emphasise, their distribution continues to fall preponderantly on either side of a North/South axis. But at the same time these poles increasingly designate possibilities of ascendant affluence or abysmal misery that can be visited on any point in the planet according to the movement of corporate investment. Inner city ghettos in North America attain 'Third World' infant mortality rates, while cities such as Sao Paulo, Seoul or Taipei begin to burgeon with a cosmopolitan affluence matching the one time 'First World.' It is beyond the scope of this thesis to analyse the full unwinding of this transformation, especially since many of its aspects have been very adequately addressed elsewhere. What I want to indicate here is the way in which it has been dependent on a massive expansion of the means of communication, and in particular on the development of computers and telecommunications.

Re-Dividing the International Labourer

At the basis of capitalist globalisation is the "new international division of labour."¹⁶ This comes into being as capital both flees from and undermines strongly organised, and consequently costly, strata of working class power--metropolitan, male, industrial--by gaining access to more vulnerable sectors--peripheral, female, domestic, cheapened by destitution and authoritarian discipline.

US employers have repeatedly responded to cycles of working class struggle with waves of investment abroad.¹⁷ From the mid-1960s on, this pattern was repeated, not only by US companies but also by European and Japanese corporations, on an extraordinary scale and across an unprecedented range of industries. From the relocation of car production to sites in Warsaw, Tehran and Brazil, through the shift of light assembly industries to the free trade zones of Hong Kong, Singapore, Taiwan and South Korea, to the emergence of Mexican and Latin American maquiladoras and the creation of industrial enclaves in post-socialist China and Eastern Europe, this process has proceeded at an accelerating rate. It involves not only smokestack industrial plant but also sunrise microelectronics enterprises. Already it has rendered traditional divisions between metropolitan industry and peripheral hinterland largely obsolete.¹⁸

This geographical reorganisation of labour power has also involved a radical reworking of the gendered division of labour. For the corporate search for inexpensive and reliable labour has largely entailed a switch from male factory hands to the supposedly docile and disposable female 'nimble fingers' employed in, say, the garment industries of the Mexican maquiladoras or the microchip assembly of the Malaysian enterprise zones. Much of this female labour is organised so as to labour at home, in isolation, while still performing unpaid domestic work in support of male labour power. The global assembly line of many industries--electronics, textiles, light engineering--is thus to a remarkable extent a homework economy, linking transnational contractors and subcontractors in long, shifting chains whose complexity hides responsibility for the abysmal conditions of the new home/factories.

This global spread of female "shadow work" has even darker aspects. Silvia Federici, Mariarosa Dalla Costa and Maria Mies and others argue that globalisation takes its impetus not only from business's attempts to escape the militancy of the industrial mass workers, but also from its flight from, and capitalisation on, the First World feminist revolt against reproductive labour work. The transnational explosion of the sex trade, pornography industry, mail order bride business and baby adoption market all represent "enormous quotas of reproduction work which capital has exported in the same way that there has been a strategy of exporting part of the manufacturing process with the free enterprise zones."¹⁹

All these strategic relocations depend on highly developed systems of transportation and communication. Electronic information systems in particular allow transnational corporations to decentralise operations while centralising control; executives in Toronto offices open on-screen windows displaying the performance of machine operators in Seoul factories.²⁰ Manufacturing strategies for products such as Ford's 'world car' rely on telecommunications to co-ordinate production flows at plants on different continents, perfect standardisation of modularised parts, fast, cheap transportation, and computerised automation carried to a point where elementary units and simple routines can be performed by unskilled workers. Global homework industries, such as those of Benetton, network computers to tie suppliers to sellers, match production to inventories, monitor dispersed workers, and check quality and speed of supply through every rung of their hierarchy. The same logic, to greater or lesser degree, is in play in the processes that allow Canadian supermarkets to sell fresh-cut flowers from Africa, or travel agencies in Bonn and Tokyo to book sex tours in Thailand and the Philippines. In all areas, even though

production remains dependent on the most arduous, protracted physical labour--in Mexican car plants, Kenyan agribusiness plantations or Bangkok brothels--co-ordination and control is effected through communication flows moving over distances and at speeds that surpass corporeal horizons.

Global Hearts and Minds

The global restructuring of production is complemented by an equally global reorganisation of consumption. As we saw in the last chapter, this is necessitated by capital's very success in driving down the wage and social benefits of metropolitan mass workers--for this undermined mass consumption within the domestic markets of the First World. Increasingly, therefore, business has turned its eyes to export markets and, increasingly toward the population masses of the South. These are so great in numbers that if even a relatively small proportion--the managerial and professional strata benefiting most directly from industrialisation--can be brought into the orbit of luxury consumer capitalism, it will more than counter-balance the eroded spending power of Northern workers.²¹ And for industries whose goods can be sold cheaply enough to penetrate the youthful economies of South African townships and Latin American barrios--cigarettes, soft drinks, cassettes--the potential profits are prodigious.

However, such a global projection of consumerism into zones previously entirely relegated to economic marginality demands a reconstruction of needs and desires--of cultural traditions, religious prohibitions, dietary habits, sexual mores, traditions of self-sufficiency --similar to that experienced by the Euro-American proletariat in the first part of the twentieth century, but exceeding it in scale. In this process the vanguard

organisations are the great media corporations--characterised by concentrated ownership, vertical and horizontal integration, and mastery of world-spanning arrays of convergent technologies. These "lords of the global village" are no longer--as in the classic formulations of the 'cultural imperialism' thesis--exclusively North American.²² Although US entertainment and information corporations still generally enjoy a pre-eminent position, these industries have themselves, to a degree, become globalised, and also include European, Japanese and even Latin American interests; newly-marketised Moscow's most popular soap opera, "Even the Rich Cry," was made in Brazil.

But, whatever their ownership, these corporations--Adorno and Horkheimer's "culture industry" gone planetary--have become the vital agents for a reconstruction of global subjectivity carried out in the interests of transnational capital. Their products--films, programs, music, videos--are quintessentially global commodities, instantaneously broadcastable, evanescent, and demanding vast, worldwide audiences in order to recoup the costs and risks of production. Globalisation means that everywhere, all the time, it is "video night in Kathmandu," as the habits of media spectatorship are stimulated and implanted worldwide.²³

These media commodities in turn provide the vehicle for the global marketing campaigns. During the 1960s and 1970s, the penetration of television to households all over the world had provided multinational corporations with the necessary communication infrastructure to carry out co-ordinated advertising in Europe, Canada, Latin America and Asia.²⁴ In the 1980s such global marketing strategies, promoted by business management gurus such as Theodore Levitt, became the creed of major advertising agencies.²⁵ These strategies are supported both by powerful campaigns to compel developing countries to lift

restrictions on advertising and by the deployment of technologies that can effectively overleap any such barriers. Carried by satellite beam and VCR to the villages of Indonesia, Zaire and Colombia, Arnold Schwartzeneger and Pamela Lee perform as the simulacral storm troopers of consumer revolutions dedicated to the attractions of soft drinks, hard bodies, high-tech weapons and high-cut swim suits.

However, this universalisation of advertising also goes hand in hand with intensifying segmentation and stratification of markets. Assuming that consumer elites in New York, Rio de Janeiro, Paris and Bombay will have more in common with each other than with the homeless who in each city swarm on the adjacent blocks, the agencies deploy ever more sophisticated technological resources for surveillance of the world's consumption zones. They also carefully modulate centrally planned campaigns in the light of detailed anthropological, ethnographic and market research. Arif Dirlik reports a paean from an advocate of this "guerrilla marketing" who declares that "just as the guerrilla fighter must know the terrain of struggle in order to control it, so it is with the multinational corporation of today. Our terrain is the world." This business-administration "guerrilla" goes onto claim that the "world market is now being computer micromapped" into 304 geographical consumption zones cross-referenced with the "unconscious" needs 507 microconsumption types:

Through an extension of this mapping, even the most autonomous and unconventional desires may be reconstructed for the benefit of market extension and control . . . we must win hearts and minds. This task can be

accomplished by constructing and reconstructing them all the way down in what can only be viewed as an endless process.²⁶

While the cutting edge of this "hearts and minds" campaign remains the standardised Hollywood style of infotainment, media conglomerates also collect themes from all over planet--world music, ethnic arts, Third World cinema--for conversion into commodities and marketing instruments. The relentless monoculture of Disney and MTV is leavened with multicultural traces of Taiwanese rice farming chants and Indian bhangra dancing. This eclecticism has led some observers of popular culture to enthusiastic celebrations of the diversity and hybridisation of the newly cosmopolitan global bazaar.²⁷

It is true that, as Marx observed, the world market brings with it a variegation and elaboration of needs and appetites. In a way it does open up new horizons and subjective possibilities. But what too many contemporary panegyrics to this process overlook is the relentless uniformity of the logic underlying this process, the enormous systematicity that precedes all the apparent differentiation. The order of this system is unequivocal. Every human aspiration, desire and creative impulse shall find their place within the commodity-form: those that refuse are condemned to oblivion.

Money in Command, World Wide

With globalisation, capital cracks the shell of the nation state. In its Fordist era, national governments had been indispensable for planning and securing the social conditions of accumulation--by Keynesianism in the First World, by neo-colonial

modernisation in the Third. However, the struggles of the 1960s and 70s threatened these arrangements. To varying degrees, ranging from revolutionary power-seizures in the Third World to First World "fiscal crises," social movements undermined business's control of public spending.²⁸ Capital's reply was to relocate social control outside the national sphere. Over the last decade, a round of regional and global trade agreements--NAFTA, Maastricht, GATT, the establishment of the World Trade Organisation--have subordinated national policy to supranational agreements favouring unrestricted mobility of capital, deregulation, privatisation and unfettered markets. But such agreements in many ways merely formalise and consolidate a level of a transnational discipline which capital had already won earlier in the globalisation process, through another mechanism--that of the international financial markets.

Since the 1960s, these markets have undergone an explosive expansion. This is the result of a number of factors: the collapse of the Bretton Woods agreement and the establishment of floating exchange; the growing importance of offshore or stateless money, such as Eurodollars; the deregulation and restructuring of banking, stock exchanges and financial institutions; the invention of ever-more arcane methods of speculation; and the increasing powers allocated to world-level financial institutions such as the IMF and the World Bank. As Arthur MacEwan points out, what is new in this situation is not the importance and interdependence of financial flows for capital, but their degree of integration, speed of transaction and capacity to escape state control.²⁹

Again, these developments are inseparable from the expansion of information technology, that has "probably changed banking and finance more than any other sector of the capitalist economy."³⁰ Computers and telecommunications accelerate financial flows

phenomenally, permitting round-the-clock planet-wide investment activity, reducing the costs of transfers, creating a common digital medium for transactions and spurring mergers and consolidations amongst monetary institutions. In a sector where a few seconds advance knowledge over competitors can translate into billion-dollar profits, information systems are hardly less sophisticated than those governing nuclear weaponry. Indeed, as one observer of electronic trading says, "It's almost like modern warfare, where people sit in bunkers and . . . push buttons and things happen."³¹

This world of virtual finance has become both increasingly detached from and superordinate over material production. As the struggles of the 60s and 70s unfolded, financial trading became very important to capital as an escape from crisis. Faced with loss of control in the shop floor and the paddy fields, many commercial interests simply evacuated the corporeal world, with its mud, blood and recalcitrant labour power, taking flight not merely by seeking new sites for production but by dematerialising themselves entirely into speculative activity. This migration of money into cyberspace left behind a mundane spoor of abandoned factories and ruined communities and was a major factor in the mounting toll of job loss that undermined labour's capacity to oppose capital.

In other ways, too, the money markets became crucial in driving down social expenses to a level where investment in tangible production would be profitable again. Previously, the financial levers of domestic economies had rested predominantly in the hands of national governments. But when governments failed to discipline their workers, global money bypassed such arrangements. With the valuation of national currencies, interest rates and credit worthiness determined by international investors and speculators, economic control became immanent within the entire planetary finance system.

Governments--national, regional and municipal--that had previously squared the demands of business and worker's movements by running up deficits now found the continuation of their credit and the stability of their currencies conditional on the implementation of austerity programs. As Christian Marazzi puts it,

the need to preserve credit ratings and currency stability has narrowed in an unprecedented way the margins of manoeuvre--the "relative autonomy"--of national states, to the extent of dramatically reducing the area of choice within which national policies has to operate. All governments and their oppositions have in this sense been pulled into the narrow area of choice imposed by the logic of international monetary austerity.³²

More and more vital areas of domestic policy are subjected to what Cleaver terms "international adjustment mechanisms virtually invisible to the average worker."³³

The full enormity of this monetary discipline is of course seen in the "structural adjustment programmes" (SAPs) inflicted by the World Bank and IMF on Third and Second World states unable to pay for the large-scale national development programs of the 1970s.³⁴ However, the debt crisis is not restricted to economies formally placed under the protectorate of the IMF. Indeed, what is remarkable about globalisation is the way in which the pressure of the money markets has resulted in the spontaneous adoption of SAP-style measures within the very heart of the former First World. From the New York deficit crisis of 1975-76, through the rampage of Reaganite and Thatcherite monetarist policy in the US and Britain, to the retreat of Mitterand's socialism in France in 1982 in the face of

financial pressure, to the gutting of the New Zealand and Canadian welfare states in the name of deficit reduction, the imperatives of world money have dictated policies of deregulation, privatisation, wage cutting and welfare reduction adopted regardless of parliamentary regimes' ostensible political coloration. By lifting financial control out of the hands of domestic governments and diffusing it through the electronic nodes of global exchanges, capital has effectively placed economic power in a stratospheric orbit where it cannot be reached by electoral choices taken within the confines of the nation state. It thus raises to a new level the negation of democracy inherent in the private expropriation of the means of production.

The Resurrection of War

However, the ultimate disciplinary instrument of the world market is, as it has always been, force. War is always critical to capitalist control, as a means for extending its circuits over new domains, dividing opposition, and destroying any threat to the operations of the market. It is therefore hard to overestimate the significance of the series of military reverses inflicted on capital by revolutionary movements from 1945 on--in Korea, China, Algeria, Cuba, Mozambique, Rhodesia, Angola, and, most seriously, Vietnam, where the pre-eminent imperial power went down to defeat, partly due to the disaffection of its own populace.

An important part of capital's restructuring has thus been the resurrection of military power as a viable instrument of global command. Amidst privatisation and deregulation, one of the few aspects of the capitalist state generally reinforced is the security apparatus. In the US, which retains its position as the principle enforcer for the world market, the

Pentagon has carefully investigated ways to circumvent the unwillingness of citizens to sacrifice themselves in foreign wars. This experimentation has followed two routes. On the one hand, there has been a development of high-tech weaponry--Cruise Missiles, Star Wars systems, first strike nuclear missiles, Stealth bombers--capable of fighting highly automated, remote-control wars. On the other, there is increasing resort to the low-intensity, covert, proxy or mercenary strategies practised in Afghanistan, Cambodia, Namibia, El Salvador, Guatemala, and Nicaragua.³⁵

In both strategies, command, control, communication and intelligence capacities are vital. Whether in the 'black' satellite systems beaming CIA messages from Virginia to the rain forests of Costa Rica and Cambodia, or the artificial intelligences unwinkingly monitoring the earth via the orbital platforms of the Strategic Defence Initiative, the new forms of warfare demand omnipresent surveillance, near-instantaneous transmission and precision-targeting. The search for global battlefield supremacy brings to bloom some of the most exotically deadly technological orchids of the information age. At the same time, control of information has also assumed a new prominence on the domestic front. Haunted by the belief that the Vietnam War was lost to the television viewers of America, the Pentagon and its allies have devoted increasing thought to the control of public opinion in time of crisis. The fruit of these deliberations appeared in the Malvinas war, the bombing of Libya, and the invasions of Grenada and Panama. Here it was demonstrated that regimes of commercial-style image-management, military marketing, press-pool control, censorship, blackout and propaganda, combined with the extreme swiftness of operations permitted by massive technological advantage, could largely stifle domestic dissent.

The real flowering of these developments, had, however, to await the Persian Gulf War. Here, as Hamid Mowlana says, "the propaganda and communication strategy surrounding the conduct of war entered a new dimension not seen in previous conflicts."³⁶ Acting as the mercenary agent of multinational capital, the US terminated the disturbance its former Iraqi client threatened to inflict on the world oil supply by an overwhelming application of information power. Smart weaponry, superior intelligence gathering, radar jamming, stealth technologies, the infiltration of computer viruses and the annihilation of enemy radar systems gave the Allied forces total battlefield superiority. Meanwhile, a massive media campaign, including fabricated 'incubator babies' stories, round-the-clock press conferences and bulletins, in-field interviews and orchestrated displays of patriotic fervour aimed to win domestic and international support for the war. This was complemented by the targeting of Iraq's civilian telecommunications and other information utilities, depriving its government of equivalent weapons in the propaganda war. In short, front and home lines were interconnected in a near-seamless regime of information control.

Indeed in a sense, the whole war, with its spectacularly excessive violence, can be understood as an act of communication. For the message sent to the world by way of bombsight videos was that any interference in the finely tuned balances and flows of the world market would be crushed with lightning force. It is no coincidence that President Bush's announcement of a 'new world order,' widely understood as signalling not merely a diplomatic, but also a politico-economic dispensation, should follow on the heels of the Persian Gulf War. For the underlying logic of globalisation is that of war--a war waged by capital to annihilate all points of opposition and permit the relaunching of a new cycle of accumulation.

Globalisation as Class Decomposition

The creed of globalised capital is clearly enunciated by Robert Reich, economic advisor and former Labour Secretary to the Clinton administration, in his The Work of Nations: Preparing Ourselves For 21st Century Capitalism³⁷ Today, Reich argues, wealth generation is entirely dependent on "nomadic corporations" that, having fully transcended any national base exist only as "global enterprise webs" held together by the threads of computers, fax, phone and video networks.³⁸ Nation states' capacities to control their own destiny is restricted to the creation of infrastructures--such as information highways--attractive to the investment by these mobile corporations. The result is to replace capital's previous territorial divisions of the workforce with an increasingly transnational hierarchy of labour power. Those countries, or regions, or cities that can render themselves hospitable in this way will attract well paying "symbolic analytic" jobs--the knowledge-based work associated with the design and development of new technologies. Those that don't will become the dumping grounds for the unfortunate industrial and routine service workers destined to be devalued by automation and global cheap labour.

Reich, to his credit, expresses considerable anxieties about how this divisive logic will effect the social fabric of the US, as privileged "symbolic analysts" retreat into fortified enclaves to escape the deepening misery of unemployed service and industrial classes. The rest of the world, however, hardly figures in his optic. But his overall perspective on globalisation is both inevitabilistic and optimistic. The accumulation of wealth permitted by enhanced trade and specialisation, although unevenly divided, will eventually raise global living standards by an inexorable trickle down process. Even those areas fated to receive the industrial work cast off by the most advanced sectors of capital

will be better off than in their previous agrarian situation. Globalisation is, Reich insists, not a zero-sum game but rather an "infinitely expanding terrain of human skills and knowledge."³⁹

He is quite correct about the astounding wealth-generating effects of contemporary technology and trade. But his analysis omits the dimension of power--the strategic logic inherent in capitalist globalisation. By expanding the division of labour, the capitalist enlargement of the world market allows huge increases in productivity. But it also expands the division of labourers--the degree to which capital can set workers in competition with each other and thereby seize for itself an ever-increasing proportion of this global wealth. The social surplus grows--but so, and probably to an ever-greater extent, does capital's capacity to expropriate that surplus. The "infinite terrain" over which capitalist globalisation expands is thus not one of "human skills and knowledge" but of inhuman profit and exploitation.

By seeking out and putting in competition with one another pools of labour power previously inaccessible or isolated because of geographical distance, state regulation or communal self-sufficiency, capital can repeat a classic strategy--creation of a reserve army of the unemployed, now realised on a world scale. In this context, the nomadism afforded corporations by the "global webs" means that demands for the maintenance, let alone improvement, of wages and social conditions, can be circumvented and outflanked. Workers are faced with the choice of acceding to corporate requirements, or seeing the now lighter-than-air means of production--software programs and communication nodes--relocated elsewhere. There is set in train what Jeremy Brecher and Tim Costello term a

"race to the bottom" whereby workers across the world are compelled to cheapen themselves into a job by competitively lowering their wages and conditions.⁴⁰

Thus, although the new mobility of investment shuffles and reshuffles relative positions in the hierarchy of labour with extraordinary rapidity, its overall drive is toward increased power for capital vis a vis the global proletariat as a whole. Reich is right that globalisation has given some knowledge workers, largely male, largely white, associated with high tech, finance, communication and information an exceptional importance.

Concentrated in the technopoles that form the hubs of "global webs," these constitute a layer of privileged labour on whose loyalty capital can largely rely. But analysis that sees "symbolic analysts" as the crucial actors in globalisation does not grasp the speed with which capital turfs yuppies from the lifeboat when cheaper replacements can be found.⁴¹

Even symbolic analysts feel the blast of globalisation, as North American computer programmers are undercut by Lithuanian or Indian competition, and architects, engineers and professors discover that those who can telecommute can always be teleterminated by cheaper services uploaded from anywhere on the planet.⁴² The ultimate benefactors of globalisation are not even the symbolic analysts, but the power that Reich hardly mentions--that of transnational capital itself.

Beneath the symbolic analysts are the mass of industrial and service workers exposed to increasing insecurity by a mobility of investment that can send jobs catapulting from Oregon to Lima to Jakarta in a matter of weeks. This logic has, so far, primarily been applied against industrial workers in the North--to the temporary benefit of labour in selected growth areas such as East Asia. However this undercutting is a process that can be repeated universally. Workers in Mexico or South Korea who have unionised find their

jobs shifted to Bangladesh or Indonesia or China--and when labour there organises, the work moves on to Vietnam.⁴³ Latin Americans see investment prospects vanish towards Eastern Europe. Indeed, at points the deindustrialising process comes full circle, by creating in the old metropolitan areas zones of immiseration so deep that they then become low wage areas which lure capital back from its flight to the one-time periphery: Scotland and Ireland are now attracting Japanese and Korean investment with industrial wage levels comparable to those in parts of Asia.

At the bottom of the new global hierarchy, in regions and cultures that do not match capital's requirements in terms of wages, work habits, or possession of desirable natural resources, lie the hapless surplus reservoirs of labour power, labelled 'not wanted on voyage' in capital's round-the-world restructuring.⁴⁴ These populations, still predominantly but not exclusively in the South, uprooted from the land by agribusiness and IMF agricultural rationalisation, but by-passed by the electronic paths through which the world market circulates wealth, survive through the networks of the drug trade, prostitution, body parts sales, exotic animal trade, arms smuggling and other informal economies. To the degree these desperate measures fail, they fall through the holes of the network into an abyss of impoverishment and debasement that is a breeding ground for ethnic, nationalist and religious wars, in Somalia, Liberia, Chechnya, Afghanistan, or Bosnia. From these catastrophe-zones the victims will only be rescued by international 'peace-keeping' interventions when the level of chaos threatens to become uncontrollable or interfere with serious investment opportunities.

Their fate--relayed by real time satellite broadcasts of famine and street fighting--serve as an admonishment to others in more fortunate places not to demand too much, to

buckle down, work harder, be grateful for what they have. Such scenes, whether from Mogadishu, Sarajevo, Kabul, Monrovia, Grozny or South Central Los Angeles, are not incidental to capitalist globalisation. They are essential to it. For they represent the ultimate outcome of a strategy of decomposition that empowers capital by intensifying the world wide competition between workers--dividing labour from itself in a process whose culmination is an internecine violence.

Globalisation as Recomposition

The terrible efficiency of this disintegrative strategy should not be minimised. Yet analysis that understands globalisation only as capitalist triumph is incomplete. For one of the remarkable features of the last decade is the way in which unexpected currents of opposition have started to emerge from the transformed conditions created by transnationalisation. Often these new vortices of subversion have started to spin precisely where the victory of the market forces was thought most complete, as in Mexico, where the Zapatista's challenge to the showcase of neoliberal development has caught the imagination of the world.

As I discussed in the previous chapter, the scope of contemporary capitalist subsumption means that such movements of opposition will no longer be found concentrated at the immediate point of production but spill across society as a whole. Battles against corporate globalisation involve waged workers, but also unwaged labour: women's organisations resisting the deconstruction of welfare services, students opposing the slashing of public spending, movements of indigenous and peasant people fighting eviction from the land, rural and urban communities refusing the ecological devastation of

hazardous waste dumps and hydro-electric development projects. The very diversity of these resistances, and the real nature of the contradictions that often divide them, makes the problems of their co-operation and co-ordination enormous, even on the scale of a neighbourhood, city or region; when viewed internationally, these obstacles might appear insuperable.

And yet the new counter-movements are making trans-sectoral and transnational interconnections. In part, this is happening because capital's very success in creating for itself a worldwide latitude of action is dissolving some of the barriers that previously separated oppositional movements geographically. In collapsing the Three Worlds into a single plane of accumulation, capital has introduced from one to the other forms of work, dispossession and struggle that were previously segregated. Thus the spread of large-scale manufacturing into Korea, Brazil or South Africa results in the emergence of mass-worker struggles of a sort that were once distinctively metropolitan while the deindustrialisation of the United States and Europe is in turn accompanied by social movements resembling those of the 'underdeveloped' world; many authors have noted the similarities between the 1992 Los Angeles riots and Latin American urban insurrections.⁴⁵ More generally, the global imposition of neoliberal policies has created commonalities of experience for waged and unwaged labour from Warsaw to Cairo, as the destruction of public services and the subjugation of government to supranational financial flows, increasingly come to constitute a shared lexicon of proletarian existence.⁴⁶

This exchange of experience is intensified by the vast flows of migrants and refugees set in motion by Third World industrialisation, war and environmental catastrophes. Moving legally and illegally, this huge movement of peoples has converted

world cities into crucibles of cosmopolitan experimentation, confounding, confusing and confronting long-held ethnocentric and colonialist perspectives. Capital everywhere tries to harness these exiles as yet another source of cheapened labour, making them the "new helots" of globalisation.⁴⁷ Yet migrant workers--Turkish autoworkers in Germany, Filipino nannies and Punjabi farmworkers in Canada, Mexican drywallers and janitors in California--also carry with them traditions of struggle, and often stand at the heart of new militancies. They challenge the racism of established trades unions and social movements, and establish new lines of international connection.⁴⁸

Moreover--and this is the point to which the remainder of our analysis will be devoted--capital's own diffusion of the means of communication has inadvertently assisted this connective process. In creating the pathways for its own transnational circuit, it has unintentionally opened the routes for a global contraflow of news, dialogue, controversy and support between movements in different parts of the planet. To a degree, the very communication channels that circulate commodities also circulate struggles. Despite all the well-known filtering and censorship mechanisms, corporate and state media do carry abbreviated scenes and news of class conflicts across the world. Sometimes--as in the case of the Israeli invasion of Beirut, or the Indonesian genocide in East Timor--shots of a riot, bombing, or a massacre have been crucial in mobilising transnational support for resistances that, in a purely national context, face overwhelming odds. However, to a large extent connections and dialogue between globally distant resistant movements depends on the construction of counter-networks, that while drawing on the technologies and expertise diffused by the world market, reconstruct them into radically new configurations.

Thus, while the effect of globalisation has often been to more intensely divide workers within a given city, region or nation, it has, paradoxically, also created the possibility of building alliances across city, regional and national boundaries. Writing of the transnational linkages established by the indigenous people's movements, Mariarosa Dalla Costa has spoken of how,

Workers and non-natives, ecological movement militants, women's groups, and human rights activists have been attracted into complex support actions, helping and monitoring from various parts of the world.

In this process, she says, a "hinterland of communication and liaison has been constructed . . . across the Americas and in the world":

Relations of analysis and information have been more clearly and more strongly interwoven. And all this has become the primary tissue for communication between and action by different sectors in the working social body.⁴⁹

Dalla Costa speaks of a growing "tissue of communication between and action by different sectors in the working social body." This tissue creates connections that run counter to the decompositional logic of capitalist globalisation. Somewhere between the ethereal activism of radio and computer networks, and the weary odysseys of proletarians trekking

from San Salvador to Vancouver or from Manila to Kuwait City, a new global class composition is being born.

Radiating the Information of Struggle

More than twenty years ago, the autonomist Romano Alquati suggested that the movements of working class struggles could be analysed as constituting a network, not just regionally or nationally, but on the international level. This network, he proposed, possessed both vertical and horizontal articulations:

. . . vertical according to the organisation of the class at points within and against the capitalist circuit of production and reproduction; horizontal according to the geographical-territorial distribution and linkage of these movements within and against capitalist accumulation.⁵⁰

In one sense, the structure of the network was given by the capitalist organisation of production against which it fought, but,

the information passing from the apex to the base of the hierarchy . . . does not correspond to that passing in the opposite direction. In other words, the network of the class struggle, like capital, has its own operational information, its own mechanisms for checking and controlling, but the

process based on hierarchical command of capitalist accumulation is turned upside down.⁵¹

This combined vertical-horizontal network of struggles has "nodal points" of interconnection; "points of maximum accumulation of information and greatest direct combination of different moments of the anticapitalist struggle." From these poles "the operational information of struggle is radiated. " Such communication about "forms, goals, content, organisation of struggle" was, Alquati said,

. . . an indirect, mediated and complex process, operating through a whole series of mechanisms . . . a form of telecommunication which transcends physical spatial contacts between the nodes that are in communication.⁵²

Today, of course, these connections are often not just metaphorically but literally telecommunicational. And amongst the many mechanisms by which it proceeds, a crucial one has been the creation of various networks of autonomous media. The emergence of these networks in North America was outlined in the Chapter Five. But a crucial ingredient of 'the other globalisation' has been the eruption of similar experiments across the planet. Indeed, a feature of contemporary struggle is the degree to which many of the crucial "nodal points" from which the "operational information of struggle is radiated " are to be found in the former Second and Third Worlds.

In the Third World, the creation of autonomous communication networks were, of course integral to anti-colonial struggle; one has only to think of Frantz Fanon's observations on the role of radio in the Algerian civil war.⁵³ The residual impetus of these

revolutionary experiments propelled the New World Information and Communications Order, the Third World challenge to US global media dominance. But this complex movement was partly harnessed to the interests of post-colonial state and media elites. Its critique of media imperialism was thus compromised by a certain willingness to overlook internal repressions and exclusions. However, over the last two decades, as national governments submit to privatisation and deregulation, the focus of information activism in the South has largely shifted from such a state-centred media base towards a proliferation of independent, grassroots, initiatives, arising from sectors in struggle with both local and global rulers: Brazilian street television, video training for Korean trades unionists, township-based South African community radio stations. These media often provide the vital channels for movements opposing capitalist globalisation within neighbourhood, regional and national boundaries.

The political potential of these forms of activism was strikingly, though ambiguously revealed, in the fall of state socialism in the ex-Second World. Here the radio activism of Solidarnosc, the rivulets of samizdat, underground music and media permeating Eastern Europe, the role of computer networks and radio stations media relaying news of the Stalinist Moscow coup, all played an important part in undermining the rule of the commissars. A similar, but more complex dynamic emerged in the deadly dance of subversion and surveillance surrounding satellite-borne images of events at Tienanman Square. The relative friendliness of the Western media (not to mention the CIA) toward these revolts makes their success a special case. Yet some would argue that they demonstrate a vernacular familiarity with technology and a popular capacity for the self-organisation of communications technology potentially inimical to either state or corporate

management, and which can be as effectively turned against neoliberal globalism as Stalinist isolation.

Others are more sceptical. Against hopeful prognoses about international democratic empowerment through information, they identify the formidable global limitations to and inequalities in access to the means of communication in a world where forty per cent of the population is without electricity and sixty-five per cent have never used a telephone. In an essay tellingly entitled, "World Wide Wedge," Peter Golding notes that "the terrain occupied by communication goods and facilities is a hilly one, marked by soaring peaks of advantage and dismal valleys of privation."⁵⁴ He points out that all information industries are very heavily concentrated in the developed world. This holds from newspaper publishing, where half the world's production is in the industrialised West, to telecommunications, with more phone lines in Tokyo or New York than in the whole of sub-Saharan Africa. These inequities are even more marked in computer-mediated communications, which are, as Golding notes, "not so world wide after all," since large portions of Africa, Asia and Latin America currently lack all but minimal connections to the Internet.⁵⁵ These problems are compounded with inequities in the availability of technical training, and with problems around translation for digital media, in which English remains the lingua franca. The implication of such analysis is that the potential for information activism remains limited to a few relatively privileged zones.

These objections are substantial enough to damn any naive political optimism. But they are not sufficient to dismiss the possibilities for a significant enlargement in the "network of struggles." Capital is, for its own reasons, diffusing and cheapening access to many information technologies. The inevitably socialised aspects of communications--its

broadcast and network aspects, which increase in value according to the number of recipients and participants--means that in many areas business is working very fast to extend the reach of its circulatory apparatus: AT & T Submarine systems aims to complete Africa One, the fibre optic undersea cable that will create a communications ring around the continent, by the year 2000. Televisions, transistors and walkmans are already available in areas without schools, running water or medical care.⁵⁶ More of this distorted universalism can be anticipated.

More importantly, extreme pessimism about global access to communication resources underestimates the ingenuity of the various communities appropriating these technologies for their own purposes. Movements that would seem at the furthest remove from high-tech, such as those of the Mayan peasants in Chiapas, or Indian farmers fighting multinational seed patenting, or the Kayapo and other indigenous peoples in the Amazon opposing World Bank development, are interfacing advanced communication networks and highly traditional forms of mobilisation.⁵⁷ They are constructing hybrids of pre- and post-industrial communication forms. I have seen film of the village-by-village oral education used by the campaigns of Indian farmers and peasants against GATT. These films were brought to North America by Canadian organic farmers, themselves involved in opposition to agribusiness, who in turn cull and relay information about these companies via the Internet to university-based members of the Indian movement.⁵⁸ This sort of interaction constructs patterns of activism that defy prediction.

Further, the transfer of technical expertise and experiences in the establishment of counter-communications is itself becoming a focus of political organising. The transfer of old computers from North to South, for example, has become a commonplace of

international solidarity activities. These global connections, both on a North/South and South/South axis are taking organisational form. Alternative radio activists have formed the World Association of Community Broadcasters (AMARC).⁵⁹ International associations of video activists and producers such as Video Tierre Monde and Videazimut are experimenting with circulation of videos via broadcast and cable networks, independent distribution circuits and formal and informal networks.⁶⁰ While the largest computer of the Association for Progressive Communications is located in Silicon Valley, it has partner networks in Nicaragua, Brazil, Ecuador, Uruguay, Russia, Australia, the United Kingdom, Canada, Sweden and Germany, affiliates from Vanuata to Zimbabwe, subscribers in ninety-five countries, and runs projects aimed specifically at facilitating the computer networking of peace, human rights, ecological and labour organisations in underdeveloped countries.⁶¹

Out of these activities horizontal linkages between various "nodes of struggle" are now being made on a very global basis. They include both the transfer of technical know-how and equipment and the relay of political analysis, discussion and support. Microwatt broadcasters from California assist Haitian activists set up radio stations in Port au Prince; video activists in Vancouver draw on the lessons of popular education from Nicaragua; British motorway protesters at Newbury receive faxes of support from Ogoniland in Nigeria, while environmental activists in Europe deluge Shell offices with email protesting the execution of Ken Saro Wiwa. This is the communicational weave of recomposition. Let us look at some of its patterns.

Modem Solidarity

Through globalisation, capital attempts to directly pit First against Second and Third World workers, undermining the wages and conditions of the former via the immiseration of the latter. However, this paradoxically opens the way to a reverse logic in which workers of the one-time metropolis, losing the position of relative privilege that gave them a partial stake in capitalism's international system, acquire an interest in raising the living standards of those in previously peripheral zones. Northern workers might--and often do--attempt to insulate themselves from globalisation by traditional forms of protectionism. But this strategy depends upon business support, at the very time when multinational capital has decisively rejected such an option. An alternative is for (ex) First World workers to seek alliances with their counterparts elsewhere in the world. Over the period of capitalist global restructuring the slogan, "When they win, we win," has begun to be heard within the most progressive sectors of US and European trades unionism, and there has appeared a tentative web of connections between metropolitan and peripheral labour.⁶²

Instances include the ten-year solidarity campaign by US trades union and church groups supporting the occupation of a Coca Cola plant in Guatemala city; networks of international sugar workers formed around issues of land reform and crop diversification; autoworkers' conferences involving US, European, Malaysian, Brazilian, Japanese, and South African delegates; US-Japan worker-to-worker meetings in the computer industry; South African unionists painting murals for striking Minnesota meatpackers fighting an apartheid-implicated employer; West Virginia steelworkers forging links with Swiss, Dutch and Eastern European unions and green movements to beat their multinational employer; the international connections spun amongst maritime labour around a Liverpool

dockers' strike; and the burgeoning networks of transnational support amongst female homeworkers, discussed in the next section.⁶³

Reviewing such initiatives amongst US labour in the late 1980s, Kim Moody suggested that their strengths included an activist orientation and the bypassing of bureaucracies in favour of direct communication among militants. Their corresponding weaknesses were lack of resources and frequent suspect status of participants within their own unions.⁶⁴ A decade or so later, these obstacles are far from dissolved. But such projects of international solidarity have--largely under the impact of free trade agreements such as NAFTA--become increasingly common. They turn not only on person-to-person contact, but also on communication via film, video, fax, and computer networks.

In a series of important articles, Peter Waterman has analysed the role of communications in forging the new labour internationalism, focusing particularly on labour's growing involvement in computer mediated communications.⁶⁵ By the mid-1990s this had produced two major networks, the US based Labornet and the European Geonet devoted to union matters, and a number of activist conferences, in locations from Manchester to Moscow. This labour interest in computerisation, Waterman says, arises largely from the obvious need of trades unions facing multinational corporations to possess communication capacities matching those of their managerial antagonist. Increasingly, such unions use large-scale databases to track information on companies' financial status, health and safety regulations, and collective bargaining practices; email for internal communications and solidarity appeals; and bulletin boards for membership orientation and discussion. But while such networks facilitate the conduct of traditional trades union activities on a larger scale, with greater speed, Waterman observes that their operation

also often replicates the classic limitations of business unionism; centralised control, a purely corporate basis of organisation, and narrow or non-existent political aims.

However, he goes on to suggest that in Europe, over the 1980s, a new, more expansive approach to modern solidarity began to emerge. This resulted from the interaction of international trade union organisations and a loose ensemble of radical activists, NGOs, communication specialists and researchers, whose base lay not so much in the European unions as in a variety of Third World collectivities. While the perspective of on-line unionists from the core tended to be pragmatic and utilitarian, those from the periphery were more innovative and experimental, opening up "alternative visions and utopian prospects."⁶⁶

These wider visions included the use of networks in alliance building between unions and other social movements, recognising differences in needs and skills amongst the various potential participants, and emphasising improved communication as a component of inter- and intra-organisational democracy. As representative of this broader style of on-line solidarity, Waterman cites examples such as South Africa's WorkNet, developed by the alternative press in the anti-apartheid struggle and subsequently used by trades union, church, media, and housing movements; the Asia Labour Monitor Resource Centre, started by radical church activists in Hong Kong on the basis of "US computer familiarity and ever cheaper East-Asian computers," to circulate information about worker struggles in China, Taiwan, South Korea and Hong Kong; Mujer a Mujer, a collective of Mexican, US, Canadian and Caribbean women's groups representing waged and unwaged female labour who use on-line communication in their transcontinental opposition to neoliberal restructuring.⁶⁷

One particularly telling example involves Glasnet, the Moscow affiliate of the Association of Progressive Communication. In the second Moscow coup of October 1993, where Yeltsinite forces of free market capitalism re-repressed democracy, three members of the independent Russian Party of Labour, including author Boris Kargilatsky, were arrested by police, charged with planning to attack a radio station, systematically beaten, and threatened with death. A criminal released from jail told the wife of one of the prisoners, who contacted an Australian correspondent for the Green Left Weekly, who in turn reached a Russian union officer with access to Glasnet, who sent an international email alert on a series of computer conferences. "Within hours the police station was inundated with calls" Kargarlitsky writes:

We were watching from the cell . . . One of the first was from Japan. The police didn't seem able to believe it. After that the calls seemed to be coming from everywhere--there were quite a few from the Bay Area in the United States.⁶⁸

Email attention was reinforced by the arrival of a Moscow TV crew from the program "The individual and the law." Within hours the detainees were released and the charges dropped. Waterman comments that "through the concrete and steel" of state socialism and "out of the shit and blood of an increasingly globalised information capitalism", there "appears to bloom one flower of global solidarity--an electronic one."⁶⁹

As he admits, labour's electronic networking is barely nascent, directly involving only a relatively low number of specialists. While it has had some manifest successes--in

pressuring states to free imprisoned militants, in providing negotiators timely access to strategic information--it is far from matching, let alone beating, the power that business has discovered in cyberspace. Nonetheless, he argues that its potential for reorienting workers' organisations is significant. Drawing on the formulations of media theorist Fred Stangelaar, he suggests that the realisation of these possibilities depends on labour computer networks becoming a relay in "spiral flows" of alternative communication that both laterally connect a wide range of oppositional groups, and vertically heighten their degree of co-ordination and support.⁷⁰ Given this condition, Waterman suggests computer networking could become a vital element in the constitution of what he calls a "fifth international"--a transnational connection of oppositional groupings that does not, like the four previous socialist Internationals rest on the hierarchical directives of a centralised vanguard party, but rather arises from the transverse communications of multiplicitous movements. Waterman's account corresponds closely to the autonomist concept of the circulation of struggles. Let us examine some further turns of the spiral.

Electronic Boycotts

Movements contesting global capitalisation extend beyond the immediate workplace, and engage corporate power in the sphere not just of production, but of consumption. This manifests in a number of ways--adbusting, cultural jamming, media piracy--but is perhaps best exemplified in the growing number of transnational boycott campaigns.⁷¹ Groundbreaking instances of this tactic include the boycotts against Nestle's infant formulae, South African wines and Chilean grapes. Recently, these examples have been widely emulated by human rights, feminist, environmental and labour groups. Targets

include clear-cutting by forest companies from British Columbia to Sarawak; Indian carpets made by child labour; US coffee-bars supplied by super-exploited Guatemalan plantation-workers; toys produced in the super-hazardous factories of China, Hong Kong and Thailand; and North American clothing chains selling garments manufactured in Taiwanese-owned sweatshops located in El Salvador.

In many ways, capital's own globalising momentum opens the door to such counter-attacks. By making the effects of sweated labour and intensified environmental destruction reverberate world-wide, planetary corporations unintentionally prompt the making of connections between conditions at the point of production and decisions at the point of sale. The heightened combativeness of the international market, the consequent corporate dependence on image and public relations, and, above all, the very communication networks vital to global production and global advertising, have made business vulnerable to challenges in the world marketplace. Thus, for example, a campaign waged by labour, religious and other groups across North America against the exploitation of sweated labour by the sportswear giant Nike could focus on the fact that in 1992 the company paid basketball superstar Michael Jordan more for his promotional efforts than the combined yearly income of 30,000 young Indonesian women who toiled to piece together the sneakers he advertised. The same campaign also used the Internet to co-ordinate international global 'phone zaps' of Nike headquarters.⁷²

An even more striking example is that of the British 'McLibel 2.' Two British activists were sued by McDonald's hamburger chain for distributing leaflets denouncing the corporation's low-wage labour practices, child-targeted advertising, involvement in rainforest destruction, animal welfare record, and promotion of unhealthy diet. By

assembling a volunteer defence of international experts that substantiated their accusations they turned the five-year civil trial--the longest in British history--into a public relations fiasco for the company. Worldwide 'McLibel' support groups have distributed over 1.5 million copies of the original leaflets, as well as sponsoring numerous demonstrations and disruptions at McDonald's across the world.

They have also created McSpotlight, a World Wide Web site combining text, graphics, video and audio materials in a thoroughgoing critique of the corporation. The Guardian newspaper reported that this site "claimed to be the most comprehensive source of information on a multinational corporation ever assembled--and that doesn't sound like an exaggeration."⁷³ McSpotlight, in addition to documenting the McLibel trial and the claims of the original leaflet, contains news of other anti-corporate campaigns and discussions of alternatives to food production by multinational corporations. It reported 190,000 hits in its first week, email responses at a rate of forty a day, and was widely reported by the mainstream press, further discomforting its corporate adversary.

The use of new information channels has also been important in throwing the light of public attention on the shadow-work of domestic labour. This has been particularly telling in the highly image-conscious fashion industries, where contracting and subcontracting allow major corporations to distance themselves from slave-like conditions of production. Here feminist organisations have built alliances both among the internationally dispersed home workers and between these labourers and the shoppers--themselves predominantly women--who purchase the products they make.

In doing so they have availed themselves of the most up-to-date means of communication. Thus on the World Wide Web one can find the well-appointed home pages

of organisations such as the Clean Clothes Campaign, a movement started in 1990 by Dutch women supporting striking Filipino garment workers in the Bataan Free Trade Zone. Its web site carries information about homeworkers unions and support organisations, strikes in Lesotho, Nicaragua, Vietnam, Egypt, Jamaica, Sri Lanka and California, discussions of the strengths and weaknesses of corporate 'codes of conduct' and 'social clauses' in free trade agreements, news of boycotts and information about other ways shoppers can support workers, for example through the use of "clean clothes scorecards."⁷⁴

Such sites sometimes contain self-reflection on the means of communication. For example, the "North South Dignity of Labor Web Site," run by Centre Nuovo Modello di Silvuppo in Italy, at once affirms the use of computer networks in co-ordinating and distributing information of world wide scope and recognises the limitations of access to such technology. It affirms the continued importance of more traditional means such as mail and face-to face-meeting, and ends by asserting a strategy of parallel channels: "Each of these means is, in its own way, irreplaceable, because it makes possible something that all the others do not. Therefore we shall go on using them all."

This is not the place to analyse all the strengths and pitfalls of boycott tactics. They can, without careful agreement amongst the different parties involved, lead to disastrous contradictions.⁷⁵ But the experiments described here do seem significant. They show electronic communications deployed to link labour, ecological and feminist perspectives, connecting oppositions to capital across the fields of production, consumption and reproduction. Aimed at specific products, they nevertheless inevitably prompt questioning of the consumerism that is the complement to capital's doctrine of endless work. And they do so by mobilising withdrawals of consumption power over the same global terrain on

which capital attempts to stimulate it, taking the same technological means corporations deploy to co-ordinate exploitation and depredation in lonely and underreported places and turning them into instruments of exposure and contestation.

Cross-Border/On-Line

The scope of oppositional networking exceeds resistance to specific corporations. Capitalist globalisation entails the subordination of state policy and public spending to international financial flows and treaty obligations. Consequently, opposition to it, whether insurrections against structural adjustment programs or mobilisations against free trade agreements, tend to catalyse the formation of broad movements involving diverse sectors of the working class with interests in resisting privatisation, deregulation and austerity. Further, the transnational logic of capital gives a powerful impetus to the connection of these revolts in regional and multinational organisations. However, such coalitions require the resolution amongst potential participants of real contradictions and conflicts of interest resulting from capital's international division of labour. They thus depend on communicational channels for information, discussion, and debate.

This was very apparent in struggles around the North American Free Trade Agreement (NAFTA). When the final draft of this treaty was announced by the governments of the USA, Mexico and Canada in August 1992, it was rapidly apparent that an agreement that gave capital unlimited mobility across borders, pitted labour forces in direct competition with one another, and dismantled a wide range of public services would encounter resistance in all three countries.⁷⁶ However, co-ordination of a trilateral opposition faced serious obstacles. In the US and Canada the anti free-trade movement

often tended toward a national-chauvinist protectionism. Development of an alternative direction partly depended on contact with and understanding of Mexican social movements. Such efforts would, however, run contrary to both the corporate media's pro-NAFTA predisposition and neglect of issues in the South, and the Salinas' regime's state control over the Mexican news flows.

In fact the NAFTA debate spawned a wide variety of alternative communications across the Canadian, US and Mexican border. Visits, personal contacts, conferences, tours, and transborder exchanges, particularly visits to maquiladoras by US and Canadian workers, became frequent amongst activists. While there were important organisational nodes for these transfers, they proceeded from a multiplicity of points in complex and interweaving paths. This circulation of struggles and perspectives was not only carried by on the ground contacts but was also made through newsletters and journals, videos, alternative radio and television broadcasts, and computer networks. These provided the media for the discussion of strategy and tactics, reports on conferences, announcement of cross-border exchanges, organising efforts and human rights appeals.

Focussing again on computer networks, John Brenner and Fredrick Howard have both made inventories of the anti-NAFTA organisations using online communication.⁷⁷ These include the North American Worker-To-Worker Network, supporting the connections, within and without official union frameworks, between US and Mexican workers in the automobile, telecommunications and electronics sectors. They also number feminist organisations, such as El Paso's La Mujer Obrera, fighting to improve the conditions of women workers in the border regions, and Mexico City-based Mujer a Mujer; green organisations, tracking pollutant flows across three borders, or funnelling

information from North American sources to Mexican opponents of medfly spraying in Chiapas; and a variety of US and Mexican-based services that specialised in disseminating critical analysis of the free trade negotiations.⁷⁸

The anti-NAFTA coalitions, while mobilising a depth of opposition entirely unexpected by capital, failed in their immediate objectives. But the transcontinental dialogues that emerged checked--though by no means eliminated--the chauvinist element in North American opposition to free trade. The movement created a powerful pedagogical crucible for cross-sectoral and cross-border organising. And it opened pathways for future connections, including electronic ones, that were later effectively mobilised by the Zapatista uprising and in continuing initiatives against maquiladora exploitation.

While the intensity of transborder networking catalysed by NAFTA was perhaps exceptional, both because the treaty so sharply posed issues of capital mobility and because of North America's situation as a centre of communications technologies, the phenomena is by no means unique. Thus, if we turn from the Americas to Asia, we can see a similar process unfolding, albeit in a more diffuse way. Over the last five years, India has been systematically opened up to the world market under a New Economic Policy, adopted under pressure from the IMF and World Bank.⁷⁹ In 1992, an estimated 15 million workers participated in a one-day nation-wide industrial strike to protest this process.⁸⁰ Resistance has taken a number of forms--some fundamentalist and fascist, such as the Bharatiya Janata Party, others of a broadly left nature.⁸¹ Amongst these latter there has emerged a variety of transnational alliances, solidarities and contacts with oppositional movements both in other Asian countries and in the North. These connections flow through multiplicitous channels of oral, written, film, video, and computer communication.

Thus we find world-spanning alliances between Northern environmentalists and Indian 'tribals' and urban intellectuals opposing the World Bank's Narmada dam project--fed by a circulation of films, videos and email; Indian peasant movements fighting GATT's intellectual-property clauses visited by Canadian organic farmers, who carry with them books analysing the activities of multinational seed corporations, return with films and videos of these same corporation's offices sacked by million-strong demonstrations, and keep in touch by e-mail; Internet solidarity appeals from Indian workers occupying jute factories; Northern NGOs electronically-scanning data banks for details of commercial plans to patent plant and animal species and transmitting the news back to the resistance organisations of Indian, Thai and Sri Lankan farmers; and Indian labour and human rights organisations sending delegates and films to North American trades unions supporting boycotts of Walmart megastores selling carpets made by child labour.⁸²

These initiatives proceed without central focus. They constitute a diffuse coalescence of micro-activisms contesting the macro-logic of capitalist globalisation. I would suggest that similar constellations could probably be found forming at virtually any point on the planet. They exist as a sort of fine mist of international activism, composed of innumerable droplets of contact and communication, condensing in greater or lesser densities and accumulations, dispersing again, swirling into unexpected formations and filaments, blowing over and around the barriers dividing global workers. In the next section we will consider some of the thunder and lightning that accompanies these clouds.

Netwars and Anti-Wars

At its cutting edge, capitalist globalisation means war--not only the immediate violence of military attack, whether in the form of imperial invasion or low-intensity conflicts, but also the sustained social and environmental violence of starvation, social disintegration, and deprivation that in turn sets the scene for ethnic rivalries and internal conflict. Consequently, the circulation of struggles between a multiplicity of movements--trades unionists, feminists, ecologists, indigenous people--has increasingly taken the form of a front arrayed in the name of peace: life against death, a refusal to accept the sentence that says what is not profitable must be erased. The great international mobilisation of the anti-nuclear movement of the 1980s, which was coloured by the particular interest of the inhabitants of the North in avoiding the punctual holocaust of nuclear armageddon, has in a sense broadened and deepened to become a demand, enunciated from a wide variety of sites, for the end of the everyday holocausts proliferating all over the planet. This perspective is not strictly pacifist, since it usually entails recognition of the right of resistance against exploitation and degradation. But it seeks to block the infinitely greater exterminatory violence brought to bear on such revolts, in order to defend a space for the creation of alternative social options. The new counter-networks transmit an old slogan: "Bread and Peace."

Communication is, again, vital--for exposing the actual or potential atrocities that capital prefers to have executed in secret. The most striking example is of course the uprising of the Zapatista Army of National Liberation against the Mexican government in 1994--a revolt that specifically denounced capitalist globalisation as the culmination of a centuries-long dispossession of the people of Chiapas. In an important analysis, Harry Cleaver has suggested that the success of the EZLN in avoiding the normal fate of peasant

revolts in Mexico--outright massacre--was partly due to their weaving of an "electronic fabric of struggle."⁸³ Despite the Zedillo regime's control of Mexico's mainstream media, the EZLN was able to rapidly disseminate its own communiques not only within Mexico but globally. This was accomplished largely through the network of electronic contacts established via the Internet during the NAFTA campaigns. EZLN documents and news reports flashed into conferences and lists on networks such as Peacenet and Usenet. They were then rediffused, accompanied by additional information, analysis and discussion from those familiar with the situation in Chiapas, into other parts of the Internet, and from thence into left-wing newspapers, magazines and radio stations, and, eventually, into the mainstream press.

This "communicative action" then passed into "physical action," not only in a world-wide series of protests at Mexican embassies and government offices, but in an influx of Zapatista supporters--journalists, human rights observers, delegations--into Chiapas.⁸⁴ This occurred in a context where NAFTA had made Mexico an exemplar of capitalist development and an object of intense scrutiny by international investors. Cleaver suggests that, together with the many protests within Mexico, it was this focusing of global attention that made it impossible for the Zedillo government to impose a purely military solution, and compelled it to switch to cease-fire and mediated negotiations.

After the initial moments of the revolt, the "electronic fabric of struggle" was strengthened with new threads. Videos made in Chiapas have gone North: microwatt broadcasting has gone South, as radio-activists from Free Radio Berkeley assist Zapatistas and local autonomists set up their own micro-watt transmitters. The translation of entire books of EZLN documents has been co-ordinated in cyberspace, and the Zapatistas have

established there own "Ya Basta" World Wide Web site.⁸⁵ And these electronic flows have in turn attracted interest in the encuentros organised by the EZLN with the explicit aim of stimulating global opposition to neoliberalism--international meetings whose discussions have then in turn been relayed out across airwaves and networks.

For capital and its advisors, such activity is a threat. This was acknowledged by some of its own analysts. In the aftermath of the Gulf War slaughter, two RAND corporation analysts, John Arquilla and David Ronfeldt, had written a paper suggesting that the conflicts of the future would take the form of "cyberwars" and "netwars."⁸⁶ Cyberwar, waged at a purely military level might "be to the twenty first century what blitzkrieg was to the twentieth."⁸⁷ It would be a type of conflict "in which neither mass nor mobility will decide outcomes; instead, the side that knows more, that can disperse the fog of war yet enshroud an adversary in it, will enjoy decisive advantages."⁸⁸ Netwar is a broader concept of "societal-level ideational conflicts waged in part through internetted modes of communication" and entails "trying to disrupt, damage, or modify what a target population knows or thinks it knows about itself and the world around it":

it may focus on public or elite opinion, or both . . . involve public diplomacy measures, propaganda and psychological campaigns, political and cultural subversion, deception of or interference with local media, infiltration of computer networks and databases, and efforts to promote dissident or opposition movements across computer networks⁸⁹

Cyberwar and netwar are "forms of war about 'knowledge,' about who knows what, when, where, and why."⁹⁰ Both "revolve around information and communications" and imply that in future conflicts "whoever masters the network form will gain major advantages."⁹¹

Shortly after the outbreak of the Zapatista revolt, Ronfeldt was interviewed on the situation in Mexico. Although in his earlier writings he had focussed on information technologies as instruments of inter-state conflict, he had also noted that netwar applies to "low intensity conflict" by "non-state actors, such as terrorists, drug cartels, or black market proliferators of weapons of mass destruction." By "making it possible for diverse, dispersed actors to communicate, consult, co-ordinate, and operate together across greater distances, and on the basis of more and better information than ever" netwar might create a terrain favourable to what would otherwise be small and conventionally weak organisations. Ronfeldt now emphasised that social activists were on the cutting edge of the new "network" system of organising. Noting the use by Zapatista's and other opponents of Zedillo of Internet, fax and video, he suggested that;

At a time when the political and economic crisis has created widespread disaffection . . . network style organising will enable the opposition to overcome its traditional factionalism. The greatest threat to the government could be hundreds or thousands of independent groups united in their opposition but accepting of each other's autonomy.⁹²

Although the "decentralisation" of this oppositional force meant it could not "take national power," Ronfeldt suggested its activities could make Mexico "ungovernable";

The risk for Mexico is not an old-fashioned civil war or another social revolution . . . The risk is social netwar. The country that produced the prototype social revolution of the 20th century may now be giving rise to the prototype social netwar of the 21st century.⁹³

What Ronefldt calls "netwars" I would rather call "anti-wars"--the mobilisation of worldwide communications to hold open spaces within which experiments in autonomy can escape extermination.

Three Examples

Subcommandante Marcos, inputting communiqus to a laptop plugged into the lighter socket of an old pickup truck, has by now become something of a mythical figure both for the left and its enemies. But the communicational logic demonstrated by the Zapatista's is not limited to Chiapas. I will point briefly to some other examples, from Asia, Africa, Europe and the South Pacific.

One is East Timor. Here, until a very few years ago, the Indonesian government's invasion and genocide could proceed in quiet obscurity thanks to the huge interests of multinational capital in the development of one of Asia's most populous and resource-rich markets. In the early 1990s this changed, largely due to three events: the filming by British television journalists of the massacre of student demonstrators in Dilli; the circulation of the independently-produced film, "Manufacturing Consent," giving central place to Noam Chomsky's analysis of mainstream media silences about Timor; and the establishment of

several computer news groups, email lists and web sites giving information about the situation on the island.⁹⁴

This dissemination of news and analysis has encouraged a proliferation of international actions in support of the Timorese resistance, including civil disobedience and sabotage in England against an aerospace company supplying fighter jets to Indonesia; North American student protests against university co-operation with the Suharto regime; and contacts between Timorese resistance leaders and US workers in Charleston, Illinois, striking against a company with commercial links to the Indonesian government.⁹⁵ Furthermore, the illumination of the Timorese situation has spilled over to shed light on other human rights abuses in Indonesia, including the repression of trades unions and students, and the implication of mining corporations such as Freeman McMoRyan in the ravaging of Irian Jaya.⁹⁶

The second case is that of Nigeria. Here again, there is a long history of struggle against the military regime whose self-styled "wasting operations" have swept across pollution drenched landscapes, protecting the operations of Shell Oil from a population whose living standards have dropped twenty-five per cent in the last twenty-five years.⁹⁷ And again, this struggle was shrouded in a handy--from the point of Shell and General Abacha--oblivion. Until the execution of Ken Saro Wiwa and nine other activists. For Saro Wiwa's role as an author and television playwright placed him at the centre of a web of cultural and communicational networks. As these transmitted the news of his death, they stimulated an unprecedeted volume of mainstream analysis of the Nigerian situation. This provided the opportunity for international solidarity groups to set underway major demonstrations and boycotts against Shell, actions that were publicised and organised

through alternative networks of computer, print, and film.⁹⁸ This activity in turn built pressure for other campaigns driving for trade sanctions, and all rolled together to create an unprecedented attention to the cost in Nigerian blood of corporate oil.

In Timor and Nigeria, unlike Chiapas, this flow of information has brought no immediate lessening of horrors. But it has resulted in an intensified circulation of struggles. It is, I emphasise, resistance on the ground, in the streets--the willingness of people to fight and die--that lies at the base of these situations. But when the cries of the wounded, the crackle of machine gun fire, and the pop of tear gas enter into global communication networks, they can create a series of feedback effects and noise very unpleasant to capital. For business went global to find stability and predictability. In search of these goals it will turn a blind eye to, and pay for, unspeakable atrocities. But when such atrocities become visible, capital's very mobility can destabilise its own operations. Facing imponderable risks--the costs of public relations, the consequences of international protests, the rising morale of the local resistors--money sometimes finds it easier to migrate than fight, relocating production elsewhere or evaporating into financial speculation.

And this volatility can create difficulties for the local authorities whose task it is to maintain the conditions of accumulation at gunpoint. On some recent occasions, the flight of private funds from 'hot spots' has created the need for massive intervention by the highest levels of capitalist organisation. In Mexico, partly as a result of the war in Chiapas, and in Russia, partly as a result of war in Chechnya, global financial institutions have had to siphon in billions of dollars to uphold the regimes they are depending on to secure the open market. The funds available for such rescue operations are vast, but not limitless; this is a

game that that can be repeated once or twice simultaneously, but perhaps not five or ten times.

Let us give one other example of oppositional networking. In 1995, France's government announced an austerity plan aimed at meeting the Maastricht treaty's requirements for European financial union. The response was a four-week strike-wave that put millions of French workers, students and citizens into the streets in what has been termed --a tad Eurocentrically-- "the first revolt against globalisation."⁹⁹ These domestic actions coincided with an international outcry against French nuclear testing in the Pacific, which included mass rioting in Tahiti and other islands in the region, world-wide demonstrations outside embassies and airline offices, and a boycott call against French wines. A few months later, the shipment of French nuclear wastes across European borders precipitated three days of pitched battle between German protestors and police.

The link between these apparently disparate events was made in a novel way on the computer list "counter@francenet.fr" that circulated news of the strike. Here an Italian group, Strano Network, proposed a "net' strike" ("greve en reseau") against French government internet sites, to be conducted by inundating them with hits to the point of paralysis. The proposal reads:

The French government shows a total contempt for its people, for the international community and for ordinary people who want to see their children grow up in a better world. It carries out nuclear tests in the Pacific. It continues to use "civilian nuclear power." It maintains its projects of "social reconstruction" despite demonstrations of massive opposition. For

these reasons we intend to take away (although partially, and for a limited period) from the institutions of the French government the privilege which all the powerful--the lords of war, famine and social injustice--seek: access to the ever more powerful means of communication and the channels of information, those same privileges which are denied to the vast majority of the global population.¹⁰⁰

The proposal stirred some online debate about its utility or desirability as a tactic, but Strano Network persisted with its initiative, and later issued a report claiming the participation of "several thousands of strikers" and success in shutting down numerous French government sites.¹⁰¹

The significance of the strike does not lie so much in its immediate effectiveness--a point on which the critics of Strano Networks are probably right--as in the linkages it made, tying together in a world-wide electronic bulletin the austerity inflicted on French workers and the nuclear fallout imposed on Pacific islanders, pointing to the value placed by neoliberalism on military as against civilian expenditures, and to its disregard for popular opinion, global or domestic. Connecting the marchers in the streets of Rouen, the rioters in Papeete, and, prefiguratively, the German anti-nuclear protestors, it thus created an optic within which the French government's partial retreat from its domestic cutbacks and its abandonment of nuclear testing could be grasped as twin victories against a common enemy. The logic of France's Juppe government and its business and financial backers is that of capitalist globalisation. The logic of Strano network, of the French strikers, and the German and Pacific Island rioters, is that of the other globalisation.

The globalisation of Others & the Other globalisation

In an earlier era, prospects of breaking through the net of the world market were often thought to lie in the piecemeal withdrawal or disassociation of liberated zones, which would succeed first in peripheral zones, and gradually surround and destabilise the capitalist centre. This concept was given classic expression in Samir Amin's theory of "delinking"-often interpreted, and in some cases implemented, as a program of nationalist autarky.¹⁰² In today's situation, where the integration of economic activity has reached an entirely new level and the positions of metropolis and periphery become profoundly intermingled, such concepts become increasingly problematic. At the very least, it is paradoxically apparent that any localised delinking can only succeed as a moment in a series of highly linked, mutually supportive regional and transnational projects of withdrawal.

In the current context a more promising line of initiative is what Jeremy Brecher and Tim Costello call " globalisation from below."¹⁰³ This refers to the activities of "peoples transnational coalitions," formed across national boundaries by social movements aiming to fulfil mutually complementary supportive objectives for workers in different parts of the world.¹⁰⁴ Brecher and Costello suggest that such movements will come to oppose the "downward harmonisation" of wages, social wages, human rights and environmental standards effected by free trade agreements and financial discipline with demands for "harmonisation upward"; they will have as a priority the democratisation of economic institutions, and be oriented toward the creation of "a multilevel one-world economy (with) regulation above and below the level of the nation state, and powers

devolved downward and upward."¹⁰⁵ Such proposals are often presented within a reformist perspective that obscures the depth of confrontation with capital that their realisation would require. Nevertheless, " globalisation from below" seems to roughly correspond to many of the tendencies in transnational struggles identified in this chapter.

I have suggested that the increasing circulation of struggles during the crisis of the 1960s and 70s compelled capital to a fundamental reorganisation, one which broke down the previous 'triplanetary' segregation of the globe into First, Second and Third Worlds. The objective of this manoeuvre was to unify and integrate the circuits of profit while severing and destroying connections amongst the working class, decomposing points of opposition and unrest from the industrial factory to the jungle paddy field. This process has, however, unintentionally created the terrain for a new recomposition of oppositional forces--not least by its fabrication of a world-wide net of communications, a net formed to facilitate the operations of the market, but increasingly expropriated by oppositional forces for very different purposes. The result has been to produce not one, but two globalisation processes --simultaneous, superimposed, interdependent and antagonistic.

The first is capitalist globalisation. Its tendency is to create incredible wealth and power for the few controlling the flows of international investment and finance; improvements in living conditions within a persisting context of exploitation for some; and, for very many, a chaos of immiseration. Celebrated, with partial truth, as the unification of the planet, this globalisation also carries within itself a lethal acceleration of divisions and antagonisms. For its mechanism is an intensification of competition within a planetary market, an intensification of polarities and hierarchies in a 'one world' economy, a relentless setting of labour against itself--a globalisation of 'others.'

The alternative, opposing tendency is that of the world wide counter- movements confronting transnational capital. As Waterman points out, these movements appear to have "no international headquarters, no organisation, . . . no obvious terrain of battle"; but "alternatively, one could say that they have many headquarters, many organisations--and many terrains, forms and levels of struggle."¹⁰⁶ Appearing first as a series of sporadic and localised neighbourhoods of survival and communities of resistance, these struggles are generating a series of connections, contacts, coalitions and networks of co-operation. They aim at the creation of a world space that , rather than being subject to the monologic of capital, contains within it the conditions for the interaction of diverse ways of living and organising. This is `the other globalisation.'

Notes

¹ Karl Marx, Capital: A Critique of Political Economy vol. 1 (New York: Vintage Books, 1977), 929.

² Marx, Grundrisse (Harmondsworth: Penguin, 1973) 524-525.

³ Karl Marx and Freidrich Engels, The Communist Manifesto (New York: Washington Square Press, 1964) 64.

⁴ Marx and Engels, 64.

⁵ Marx and Engels, 73.

⁶ See Manuel Castells, The Informational City: Information Technology, Economic Restructuring and the Urban-Regional Process (Oxford: Blackwell, 1989); David Harvey, The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change (Oxford: Blackwell, 1989); Joyce Kolko, Restructuring the World Economy (New York: Pantheon, 1988); Robert Ross and Kent Trachte, Global Capitalism: The New Leviathan (New York: University of New York 1990); Gary Teeple, globalisation and the Decline of Social Reform (Toronto: Garamond, 1995).

⁷ This approach is strongly influenced by Harry Cleaver's observation that most Marxist analyses of the expanding planetary scope of capitalism--e.g. the Hobson-Bukharin-Leninist theory of imperialism, dependency theory, and world-systems theory-- focus on the totalising, world-wide imposition of commodity relationships to the neglect of the resistances and alternatives that challenge this process, Cleaver, "Secular Crisis in Capitalism: The Insurpassability of Class Antagonism," Rethinking Marxism Conference, Amherst, 1993, says "Because of the top-down orientation of these projects, nowhere has

there been an attempt to grasp the logic of capitalist development in terms of the autonomous self-activity of the people struggling against it."

⁸ See Zerowork Collective, "Introduction," Zerowork: Political Materials 1 (1975):reprinted in Midnight Notes Collective , Midnight Oil (New York: Autonomedia, 1992) 108-114 and Cleaver, Reading Capital Politically (Brighton: Harvester, 1979).

⁹ Cleaver, Reading Capital 43.

¹⁰ In addition, the appearance in the Second World of dissident movements experimenting in alternative forms of socialism and self-management, such as the Prague Spring, undermined the stability not only of the Stalinist regime, but of the Cold War polarisation on which so much capitalist control rested, and breathed new life into the European left.

¹¹ To focus on the role of this wave of international unrest in precipitating the economic crisis is not to discount other factors--for example, the intensified international competition resulting from the post-war recovery of European and Japanese industry. It is, however, to place such issues of intercapitalist rivalry in the context of the greater issue that faced capital as a whole--namely, the control of socialised labour. If Japanese capital constituted a challenge to North American capital this is precisely because the former, having, with US help, inflicted a significant defeat on their own working class in the immediate post-war period, were in a position to squeeze more cooperation and creativity out of 'their' workers for less money, while social militancy confronted U.S. business with rigid or rising wages and social costs (see Joe Moore, Japanese Workers and the Struggles for Power 1945-1947 (Madison: University of Wisconsin, 1983).

¹² On the place of the 'oil shock' in restructuring see *Midnight Notes*, *Midnight Oil* (New York: Autonomedia, 1992).

¹³ Mario Montano, "Notes on the International Crisis," *Zerowork* 1 (1975) 52-53. Repr. *Midnight Notes*, *Midnight Oil*. 115-143,

¹⁴ Montano, 52-53

¹⁵ Montano, 52-53

¹⁶ Folker Fobel, Jurgen Heinrichs and Otto Krege, *The New International Division of Labour: Structural Unemployment in Industrialised Countries and Industrialisation in Developing Countries* (New York: Cambridge, 1988).

¹⁷ Monsanto, 31.

¹⁸ On these points see, in addition to the sources already cited, Arthur MacEwan, "What's "New" About the "New International Economy"?" *Socialist Review* 21. 3/4 (1991) 111-131.

¹⁹ Caffentzis, George, and Silva Federici "Modern Land Wars and the Myth of the High-Tech Economy," *The World Transformed: Gender, Labour and International Solidarity in the Era of Free Trade, Structural Adjustment and GATT*, ed. Cindy Duffy and Craig Benjamin (Guelph, Ontario: RhiZone, 1994) 144; See also Maria Mies, *Patriarchy and Accumulation on a World Scale: Women in the International Division of Labour* (London: Zed Books, 1986); Maria Mies, Veronika Bennholdt-Thomsen and Claudia von Werlhof, *Women: The Last Colony* (London: Zed Books, 1988); and various essays in Mariarosa Dalla Costa and Giovanna Dalla Costa, eds, *Paying the Price: Women and the Politics of International Economic Strategy* (London: Zed Books, 1995).

²⁰ Heather Menzies, Fast Forward and Out of Control (Toronto: MacMillan, 1989) 96, observes that through its global information network, the giant US firm, Bechtel Corp can "take advantages of differential labour costs by employing lower salaried architects in India to draft construction plans, which become instantaneously available via satellite to supervisors in one corner of the world and project managers in another. Bechtel can use up to the minute financial information to get the best financing rates from New York banks and insurance from a London company. It can then manage the construction of the project in the middle of Saudi Arabia by using Korean workers, Indian architects, American managers and European material managers. Computer communications makes it all possible."

²¹ See Kim Moody, "When High Wage Jobs Are Gone, Who Will Buy What We Make?"

Labor Notes, June 1994, 8.

²² Ben Bagdikian, "Cornering Hearts and Minds: The Lords of the Global Village," 12 June, 1989 Nation, 805-820. For recent discussion of the degree of US domination in global media see David Morely and Kevin Robins, Spaces of Identity: Global Media, Electronic Landscapes and Cultural Boundaries (London: Routledge, 1995) and Benjamin Barber, Jihad vs McWorld (New York: Times, 1995).

²³ Pico Iyer, Video Night in Kathmandu: And Other Reports From the Not So Far East (New York: Knopf, 1988).

²⁴ On these tendencies see Armand Mattelart, Advertising International: The Privatisation of Public Space (New York: Routledge, 1991)

²⁵ Theodore Levitt, "The globalisation of Markets." Harvard Business Review 6.1 (1983): 92-102.

²⁶ Cited in Arif Dirlik, "Post Socialism/Flexible Production: Marxism in Contemporary Radicalism," Polygraph 6/7 (1993): 156-157.

²⁷ An egregious example is the radio series by Gwenn Dyer, "Millenium," CBC Radio, Jan. 1996.

²⁸ James O'Connor, The Fiscal Crisis of the State (New York: St Martins, 1973). On this point see also Harry Cleaver, "The Subversion of Money-As-Command Within the Current Crisis," Conference on Money and the State, Mexico City, Mexico, 14-17 July, 1992.

²⁹ MacEwan, 123. See also Howard Wachtel, The Money Mandarins: The Making of a Supranational Economic Order (London: Pluto, 1991).

³⁰ Richard Barnet and John Cavanagh, Global Dreams: Imperial Corporations and the New World Order. (New York: Simon Schuster, 1994) 399.

³¹ Barnet and Cavanagh, 399.

³² Christian Marazzi, "Money in the World Crisis: The New Basis of Capitalist Power." Zerowork 2 (1977): 107

³³ Cleaver, "The Subversion of Money as Command."

³⁴ On the debt crisis see Cleaver, "Close the IMF, Abolish Debt and End Development." Capital and Class. 39: (1990) 17-50, and Dalla Costa and Dalla Costa.

³⁵ As George Caffentzis observes, "Rambo on the Barbary Shore," , Midnight Oil, ed. Midnight Notes Collective (New York: Autonomedia, 1992) 299-300, this dual military strategy has mirrored economic development: "It is premised on the Vietnam era revolt against mass military service between 1965-73, just as recent economic strategy premises the revolt of the mass factory worker in the late 1960 and early 1970s. . . .(T)he military's

"solution"--a combination of buying automated death machines and hiring out the "dirty jobs" to low wage mercenaries abroad --is identical to the economic "solution"-- automation and computerisation of domestic production and the exportation of "dirty work" to the "dirt wages" of the "free trade zones" of the Philippines, Singapore, South Korea, Mexico and so on."

³⁶ Hamid Mowlana, "Roots of War: The Long Road to Intervention," Triumph of the Image: The Media's War in the Persian Gulf -- A Global Perspective ed. Hamid Mowlana, George Gerbner, and Herbert Schiller (Boulder: Westview, 1992) 35. This collection contains many other excellent papers of the issues discussed in this section. See also Haim Bresheeth and Nira Yuval-Davis, eds., The Gulf War and the New World Order (London: Zed Books, 1992) and John MacArthur, Second Front: Censorship and Propaganda in the Gulf War. New York (Hill and Wang, 1992).

³⁷ Robert Reich, The Work of Nations: Preparing Ourselves For 21st Century Capitalism (New York: Knopf, 1991).

³⁸ Reich 111.

³⁹ Reich 312.

⁴⁰ Jeremy Brecher and Tim Costello, Global Village or Global Pillage: Economic Reconstruction From the Bottom Up (Boston: South End, 1994).12.

⁴¹ On this point see Butch Lee and Red Rover, Night-Vision: Illuminating War & Class on the Neo-Colonial Terrain (New York: Vagabond Press), 1993.

⁴² On these tendencies in the computer industry see Eric Auchard, "Discount Programming: The Global Labour Market," CPU: Working in the Computer Industry 001. (1993): 13-24. online, Internet.

⁴³ This is the route followed by Nike as its footwear plants flee across the world. See John Cavanagh and Robin Broad note, "Global Reach: Workers Fight the Multinationals," Nation, 18 Mar., 21-24.

⁴⁴ See the important analysis in Midnight Notes Collective, "The New Enclosures," Midnight Oil, (New York: Autonomedia 1992) 317-333. On tendencies to global immiseration, Michel Chossudovsky, "The Globalisation of Poverty and the New World Economic Order," Working Paper #9114E, Department of Economics, Faculty of Social Sciences, University of Ottawa, 1991, and Riccardo Petrella, "World City States of the Future." New Perspectives Quarterly 8.4 (1991) 59-63.

⁴⁵ See for example Cynthia Hamilton, "Urban Insurrection and the Global Crisis of Industrial Society," The World Transformed, ed. Cindy Duffy and Craig Benjamin, (Guelph, Ontario: RhiZone, 1994) 169-179.

⁴⁶ On this point see Midnight Notes, "The New Enclosures."

⁴⁷ Robin Cohen, The New Helots: Migrants in the International Division of Labour (Vermont: Gower, 1987).

⁴⁸ See Caffentzis and Federici, 140.

⁴⁹ Mariarosa Dalla Costa, "Development & Reproduction," Common Sense 17 (1995): 29.

⁵⁰ Romano Alquati, "The Network of Struggles in Italy," unpublished paper, Red Notes Archive, 1974.

⁵¹ Romano Alquati, "The Network of Struggles in Italy," unpublished paper, Red Notes Archive, 1974.

⁵² Romano Alquati, "The Network of Struggles in Italy," unpublished paper, Red Notes Archive, 1974.

⁵³ Frantz Fanon, "This is the Voice of Algeria," in A Dying Colonialism (New York: Monthly Review, 1965) 69-98.

⁵⁴ Peter Golding, "World Wide Wedge: Division and Contradiction in the Global Information Infrastructure," Monthly Review 48.3 (1996) 82.

⁵⁵ Golding, 81.

⁵⁶ Lee and Rover, 129.

⁵⁷ On the Kayapo see Ella Shohat and Robert Stam, Unthinking Eurocentrism: Multiculturalism and the Media (London:Routledge, 1994).

⁵⁸ Seeds of Struggle, presented by Brewster Kneen at Simon Fraser University, 4 Nov., 1996. Kneen, editor of The Ram's Horn magazine and author of Trading Up: How Cargill, the World's Largest Grain Company is Changing Canadian Agriculture (Toronto: NC Press, 1990) was invited to India to assist in the "seed satyagraha" whose demonstrations culminated in the destruction of Cargill's India offices. This account of the circulation of struggles drives from personal conversations with him.

⁵⁹ See Bruce Girard, ed., A Passion for Radio (Montreal: Black Rose, 1992).

⁶⁰ See Nancy Thede and Alain Ambrosi, eds., Video the Changing World. (Montreal: Black Rose, 1991).

⁶¹ See Howard Frederick "Electronic Democracy," Edges 5.1 (1992) 13-18.

⁶² See MacEwan.

⁶³ These examples are drawn from Brecher and Costello, Global Village or Global Pillage, and Kim Moody An Injury to One (London: Verso, 1988). Information on the Merseyside dock strike can be found at <http://www.gn.apc.org/lbournet/docks/>

⁶⁴ Moody 297-301.

⁶⁵ Peter Waterman, "International Labour Communication by Computer: The Fifth International?" Working Paper Series 129 (The Hague: Institute of Social Studies, 1992). See also his "Communicating Labour Internationalism: A Review of Relevant Literature and Resources," Communications: European Journal of Communications 15. 1/2 (1990): 85-103, and "Reconceptualising the Democratisation of International Communication," International Social Science Journal 123 (1990): 78-91.

⁶⁶ Waterman, "International Labour Communication by Computer" 38.

⁶⁷ Waterman, "International Labour Communication by Computer" 35.

⁶⁸ Cited Waterman, "From Moscow With Electronics: A Communication Internationalism For an Information Capitalism," The Democratic Communique 11:2/3 (1994) 11.

⁶⁹ Waterman, "From Moscow With Electronics" 15.

⁷⁰ Waterman, "International Labour Communication by Computer," 67, citing Fred Stanglaar, "An Outline of Basic Principles of Alternative Communication," Workshop on International Communication by Computer, Institute of Social Studies, The Hague, 27 Oct. 1985.

⁷¹ The periodical Boycott Quarterly is entirely devoted to this strategy.

⁷² Cavanagh and Broad, 22.

⁷³ The Guardian, 22 Feb., 1996. McSpotlight can be found at <http://www.mcspotlight.org>.

⁷⁴ The Clean Clothes site can be found at <http://www.cleanclothes.org/1/index.html>

⁷⁵ Moreover, as Cavanagh and Broad note, corporations often evade boycotts by implementing tokenist 'codes of conduct' or greenwashing campaigns. Boycotts tend to be effective against products with strong brand loyalties, but less so in industries where this is not so important, or where the consumers are other companies. And there are scores of boycott attempts which fail because, in a context where they can expect little or no attention from mainstream media, they lack the resources to command public attention.

⁷⁶ In the US & Canada, the threat to incomes, social programs and environmental conditions posed by direct exposure to the low wage Mexican economy was obvious. In Mexico, although the government was able to muster significant support for the agreement through lavish promises of development and modernisation, there was opposition from peasants and small farmers threatened by the influx of agribusiness, workers in telecommunications and other public sector industries confronting privatisation, and those who feared the generalisation of 'maquila' conditions. See Cindy Duffy and Craig Benjamin, "Women and the World Transformed," The World Transformed, ed. Cindy Duffy and Craig Benjamin, (Guelph, Ontario: RhiZone, 1994) 83.

⁷⁷ Joseph Brenner, "Internationalist Labor Communication by Computer Network: The United States, Mexico and Nafta," School of International Service, American University, Washington D.C., 1994; Howard Frederick, "North American NGO Networking Against NAFTA: The Use of Computer Communications in Cross-Border Coalition Building,"

XVII International Congress of the Latin American Studies Association, Los Angeles, 24-27 Sep. 1994.

⁷⁸ See also Mujer a Mujer Collective, "Communicating Electronically: Computer Networking and Feminist Organising," RFR/DRF 20.1/2: (1991) 10.

⁷⁹ See Praful Bidwai, "Making India Work--For the Rich," Multinational Monitor 16.7/8 (1995): 9-13, and Michel Chussudovsky, "India Under IMF Rule," The Ecologist 22.6 (1992), 270-274.

⁸⁰ Brecher and Costello, 86.

⁸¹ See Salim Lakha, "Resisting globalisation: The Alternative Discourse in India," Arena Journal 4 (1994/95) 41-50.

⁸² On the Narmada dam struggle see the film Narmada: A Valley Rises, dir. Ali Kazimi, Colour Canada, 1994; on the anti-GATT uprisings, see footnote 57 and Vandana Shiva, "Seeds of Struggle." The World Transformed, ed. Cindy Duffy and Craig Benjamin, (Guelph, Ontario: RhiZone, 1994) 57-70; on biopiracy activism see Yuli Ismartono, and Teena Gill, "Asian Farmers Struggle Against Transnationals," online, Internet, ACTIVE-L, Third World Network, 17 Jan. 1996; Martin Kohr, "Global Fight Against 'Bio-Piracy,'" online, Internet, ACTIVE-L, Third World Network 6 Nov. 1995; the Third World Network can be contacted at twn@igc.apc.org. Also, visit the World Wide Web site of Rural Advancement Foundation International at <http://www.charm.net/~rafi/rafihome.html>; on child labour activism see Broad and Cavanagh.

⁸³ Cleaver, "The Chiapas Uprising," Studies in Political Economy 44 (1994): 15.

⁸⁴ Cleaver, "The Chiapas Uprising," 16.

⁸⁵:Cleaver, "Zapatistas in Cyberspace," Simon Fraser University, Vancouver, 15 Nov. 1994. The text whose translation was co-ordinated via email is Zapatistas: Document of the New Mexican Revolution (New York: Autonomedia, 1994). A communique from Subcommandante Marcos of 17 Mar., 1995, (cited by Jason Wehling, "'Netwars' and Activists Power on the Internet," online, Internet, ACTIV-L, 25 Mar., 1995) refers to the importance of international support for the the revolt in the following terms: ". . .we learned that there were marches and songs and movies and other things that were not war in Chiapas, which is the part of Mexico where we live and die. And we learned that these things happened, and that "NO TO WAR!" was said in Spain and in France and in Italy and in Germany and in Russia and in England and in Japan and in Korea and in Canada and in the United States and in Argentina and in Uruguay and in Chile and in Venezuela and in Brazil and in other parts where it wasn't said but it was thought. And so we saw that there are good people in many parts of the world... when they are old, then they can talk with the children and young people of their country that, 'I struggled for Mexico at the end of the 20th century, and from over here I was there with them . . . and I did not know their faces but I did know their hearts and it was the same as ours.'

⁸⁶ John Arquilla and David Ronfeldt, "Cyberwar Is Coming!" Comparative Strategy. 12.2 (1993): 141-165. Citations are from an electronic copy.

⁸⁷ Arquilla & Ronfeldt.

⁸⁸ Arquilla & Ronfeldt.

⁸⁹ Arquilla & Ronfeldt.

⁹⁰ Arquilla & Ronfeldt.

⁹¹ Arquilla & Ronfeldt.

⁹² Cited in Joel Simon, "Netwar Could Make Mexico Ungovernable." Pacific News Service,.online. Internet, ACTIVE-L, 20 Mar. 1995.

⁹³ Simon.

⁹⁴ Manufacturing Consent, dir. Mark Achbar. On networked information about the Timorese resistance movement, see Charles Scheiner, "Electronic Resources on East Timor," online, Internet, ACTIVE-L, 25 Oct. 1996, availabe from timor_info@igc.apc.org.

⁹⁵ See "US Labor Dispute Raises East Timor," online, Internet, ACTIVE-L, 25 April 1996, and "Ramos Horta to Speak in Charleston," online, Internet, ACTIVE-L, 25 April 1996: the latter describes how Timorese resistance leader Ramos Horta, and Allan Nairn, one of the journalists who reported the Dilli massacre, spoke to members of the United Paperworkers International Union on strike against Trailmobile Corporation "before a backdrop of banners demandingIndonesia end its occupation of East Timor and calling for justice for locked-out Trailmobile workers."

⁹⁶ "Trailer Workers Meet Timor Resistance Leader," online, Internet,ACIVE-L, 15 Aug. 1996.

⁹⁷ Joshua Hammer, "Nigeria Crude," Harper's Magazine June 1996, 58--71.

⁹⁸ See film Delta Force, CARNA Films, 1995.

⁹⁹ Raghu Krishnan, "December 1995: "The First Revolt Against globalisation," Monthly Review 48.1 (1996) 1-22.

¹⁰⁰" Net'Strike--Greve En Reseau," online, Internet, counter@francenet.fr, 19 Dec. 1995, my trans. Valuable archives of computer messages at the time of the strikes can be found at <http://www.lglobal.com/TAO/A-Infos 95-2/0.117.html> and <http://www.anet.fr/~ans>.

¹⁰¹ One dissenter argued that the Internet was not an appropriate site for such sabotage, that the "net'strike" would simply exasperate webmasters of the particular sites, but not be understood as a form of social protest. Moreover, if generalised, this type of sabotage would set in motion a destructive logic: "anti-fascists paralyze the sites of fascists, fascists paralyze the sites of anti-fascists, Christians paralyze the sites of Muslims, Muslims paralyze the sites of Hindus, Hindus paralyze the sites of Christians, Christians paralyze the sites of gays and lesbians, Macintoshennes paralyze sites dedicated to Windows . . .

This would be damaging because "The Net is the best tool of counter power (because it is the best means of diffusion of information and knowledge is power) which we have been given. It is our greatest treasure, for us militants, too--don't count on me to engage in an action that would damage it." Another said "To see the net as a means of direct action seems to me an error for two reasons: one is its inefficiency, the other is that it can very well be turned against sites and means of diffusion such as this one here." On Boxing Day, 1995, Strano issued an email bulletin, "Echoes of the Net'Strike," presenting a preliminary assessment of the action. They observed that while it was not possible to precisely quantify the number of participants, the count of hits on French government sites led them to suppose that there had been "several thousand of strikers." While there had been rapid access to the sites before the strike hour, it had declined rapidly thereafter, so that within 15 minutes several sites--that of the Ministry of Education first--were jammed. Strano network also

reported many online messages of support for the action, including one from US cyberpunk celebrity Bruce Sterling--and several news items about the "net'strike in the press and radio. They concluded that the action showed a "widespread desire to take actions against the French government," "the potential effectiveness of the online strike as an instrument of action, and the willingness of cybernauts to use it, and "the extreme speed and spontaneity of organisation of such a movement."

¹⁰² Samir Amin, Accumulation on a World Scale: A Critique of the Theory of Underdevelopment. (new york: Monthly Review, 1974)..

¹⁰³ Brecher and Costello, Global Village or Global Pillage 96-97 For a collection of articles--very mixed in both perspective and quality--which shares the general orientation see Jeremy Brecher,, John Brown Childs, and Jill Cutler, eds., Global Visions: Beyond the New World Order (Boston: South End, 1993)..

¹⁰⁴ Brecher and Costello, Global Village or Global Pillage 96-97

¹⁰⁵ Brecher and Costello, Global Village or Global Pillage 174

¹⁰⁶ Waterman, "International Labour Communication by Computer," 47. See also Dirlik.