What happened at the turn of the millennium, when a myriad of recording devices were hooked up to the Internet, and the World Wide Web became an electronic prism refracting all the colours of a single anti-capitalist struggle? What kind of movement takes to the barricades with samba bands and videocams, tracing an embodied map through a maze of virtual hyperlinks and actual city streets? There are aesthetic and cultural strategies behind the Zapatista solidarity, the blockades of the G8/IMF/WTO, the No Border network, the pan-European precarity campaigns. And though the term ‘tactical media’ has been rich as a driver of theoretical and artistic experimentation, the effectiveness of media activism in the context of networked political practices is not explained by the meeting of consumer electronics and the concepts of Michel de Certeau. The subversiveness of daily life that Certeau describes so beautifully, the spontaneous rewriting of dominant codes by popular gestures and practices, has always been the background and the refuge of resistance. But the foreground can be much more interesting.

In the officially sanctioned programmes of the international festivals, ‘tactical media’ describes playful or satirical incursions into everyday consumer reality: the digital graffiti of the neoliberal city, the info-poetics of the postmodern multitudes. There were other things in the mix a few years ago. *The ABC of Tactical Media*, 1997, the founding text by Geert Lovink and David Garcia, also linked the new media practices to grassroots impatience with old left hierarchies, overflowing anger against governments and businesses, and an urge to rethink the art of campaigning on the fly – all of which were at the centre of the Next 5 Minutes gatherings in Amsterdam in the 1990s, before pouring out on the streets at the turn of the century. But later, when the urgency subsided (or was repressed by the police), the multiple inventions of daily media-life just became aesthetics-as-usual, enjoyed by consumers and supported by the state, for the benefit of the corporations. The theory and the artistic refinements of tactical media fell away from the radicality of their politics.
Almost a decade after Seattle, we still cannot explain the role of decentralised media intervention as a catalyst for grassroots action at global scales. The persistent concept of tactical media might ultimately be a barrier. If global social movements are going to reinvent themselves beyond the neocon shadow of the 2000s, we will need another media theory, closer to our self-understanding and our acts. To start, there’s no time like the present.

PULSATING NETWORKS

The mobilising process for the global resistance actions almost immediately became known as ‘self-organisation’ because of the absence of hierarchical chains of command. What appeared instead was the formal structure of digital communication nets. The multicoloured starburst patterns of early network graphs became emblems of a cooperative potential that seemed to define the ‘movement of movements’. Shortly after the IMF protests in Washington in early 2000, Naomi Klein wrote a text called ‘The Vision Thing’:

> What emerged on the streets of Seattle and Washington was an activist model that mirrors the organic, decentralized, interlinked pathways of the Internet – the Internet come to life. The Washington-based research center TeleGeography has taken it upon itself to map out the architecture of the Internet as if it were the solar system. Recently, TeleGeography pronounced that the Internet is not one giant web but a network of ‘hubs and spokes.’ The hubs are the centers of activity, the spokes the links to other centers, which are autonomous but interconnected...

Condensed in this vision are two distinct ideas. One concerns the morphology of the Internet as an all-channel meshwork, where each node is connected by several pathways to others. Ultimately there are only a few degrees of separation between every single element – a flattened hierarchy. The other concerns the property of emergence, associated with large populations of living organisms like ants and bees, where group behaviour is coordinated in real time and manifests a purposiveness beyond the capacities of any individual. Emergence describes a moment of possibility – a phase-change in a complex system. These ideas came together in the early 1990s, in the figure of the networked swarm promoted by technovisionary Kevin Kelly in the book *Out of Control*. But they were already connected in Deleuze and Guattari’s *A Thousand Plateaus* with the figures of the rhizome, the pack and the nomadic war machine. A theoretical and practical understanding of networked emergence made the effective chaos of the counter-summits feel familiar to many people.

What lends form and regularity to emergent action? How to grasp the consistency of self-organised groups and networks? The word ‘swarming’ describes a pattern of self-organisation in real time which seems to arise from nowhere, yet is immediately recognisable, because it rhythmically repeats. It was understood by strategists as a pattern of attack, and it is worth recalling the classic definition given by RAND corporation theorists Arquilla and Ronfeldt:

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Swarming occurs when the dispersed units of a network of small (and perhaps some large) forces converge on a target from multiple directions. The overall aim is sustainable pulsing – swarm networks must be able to coalesce rapidly and stealthily on a target, then dissever and redisperse, immediately ready to recombine for a new pulse.2

Arquilla and Ronfeldt studied these pulsating tactics in the complex patterns of mediated and on-the-ground support for the Zapatistas, which prevented the Mexican state from isolating and destroying them. Interestingly, the ‘target’ here was the repressive activity of the state, and the ‘attackers’ were non-violent individuals, affinity groups, communities and NGOs who either converged physically on the Mexican territory, or converged temporally with simultaneous barrages of information and interpretation in the media. But the swarm tactic only became a tangible promise – or a threat – with the successful blockade of the November 1999 WTO meeting in Seattle, Washington, thanks to the Direct Action Network (DAN). One of the best texts on the use of swarming in Seattle, by Paul de Armond, was reprinted in a successive RAND volume under the title ‘Netwar in the Emerald City: WTO Protest Strategy and Tactics’.3

The DAN used swarming as part of a broader strategy to draw union protesters into a radical blockade. Arquilla and Ronfeldt suddenly had palpable proof of their theories. Since then, American and Israeli military theorists have analysed swarm behaviour and tried to use it as a doctrine. But the military by its very nature (chain of command) cannot engage in full-fledged self-organisation where individuals coordinate their actions spontaneously. When they try to do so, it ends in disaster, as Eyal Weizman has shown.4 Something here is not subject to command. What we need to understand is the ‘ecology’ of emergent behaviour, to use a word that suggests a dynamic, fractal unity: a oneness of the many and a multiplicity of the one.

**TWICE-WOVEN WORLDS**

There are two factors that help explain the consistency of self-organised actions. The first is the capacity for temporal coordination at a distance: the exchange among dispersed individuals of information, but also of affect, about unique events unfolding in specific locations. This exchange becomes a flow of constantly changing, constantly reinterpreted clues about how to act within a shared environment. But the flow aspect means that the group is constantly evolving, and in this sense it is a full-fledged ecology: a set of dynamic, interdependent relations. Temporal coordination makes possible the second factor, which is the existence of a common horizon – aesthetic, ethical, philosophical and/or metaphysical – that is deliberately built up over time, and that allows the scattered members of a network to recognise each other as existing within a shared referential and imaginary universe. Media used in this way is more than just information: it is a mnemonic image that calls up a world of sensation and, at best, opens up the possibility of a response, a dialogic exchange, a new creation. Think of activist media as the continuous process of ‘making worlds’ within an otherwise fragmented, inchoate market society.5

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4 Eyal Weizman, ‘Walking Through Walls’, published on the webzine Transform; transform.eipcp.net/transversal/0507/weizman/en

For an example, take Indymedia, launched at the Seattle WTO protests in 1999 using an Active Software programme that allows for the spontaneous uploading of various file formats onto a ‘newswire’. On the one hand, this is a strictly determined technical environment. Indymedia operates on specific codes and server architectures that only allow for a limited range of actions. In addition to those technical protocols, the content of the sites is shaped by clearly stated ethical principles which attempt to regulate and legitimise the kind of editing that may or may not take place. The existence of both protocols and principles is a necessary condition for the interaction of large numbers of anonymous persons at locations far distant from the surroundings of their daily existence.6

Indymedia aims to instantiate ideals of equality, open access, free expression. But the creation of possible worlds cannot stop there. It requires a cultural strategy of liberation whereby media is ‘tactile’ first of all: where it touches you as a process of expression, open to creative reception and transformation by each person. This kind of approach can be found in the aesthetics of the Reclaim the Streets carnivals or the Pink Bloc campaigns, to name well-known activist projects that create entire participatory environments or ‘constructed situations’. At stake in such situations is the development of an existential frame for collective experience, what Prem Chandavarkar calls an ‘inhabitable metaphor’.7 Only such metaphors make dispersed intervention possible. But they must be widely communicated, woven into dialogical worlds.

What needs to be understood – the media strategy of the global campaigns – is this tight imbrication of technological protocols and cultural horizons, lending a machinic extension to intimate desires and shared imaginaries. Swarming is what happens when the aesthetic or metaphorical dimensions of radical social contestation are enriched and complexified around the planet, via electronic communications. A global activist movement, for better or worse, is a swarmachine.

**THRESHOLDS OF INVENTION**

The point is that the contemporary movements are original and should not be reduced to models from earlier periods. To illustrate this distance from the ideas of the 1960s and 1970s, we can look more closely at the strategy/tactics distinction deployed by Michel de Certeau. He describes strategic actors as having a ‘proper’ place from which they can analyse and manage an exteriority conceived as a target or a threat. By contrast, the dominated have no place to call their own and must operate by ruse and subterfuge within the grid of the opponent’s strategy. This becomes the archetypal plight of the marginalised individual:

Increasingly constrained, yet less and less concerned with these vast frameworks, the individual detaches himself from them without being able to escape them and can henceforth only try to outwit them, to pull tricks on them, to rediscover, within an electronicized and computerized megalopolis, the ‘art’ of the hunters and rural folk of earlier days. The fragmentation of the social fabric today lends a political dimension to the problem of the subject.8

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6 This discussion was informed by Felix Stalder’s definition of a network, both on Nettime and in his book, Manuel Castells: The Theory of the Network Society, Polity, Cambridge, 2006, chapter 6.
7 See Prem Chandavarkar’s insightful reply to these ideas, posted on Nettime on 20 April 2006.
The Practice of Everyday Life delves into premodern registers, in search of styles of sociability that are irreducible, invisible, untotallisable. The idea is to discover a wandering, unfocused consumer usage as the multiple, unquantifiable other of an instrumental goal-oriented rationality. Subjective errancy becomes a politics of difference which can be expressed even amidst the standardised environments of consumption. But a kind of nightmare inhabits this dream: the fear that even tactics will become random, indifferent and indistinct, as they extend throughout a strategic system whose corrosive force has at once liberated them from their traditional limits and colonised everything with its rational calculations:

Because of this, the ‘strategic’ model is also transformed, as if defeated by its own success: it was based on the definition of a ‘proper’ distinct from everything else; but now that ‘proper’ has become the whole. It could be that, little by little, it will exhaust its capacity to transform itself and constitute only the space (just as totalitarian as the cosmos of ancient times) in which a cybernetic society will arise, the scene of the Brownian movements of invisible and innumerable tactics. One would thus have a proliferation of aleatory and indeterminable manipulations within an immense framework of socioeconomic constraints and securities: myriads of almost invisible movements, playing on the more and more refined texture of a place that is even, continuous, and constitutes a proper place for all people.9

Everyday tactics, in de Certeau’s sense, are a refuge of multiplicity amidst a dominant technological rationality. Yet by his own account they are destined increasingly to lose their archaic depth and secret purpose, to dance in agitated, aleatory spasms over the surfaces of a cybernetically programmed society. We are not far from the nihilistic abandon of the postmodern revolutionaries, influenced by disenchanted Situationists like Baudrillard. But their apocalyptic aesthetics may not be the best way to describe the media production of the counter-globalisation movements.

Ironically, the Brownian motion which de Certeau takes as the very signifier of aimlessness and unpredictability was in fact mathematicised as a probability function by Norbert Wiener, the father of cybernetics. Wiener was fascinated by the turbulence of water, the volatility of steam, the erratic, bifurcating course of a flying bee, or ‘the path of a drunken man walking across a large deserted playing field’.10 He invented a formula that could describe the probable trajectories, not of individual particles, but of aggregate groups. In 1973, just a year before The Practice of Everyday Life was first published, Wiener’s equations were employed by the economist Robert C Merton to predict the volatility and drift of equity values on the stock market, giving rise to the infamous Black-Scholes option pricing formula which led in its turn to the hedge funds of the 1980s and 1990s. The Brownian motion of the stock markets became predictable and profitable. In our age, the forms of expression are never just random, but always liable to be harnessed in their very randomness for ends that transcend their seeming aimlessness. But this just means that the thresholds of social invention are elsewhere.

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9 Ibid, pp 40–1
10 Flo Conway and Jim Siegelman, Dark Hero of the Information Age: In Search of Norbert Wiener, the Father of Cybernetics, Basic Books, Cambridge, MA, 2005, p 51
GLOBAL MICROSTRUCTURES

One way to approach the new intentional formations is through the work of the sociologist Karin Knorr Cetina, whose studies of currency traders led her to the concept of ‘complex global microstructures’. By this she means geographically extended interaction systems which are not bound by the multilayered organisations and expert systems used by modern industrial society to manage uncertainty. To take her own example, currency-trading networks, swollen with the liquidity generated by the hedge funds, were able to precipitate the 1997–1998 Asian financial crisis, thereby reorganising the economy of the world’s most important capitalist growth centres. The financial markets, Knorr Cetina observes, ‘are too fast, and change too quickly to be “contained” by institutional orders’. At stake are the dynamics of change and innovation studied by complexity theorists. As she continues:

Global systems based on microstructural principles do not exhibit institutional complexity but rather the asymmetries, unpredictabilities and playfulness of complex (and dispersed) interaction patterns; a complexity that results, in John Urry’s terms, from a situation where order is not the outcome of purified social processes and is always intertwined with chaos. More concretely, these systems manifest an observational and temporal dynamics that is fundamental to their connectivity, auto-affective principles of self-motivation, forms of ‘outsourcing’, and principles of content that substitute for the principles and mechanisms of the modern, complex organization.11

Knorr Cetina stresses the importance of real-time coordination and the creation of shared horizons. She shows how networked ITCs allow distant participants to see and recognise each other, and to achieve cohesion by observing and commenting on the same events at the same time.12 Yet the technology employed is used opportunistically; it can be ‘outsourced’. What matters is the system of goals or beliefs that binds the participants together. She reinterprets the usual view of networks, as a system of pipes conveying informational contents, to insist on their visual function: from ‘pipes’ to ‘scopes’. It is the image that maintains the shared horizon and insists on the urgency of acting within it, especially through what Barthes called the ‘punctum’: the affective register that leaps out from the general dull flatness of the image and touches you. Finally, the idea of ‘auto-affection’ derives from Maturana and Varela’s concept of the living organism as a self-sustaining autopoietic machine, defined in classic circular fashion as ‘a network of processes of production’ which ‘through their interactions and transformations continuously regenerate and realise the network of processes (relations) that produced them’.13

Standard social network theory found its dynamic principle in more or less random attractions between atomistic units bound only by the ‘weak ties’ of contemporary liberal societies.14 The notion of autopoietic social groups introduces a very different type of actor. To understand the implications, one has to realise that each autopoietic machine or ‘microstructure’ is unique, depending on the coordinates and horizons that configure it. For example, take the open-source software networks. There is a shared horizon constituted by texts and exemplary projects:

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Richard Stallman’s declarations and the GNU project; Linus Torvalds’s launch of Linux; essays like ‘The Hacker Ethic’; projects such as Creative Commons; the relation of all that to older ideals of public science; etc. There are formal principles: above all the General Public License, known as ‘copyleft’, with its legal requirements for both the indication of authorship (allowing recognition of everyone’s efforts) and the continued openness of any resulting code (allowing widespread cooperation and innovation). Finally there are concrete modes of temporal coordination via the Internet: SourceForge as a general version-tracker for continuously forking projects, and the specific wiki-forums devoted to each free software application. The whole thing has as little institutional complexity as possible, but instead is full of self-motivation and auto-affection between dispersed members of a highly coherent and effective formation. And the free software designers are highly capable of swarming around targets – such as the copyright provisions of the so-called content industries, gleefully attacked by peer-to-peer file-sharing technologies. The reason for the antagonism is obvious: copyright directly threatens the cooperative processes that make free software possible. The open-source movement is an active, vibrant, inventive swarmachine.

Tendencies favouring the emergence of global microstructures have been developing for decades, along the unravelling edges of national and institutional environments weakened by neoliberalism. But a turning-point was reached when a world-spanning group with a particularly strong religious horizon and a particularly well-developed relational and operational toolkit was able to coordinate violent strikes on the centres of capital accumulation and military power in the USA. Suddenly, the capacity of networked actors to operate globally, independently and unpredictably began to appear as a crisis affecting the deep structures of social power. The threshold of invention became deadly dangerous. At that point, the figure of the swarm rushed to the forefront of military analysis, and the broader question of whether complexity theory could predict the emergent behaviour of self-organising networks became a priority in the social sciences.

Knorr Cetina’s article is subtitled ‘The New Terrorist Societies’, and extends the analysis of global financial microstructures to Al Qaeda. Where, in the 1990s, everyone saw networks, now everyone would see the threat of radical militants. The counter-globalisation movement, long plagued by the difficulty of distinguishing its own mobile formation from the vanguards of financial globalisation, began rapidly to fall apart after September 11 when accusations conflating the protesters with the terrorists started rising on all sides. Almost four years later, on the last day of the 2005 G-8 summit in Gleneagles, Scotland, the explosion of terrorist bombs in London totally eclipsed any message that could have been brought by the protesters. Al Qaeda still appeared as the exemplar of global activist movements – and the perfect excuse for eradicating all of them.

SECOND CHANCES
What I have just suggested is rather frightening: a comparison of the counter-globalisation movements to both terrorists and financiers. But
the only thing that brings these distant galaxies together is the force of historical change, which upsets the rhythms of daily life and throws every certainty into question. Knorr Cetina claims that change in the contemporary world is driven by microprocesses, put into effect by light, agile formations that can risk innovation at geographical scales and degrees of complexity where traditional organisations are paralysed. As she has written: ‘The texture of a global world becomes articulated through microstructural patterns that develop in the shadow of (but liberated from) national and local institutional patterns.’ But the ways that national institutions have reacted to the changes says a lot about how the emergent world society is being articulated.

Even as swarm theory became a strong paradigm for the militarised social sciences, attempts were launched around the planet to stabilise the dangerously mobile relational patterns unleashed by the neoliberal market society and its weak ties. On the one hand, there is a continuing effort to enforce the rules of free trade, and thus to complete a project of liberal empire. Its theory is stated in the book *The Pentagon’s New Map* by the strategist Thomas P Barnett, who explains that the priority of American military policy is to identify any breach in the world network and then ‘CLOSE THE GAP’, by force if necessary. The thesis – providing one of the rationales for the invasion of Iraq – is that only the extension of the world market can bring peace and prosperity, rooting out the atavistic beliefs on which terrorism feeds and, in the process, rationalising the access to resources that capitalism needs to go on producing growth ‘for everyone’.

On the other hand, the most common responses to this market enforcement are regressions to exacerbated forms of nationalism, often with a deep-seated fundamentalist component, as in the United States itself. Neconservatism in all its forms is the ‘blowback’ of neoliberal economics. On a longer timeline, one sees continuing efforts to configure continental economic blocs – the EU, the Russian Federation, ASEAN+3, MERCOSUR, NAFTA – whereby the instability and chaos of market relations could be submitted to some degree of institutional control. These reactions can be conceived as ‘counter-movements’ in Karl Polanyi’s sense: responses to the atomisation of societies and the ecological destruction brought about by the unfettered operations of a supposedly self-regulating market.16

The political pressures on any democratic-egalitarian movement thus include the imperial project of a world market, the regressive nationalist refusal of it and the more ambiguous processes of bloc formation. All these may be actively pursued by the same state, but they are antithetical, and their contradictions lie at the source of world conflicts. In this respect, there is something prophetic about Félix Guattari’s discussion in the late 1980s of the interplay between deterritorialisation (which ‘has to do with the destruction of social territories, collective identities and systems of traditional values’) and reterritorialisation (which ‘has to do with the recomposition, even by the most artificial means, of individuated frameworks of personhood, structures of power, and models of submission’). Or maybe his concepts, which run parallel to Polanyi’s notions of ‘dismembering’ and ‘reembedding’, are just historically exact:

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16 Karl Polanyi (1944), *The Great Transformation*, Beacon, Boston, MA, 1957/1944
As the deterritorializing revolutions, tied to the development of science, technology and the arts, sweep everything aside before them, a compulsion toward subjective reterritorialization also emerges. And this antagonism is heightened even more with the phenomenal growth of the communications and computer fields, to the extent that the latter concentrate their deterritorializing effects on such human faculties as memory, perception, understanding, imagination, etc. In this way, a certain formula of anthropological functioning, a certain ancestral model of humanity, is expropriated at its very heart. And I think that it is as a result of an incapacity to adequately confront this phenomenal mutation that collective subjectivity has abandoned itself to the absurd wave of conservatism that we are presently witnessing.17

Guattari’s question is this: how to invent alternatives to the violence of capitalist deterritorialisation, but also to the fundamentalist reterritorialisation that follows it? The dilemma of the contemporary world is not Christianity versus Islam. It is at the very heart of the modern project that human potential is expropriated. Since September 11, the American corporate class and its allies have at once exacerbated the abstract, hyperindividualizing dynamics of capitalist globalisation, and at the same time reinvented the most archaic figures of power (Guantánamo, Fortress Europe, the dichotomy of sovereign majesty and ‘bare life’).18 Guattari speaks of a capitalist ‘drive’ of deterritorialisation, a ‘compulsion’ for reterritorialisation. What this means is that essential dimensions of human life are twisted into violent and oppressive forms. The effect is to render the promise of a borderless world repulsive and even murderous, while at the same time precipitating the crisis, decay and regression of national social institutions, increasingly incapable of contributing to equality or the respect for difference.

So after all the definitions of tactical media, and even of the ‘movement of movements’, what we still need to know is whether one can consciously participate in the improvisational, asymmetrical force of microprocesses operating at a global scale, and use their relative autonomy from institutional norms as a way to influence a more positive reterritorialisation, a dynamic equilibrium, a viable coexistence with technoscientific development and the trend toward a unification of world society. To do this means taking on the risk of global micropolitics. It also means drawing mnemonic images from latent historical experience and the intricate textures of everyday life and mixing them into media interventions in order to help reweave the imaginary threads that give radical-democratic movements a strong and paradoxical consistency: the resistance to arbitrary authority of course, but also solidarity across differences, the search for the common grounds of both oppression and liberation, and the desire to create consensus on the basis not of tradition but rather of invention, experimentation in reality and collective self-critique. The ability to create the event is what has given the recent movements their surprising agility in the world space. As Maurizio Lazzarato has written:


images, to put them at the service of the multiplicity’s power of articulation; she links the singular situations together, without placing herself at a superior and totalizing point of view. She is an experimenter.  

The close of his book makes clear, however, that what should be sought is not a chaotic escape into the unpredictable. The point is to find articulations of human effort that can oppose and even durably replace the death-dealing powers of the present society. Right now, the prospects look extremely slim for any kind of grassroots intervention into a highly polarised conjuncture. But if things become desperately worse, or if on the contrary the political-economic pendulum makes one of its swings back to a more confident phase of expansion, the likelihood is that there will be important second chances for radical democracy movements, and new roles for improvised global media. The future belongs to those who can make the experimental difference.

19 Maurizio Lazzarato, *Les révolutions du capitalisme*, op cit, p 230