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Exposing Globalisation: Biopolitics in the Work of Critical Art Ensemble

Gabriella Giannachi

to the memory of Julian Beck
who first showed me
what is possible
with theatre and power
and life

I am very naïve. When I first encountered the word globalisation I felt an instant gratification. As an Italo-German, resident in the UK, I thought a word had finally been invented to describe the condition of my – literally – multicultural upbringing. Finally, we would no longer need to describe ourselves, and our cultural, economic and political backgrounds, in terms of nationhood; rather, we could all participate in this new multicultural, or even intercultural society. Little did I know that globalisation, a complex concept *as well as* an economic and social reality, has as much in common with capitalism's means of production as with either multiculturalism or interculturalism, and that any shift towards globalisation can also imply exclusion, segregation and even some degree of 'natural' selection. So, before engaging with theatre's response to 'globalisation', I think it is crucial not only to excavate what is commonly intended by the actual term, but also to recall the hidden, and yet fundamental connections between globalisation, biopolitics and what is often described as 'life itself'.

What is globalisation? The term can be utilised to indicate an economic and political phase of (post-)modernity. Thus, for a number of theorists, globalisation indicates an *actual* stage in the development of capitalism,[1] signalling a movement beyond the nation-state,[2] and replacing the nation-state not only politically and economically but also 'as the decisive framework for social life'.[3] Whether globalisation is read as unavoidable,[4] the very consequence of modernity,[5] structural,[6] or even performed,[7] the term also appears to be indicating, very much like post-modernism, a *condition*, a structure of feeling. And it is precisely as a condition, a 'developing' concept, that globalisation is able to portray the economic, political and sociological parameters that have been manifesting themselves since the latter part of the twentieth century, as well as to render the predominant artistic and philosophical concerns of the 'cultural

1. S. Lash and J. Urry, *The End of Organised Capitalism* (Cambridge: Polity Press, 1987) and S. Lash and J. Urry, *Economics of Signs and Space* (London: Sage, 1994).
2. A. Giddens, *The Consequences of Modernity* (Cambridge: Polity Press, 1990) and M. Hardt and A. Negri, *Empire* (Cambridge, Massachusetts and London: Harvard University Press, 2000).
3. M. Featherstone and S. Lash, 'Globalisation, Modernity and the Spatialisation of Social Theory: An Introduction', in M. Featherstone, S. Lash, and R. Robertson (eds), *Global Modernities* (London: Sage, 1995), p. 2.
4. U. Beck, *What is Globalization?*, trans. P. Camiller (Cambridge: Polity Press, 2000).
5. Giddens, *The Consequences of Modernity.*
6. C. Chase-Dunn, Y. Kawano and B. Brewer, 'Trade Globalization since 1795: Waves of Integration in the World-system', *American Sociological Review* 65 (2000), 77–95.
7. S. Franklin, C. Lury and J. Stacey, *Global Nature, Global Culture* (London: Sage, 2000).

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logic of late capitalism'.[8] In other words, globalisation indicates both an economic or political 'reality', and its cultural framework. It is both the product of social reality and its own fiction. It constitutes the practice of our 'global' markets as well as an enriching and continuously evolving knowledge.

As shown by Sarah Franklin, Celia Lury and Jackie Stacey, globalisation or global culture can also be associated with 'products, industries and technologies':[9] globalisation can present itself as a commodity, as well as a process, a medium and knowledge. Thus 'global' is identified with the brand names of what we wear, eat, or drink: Nike, McDonalds, Coca Cola. Global is also the process by which these commodities are produced and consumed. And finally global is our interpretation, our reading of them as cultural products of a certain kind. So not only is everything we do global, but also the global *is* everywhere. We exist in a global space and time, and 'global' is not only the structure that measures our performance, but also our condition, our *hic et nunc*.

Indeed we *are* global. Globalisation dictates not only the decisive framework for *social life*, but also the framework for *life itself*. Within this so-called 'global' economy, nature and the human body have become, through the possibilities of genetic manipulation and patenting, a desirable site for global productivity. Moreover, the means by which globalisation seemingly aims towards the incorporation of 'the peoples of the world ... into a single world society, global society'[10] operate by what is an inherently Darwinian process, i.e., the selection, replication and propagation of 'some local' as 'global'. In this sense globalisation indicates not so much a process of homologation, or even compression, by which *we* can all similarly become part of 'the global', as one of productivity, replication and simulation. In other words, globalisation must also be understood as a means of (economic, political and cultural) production. In fact, globalisation can be read as the self-referential, cost-effective and predominantly simulated process by which capitalism regenerates itself.

So what is behind 'globalisation'? What propels it? In Michael Hardt and Antonio Negri's now classic *Empire* (2000), the authors argue that following the collapse of Soviet barriers to the capitalist world market, there has been 'an irresistible and irreversible globalisation of economic and cultural exchanges' which has led to a new form of sovereignty, namely empire, designating 'the political subject that effectively regulates these global exchanges, the sovereign power that governs the world'.[11] Thus empire is the primary agent of globalisation and processes of globalisation are the symptom of this 'sovereign power'. However, unlike previous forms of empire, this contemporary phenomenon is not identifiable with any one nation or even corporation. At the heart of empire is a vacuum, an economic black hole towards which everything implodes. And because empire is everywhere, everything is always already a function of it – empire knows no other. Thus, curiously, empire is contaminated: it encloses its own critique. This suggests that an evaluation of empire, and thus also of globalisation, must and in fact can only be produced *by and from within* the processes that regulate it.[12] In other words, to change empire and its practice of globalisation, the very knowledge of 'global' needs to be addressed.

There are a number of points at the heart of this paradox which are explained, crucially, by the profound connection between empire, globalisation and (re-)production technologies and processes. A defining characteristic of empire is that it regulates economic and cultural global exchanges. One way it achieves this is by redefining the very practices of life production as we know them. In empire, life itself has become a global product. Already Michel Foucault had shown that '[t]he control of society over individuals is not conducted only through consciousness or ideology, but also in the body and with the body'. Subsequently, what is most important for empire is not so much politics as biopolitics, the politics that control 'the biological, the somatic, the corporeal.'[13] This suggests that in today's capitalist society the highest form of control is not external, but internal to the body. Through biopower, control can be achieved 'over the entire life of the population' precisely because biopower is in effect 'an integral, vital function that every individual embraces and reactivates of his or her own accord'. So what is at stake in biopower is actually 'the production and reproduction of *life itself*'.[14] Consequently, if the ultimate form of control is

8. F. Jameson, *Postmodernism, or, The Cultural Logic of Late Capitalism* (London and New York: Verso, 1991).
9. Franklin, Lury and Stacey, *Global Nature, Global Culture*, p. 2.
10. M. Albrow and E. King (eds), *Globalization, Knowledge and Society* (London: Sage, 1990), p. 45.
11. Hardt and Negri, *Empire*, p. xi.
12. Ibid., p. 187.
13. M. Foucault, 'La Naissance de la médicine sociale', in *Dits et écrits* (Paris: Gallimard, 1994), 3, p. 210; quoted in Hardt and Negri, *Empire*, p. 27.
14. Hardt and Negri, *Empire*, p. 24, added emphasis.

exerted over the body, over life, the ultimate 'revolution' needs to start at the level of biopolitics.

The fact that empire regulates globalisation through 'life itself' is visible at the level of the relationship between branding and natural classification. Donna Haraway has pointed out how classifications of kind and type have been denaturalised via proprietary marking through the patenting of transgenic and cloned organisms.[15] Thus, while on the one hand 'nature' has become de-naturalised, technologically modified and commercially (re-)producible, 'trade' has appropriated the realm of the 'natural' in that it can now not only generate but also own and thus control life. As Haraway has shown, between the First World War and the early 1990s, biology was transformed from 'a science centred on organisms, understood in functionalist terms, to a science studying automated technological devices, understood in terms of cybernetic systems'. Likewise, just as biology was transformed from a 'science of sexual organisms to one of reproducing genetic assemblages', life science moved its focus from 'psychobiology to sociobiology'.[16] This means that when looking at capitalist processes such as globalisation and their relationship with life itself, power and biopower ought to be analysed in relation to each other not only because they partly overlap, but also because they *act* as one another. In other words, in the twenty-first century, power principally manifests itself in our everyday lives as biopower and not only is there a direct link between practices of empire, globalisation and biopower, but also human beings (as well as animals and plants) are in fact the very site within which the interaction between these seemingly different forces takes place.

One way biopower is able to control life is by 'denaturalising' it. As Franklin, Lury and Stacey show, the very commodification of nature is a symptom of global power:[17] 'nature becomes biology becomes genetics, through which *life itself becomes reprogrammable information*',[18] i.e. knowledge. Just as power has become active at the level of biopower, it is at the level of genomics, of bioinformation, that one of the fiercest and most crucial battles for the maintenance of the independence of the general population's control over life itself is being fought. Since the 1980s, when the equation of life as information was importantly noted,[19] biopolitics has thus come to represent the means by which the control over this information is maintained.

The fields within which the link between global market forces and biopower is most evident are those derived from genetic and genomic experimentation. An example of this is the Harvard/Dupont OncoMouse®, created in 1988 and bred to contain human DNA in the form of oncogenes that were able to produce cancer in each individual to provide standard animal models for the testing of pharmaceuticals. The mouse was marketed under patent as if it was a tool, a manufactured product. OncoMouse® was the first patented animal in the world, the first instance in which life itself was branded as a 'global' product: an 'animal model system for a disease', 'a living animal', a 's/he', 'an invention', a 'commodity' and a 'machine tool'.[20] The OncoMouse®'s name also alluded to its own death: the whole point of the animal's life being not its reproduction or Darwinian survival, but merely its potential for ending in a determinate way. Of course, the OncoMouse® was only the first among a whole new breed of transgenic animals. As indicated by Haraway, only five years after the OncoMouse®'s 'birth', in January 1993, there were over 180 applications for transgenic animals pending.[21] By the mid-1990s David Winter, the president of GenPharm, made a remark by which it was clear that, as Haraway put it, 'he considers the technique of custom-making a rodent so routine that he calls it "dial-a-mouse"'.[22]

Cloning too has been a major instrument in the rewriting of life itself as a globally branded product. The first cloned animal was Dolly who was created at the Roslin Institute in Scotland in 1996. Dolly was cloned by utilising an adult cell from a six-year-old Finn Dorset ewe, which was taken from a cryo-preserved cell line and transferred to a denucleated ovum of another sheep.[23] Shortly afterwards, it was announced that a transgenic ewe carrying human genes, Polly, had been born. The same year scientists at the Whitehead Institute and University of Hawaii cloned over fifty mice which included Tetley, the 'first ever clone of clones'.[24] Through

15. D. Haraway, *Modest_Witness@Second_Millennium: FemaleMan©_Meets_Oncomouse*™ (London and New York: Routledge, 1997).
16. D. Haraway, *Simians, Cyborgs, and Women: The Reinvention of Nature* (London: Free Association Books, 1991), p. 45.
17. Franklin, Lury and Stacey, *Global Nature, Global Culture*, p. 109.
18. S. Franklin, *Life Itself: Global Nature and the Genetic Imaginary*, in ibid., p. 190, added emphasis.
19. S. Franklin, 'Life Itself'.
20. Haraway, *Modest_Witness@Second_Millennium*, p. 79.
21. Ibid., p. 98.
22. Winter, quoted in Haraway, *Modest_Witness@Second_Millennium*, p. 98.
23. Franklin, Lury and Stacey, *Global Nature, Global Culture*, p. 88.

Tetley, the barrier between cloning and transgenics, indicating the actual transference of genes from one species to another, was first crossed.

As suggested by Franklin, 'Dolly's patented novelty represents a new kind of genetic capital, or breed wealth.'[25] This means that what biopower is ultimately about is the control of corporate capital. It should therefore be unsurprising that the Roslin Institute's website, for instance, in advertising the cloning process, points out its economic gain for the farmer: '[t]he main advantage of cloning would be within selection programmes... in the more rapid dissemination of genetic progress from elite herds to the commercial farmer.... Farmers who could afford it would receive embryos that would be clones of the most productive cows of elite herds.'[26] Franklin identifies the steps involved in the cloning process described by the Roslin Institute as follows: a. '*selection* of elite animals from elite herds'; b. '*substitution* of cloning for sexual reproduction'; c. '*elimination* of the genetic "noise" of sexual reproduction'; d. 'exact *replication* of desired traits'.[27] The processes of cloning are therefore primarily processes of control (Franklin's selection, substitution and elimination) and reproduction, which find an ancestry in eugenics and replication, the main means of capital production. In other words, the processes of genetic modification and cloning are primarily biopolitical and aim towards the rewriting of the production of life itself in terms of productivity and capital gain.

So what has become of life itself? Franklin points out how both Dolly and Polly 'embody the technological capacities which brought them into being, and are protected by intellectual property law as forms of biowealth. Both are clearly corporate entities, the animate equivalents of industrial machinery in their production and design as manufacturing technologies.' Because of this, Franklin suggests, 'we are witnessing the emergence of a new genomic governmentality – the regulation and surveillance of technologically-assisted genealogy. This is necessitated by the removal of the genomes of plants, animals and humans from the template of natural history that once secured their borders, and their reanimation as forms of corporate capital, in the context of a legal vacuum.'[28] Just as life itself is now re-branded as a global, manufactured, re-producible good, biopolitics becomes the main instrument by which the regulation, surveillance and maintenance of a technologically-assisted genealogy whose purpose is the creation of the best environment for corporate capital to flourish can be critiqued, opposed and perhaps even controlled.

I hope that those of you who, like me, had maintained an uncritical approach to globalisation and its intercultural and multicultural façade can now distinguish between globalisation as cultural internationalism – a broadly desirable and welcome aspect of globalisation – and, on the other hand, the economic processes behind it. These processes represent a much more complex, disturbing and in many ways revolutionary phenomenon in that they not only define what we are culturally, they also determine, literally, what our flesh and blood are actually made of. I also hope that the importance of this link is not undervalued. Although in the sciences, centres for the study of globalisation, as well as institutes for the study of genetic and genomic experimentation on society, are beginning to flourish, in the arts and humanities we still seem to be blindly unaware not only of the ways in which 'global' transgenic experimentation is affecting our daily lives and cultural frameworks, but also of the role that art can play to create awareness and disseminate alternative models. This is particularly evident and relevant to our discipline since theatre, perhaps more than any other art form, is especially well suited to offer a response to these ethically and politically complex phenomena. Theatre, with its capacity to both represent and produce life, as well as its ability to constitute itself as a place from which to view and observe the real, can challenge, critique and perhaps also affect the processes behind globalisation, biopolitics, and even empire itself.

One of the groups which has most originally and successfully pursued this objective is the North American collective Critical Art Ensemble whose texts have been translated in at least eight languages and whose art has been seen internationally, in both 'real' and virtual locations.[29] Through their publications, web-activity, and performance Critical Art Ensemble work to denounce the dangerous links between empire, globalisation and the biotechnological industries. This is evident at a number of levels. First their work is rhizomatic, non-locable,

25. S. Franklin, 'Animal Models: an Anthropologist Considers Dolly', http://www.comp.lancs.ac.uk/sociology/soc048sf.html, 1998 (accessed 30 April 2003).
26. Roslin Institute, ibid.
27. Franklin, 'Animal Models', added emphases.
28. Ibid.

29. I would like to thank Critical Art Ensemble and especially Steve Kurtz for their generous assistance with information about the company and specific works in the preparation of this article.

'global'. This non-locability, or inter-locability is also evident in its interdisciplinary breadth. The company in fact work at the point of intersection between art, technology, critical theory and political activism. Notably, the word intersection here is crucial, since the work literally resides between these different, but interrelated areas. According to them, 'one local group cannot depend on inter-subjective experience as a means to acquire political support for their cause. Globalisation has created a new theatre that bursts the boundaries of the theatre of everyday life. We now have a theatre of activism that has emerged out of the necessity of taking material life struggles into hyperreality.'[30] The theatre of Critical Art Ensemble thus operates through sets of interrelated interventions, which take place in the everyday as well as in virtual reality. Through this plurality of interventions, Critical Art Ensemble are able to utilise empire's mechanisms of globalisation and expose them from within. Thus the company's curiously hyper-real theatre allows for a dialogue between politics, art, new media and critical theory which is able to challenge preconceptions about the relationship between globalisation, science and art precisely because of its ability to dislocate and 'burst' its disciplinary and aesthetic boundaries.

There are a number of features that render this work particularly important within the fields of radical, political, but also post-modern, and new media theatre. These are its capacity to combine different and even seemingly contrasting media and discourses; its ability to perform 'invisibly' and to address wide, 'global', audiences; and its interest in blurring science and art, technology and theatre, post-modernism and politics. Another salient feature of its work is its dispersal. Though determinant in challenging social preconceptions, the actions of Critical Art Ensemble tend to be invisible, 'rhizomatic'. The company have in fact recognised that 'power in pancapitalism has become nomadic, decentered (or at least multicentered), and global'.[31] To propose a form of theatre and/or activism that critiques globalisation, a multifocal and decentred response is necessary since direct political intervention necessitates 'invisibility and non-locatability'.[32]

Founded in 1987, Critical Art Ensemble work both electronically and in 'real' locations. The electronic actions are a fundamental part of their work since they argue that 'for information economies, the net is the apparatus of command and control' and so invariably 'the net is culturally and politically bordered.'[33] For them, it is important to act as a destabilising and critical presence online. For this purpose, the company have been utilising electronic civil disobedience (ECD) as an 'option for digital resistance'[34] since 1994. To them, ECD represents 'an inversion of the model of civil disobedience'. Thus, rather than aspire for a mass movement of public objectors, ECD aims towards a 'flow of particularized micro-organizations (*cells*) that would produce multiple currents and trajectories to slow the velocity of capitalist political economy'.[35] The company are among the principal theorists and activists of ECD, through which they have been offering a continuous and corroding critique of capitalist production processes whilst also creating an efficacious post-Brechtian model of post-modern political activism. By working both politically and aesthetically on the fringes, Critical Art Ensemble have thus been able to present one of the most complex models for civil practice (and 'disobedience') to date. Whether their work is first encountered online, or live, in a university, a street or a gallery, at its heart is the simple and yet overwhelmingly powerful idea that theatre, whether 'real' or virtual, can at least temporarily displace its audience. It is this dislocation, this *Verfremdung*, that allows for a cutting insight into the 'globalised' world of the biotechnology industries.

The company define their practice as a 'recombinant theatre' formed by 'interwoven performative environments through which participants may flow'. I have already introduced the company's digital, online activity. The other main environment utilised is constituted by the 'theatre of everyday life', which includes street theatre as well as happenings and other non-matrixed forms. Through these 'ephemeral, autonomous situations... temporary public relationships emerge that can make possible critical dialogue on a given issue'.[36] The company's performative environments are participatory and it is in the actual interaction with the audience that the aesthetics and politics of their work operate at their most complex levels. Interestingly, the company perceive a marked difference between pedagogical and political actions. According to

30. Critical Art Ensemble, *Electronic Civil Disobedience*, http://critical-art.net, 1996 (accessed 6 May 2003), p. 94.
31. R. Schneider, 'Nomadmedia: on Critical Art Ensemble', *TDR: The Drama Review*, 44:4 (2000), 120–131 (p. 125).
32. Ibid., p. 131.
33. Critical Art Ensemble, *The Mythology of Terrorism on the Net*, http://www.t0.or.at/cae/mnterror.htm, 1995 (accessed 13 June 2003).
34. Critical Art Ensemble, *Electronic Civil Disobedience*, p. 13.
35. Ibid., p. 14, added emphasis.
36. Ibid., p. 87.

them, pedagogical actions can 'slide into the space between location and dislocation, visibility and invisibility' whereas political actions necessitate 'invisibility and non-locatability'.[37] Thus the participatory events – through their non-matrixed, intangible, non-canonical nature – maintain a primarily pedagogical role, while the Ensemble's online, virtual existence is more directly political precisely because of its invisibility and non-locatability.

Critical Art Ensemble argue that under the capitalist regime, individuals will be 'forced to submit their bodies for reconfiguration so they can function more efficiently under the obsessively rational imperatives of pancapitalism'. The body of the future will be 'a solid entity whose behaviours are fortified by task-oriented technological armor interfacing with ideologically engineered flesh'.[38] Already, they claim, soldiers are no longer soldiers but 'weapon systems'.[39] Thus, for them, the 'biological body, or more precisely, the privatisation, manipulation, and commodification of the *organic*, is the "new frontier" that capital is "penetrating"'.[40]

The collective see science as the new religion, 'the institution of authority regarding the production of knowledge', which defines concepts and practices such as nature in terms of 'the political economy of the day' and is 'a key mediator of the public's relationship with nature'.[41] They thus argue that assisted genetic reproduction can function as a form of eugenics adopted in order 'to give that child a predisposition for a competitive edge in the open market (higher intelligence, better health, better dexterity, more desirable appearance, etc.)'. According to them, '[t]he values/needs of capital are now being inscribed on the body at a molecular level'.[42] To counteract this, Critical Art Ensemble work at the level of 'cellular practice',[43] with a digital aesthetics characterised by copying, 'a process that offers dominant culture minimal material for recuperation by recycling the same images, actions, and sounds into radical discourse'.[44] This copy-cut-paste technique is visible not only in the deliberate recycling of ideas between the live and virtual actions, as well as between their own critical theory (available on their website) and their practice, but also in the carefully constructed collages of facts and fiction, real and simulated, theatre and lecture, that constitute their performance events. And it is precisely within this ability to work at a rhizomatic, cellular level that the company's most original and politically effective reply to empire is located. Through its cellular activity Critical Art Ensemble is able to show us how to rewrite empire from within.

The main aims of this interdisciplinary hyperreal theatre are the demystification of transgenic production, the addressing of public fear in relation to it, the promotion of critical thinking/art, the opening of the halls of science to public scrutiny and, ultimately but also very importantly, 'the dissolution of the cultural boundaries of specialisation'.[45] Unsurprisingly, their works are structured deceptively so that what are actually carefully put together theatrical performances are presented as seemingly spontaneous interactions around information points where fliers, pamphlets, and computer monitors can be freely consulted by the general public. Standing nearby the displays, the collective present themselves as a company *performing* a particular mission. By creating a kind of invisible theatre, Critical Art Ensemble – who quote as their models the Living Theatre, the Theatre of the Oppressed, Guerrilla Art Action Group, Rebel Chicano Art Front and the Situationists[46] – are thus able to approach their unaware audience on subjects of ultimate controversy.

For instance, in the performance of *Flesh Machine* (1997–98) they introduced themselves as BioCom, a company whose mission is 'Building a better organic platform' for the planet. Here, they *performed* as a business aiming to assist 'in the reconfiguration of the body to help it to adjust to the intensified rigours of pancapitalist imperatives and to adopt to its pathological environment'. Claiming maintenance over 'the largest sperm and egg bank in the market', as well as the ownership of a large pharmaceutical company with remits medicinal, recreational and spiritual, the Ensemble portrayed themselves as a 'leader in the emerging field of genomics', able to advise about a more efficient way of using reproduction so that 'no useless activity occurs in the reproductive process, and less genetic material is wasted. Excess genetic material is reconfigured into a substance for

37. Schneider, 'Nomadmedia', p. 126.
38. Critical Art Ensemble, *Posthuman Development in the Age of Pancapitalism*, 2003, http://t0.or.at/cae/psthuman.htm (accessed 13 June 2003).
39. Critical Art Ensemble, *Flesh Machine*, 1998, http://critical-art.net (accessed 6 May 2003), p. 27.
40. Schneider, 'Nomadmedia', p. 128.
41. Critical Art Ensemble, *Electronic Civil Disobedience*, p. 40.
42. Ibid., p. 54.
43. Ibid., p. 69.
44. Ibid., p. 77.
45. Critical Art Ensemble, *The Molecular Invasion*, http://critical-art.net, 2002 (accessed 6 May 2003), p. 59.
46. Ibid., p. 87.

commodified process.... Let BioCom demonstrate that a "better baby" (one better adapted to the imperatives of pancapitalism) can be produced through rationalized intervention'.[47]

But BioCom is seen not only to rid the human species of terrible diseases, but also to promote the 'rational' redesign and engineering of 'body functions and psychological characteristics that refuse ideological inscription'.[48] Highlighting the links between reproductive technologies and eugenics, the piece even featured genetic screening of its audience members as well as the presentation of the diary of a couple going through assisted reproduction. Here the physiological and the political merged and the body quite literally became the site for biopolitics.

Another performance piece, *Society for Reproductive Anachronisms* (1999–2000), follows similar but diametrically opposite dynamics in that on this occasion information on genetic experimentation in reproductive technologies was presented by the Ensemble as if they were a group of 'activists who spoke to people about the dangers of medical intervention in the reproductive process'. Here, Critical Art Ensemble introduced themselves as a society formed in 1992 'to combat the rationalization and instrumentalization of the reproductive process that is occurring is order to totally manage its service to the pancapitalist order'. Thus the collective's aims were said to be, among other things, to resist eugenics, to maintain the connection between sexuality and reproduction, to disrupt the commodification of flesh, to expose the politics of reproductive technology, and disturb 'the waters of capital's gene pool'. After an 'informative' section, the company presented a 'know your genetic future' questionnaire in which the viewers could find out whether they were 'a flesh market reject, or booty for the DNA pirates'.[49]

When performing the piece at Rutgers University, Critical Art Ensemble also drew the viewers' attention to sperm and egg donor recruitment on University campuses in North America for use in what they claim to be 'neo-eugenic practices'. Here they created

> the illusion that a reprotech company visiting Rutgers was actively recruiting a sperm donor for a woman who was monitoring the process online from Florida. (In actuality, the performer was in a back room in the building, but it read perfectly as a transborder process.) The effectiveness of this technology was due to the looping back of the virtual into real space, and a surrendering of interactivity in favor of participation.[50]

As in other pieces, it was the deliberate blurring of facts and fiction that left this audience uncertain, not only about what was real and what simulated, but also about the uncanny relationship between the science of theatre – with its obsessive interest in truthfulness and representation – and the theatre of science – with its disturbing ability to re-create life.

In their most recent performance piece, *GenTerra* (2001–03), Critical Art Ensemble introduced themselves as a company (Gentess) adopting 'transgenic solutions for a greener world'. Here they claimed to be aiming to 'discover and create products for resource management that are harmonious with the ecosystem in which they function'; 'develop biological environmental resource management initiatives that serve as an alternative to chemical environmental resource management'; 'refine techniques of biological environmental resource management, so that its past disasters will not be repeated'; and 'explore the options offered by new breakthroughs in biotechnology so that they may be used as a resource that functions in the public interest'. As GenTerra, Critical Art Ensemble claim to be presenting both 'the good and bad news' regarding the possibility of a transgenic ecology so that 'people can make up their own minds about these extremely complex issues'.[51]

I saw the piece at the Natural History Museum in London in the summer of 2003. Typically, the company had created a display with a number of computers that the audience could consult in order to learn about the work of GenTerra and similar companies. Again, facts and fiction were carefully interwoven so that it was difficult to tell them apart. Without hiding the performative nature of their event (a large poster introducing the piece as 'theatre' – 'Critical Art Ensemble presents GenTerra' – was displayed nearby the tables), the performers, wearing white medical gowns and appropriate nametags, approached the audience to discuss GenTerra's mission and performance. Surrounded by other displays presenting 'real'

47. Critical Art Ensemble, *BioCom*, http::://www.critical-art.net/biotech/biocom/biocomWeb/product.html (accessed 5 March 2004).
48. Ibid.
49. Critical Art Ensemble, *Society for Reproductive Anachronisms*, http://www.critical-art.net/biotech/sra/index.html (accessed 5 May 2004).
50. Critical Art Ensemble, *Electronic Civil Disobedience*, p. 97.
51. Critical Art Ensemble, *GenTerra*, http://www.critica-art.net/biotech/genterra/index/html (accessed 5 March 2004).

scientific projects and in the presence of 'real' scientists swiftly crossing the Darwin Centre's busy corridors, the performance of GenTerra tended to disappear against the Museum's flow of everyday life.

As in other pieces, the interaction with the audience led to an actual experiment. A number of volunteers gave blood for the making of some of the bacteria in advance of the event. During the performance, participants in the project would then decide whether to activate the 'transgenic bacteria release machine'[52] that allowed them to prepare samples for their own use and so be able to walk off GenTerra's display centre with a sample of recombinant bacteria containing a complete random human genome library. As I mentioned before, I am a very naïve person. Although I quite deliberately set off that day to see Critical Art Ensemble at work, I was still uncertain as to what was happening in front of my eyes. Was it all real? Or was it theatre? Not only was I mostly unable to decode fact from fiction, but also, more worryingly, I was unsure as to what the transgenic bacteria release machine actually was. Could it *really* generate bacteria? Would it be safe for my baby daughter if I took them home? What would I do with them anyway – put them on the mantelpiece? Or in the fridge?

And yet I am hardly an inexperienced theatregoer. I know how to behave in the presence of a theatrical performance, and I work specifically with new media, politics, and theatre, so I trust myself to be able to disentangle the different languages and vocabularies employed in this performance. Moreover, I really do enjoy all forms of audience participation – as a teenager, I always applauded Julian Beck and the Living Theatre's provocations, and later I allowed Stelarc to wire me up so that he could manipulate my arm's muscles electronically from a distance, to the amusement of a room full of colleagues and computer scientists. Yet at *GenTerra*, I was really unsure of what to do. I was not only experiencing a sophisticated form of *Verfremdung* that allowed me to see transgenic experimentation from a different, perhaps ironic and yet simultaneously terrifying angle, I also remembered why theatre has always been so crucial in exposing political issues.

So what had *really* happened? First of all, the transgenic bacteria release machine could not really generate bacteria. The machine simply consisted of ten sample dishes, nine of which had wild bacteria or moulds collected from the area while the tenth contained recombinant bacteria. The characters in the piece and their affiliations, as in all the Ensemble's works, were fictional, and yet the scientific information provided and the processes presented were factually correct. This complex layering of fact and fiction at the heart of the actual performance of *GenTerra* allowed me to realise how much I was, and still am, critically ignorant of actual scientific research precisely because I couldn't entirely distinguish between them. Moreover, I became aware that I am so uninformed that I could easily believe *anything* I am told. And not only would I believe it, I wouldn't know what to do with it. For instance, I wouldn't know what the civil, economic, political, and perhaps, most importantly, ethical consequences of any of this was. I became aware of my severe ignorance of the so-called global economic markets. I may no longer misconceive the presence of my favourite Italian products in my local UK supermarket as the limit of globalisation's market effects, and yet I still struggle with understanding the full implications of the term. Finally, I realised that theatre was still a phenomenally powerful weapon not only because it could make us believe anything, but also because it could expose our ignorance, thus allowing us a possibility not of catharsis but of further, continuous, knowledge.

Through their work, Critical Art Ensemble not only exploit and simultaneously denounce the *performance* of globalisation but also draw our attention to the plurality of ways in which corporate capitalism, and thus empire, is rewriting life itself. By *acting* this out in all the levels of their work, Critical Art Ensemble are able to operate rhizomatically, thus effectively challenging empire from within by utilising its very own languages and communication systems. And yet it is precisely by exposing these mechanisms through theatre that the company allow for the possibility of change. They create a platform through which to educate audiences like me who clearly find it difficult to extricate fact from fiction within the fast-changing field of the biotechnological industries. They also effectively present themselves as a model of actual change, indicating how it is possible to work within the industry without subscribing to its capitalist processes. To conclude, we should beware of globalisation, for what is it if not also the reduction of multiplicity to sameness and differentiation to replication? What is it if not also the annihilation of cultural difference into undifferentiated simulacra and, perhaps most crucially, the rewriting of life itself as biopolitics? If the future is 'global', it is only by rethinking and redefining the sphere of life itself

52. Ibid.

that we will protect ourselves from nihilistic homologation and preserve the difference that characterises our lives.

Postscript: shortly after the completion of this article I received an email from a friend informing me of the unexpected death of Hope Kurtz, the wife of Steve Kurtz, my main contact with the Critical Art Ensemble, of which he is a founding member, and also Associate Professor of Art at the University of Buffalo. As I wrote to Kurtz to offer my condolences, he emailed back to inform me of the chilling sequence of events that followed his wife's death – events that were to change not only his own life but also the modus operandi of the Critical Art Ensemble and the work of many other artists and academics in the United States employing biological materials.

Here are the specifics. On 11 June 2004, Steve Kurtz awoke to find that his wife of over twenty years had unexpectedly died. Subsequent investigations found the cause of death to be a fatal heart attack. However, the paramedics at the scene had become alarmed at the scientific materials in Kurtz's house and called the FBI and the Joint Terrorism Task Force. The property was then cordoned off, Hope Kurtz's body, their computer, books and papers seized, and Steve Kurtz arrested. It emerged that under the Patriot Act it is now illegal in the United States to use biological research material and that 'Whoever knowingly possesses any biological agent, toxin, or delivery system of a type or in a quantity that, under the circumstances, is not reasonably justified by a prophylactic, protective, bona fide research, or other peaceful purpose, shall be fined under this title, imprisoned not more than ten years or both.' Kurtz, in collaboration with Beatriz da Costa, was utilising some harmless bacteria for the performance/exhibition 'The Interventionists' due to be held at the Massachusetts Museum of Contemporary Art. In the piece, the company aimed to determine whether certain foods contained genetically modified organisms and thus to raise awareness about genetically modified food.

Shortly after Kurtz's arrest, subpoenas were issued to a number of people working with him: Adele Henderson, Chair of the Art Department at University of Buffalo; Andrew Johnson, Professor of Art at University of Buffalo and member of Critical Art Ensemble; Paul Venouse, Professor of Art at University of Buffalo; Beatriz da Costa, Professor of Art at University of California at Irvine and member of Critical Art Ensemble; Steven Barnes, Florida State University and Critical Art Ensemble member; and Dorian Burr and Beverly Shlee, also members of the collective. A Grand Jury was subsequently convened at the behest of the FBI with the apparent intent to collect evidence to indict Kurtz on charges of possessing biological materials though Kurtz and his colleague Dr Robert Ferrell, Professor of Genetics at the University of Pittsburgh, who allegedly had helped him to procure the bacteria, were finally arraigned on charges of mail and wire fraud which carry a maximum sentence of 20 years in prison. Under the arraignment conditions, Kurtz is now subject to travel restrictions, random and scheduled visits by a probation officer and periodic drugs tests. Following his arrest, various letters and petitions were circulated and signed by scholars in fields as diverse as Art, Computing, Theatre and Performance Studies, Chemistry, English, Music, New Media, Photography, Visual Culture, Politics, Biological Sciences, Electronic Art, and Architecture. Many individuals also signed – teachers, film-makers, artists, industrialists, architects, museum curators, software engineers, general practitioners, students, art critics, poets, biologists, publishers, microbiologists, teachers, community health specialists, museum and festival curators, epidemiologists, environmentalists, lawyers and attorneys. The signatures came from the United States, Macedonia, the Netherlands, Scotland, Switzerland, Russia, Serbia and Montenegro, New Zealand, Sweden, Slovenia, Israel, Malta, Finland, the UK, Argentina, Slovakia, Taiwan, Australia, Denmark, Iceland, South Africa, Singapore, Wales, Italy, Germany, Austria, France, Canada, Ireland, South Korea, the Slovak Republic, India, Belgium, Norway, Spain, Venezuela, Hungary, Brazil, Portugal, Greece, Turkey and Japan. One of the petitions, signed by some thirty-six US West Coast academics – the top researchers in the field of new media at the Universities of Santa Barbara, Berkeley, Irvine and San Diego – sums up the general concern:

> *we see here a pattern of behaviour that leads to the curtailing of academic freedom, freedom of artistic expression, freedom of interdisciplinary investigation, freedom of information, exchange, freedom of knowledge, accumulation and reflection, and freedom of bona fide and peaceful research. All of which are fundamental rights and cornerstones of a modern academic environment.*[53]
>
> *(http://www.caedefensefund.org/)*

If the Patriot Act allows for the use of the agents in 'prophylactic, protective, bona fide research, or other peaceful purpose' why was Kurtz's artistic work, carried out openly, primarily in museums, but also at universities and a whole variety of performance

53. Critical Art Ensemble, Defense Fund, http://www.caedefensefund.org/

spaces, with the aim to educate and distribute knowledge, framed as bioterrorism? Is theatre no longer considered 'bona fide' or 'peaceful' in the United States? How could there have been such confusion? How could props be mistaken for biological weapons and an artist for a terrorist? Clearly, something else was happening here. As suggested by the journal Nature: *'As with the persecution of some scientists in recent years, it seems that government lawyers are singling Kurtz out as a warning to the broader artistic community'.*[54] *But a warning for what? Clearly the work of the Critical Art Ensemble is peaceful and educational. As in the words of D. A. Henderson, M.D., M.P.H., Senior Advisor of the Center for Biosecurity of the University of Pittsburgh Medical Center:*

> *I am absolutely astonished... based on what I have read and understand, Professor Kurtz has been working with totally innocuous organisms... I am dismayed by what appears to me to be yet one more instance in which knowledgeable persons in the field of bioterrorism are not being brought in and consulted to ascertain what might be real problems and what are purely spurious problems.*
>
> *(http://www.caedefensefund.org/)*

So why were the experts not consulted? Who was the 'warning' really meant for? To me, this tragic story proves, if anything, how absolutely necessary the work of the Critical Art Ensemble has been and still is, and how crucial it is not only that individuals are given access to knowledge about art, politics, and biopolitics, but also that they are given this knowledge through art, through theatre. This also proves how powerful and effective a 'weapon' for aesthetic and political discussion theatre still is. The 'global', interdisciplinary, support that Kurtz and the Critical Art Ensemble have received over the past months finally shows the actual – and 'global' – need for further thinking, debating, and, perhaps most urgently, legislation on the subject so that theatre and other arts may continue to do work in this dangerous field where biology meets technology and the local becomes 'global'.

54. *Nature*, 429 (17 June 2004), p. 685.