Climate Change, Communication and Food

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Book Review: Graham Murdock and Benedetta Brevini (Eds) 2017 Carbon capitalism and communication: Confronting climate crisis. London, Palgrave.
Alana Mann (2019) Voice and participation in global food politics. London: Routledge.

Anthropogenic global climate change is opaque. The long-term linkages between coal and oil extraction, industrial refining, CO_2 emissions and temperature rise plus the multiple effects on biospheric and ecological life are not fully apparent. Occasionally, though, a cataclysmic event, or series of events, brings historical processes to light. As I write, the spreading bushfires in Australia suggest that a time of reckoning has arrived. This is not a one off. Australia's ecology is changing, brutally and permanently. Entire forests are being destroyed, wildlife extinguished and towns burnt out amidst baking heat, high winds and a mosaic of flame fronts, all before midsummer. The long-term consequences of historic and exponential CO_2 emissions are matters of open controversy. Flat denials of anthropogenic climate change are becoming difficult to sustain publicly, despite lies and disinformation about the fires (i.e., that they were lit by Islamic State supporters, eco- terrorists or criminal gangs of arsonists).

All of the developments I have outlined pose particular challenges for the political economy of communication. Researchers in our field must investigate the contest of news frames, the ideological predispositions of corporate media, alongside the carbon footprints of ICT products and the communication industries themselves. Such themes are examined in Graham Murdock and Benedetta Brevini's *Carbon capitalism and communication: Confronting climate crisis*. This collection of essays and interviews involving journalists, activists and academics opens up new avenues for research and political intervention.

The experience of Michael Mann, outlined in chapter 2, highlights the political stakes of climate change science. As pioneer of the 'hockey stick' graph, which demonstrated the historic connection between CO_2 emissions and global temperature rise, he has been targeted by climate change denialists linked to the mining and fossil fuel industries. Just before the 2009 Copenhagen Climate Summit, his confidential emails were hacked and selectively leaked to undermine the entire rationale of anthropogenic climate change. In dialogue with Benedetta Brevini, Mann argues that climate scientists must communicate their findings, without abbreviations or jargon, across mass

media, social media and generalist scientific journals such as *Nature* and *Science*. Aside from the obstacles to this strategy - denialist propaganda, fragmented mediascapes, commercially driven media organisations - a fundamental question remains. Who is responsible for anthropogenic climate change? For Naomi Klein, humanity itself cannot be blamed. If the extraction and energy conversion of coal and oil drive CO_2 emissions, then culpability rests with the fossil fuel corporations. Recent research from Richard Heede's Climate Accountabilty Institute proves the point. The likes of Shell, Exxon, Chevron and BP generate most of the world's carbon emissions while avoiding responsibility for their actions (Heede, 2019). They are the perpetrators and beneficiaries of carbon capitalism. Talking to Christopher Wright in chapter 2, Klein notes that knowledge concerning the geological and capitalist determinants of global warming became apparent just as neoliberalism was gaining worldwide ascendancy. After the election of the Thatcher and Reagan governments in the UK and US, Keynesian social democracy and the import substituting Third World state were dismantled. Further, the entire Soviet Bloc collapsed from 1989. The general imposition of neoliberal economics, the North American Free Trade Agreement (NAFTA) and IMF-led structural adjustment programmes made international climate change agreements especially difficult to formulate.

In contrast, Klein proposes a major investment push away from fossil fuels toward decarbonised, renewable energy grids and public transport infrastructures. This requires the advancement of a globally networked climate justice movement which can defend those populations most affected by extraction and other fossil fuel operations. An associated plethora of public activist groups, think tanks and mass action initiatives depend upon transnational communication linkages which have developed from the internet-driven anti-corporate mobilisations of the 1990s. However, the political affordances of information-communications technology elide their biospheric and environmental impacts. In a section entitled 'Toxic technologies: Media machines and ecological crisis', Richard Maxwell and Toby Miller remark that "good green intentions do not exempt progressive uses of digital technology from having negative effects associated with environmental decline: rising energy consumption, associated carbon emissions, toxic working conditions and wasteful consumption habits" (Maxwell, Miller, 2017: 43-44). Their chapter points out that billions of networked devices, private and government ICT complexes, telecommunication structures and cloud services running millions of servers depend upon energy grids which produce carbon emissions. Rising energy demand also reflects the growing sales of electronic equipment such as tablets, notebooks and smart phones. The decreasing use-life of these devices creates multiple e-waste deposits with health and ecosystem risks. Although green activists cannot avoid their use of digital communication infrastructures, Maxwell and Miller insist that they examine specific ICT supply chains against the criteria of energy use, carbon emissions plus workers' wages and conditions. Correspondingly, transparent reporting of actual e-waste practices should be complemented by a repair-reuse-recycle counterculture of ICT consumption.

Chapters 5 and 6 in this section reinforce Maxwell and Miller's analysis. Justin Lewis observes that the digital revolution speeds the production cycle for products and devices. Meanwhile, the media and communications industry use "marketing strategies to institutionalise obsolescence, to create the idea that in the digital age progress *depends upon* (italics in the original) the regular replacement of devices" (Lewis, 2017: 65). He concludes that media and communication technologies can only be employed to tackle climate change outside of the commercial imperatives of advertising and consumer culture. Xin Tong details how urbanised consumer culture generates electronic debris within two major waste villages on the edges of Beijing. Field studies undertaken

between 2007 and 2013 revealed microeconomies of scavenging, junk sorting and recycling. The size and scale of such activities potentially disrupts plans for urban redevelopment.

One must appreciate that the causal linkages between ICTs and biospheric-ecological depletion are affected by technological change itself. As Vincent Mosco explains, the original internet is becoming but one component of an emerging digital world comprised of three interconnected systems: cloud computing, big data analytics and the Internet of Things. Together, they build upon, and are successors to, electricification, telegraphy, telephony, broadcasting and the World Wide Web. Aside from the accelerating increase in surveillance capacities and the commercialisation of data, the so called 'Next Internet' is having a massive environmental impact. As of 2017, data centres consumed approximately 12 % of the global electricity grid. Four years earlier, the US coal industry recognised that mobile internet and cloud architecture required far more energy than wired networks. Mosco remarks that "when the environmental impact of Next Internet systems are considered alongside their massive stimulation of consumption, the implications for climate change are staggering" (p. 102). Jo Bates reminds us, in chapter 7, that these internet systems also drive the data streams of financial markets, including those associated with climate risk modelling. Examples include weather derivatives (in relation to prospective commodity price variations) and the use of derivatives to reduce firms' financial exposure to climate instabilities. It seems, then, that the constancy of derivatives trading and the expansion of climate risk markets contribute to the carbon energy dependence of communication infrastructures *and* the misapprehension of climate change futures, as priceable commodity trades rather than as a threat to the earth system.

As material entities, communication infrastructures and networks are also enmeshed within power structures and ideological discourses. Thus, Section Three of Murdock and Brevini's collection addresses the 'corporate captures, PR strategies and promotional gambits' inherent to carbon capitalism and climate change politics. Here, two prescient contributions stand out. In chapter 10, David McKnight and Mitchell Hobbs background, firstly, how Australian fossil fuel corporations obstructed the introduction of a carbon emissions trading scheme by Prime Minister Kevin Rudd's Labour government during 2008-2009, and, secondly, how the same players stymied the carbon tax proposed by Julia Gillard, Kevin Rudd's successor. The general communications strategy of mining interests was to foster doubts about climate science and concerns about the likely consequences of CO2 emissions regulation. They lobbied government elites, issued news releases and developed public relations offensives centred upon the economic costs of the proposed tax policy and the economic importance of the Australian coal industry. To entrench such views local rallies, meetings and protests were corporately funded, alongside political parties and individual politicians. As McKnight and Hobbs emphasise, these operations are relentless, sophisticated and multifaceted; the ongoing profitability of carbon capitalism is paramount. One wonders though whether the unfolding bushfire crisis might force a recalibration of corporate PR strategies.

The same thoughts arise from Benedetta Brevini and Tony Woronov's chapter on the Adani–Carmichael mine complex in Queensland, Australia. Focusing on the political and media debates surrounding this massive project, they found that mining proponents never questioned the long-term efficacy of Australia's resource-extraction economy and assumed that coal mining was an ecologically sustainable industry. The supposed viability of the Adani-Carmichael complex hinged upon unverifiable growth and job creation figures for Queensland and the country. Brevini and Woronov describe the reproduction of these themes, across national and regional media, as a 'truthiness regime' impervious to the scientific consensus that Adani coal exports would advance global CO2 emissions and global warming. Brevini's analysis may be superseded by events. The

very permanency of drought, temperature rise and lethal summer fires could mobilise popular sentiment against corporate-media 'truthiness regimes'. The findings from this section, which also includes chapters on corporate greenwashing and Canada's oil/tar sands controversy, raise crucial political questions. Do communication structures and networks provide sufficient resources for climate science communicators and the climate justice movement? How do they counter the strategies and gambits of fossil fuel corporations?

A range of answers to the above questions are proffered in Section Four –'Communicating and campaigning: oppositions and refusals'. Jodi Dean, in chapter 13, eschews global, anthropocenic conceptions of climate change in order to prioritise public art and performance initiatives that will give collective action a cultural presence. Next, Robert Hackett and Shane Gunster outline how corporate and news framings of the climate crisis might be challenged by ecologically informed civic journalism. Benedetta Brevini's interview with Alan Rushbridger recounts the *Guardian's* 'Keep it in the ground' campaign against carbon-based economic policies. The dual purpose was to shift corporate and foundation investment away from fossil fuels and to spark a comprehensive debate about climate change and global warming. In chapters 16 and 17, Brevini discusses other, interlinked developments with David Ritter from Greenpeace and Blair Palese from the 350.org campaign. They are both working, transnationally, to counter the power of fossil fuel corporations and prevent the further development of carbon intensive extractionist projects.

The actual efficacy of struggles around carbon capitalism and global climate crisis is hard to determine with any finality. Since publication of Brevini and Murdock's collection in 2017, youth-based mass actions have spread worldwide. Greta Thunberg personifies the growing intergenerational dimension of climate justice activism. Yet, the CO_2 emissions which generate global temperature rise continue to increase. If we are indeed in a race against time then *Carbon capitalism and communication* has become, retrospectively, an essential guide for the struggles ahead. In this context, Graham Murdock's end-chapter diary of March 2017 acutely historicises climate change politics while restating the case for a socio-ecological commons and for the strategic centrality of communication technologies and organisations.

Let us now reflect upon the multiple feedback loops of global warming; melting glaciers and ice sheets, ocean acidification, sea level rise, unruly climate, floods, droughts, storms and other extreme weather events, desertification, mass migrations, collapsing agricultural systems and violent geopolitics. Such developments are bound to worsen already existing crises of food production and food security. These circumstances can be seen as the backdrop for Alana Mann's *Voice and participation in global food politics*. Her analysis, as it unfolds, doubles as an original contribution to the political economy of communication. Initially, Mann juxtaposes the corporate agro-food system with the operating principles of agro-ecology. In the former, industrialised agriculture committed to increases of output intensifies farming practices, encourages the use of chemical and pharmaceutical products and necessitates the mass processing, mass marketing and mass packaging of food. The entire system reproduces specialised monocultures – bananas, coffee, corn, beans, peas, stone fruit orchards and feed-lot stock farming. Vegetables, fruit, meat and other edible produce become packaged items of commodity exchange in supermarkets, signifiers of cuisine on restaurant menus and takeaway orders from fast food outlets. The quality and seasonal availability of produce is entirely dependent on the price mechanism. The quality and sustenance of individual diets depends upon the ability to pay. By contrast, the agroecology framework prioritises the ethos of food sovereignty for designated populations. Sustainable, mixed farming practices utilise the nutrient cycle and preclude dependence on chemical products and biogenetic interventions. Within

communities, forums encourage people to discuss food policy concerns, exchange agricultural knowledge, foster social learning and collaborate with other regions. The horizontal relations which take shape are founded on participatory and inclusive democracy. The paradigm case, which Mann explores, is La Via Campesina (LVC). Pioneered by indigenous peasant and rural proletarian groups in Latin America, the movement now incorporates over 200 million small producers, fishers and landless workers in over 70 countries. Throughout this mosaic, food sovereignty encapsulates the right of peoples to develop and defend ecologically sustainable agricultural systems (Mann, 2019: 12).

Mobilising agroecological principles against the corporate agro-food system entails expressions of voice and social reciprocity which move beyond individuated consumption practices. Specific priorities include place-based ways of growing, preparing, sharing and understanding food which openly challenge the import-export imperatives of agribusiness conglomerates. Within chapter 2; 'The capture of voice and value', Mann historicises the political economy and ideological encroachments of today's agro-corporate food complex. The key institutional components are agribusiness corporates, G8 governments, neoliberal free trade architectures and supranational organisations such as the World Bank, IMF and various think tanks. The entire apparatus, established in the 1980s and 1990s, is now supplemented by the corporate imposition of biotechnology and genetic engineering on established farming practices. Exemplary here is Mann's dissection of Monsanto's relentless commodification of organic life, proprietorial business model and 'greenwash' promotional strategies, amidst food sovereignty activism.

Mann's parallel analysis of La Via Campesina (LVC) in chapter 4 – 'Organising through communication' portrays food politics as a struggle over communication infrastructures, networks and domains. Against the top-down media manipulations of agro-food and biotechnology corporates, she argues, a counter strategy has taken shape.

> Drawing on the resources of news outlets including the International Consortium of Investigative Journalists, LVC hyperlinks to reports on corporate wrong-doing and failures of global governance, reframing the struggle for food sovereignty in the wider campaign for social and economic justice. Activist members also engage in story telling via Twitter, Facebook and Instagram, platforms that foster the growing sphere of global social media activism by providing new opportunities for the articulation of concern and dissent to wider audiences (2019: 73).

Mann further notes that LVC disseminates its own audiovisual materials in collaboration with global justice networks such as the World Social Forum. The following chapter, entitled 'Learning as resistance', investigates, from a political economy perspective, the activist communication strategies of three LVC member organisations: the Brazilian Landless Workers Movement; the National Association of Indigenous and Rural Women in Chile; and the National Association of Agricultural Producers in Cuba. Mann concludes that in the context of class, labour and land struggles in Latin America "communication is one of the primary sources of resistance to power". Worldwide, this precept "has underpinned the movement for food sovereignty, which proposes a transformative economic and political framework that demands culturally appropriate food, produced through culturally appropriate agroecological methods based on principles of pluralism and inclusivity" (93).

Mann's thoroughly researched work, alongside Brevini and Murdock's *Carbon capitalism and communication,* points to an underdeveloped research area: the triangulated complex of food

politics, climate crisis and communication. In this regard, the three writers, in combination, could forge the way ahead.

References

Heede R (2019) It's time to reign in the fossil fuel giants before their greed chokes the planet. *The Guardian*, 8 October. Available at: https://www.theguardian.com/commentisfree/2019/oct/09/fossil-fuel-giants-greed-carbon-emissions