'But the real problem is. . . .': The Chameleonic Insidiousness of 'Overpopulation' in the Environmental Humanities

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Introduction
There is a pervasive, usually unconsidered postulate in most environmental thinking and criticism. This is that its work means the isolation of some phenomenon that can then be argued to be the primary cause of environmental degradation. For some, overpopulation seems the self-evident issue, for others the dynamics of consumer capitalism, for others the underlying cultural contexts of patriarchy, or colonial or neo-colonial attitudes to nature, and so on.

However, as more and more nonhuman agencies interact in badly understood ways with increasingly obtrusive human actions, environmental degradation becomes less a matter of unitary or even discernibly plural causes, and more the emergent effect of the combination of numerous interacting issues of a hybrid kind, comprising capitalism, population pressure, technological innovation per se, deforestation, neo-colonialism, and cultural norms (such as those of patriarchy), along with such capricious material factors such as levels of methane from thawing ground in Siberia, soil degradation, the varying reflectivity of clouds.... Here, increasingly, there may seem to be no one localizable or unitary, root 'real problem' at all. Instead, these phenomena — warming tundra, deforestation, overpopulation, human flourishing and excessive resource use — create together an obscure whole, alarming and only partially knowable. Complexity has become, as it were, the underlying environmental meta-problem. One sign of this opaque complexity is the proliferation and now becoming-cliché

of the term 'Anthropocene', for the one word forms a convenient but also masking shorthand for innumerable uncertainly related phenomena.

The issues gathered under the heading 'overpopulation' instantiate, as if in miniature, this complexity at its most intellectually and morally intractable, so much so that many thinkers seem to prefer to overlook it altogether. A representative example of how such complexity unfolds is 'The Population Delusion', a *New Scientist* special feature of 26th Sept 2009 (35–4), a series of current, differing arguments on the relation of human population growth to environmental degradation. The editors' introduction observes: 'Every time we publish an article in *New Scientist* detailing yet another of the planet's environmental woes, readers respond by arguing that the real problem is overpopulation' (35). The *New Scientist* special has 4 main features/arguments. The first is by thinkers and activists for ever associated with arguments about a 'Population Bomb' from the 1970s. Paul Ehrlich and Anne Ehrlich directly correlate the increased resource needs of the ever expanding human population with increased malnutrition, poverty, poor education and environmental degradation, arguing that unevasive global debate is urgently needed on acceptable measures for slowing and then reversing human population growth, and that 'it should be considered immoral to have excessive numbers of children' (37). In the next paper the 'techno-optimist' Jesse Asuble projects a world in which improved agricultural and conservation measures could enable an ecologically healthy planet to sustain even 20 billion people. In effect, as in many other arguments against the so-called 'population myth',[1] the real issue is said to be the full application of science, of matching technological know-how and wisdom to the stresses of demography, for, refuting the arch-, early Nineteenth Century populationist Thomas Malthus, 'the world's food supply has steadily increased in something like "geometrical" proportion; and with the help of agricultural technology and human ingenuity, food supplies can continue to increase in tandem with population' (Howard P. Kainz).[2] In the third paper Fred Pearce writes that 'The real issue is not overpopulation but overconsumption — mostly in rich countries that have long since given up adding substantial numbers to their population' (40). Pearce expresses what is also the dominant view in environmental criticism and the humanities more generally.

Finally and more parochially, Reiner Klinholz, focuses on Europe alone to argue that the 'biggest challenge' will be the social and economic demands of an aging population (41).

Considerations of effects of overpopulation at the global level are necessarily a matter of statistics, demographic projections, and ecological models, with each entailing debates about the nature and the effects of different social, political and economic arrangements, all on varying time scales. One effect of such a complexity of factors is that it becomes hard to imagine any specific environmental issue in which effects of population pressure could not seem resolvable into something else in each individual case: poor farmers rushing in to exploit land cleared by excessive foresting can clearly — and justly in each *individual* case — be argued to be responding to a lack of livelihood options (the 'real problem' is poverty); overcrowding in conditions of urban squalor can be justly be argued to be confusing crowding in one place with the issue of too many people globally — the 'real problem' is the impoverishment of rural life, and systems of economics that favour large agglomerations. In each case, overpopulation can even seem a morally obnoxious theme to highlight, evasive of other causes of environmental degradation, tantamount to saying 'the problem here is that these people exist'.

Thus it is that in the humanities the complexity of environmental questions has had the ironic effect of enabling intellectual simplification, even evasion, when it comes to issues of population. The temptation is easy to feel, given the associations of this issue with coercive measures of population control in China and India, along with its immediate intrusion into areas of 'private' life, such as family size, and its perceived threat to women's rights etc. It has seemed far more straightforward to sidestep this part of the complex of factors destroying the former biosphere of the Holocene in favour of others, more morally comfortable to engage with — such as issues of human equity, anthropocentrism, capitalist oppression, patriarchy. To use the search function on the website of the leading journal of ecocriticism, *ISLE,* is to find, since foundation of the journal in 1993, 'overpopulation' mentioned occasionally but almost never discussed. Even the issue of 2014 devoted to ecocriticism in China, with its notorious and now revised One Child Policy, contains only the most cursory, passing mention of population.[3]

The chameleonic insidiousness of overpopulation is always to seem resolvable into something more comfortable to categorise, and so escape adequate acknowledgment. Ursula Heise's chapter on novels concerning population pressure in *Sense of Planet Sense of Place* argues that dystopian scenarios like some of J.G. Ballard's are really depictions of overcrowding in an urban space (i.e. a different issue from global overpopulation). The real issue here could rather be said to be that of sometimes class-based anxieties about personal space and identity.[4] Andreu Domingo's survey of 'demodystopsias', as he calls them, finds that, at worst, novels continue the eugenicist scenarios associated with demography in the first half of the twentieth century, and express elitist fears of being swamped by 'the masses', or of 'hordes' of Asians overrunning America or Australia, and so on.[5] The challenge for critical engagement may be this: to acknowledge the dubious cultural politics which Heise, Domingo and others trace in so many literary texts that present themselves as engaging with demographic change, without, however, allowing the impression that highlighting the social prejudice in many representations is adequate to dispel issues of global overpopulation altogether. This would mean, for example, that Mia Jian's novel *Dark Road* (2012)[6] can be acknowledged in its force of protest against individual injustice in relation to China's One Child Policy, without at the same time making any pretense that celebration of this book in any way implies that the question of global overpopulation has thereby been adequately, or even directly engaged. Valid arguments about injustice and economic equity should not do double duty as forms of population denialism.

It now seems increasingly to be recognised in the environmental humanities that overpopulation is a topic which demands a more adequate stance. Dipesh Chakravorty has recently highlighted it as a problem that does not resolve into a subset of standard postcolonial arguments about the effects of imperialism or expanding Western capitalism:

Population is often the elephant in the room in discussions of climate change. The 'problem' of population — while due surely in part to modern medicine, public health measures, eradication of epidemics, the use of artificial fertilisers, and so on — cannot be attributed in any straightforward way to a logic of a predatory and capitalist West,

for neither China nor India pursued unbridled capitalism while their populations exploded.[7]

Since overpopulation is fed by some developments that only a psychopath would wish reversed (improved health etc.), one can understand why Braden R. Allenby and Daniel Sarewitz's study of present and future social and technological challenges effectively, if evasively, describes overpopulation as condition to be inhabited rather than any sort of problem to be solved.[8]

Is this merely a kind of fatalism, however? Diana Coole ends a survey of debates on the issue of overpopulation with the following conclusion:

> [there are] not good enough reasons for suppressing discussion about population numbers and the merits of fewer people, especially as renewed public concerns emerge over resource insecurity, biodiversity, climate change and high-density urban living, but suppression of the issue has been such that it still seems unlikely to get the attention it needs.[9]

Reasons to try to look at 'overpopulation' head-on

Partly following Coole's lead, it may be helpful to reiterate why overpopulation, as an environmental issue, ought to be more directly addressed.

(1) A first point is the interrelation of capitalism and population, and the fact that overpopulation directly feeds the needs of ever expanding markets. So-called developed countries like Britain, with an 'expanding economy' and aging population, demand an ever-renewed stream of new workers and consumers. The attendant increase in economic activity also provides the most easily achieved statistics of economic 'success', increased GDP. Conversely, overpopulation in many parts of world supports poverty by reducing the bargaining power of labour. In sum, for environmental criticism to ignore overpopulation is to pass over a crucial way in which capitalism works and expands.

(2) A second closely related issue concerns the environmental costs hidden in the now standard, 'optimistic' response to projected future population numbers—the appeal to interpretations of the 'demographic transition' model currently dominant in demography.[10]

The model is effectively a theory of modernisation, even another 'end of history' narrative. It projects a process whereby 'undeveloped' societies with initially both high mortality and high fertility rates are seen to mutate through first, a phase of enhanced development and reduced mortality leading to rapid population growth (the phase occupied by much of the world at present), but then to developed conditions enabling reduced fertility, resulting finally in a higher but stable population at rough equilibrium (the phase already achieved by developed nations). In political practice, this theory is taken up crudely as a way of dismissing population concerns, with arguments that 'development is the best contraceptive'.[11] Increased economic security, backed up by the increased freedom of women to make their own reproductive choices free of patriarchal and other cultural pressures, is also seen to reduce the sense of a need for children as future family support in old age.

This double appeal to increased prosperity and women's rights and welfare has been nicknamed the Cairo Consensus,[12] after the UN conference on population at Cairo in 1994 where previously coercive forms of population control were rejected in favour of a focus on issues of individual reproductive rights. The Cairo consensus can seem an ethically bewildering scenario, an expansion of the individual rights agenda that few would see as unwelcome, however evasive of overpopulation as a macro-social concern, but also a reformulation of population issues in limitedly individualistic terms that help underwrite the ecocidal and self-conflictual capitalist super-state now emergent across the globe. Appeals to a future 'demographic transition' in Africa and elsewhere also evade the moral duty of 'developed' nations themselves to reduce their environmental impact.[13]

A recurrent danger for the world's societies in addressing longer term environmental trends is that of inter-generational buck-passing, the endorsing of environmental policies whose apparent engagement masks the fact of their longer-term inadequacy, thus foisting large costs and impacts onto future generations. Many appeals to a 'demographic transition' are effectively gestures of this type. Stephen Gardiner writes:

> Strong coercive regulatory regimes may be needed in order to stop overpollution, and so to address the pressing problem suggested

by population growth. Second, the benign demographic transition hypothesis should be treated with suspicion.[14]

In sum, by letting standard arguments on the 'demographic transition' circulate without comment, many environmental thinkers are avoiding a crucial issue.

(3) Thirdly, debates about how the planet's biosphere might accommodate a growing human population always change drastically in nature if one drops their often total disregard for the needs and ethical claims of other species. Books like Danny Dorling's *Population 10 Billion* strike their supposedly reassuring stance on population future land-use by assuming an exclusive human entitlement to the planet. A repellent anthropocentrism also marks most advocates of the supposed virtues of the 'demographic transition'.

The Insidious Elusiveness of Overpopulation

Within the humanities the long-orthodox view is that, as an environmental threat, the topic of overpopulation mainly represents an ideological ploy by which, through a rhetoric of natural limits, the poor are themselves rendered responsible for deprivation or environmental degradation. 'Overpopulation' is immediately associated with the arguments, often misrepresented, of the early nineteenth-century cleric Thomas Malthus. Andreu Domingo sums up:

> For Malthusian orthodoxy, defended by [fictional] dystopias that play on and heighten the fear of population explosion, scarcity is not a problem of production and distribution of goods, but a simple consequence of too many people. (Domingo, 731)

Timothy Morton's *The Ecological Thought* is exemplary of the stance of ecocritics on overpopulation. Morton takes up and dismisses the issue of overpopulation briefly, simply identifying it with the popular Malthusianism of the 1970s and after.[15] Currently, the issue of overpopulation can function in ecocritical contexts as a kind of Rorschach test. Whereas a reader who stresses elements of 'ecology' in a text is held to serve a moral cause, one highlighting 'overpopulation' is immediately suspect, a latent racist, fascist, imperialist or whatever.

Yet the challenge of overpopulation is caricatured if merely identified with popular Malthusianism. It is better if less simply seen as the fraught, complex effect of improved health conditions, inherited cultures of reproduction, and economic pressures, including lack of security. Correspondingly, the negative impacts of overpopulation are also not those of crass Malthusianism, but rather a hybrid of various dangers and impacts. Already risking simplification, these can be schematised as follows.

(1) Acknowledging that overpopulation is a legitimate issue, though often a tool for evasive scapegoating, Bryan G. Norton writes that 'population growth cannot be considered an *independent* driver of the social changes that result in environmental degradation' (emphasis added).[16] The operative nuance here is the term 'independent', for population is better considered as a catalyst than an independent factor. The presence of a catalyst is decisive as to whether a chemical reaction happens or not, but it is the other elements which determine what that reaction is. Analogously, overpopulation intensifies the ravages of capitalist exploitation, but it is not capitalism itself. A high population multiplies/transforms what might seem merely cultural change into a significant material and even global one—the growth of meat eating in China, taken as a mark of social prestige, becomes, through the vast population multiplier, the loss of large areas of the earth to destructive forms of animal husbandry. Workers in environmental criticism who idealise the value of their work in terms of the effects that must result from changing the 'environmental imaginary' are also appealing to the assumed transformative power of large populations.

(2). Overpopulation as an issue is often controversial because so chameleonic, appearing as a very different matter depending on the scalar context at issue. The three main scales at which the issue is usually posed are the *national*, the *individual* and the *global*, and these both differ greatly in implication but also interfere with each other. (a) Let us take scale framing at the national level first. Writing in the critical anthology *Life on the Brink,* Tim Palmer writes of his career in river conservation in the US. He argues that each success in doubling the efficiency of water use per individual had been rendered null by increased population. 'In the end we will not have protected wild rivers, spared endangered species, or saved public money as we

had intended, but we will have principally served to make more population growth possible'.[17] Palmer also relates how a long hard-fought campaign against a new freeway was successful — but only till increased population made the pressure to reduce 'congestion' overwhelming. So 'The freeway was built' (98).

However, Palmer's essay in *Life on the Brink* becomes, like several in this American collection, an argument for curbing immigration into the United States, a different issue altogether from that of global overpopulation. An argument relating increasing population pressure to the undermining of campaigns of environmental conservation would seem incontrovertible if applied to the earth as a whole. To relate it to the issue of how human numbers are distributed into specific national areas, however, is effectively to change the subject, exemplifying the kind of national scale framing that has made demography often so politically dubious.

Palmer's case may also highlight another reason why overpopulation so rarely appears in Western ecocriticism. A critic in the United States who, in order to avoid being seen to make pronouncements about population politics in other cultures, decides to focus on her own nation's population impact, would at once be embroiled in debates about immigration as well.

(b) A more challenging scale framing is that at the level of the individual. It was recognised at the UN Cairo conference that official policies on overpopulation had all too often been responsible for systematic injustice against many individuals, especially women.

Betsy Hartmann's classic denunciation of the sexism and misogyny latent in measures of population control makes a case for framing issues of reproductive politics solely, even exclusively, at the level of the rights of each individual woman. She observes that anti-abortion campaigners and advocates of population control, seemingly at odds with each other, yet 'share one thing in common':

> They are both anti-women. Population control advocates impose contraception and sterilization on women; the so-called Right-to-Life movement denies women the basic right of access to abortion and birth-control. Neither takes the interests and rights of the individual woman as their starting point.[18]

The first section of Hartmann's book ('The Real Population Problem') targets varieties of Malthusian argument and later sections argue for the priority and 'inviolability of individual reproductive rights' (xviii) in any debate about overpopulation. Scale-framing at the individual level is also the commonest form of treatment in literary representations of overpopulation — depictions of the individual experience of overcrowding or, more directly, Ma Jian's account in *Dark Road* of one women's persecution under the then current Chinese One-Child Policy, or, in many an overcrowded fictional dystopia with draconian anti-natal laws, the trials of a woman who discovers herself to be pregnant (as with the heroine of Anthony Burgess's *The Wanting Seed* (1962)).[19]

However, as Coole writes, dismissals of the 'numbers game' picture of humanity en masse which scale-frame the population question as a matter of individual and family options, effectively 'disintegrate' the issue '('Too many bodies', 209), rendering out of sight consideration of overpopulation as a *global* pressure. A crucial factor here is that of 'methodological individualism' viz. the postulate that there are no properties of human, social groups that cannot be understood adequately and exclusively by reference to the properties of individuals. Hartmann's framing of the overpopulation issue as an ethical matter of individual right is analogous to this postulate. Yet this also, antagonistically, forms an intellectual pillar of neoliberal economics and politics, with their ideologies of individual choice and 'free markets'. Carol A. Kates weighs arguments about reproductive right and finds the liberal, individual rights discourse dubious in this context, given that too absolute an insistence on individual right now conflicts with others' more fundamental rights to sufficient conditions for human life.[20]

Overpopulation also undermines methodological individualism because of scale effects: the impact of more and more people in relation to some area or issue is not a matter of the merely aggregative extension of given individual impacts. The catalysing destructiveness of increased numbers is often an emergent property (a 'tipping point') — vast areas can become devastated by changes resulting from population growth in just one city, along with its creation of newly demanding levels of complexity in administration, politics, distribution, transport systems etc.

(c) The elusiveness of overpopulation *as a global issue* is that it does not exist as a unitary phenomenon. While the overall impact of overpopulation is felt world-wide, the term itself, like the term 'Anthropocene' in cultural debate, remains a shorthand for multiple and contradictory issues and an opaque complexity. In any one country, advocates for population restraint may have a bewilderingly diverse set of aims. These may be: economic development (as argued during the emergence of China's One Child policy); an end to immigration; women's rights; forms of closet racism or social prejudice, nature conservation. . . .

Jacques Derrida wrote, defining a concept of an 'event' as intellectual trauma:

> A major event should be so unforeseeable and irruptive that it disturbs even the horizon of the concept or essence on the basis of which we believe we recognize an event as such ... the event is first of all that I do not comprehend.[21]

In relation to the event of overpopulation on the global scale, one would also seek to fine-tune this definition. Firstly, overpopulation is not unforeseeable. As David Wood has written of global environmental degradation, it requires us to acknowledge an ethical demand that 'does not begin on the other side of calculation, but is already intimately involved in it'.[22] Secondly, there is no '*an* event' in the sense of a unitary irruption, but only, in each varying individual or national instance, the uncertain, always contestably chameleonic implication of various impacts, each caught up in scale effects that may be imperceptible as significant in any one case, dispersal being their nature. Intellectually, with global overpopulation as an environmental issue, the 'event' is partly that there is no 'the real problem' as such, but multiple and never fully localisable contaminations and catalytic factors feeding various environmental pressures. The causes of expanding human numbers are likewise multiple — cultures of reproduction, insecurity and impoverishment through destructively industrialised systems of agriculture, 'economic growth' and expanding consumer markets, international rivalries, improved health care.

Each of the three levels of scale framing overpopulation can so easily support a view evading the issues raised by the others. If you scale

frame the issue at the level of the individual woman or man you may be predetermined to evade other questions (the evidence that there are too many people already, a very large number of them young); to frame it at the level of the nation state is also evasive of global overpopulation, as well as leading into the divisive and arguably irrelevant issue of immigration. Yet to engage the issue at the global level is to entail a complexity that strains to breaking point accessible representation, or any kind of monolithic diagnosis.

Overpopulation: Literary Representation at Breaking Point
As an issue for literature and criticism, demography entails phenomena often too big to be seen. They form a kind of meta-context, enabling the conditions in which the institutions of a national literature can emerge in the first place, with all the readers, writers and critics, publishers, literate markets etc. which sustain it. For instance, what would 'Argentinian literature' or 'Australian literature' be without the imperialist demographic politics of the 19th and 20th centuries, programmes of settler colonization that shifted millions of people from Europe? Furthermore, could one honestly separately the prestige and influence of centuries of literature in English from the large numbers of native speakers of that language now alive, as compared to the fate of great literature written in a language that relatively few people can read?

So population is, like the climate, both a completely obvious yet usually unconsidered context for any literary work. Correspondingly, global overpopulation has some of the elusive features that have made climate change so intractable to conceptualise as an object of cultural or political representation, and the two issues often merge into one maddeningly imponderable hybrid. It takes place on a time scale of generations, and the connections, when they even exist, between causal responsibility and moral responsibility are complex, disjunctive in space or time and often contestable. It is never perceptible *as such*, for population elsewhere in the world is not obviously perceptible from any one area (though images of city crowds have often acted as a dubious synecdoche for the global question). Its apparent partial manifestations can be deceptive — a crowded city in Africa may well have less environmental impact than a small town in Canada. Another

analogy is that, just as one daily face of environmentally destructive fossil fuel use is domestic comfort, time-saving utilities etc., so the immediate manifestation of overpopulation is of no seeming enemy of humankind but the faces of babies and children. Finally, if more tacitly than fossil fuel use, an ever-growing population is deeply implicit in the cult of economic growth and in national power and influence.

Demographic issues pervade current cultural self-understandings while rarely being conceptualised as such. One exception is the term 'baby boomer' (people born loosely in the post-WW 2 baby boom (c. 1946–1964)), now widely if loosely used in accounts of conditions for the rise of 'youth culture' and attendant changes.

Under-examined assumptions about population on the national scale underlie some seemingly common sense methods of criticism. An extremely common way of proceeding in the interpretation of novels is this: the critic takes up some chosen text to highlight how specific issues of culture or identity play out within it, usually suggesting this particular text as offering some sort of explanatory critique, satire, model or norm. At the basis of such a cultural reading is a constitutive notion of *representativeness*, viz. a particular fictional woman's story is taken as saying something in general about many women's lives in that society; or, the life-story of a fictional poor person implies the recognition of millions of poor nationally, and so on. The basic trope of critical interpretation is correspondingly a *scaling-up*, that is, to highlight the book as enacting in fictional miniature a cultural political drama that could be held usefully to apply, scaled-up, on the national level. That this is how so many novels are written and read may seem too obvious to need stating, yet an undertheorised and unquantified notion of representativeness and population is at the basis of it.

Such assumptions about population, constitutive of the argument though they are, are rarely made explicit in such readings. An exception is E. Steinlight's reading of the representation of female characters who stand for 'surplus national population' of women in the mid and late Victorian 'sensation' novel — the figure of Lady Audley in Mary Elizabeth Braddon's *Lady Audley's Secret* (1862)[23] for instance, who, beneath the manipulative appearance of an alluring genteel femininity, is actually a ruthless social-climber, bigamist, and murderer. In this one invented character, in herself improbable, the novel is read as

representing pervasive anxieties about social fluidity, the insecurity of clear class and gender roles in an amorphous national population, including the large number of 'redundant' women.[24] One problem with such realist metonymy as a mode of representation is that anxieties concerning national trends and possibilities, once scaled down into the psychology and actions of one character, stretch the limits of psychological realism in the specific case, with Lady Audley becoming a figure of strikingly grotesque monstrousness.

In Steinlight, and in critical work on numerous texts since the mid-19th century, the boundary that determines representativeness is the nation state. The assumed context of a sizable, bounded national population, shared by critic, author and implied reader, is what tacitly gives significance and cultural reference to the characters in a text. Yet, this way of reading, though still very prominent, is also anachronistic. Fredric Jameson argues of work even from the early twentieth century that realist or even modernist modes of representation were no longer adequate in a world in which the nation state could no longer be imagined setting relatively determinate boundaries of significance, implication and impact. Writing of modernist techniques of deep narrative immersion in the consciousness of a city such as London, 'a tiny corner of a social world' he argues:

> The truth of that experience no longer coincides with the place in which it takes place. The truth of that limited daily experience of London lies, rather, in India or Jamaica or Hong Kong: it is bound up with the whole colonial system of the British Empire that determines the very quality of the individual's subjective life.[25]

The fact of global overpopulation exacerbates this problem of fictional representativeness to a new and perturbing degree: incalculable, virtual multitudes of distant, diverse and often impoverished people now hover, so to speak, in the air of even the most secluded Western-style interior. Future generations and their deprivation become a morally unavoidable question for present readings. Their questioning presence discredits, for example, readings of contemporary or twentieth century literature that simply endorse the material and individualist norms of the developed world.

What of attempts to artistic represent overpopulation directly? Global overpopulation is not a unitary entity, isolable as such, but a catalytic element, inseparable from diverse other issues, and one whose force inheres in the impersonality of scale effects. As a consequence, its literary representation in some sensuously perceptual form can only be of some local effect, in scenes either knowingly partial, or symbolic. It becomes a strange instance of a real-world, important issue whose would-be representation must tend to modes of writing associated with the irrealism or even the fantastic, the correlate of modes of attention associated with mere 'genre fiction'. Adam Trexler's arguments, in relation to the novel and climate change, against critics' aesthetic bias towards modes of individualised realism and depictions of individual psychological subtlety, are also pertinent here. The counter-advocacy of genre fiction, by Trexler and Mark McGurl, arises from the sense that the aesthetic canons of the realist novel are now damagingly anachronistic.[26] If genre fiction 'names those literary forms willing to risk artistic ludicrousness in their representation of the inhumanly large and long',[27] then it follows that enquiry is needed into the assumptions and effects of what currently counts as artistic, non-ludicrous, authentic, and so on.

For one can hardly say that overpopulation is not prominent, nor a cliché even, in forms of dystopian art, film and literature of the last fifty years, even as it has almost disappeared as a serious issue for academic criticism. These dystopian projects demonstrate how attempts to think demography on the grand scale, as an independent issue, entail modes of writing that risk seeming immediately caricature. The inherently distributed nature of longer-term demographic issues may result in an irrealist condensation or inflation of events or trends into one fantastic event or plot, as in P.D. James's *The Children of Men* (1992)[28] in which humanity suddenly becomes infertile, and no more babies at all are born to replenish an ever aging world, or as in Amin Maalouf's *The First Century After Beatrice* (1992; trans.1993),[29] which imagines the development of a drug for men that guarantees that any child they father will be male, a drug that proves all-too popular in a misogynist societies and which is projected to be irreversible in effect. In such plots the slow-motion and distributed nature of demographic effects, whether of an aging population or a preference for male progeny, take on a cartoon-like extremism, whereas the often

insidious power of demographic change actually lies in its dispersed, gradual, low-visibility, its contamination or catalytic supplementation of innumerable other questions and areas of life.

Moreover, many of these fictional dystopias are finally evasive of the challenges of overpopulation as it currently exists. A familiar plot device is to extrapolate current trends into future worlds with draconian anti-natal laws or severe restrictions on space or mobility (see, for instance, Anthony Burgess, *The Wanting Seed*; Brian Aldiss, *Earthworks* (1965),[30] J.G. Ballard, 'Billenium' (1961);[31] Philip José Farmer, Dayward (1985);[32] T.J. Bass, *Half Past Human* (1971)[33]). Such plots both (1) seem to highlight contemporary demographic and other trends, usually on rather vague terms that simplify the implication of demography in every facet of contemporary life, and (2), to project a narrative in which the drama for the reader lies, not in thinking through the nature of overpopulation, but in the criminality of characters who work to reduce human numbers in unacceptable ways, with conspiracies to reduce the population, or selected parts of it, by deliberately induced plague, sterilization or impoverishment (as in Chelsea Quinn Yarbo's *Time of the Fourth Horseman* (1976),[34] or Marshall Goldberg and Kenneth Kay's *Disposable People* (1980),[35] George Reginald Turner's *The Sea and Summer* (1987),[36] Lionel Shriver's *Game Control* (1994),[37] or Colin Macpherson's *The Tide Turners* (1999)).[38] Alternatively, these texts indulge fantastic solutions to population pressures (alien intervention in Sheri S. Tepper;[39] enhanced human evolution in Joanna Russ's *And Chaos Died* (1970)).[40] All such plots offer ways of both having your cake and eating it: they raise a contemporary issue of population growth and then, instead of conceptualizing it more fully, they extrapolate it into a dystopian scenario whose extremisms then become objects of repulsion and rejection according to current moral norms. As to present day demography, the overall implication of such texts remains only of a vague something-needing-to-be-done.[41]

A final point suggests itself. Global overpopulation tends to become a topic largely in modes of fictional representation that make it less likely to be taken seriously as an issue for critical discussion. In this respect the topic may highlight human biological limits, not in the Malthusian sense however, but in that of our relative psychic entrapment in the spatial and temporal scales of day-to-day

experience. Neuro or cognitive criticism — the use of neurological research and cognitive science in literary study — offers a compelling set of arguments to the effect that scale-framing at the (limited) level of individual, subjective experience is constitutive of literary representations when at their most forceful or memorable. This inbuilt bias is highlighted even by Sharae Deckard's defense of a notion of 'world literature' when she writes:

> As the social form of capitalist modernity, literature necessarily registers the ecological regimes that constitute the world-ecology, revealing the structures of feeling, affects, bodily dispositions, and lived experiences that correspond to particular socio-ecological relations.[42]

In such a case, an issue such as global overpopulation, often exceeding individual-scale factors such as 'structures of feeling, affects, bodily dispositions, and lived experiences', will necessarily be subject to elision or to very partial or mis- representation, or will become apparent largely in modes of fictional representation that are unlikely to be taken seriously.

Conclusion

The almost complete evasion of issues of population in environmental literary criticism now damages its claim to be taken seriously as an intellectual movement. The absence may arise both from the chameleonic elusiveness of the issue and from that fact that 'overpopulation' as a concern is discordant with dominant notions of 'ecology', romanticised and moralised as affirming a knowledge of 'interconnection' and 'interaction' taken as automatically affirming an agenda of mutual recognition and help ('All things connect and cannot escape into separation' (Steve Menz)).[43] 'Overpopulation' describes the same fact of 'interconnection,' but without the moral gloss. It foregrounds the unpalatable fact that environmental understanding leads at least as easily to aggression, blame and resource wars. It remains the largely unacknowledged shadow of the limited 'ecological' ethics at the basis of numerous readings of culture and the environment. However, to acknowledge the horrible ethical complexities that beset questions of population pressure, the multiple, contradictory nature of its 'event', is surely preferable to pretending the issue does not exist.

Notes

[1] See, for example, Dany Dorling, *Population 10 Billion: The Coming Demographic Crisis and How to Survive it* (London, Constable, 2013); Ian Angus and Simon Butler, *Too Many People: Population, Immigration, and the Environmental Crisis* (Chicago IL, Haymarket Books, 2011).

[2] 'Sexual Mores, Ethical Theories, and the Overpopulation Myth', *Heythrop Journal*, XLIX (2008), 361–69, 367.

[3] Lili Song, 'To be or Not to be: The Pathos of Chinese Environmental Writing About the Yellow River', *ISLE* 21.4 (Autumn 2014)), 766–80, 776.

[4] *Sense of Place and Sense of Planet: The Environmental Imagination of the Global* (Oxford, Oxford University Press, 2008), 71–9. I have taken up Heise's accounts of overpopulation in my *Ecocriticism on the Edge: The Anthropocene as a Threshold Concept* (London, Bloomsbury, 2015), 88–91.

[5] '"Demodystopias": Prospects of Demographic Hell', in *Population and Development Review* 34 (2008), 725–45, 730. For the demographic politics of various population control movements since the Nineteenth Century, see Matthew Connelly, 'Seeing Beyond the State: The Population Control Movement and the Problem of Sovereignty', *Past & Present*, no 193 (Nov. 2006), 197–233.

[6] Mia Jian's *Dark Road*, trans. Flora Drew (London: Vintage, 2014).

[7] 'The Anthropocene and the Convergence of Histories', in *The Anthropocene and the Global Environmental Crisis: Rethinking modernity in a new epoch*, edited by Clive Hamilton et al. (London, Routledge, 2015), 44–56, 50.

[8] Braden R. Allenby and Daniel Sarewitz, *The Techno-Human Condition (*Cambridge, MA, MIT Press, 2011), 64, 195–6.

[9] Diana Coole, 'Too many bodies? The return and disavowal of the population question', *Environmental Politics* 22.2 (2013), 195–215, 213.

[10] See Simon Szreter, 'The Idea of Demographic Transition and the Study of Fertility: A Critical Intellectual History',*Population and Development Review*, 19 (1993). 659–701.

[11] Quoted from Matthew Connelly, 'Seeing Beyond the State: The Population Control Movement and the Problem of Sovereignty', in *Past and Present* 193 (2006), 197–233, 230.

[12] See, for example, Saul Halfon. *The Cairo consensus: demographic surveys, women's empowerment, and regime change in population policy* (Lanham, MD, Lexington Books, 2007).

[13] Solve-all appeals to the 'demographic transition' in relation to future population pressure overlook the ways in which reduced birth rates are effectively counter-balanced as environmental impacts by increased longevity, presumably

because no one with any moral sense would advocate things like euthanasia, plague etc.

[14] 'The Real Tragedy of the Commons', *Philosophy and Public Affairs* 30 (2001), 387–416, 416.

[15] *The Ecological Thought* (Cambridge MA, Harvard University Press, 2010), 37, 121–122.

[16] 'Population and Consumption: Environmental Problems as Problems of Scale', *Ethics and the Environment* 5 (1) (2000), 23–45, 24.

[17] 'Beyond Futility', in *Life on the Brink: Environmentalists Confront Overpopulation*, edited by Philip Cafaro and Eileen Crist (Atlanta GA, University of Georgia Press, 2012), 98–107, 99.

[18] Betsy Hartmann, *Reproductive Rights and Wrongs: The Global Politics of Population Control* (revised edition. Boston MA, South End Press, 1995), xviii.

[19] *The Wanting Seed* (London, Heineman, 1962).

[20] Carol A. Kates, 'Reproductive Liberty and Overpopulation', *Environmental Values* 13 (2004), 51–79, 62.

[21] 'History of the Lie', in *Futures: Of Jacques Derrida*, edited by Richard Rand (Stanford CA, Stanford University Press, 2001), 90.

[22] 'On Being Haunted by the Future', *Research in Phenomenology* 36 (2006), 274–98, 283.

[23] Mary Elizabeth Braddon, *Lady Audley's Secret*, edited by Lyn Pykett (Oxford: Oxford University Press, 2012).

[24] Steinlight, 'Why Novels are Redundant: Sensation Fiction and the Overpopulation of Literature', *ELH* 79.2 (2012), 501–35.

[25] *Postmodernism, or the Cultural Logic of Late Capitalism* (Durham NC, Duke University Press, 1991) 411.

[26] Trexler, *Anthropocene Fictions: The Novel in a Time of Climate Change* (Charlottesville, University of Virginia Press, 2015), 13–14; McGurl, 'The Posthuman Comedy', *Critical Inquiry* 38.3 (2012), 533–553.

[27] 'Posthuman Comedy', 539.

[28] *The Children of Men* (London, Faber and Faber, 1992).

[29] *The First Century After Beatrice*, translated by Dorothy S. Blair (London: Quartet, 1992).

[30] *Earthworks* (London, Methuen, 1965).

[31] In Ballard, *The Complete Short Stories* (London, Flamingo, 2001), 267–276.

[32] *Philip José Farmer*, *Dayward* (New York, Putnam, 1985).

[33] T.J. Bass, *Half Past Human* (New York, Ballantine, 1971).

[34] *Time of the Fourth Horseman* (New York, Ace Books, 1976).

[35] *Disposable People* (New York, Tower Books, 1980).

[36] *The Sea and Summer* (London: Faber and Faber, 1987).

[37] *Game Control* (London, Faber and Faber, 1994).

[38] *The Tide Turners* (Yeppoon, Qld, Mopoke Publishing, 1999).

[39] For Sheri S. Tepper, see Samantha Morgan, 'Malthusian Ideas: Sherri S. Tepper's New Ecological Misery', *ISLE* 22 (2015), 222–240.

[40] *And Chaos Died* (New York, Ace Books, 1970).

[41] The aesthetic challenge is considerable for a novel that would strive to represent the working of successful measures to address overpopulation, with changes taking place in many different cultures over several generations in education, with reduced economic insecurity, family planning and women's freedom. It is no wonder perhaps that John Brunner's *Stand on Zanzibar* (London, Doubleday, 1968), the only novel widely recognised to approach an adequate representation of some of the multifariousness of global overpopulation, still allows itself to end with an implausible fantasy about some possible change in the human genome to eradicate aggression. The reason it seems, is partly that Brunner, pessimistically, does not believe that cultural and political change alone could overcome the destructive tendencies inherent in human biology. See M. Keith Booker, 'English Dystopian Satire in Context' in *A Companion to the British and Irish Novel*, edited by Brian W. Shaffer (Oxford, Wiley-Blackwell, 2005) 32–44, 4–42.

[42] *http://www.academia.edu/2083255/Mapping_the_World-Ecology_Conjectures_on_World-Ecological_Literature*

[43] Steve Menz, 'Brown', in *Prismatic Ecology: Ecotheory beyond Green*, edited by Jeffrey Jerome Cohen (Minneapolis and London, University of Minnesota Press, 2013), 193–212, 209.