## off

### T-Medicines

#### 1] Interpretation – Medicines solely refer to physical substances.

American Heritage Dictionary of Medicine 18 The American Heritage Dictionary of Medicine 2018 by Houghton Mifflin Harcourt Publishing Company <https://www.yourdictionary.com/medicine> //Elmer

"A **substance**, **especially a drug**, **used to treat** the signs and symptoms of a **disease**, condition, or injury."

#### 2] Violation – Genomic Medicine is not – it’s an “interdisciplinary medical specialty”.

Roth 19 Stephanie Roth J Med Libr Assoc. 2019 Jul; 107(3): 442–448. Published online 2019 Jul 1. doi: 10.5195/jmla.2019.604 (Biomedical and Research Services Librarian, Ginsburg Health Sciences Library, Temple University, Philadelphia)//Elmer

**Genomic medicine is an interdisciplinary medical specialty involving the use of genomic information** that has rapidly grown since the completion of the Human Genome Project (HGP) more than a decade ago. Definitions of basic concepts of genomic medicine are provided in Table 1.

#### Their solvency advocate agrees, vidyasagar defines CRISPR as “specialized stretches of DNA”, not a specific medicine

#### Medical Specialty refers to the field, not a particular substance.

American Heritage Medical Dictionary 7 The American Heritage® Medical Dictionary Copyright © 2007 //Elmer  
A **branch of medicine** or surgery in which a physician specializes; the field or practice of a specialist.

#### 3] The Standard is Limits – They explode the topic to include therapies, research areas, treatments, drug discovery techniques, etc. that eviscerate a stable locus of predictability. Limits is a sequencing question to Clash and in-depth Education since we’re only able to prepare if there’s stable core controversies.

#### 4] TVA Solves – reduce IP protections on gene-based medicines.

#### 5] Paradigm Issues –

#### a] Topicality is Drop the Debater – it’s a fundamental baseline for debate-ability.

#### b] Use Competing Interps – 1] Topicality is a yes/no question, you can’t be reasonably topical and 2] Reasonability invites arbitrary judge intervention and a race to the bottom of questionable argumentation.

#### c] No RVI’s - 1] Forces the 1NC to go all-in on Theory which kills substance education, 2] Encourages Baiting since the 1AC will purposely be abusive, and 3] Illogical – you shouldn’t win for not being abusive.

### 1nc – Kritik

#### Settler colonialism is a power relation structured around the logic of elimination – the libidinal drive to eliminate the native, evidenced by centuries of smallpox blankets, boarding schools, bounties, pipelines, etc. This fundamental logic consistently articulates itself across time and space, seeking to remove native presence from the land by assimilation and genocide.

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Patrick Wolfe (2006) Settler colonialism and the elimination of the native, Journal of Genocide Research, 8:4, 387-409, DOI: 10.1080/14623520601056240 // sam :)

The question of genocide is never far from discussions of settler colonialism. Land is life—or, at least, land is necessary for life. Thus contests for land can be— indeed, often are—contests for life. Yet this is not to say that settler colonialism is simply a form of genocide. In some settler-colonial sites (one thinks, for instance, of Fiji), native society was able to accommodate—though hardly unscathed—the invaders and the transformative socioeconomic system that they introduced. Even in sites of wholesale expropriation such as Australia or North America, settler colonialism’s genocidal outcomes have not manifested evenly across time or space. Native Title in Australia or Indian sovereignty in the US may have deleterious features, but these are hardly equivalent to the impact of frontier homicide. Moreover, there can be genocide in the absence of settler colonialism. The best known of all genocides was internal to Europe, while genocides that have been perpetrated in, for example, Armenia, Cambodia, Rwanda or (one fears) Darfur do not seem to be assignable to settler colonialism. In this article, I shall begin to explore, in comparative fashion, the relationship between genocide and the settler-colonial tendency that I term the logic of elimination.1 I contend that, though the two have converged—which is to say, the settler-colonial logic of elimination has manifested as genocidal—they should be distinguished. Settler colonialism is inherently eliminatory but not invariably genocidal. As practised by Europeans, both genocide and settler colonialism have typically employed the organizing grammar of race. European xenophobic traditions such as anti-Semitism, Islamophobia, or Negrophobia are considerably older than race, which, as many have shown, became discursively consolidated fairly late in the eighteenth century.2 But the mere fact that race is a social construct does not of itself tell us very much. As I have argued, different racial regimes encode and reproduce the unequal relationships into which Europeans coerced the populations concerned. For instance, Indians and Black people in the US have been racialized in opposing ways that reflect their antithetical roles in the formation of US society. Black people’s enslavement produced an inclusive taxonomy that automatically enslaved the offspring of a slave and any other parent. In the wake of slavery, this taxonomy became fully racialized in the “one-drop rule,” whereby any amount of African ancestry, no matter how remote, and regardless of phenotypical appearance, makes a person Black. For Indians, in stark contrast, non-Indian ancestry compromised their indigeneity, producing “half-breeds,” a regime that persists in the form of blood quantum regulations. As opposed to enslaved people, whose reproduction augmented their owners’ wealth, Indigenous people obstructed settlers’ access to land, so their increase was counterproductive. In this way, the restrictive racial classification of Indians straightforwardly furthered the logic of elimination. Thus we cannot simply say that settler colonialism or genocide have been targeted at particular races, since a race cannot be taken as given. It is made in the targeting.3 Black people were racialized as slaves; slavery constituted their blackness. Correspondingly, Indigenous North Americans were not killed, driven away, romanticized, assimilated, fenced in, bred White, and otherwise eliminated as the original owners of the land but as Indians. Roger Smith has missed this point in seeking to distinguish between victims murdered for where they are and victims murdered for who they are.4 So far as Indigenous people are concerned, where they are is who they are, and not only by their own reckoning. As Deborah Bird Rose has pointed out, to get in the way of settler colonization, all the native has to do is stay at home.5 Whatever settlers may say— and they generally have a lot to say—the primary motive for elimination is not race (or religion, ethnicity, grade of civilization, etc.) but access to territory. Territoriality is settler colonialism’s specific, irreducible element. The logic of elimination not only refers to the summary liquidation of Indigenous people, though it includes that. In common with genocide as Raphael Lemkin characterized it,6 settler colonialism has both negative and positive dimensions. Negatively, it strives for the dissolution of native societies. Positively, it erects a new colonial society on the expropriated land base—as I put it, settler colonizers come to stay: invasion is a structure not an event.7 In its positive aspect, elimination is an organizing principal of settler-colonial society rather than a one-off (and superseded) occurrence. The positive outcomes of the logic of elimination can include officially encouraged miscegenation, the breaking-down of native title into alienable individual freeholds, native citizenship, child abduction, religious conversion, resocialization in total institutions such as missions or boarding schools, and a whole range of cognate biocultural assimilations. All these strategies, including frontier homicide, are characteristic of settler colonialism. Some of them are more controversial in genocide studies than others.

#### Indigeneity exists in a constant state of sickness – the confluence of power structures that create a world uninhabitable for the native. This violence is profoundly incalculable – how does one imagine sickness as the inevitable product of a world built to eliminate indigenous people? How do you cure the incurable? The construction of Western medicine and biomedical apparatuses is invested in orchestrating sickness – the discourse of health and medicine can never come face to face with the native, because it cannot theorize life at the end of the world.

**Belcourt 17** - Billy-Ray Belcourt is a member of the Driftpile Cree Nation, a 2016 Rhodes Scholar, and Reading for an M.St. in Women’s Studies at the University of Oxford and Wadham College,

Billy-Ray Belcourt, “Meditations on reserve life, biosociality, and the taste of non-sovereignty” *Settler Colonial Studies*, pp. 2-8 // sam :)

The main argument of this paper is that the feeling of indigeneity is the miserable feeling of not properly being of this world, and that a disease like diabetes mellitus is a key manifestation of this sort of exhausted existence. To do this, I pursue the secondary claims that indigeneity is a zone of biological struggle and that the reserve is something of a non-place calibrated by affects I want to group under the sign of misery. Yes, misery is a bad word. Harsh, even. But I think it is big enough to conceptualize the cramped conditions under which life is haphazardly improvised on the reserve. Misery wears you down, effecting both a corporeal fragility and an intellectual fatigue that double as sociality’s background noise. I am recruiting misery here because it does not rest on the eventful. Instead, it blends into ordinary time. It is possible to make joy or to feel enlivened within a miserable context. But, misery circumscribes the body’s potentialities. If misery is a part of slow death’s arsenal, if it hangs ‘in the air like a rumor’, 6 then there is no easy way out. Existence is what taxes. 7 If the reserve is a geography of misery, then it is where being in life feels like falling out of it. There, negative affect bubbles just below a collective ‘threshold of awareness’, 8 but nonetheless fills out a confined area, mutating over time into the bodies that people it. Misery flattens subjectivity and makes us submit to its tempos, operating here as both a pesky obstacle to radical worldings and as an affective atmosphere that ‘hover[s] around daily practices of survival’. 9 Unlike the cruel optimist about which Lauren Berlant writes, 10 the band member is not oblivious to the cruelties of her object attachments. She knows or is repeatedly told they are damaging, but cannot easily forge new ones, if only because the reserve absents the possibility of making life unhinged by the rote of premature death. She is stuck in a rut that was dug in the name of a colonial ethos bent on disappearing Indians from the future, a rut whose chronic episodes of bio- political tragedy are somehow still bearable by those who endure them. The goal is not to be better at life, but simply to keep at it, even if ‘it’ taxes and eschews happiness without becoming too conspicuous. The reserve is thus where we should go to think about what happens when surplus populations get stowed away from the ‘what’ of what makes life worth living, if we describe ‘life’ as a mix of reckless capitalist worldings and racist histories of uneven precarity and safety. Here, I want to ask the tricky question: might biosocial trauma partly make up indigeneity’s racial terrain? For me, the biosocial is where biology’s politics are thinkable, where bodily production and statecraft meet, where sickness coheres as a racialized symptom of a world that is not good for most of us. The biosocial is where disease’s raciality takes shape. As I see them, indigeneity and sickness are co-constitutive categories in a day and age where health is the biopolitical measure of a subject’s ability to adjust to structural pressures endemic to the affective life of setter colonialism. This is thus also a story about the politics of interpretation, about how we take stock of the horrors of Indigenous embodiment and how we might do it differently. If indigeneity is where the fantasy of self-sovereignty is especially weak (none of us are self-sovereign), then colonial publics hone in on and amplify this weakness to show that the world is not ours to freely inhabit. Again, in what follows, I take diabetes mellitus as a case study in the quiet forms of non-sovereignty that proliferate on the reserve, a place where living, dying, and failed flourishing always hang in the balance. 11 Dying and misery are affective bedfellows. ‘Dying’ is an adjective used to describe a noun ‘on the point of death’. To be ‘on the point of death’ is to exhibit a mode of being in the world that leaves loose ends untied. This is to say (1) that death’s origin story amasses small and big culprits as time passes such that it becomes laborious to track its long political history. Scapegoats like genes, for example, dilute the recent past’s lethal ecologies. And (2) that there is an indeterminacy with which subjects and objects die: slowly or quickly, suspiciously or predictably – or a cacophonous mix of all of these. There is always something left to be said at the funeral. One of the conditions of Indigenous life today is manslaughter hidden under the ruse of botched ways of populating the world. ‘Dying’ is a present participle too: it describes the affective energies of an inchoate happening, or time’s rupture between life as we knew it and death. It is a process of becoming-liminal that is phenomenologically promiscuous. Its affects range from shock to agony to a kind of cold sobriety. Death’s grammar is telling: to die is to have been dying, and ‘has been’ takes a subject and the ‘of’ or the ‘from’ of ‘dying’ piece together a causal relation that looks like a crime scene. Is dying worth zeroing in on if it could be said that we are all dying, that to be human or to be in life is in fact to be dying? Of course, though, death is not fairly apportioned when empire’s worlds are wrangled together by the unlivability of toxic pockets of minoritarian life. And, dying unevenly stands in for ordinary life’s sociability in a big world whose public feelings circulate in the build up before and in the aftermath of racial crisis. Perhaps dying is the racialized state of not properly ‘having’ or ‘being in’ a body. 12 Perhaps it is where the advance of life eventually gets quasi-melodramatic via a biopolitical drive to palliate racial surplus until an assailant (the state) gets acquitted by time’s shoddy memory work and all you are left with is a body beside itself. The reserve, however, is a site of augured disappearance propped up in the wake of insidiously lawful world-breaking events, 13 ones whose delayed traumas fester beneath the skin. For Donna Haraway, the Anthropocene – the current geological era in which the social is animated by human-made ecological catastrophe and the anxieties produced by it – pressures us to strategize about what she calls ‘the arts of living on a damaged planet’. 14 Indigenous worlds, however, have been sutured by this sort of apocalypticism for quite some time now. 15 The arts of living on a damaged reserve have little do with building pleasurable collectivities, as Haraway sees it globally. Rather, we have to figure out how to ward off an impoverished social life that our cells know is coming. What does it mean to politically commit to a place that wears you down in order to maintain an allegiance to indigeneity’s visible cultural forms? Is this all some of us have left? Here is the historical aporia: in a twenty-first-century Canada manned by a liberal prime minister dedicated to politically diluted forms of reconciliation, Indigenous peoples are nonetheless still feeling the affective wrath of the long-twentieth century’s colonial state- craft. 16 Justin Trudeau’s is a national culture of sentiment that buries his and previous Canadas’ complicities in decades-long biological warfare against Indigenous life. Speaking to an audience of residential school survivors during the launch of the final report of the Truth and Reconciliation Commission of Canada in December 2015, Trudeau said: To the former Indian residential school students who came forward and shared your painful stories, I say: thank you for your extraordinary bravery and for your willingness to help Canadians understand what happened to you …The burden of this experience has been on your shoulders for far too long. The burden is properly ours as a government, and as a country …This is a time of real and positive change. 17 Note how Trudeau’s authoritative speech acts fail also to be performative, if performative speech aims to bring about that which it names. 18 His tears are epistemological hallucinogens, 19 luring us into an era of settler governance he vows is attuned to Indigenous grievances, one that pledges to stop hurting us. That is, he lauded Indigenous elders for opening themselves up to a nation-state that broke open their worlds, assuring them that the past’s injustices would not live again in the present. Alas, bad feelings do not go away because a head of state asks them to, especially if the conditions under which they germinate are left intact. The affect of the now and the near future is sickness, and this is a structural diagnosis. The reserve, then, is where life is lived at the edge of the world, a bio-necropolitical gulag of sorts where slow death stunts indigeneity’s future-bearing potentiality. Put differently, it is an incubator of deadened life, where the plasticity of the life-death binary is worked up so as to harvest bodies that are stripped of vitality and sensation. For Jasbir Puar, the ‘bio-necro collaboration’ is where the sovereign thirst for blood and the management of biological life operate harmoniously – an addendum to Foucault’s biopower, which Puar argues overlooks ‘biopower’s direct activity in death’ in a so-called age of terror. 20 As Scott Morgensen pointed out in 2012, settler colonialism too churns out its own type of biopower, one that aggressively seeks to eliminate and then replace Indigenous peoples, and coterminously to extend the ‘West’s’ juridical reach across the globe. Indeed, to make everywhere its colony. 21 My claim, then, is that the reserve worlds death-worlds, to use Achille Mbembe’s term, 22 whose poisonousnesses flatten into indigeneity’s hardened arenas of life. It is a coral whose biopower is characterized by the mismanagement of biological life, where disease control has been avoided as a method of ethico-political abandonment. Sometimes negligence is the form that state power takes. Which is to say that ongoingness on the reserve is an aspirational deadlock stymied by negative affects like hunger, nausea, and dizziness. For Sara Ahmed, this style of getting by produces a racial fatalism of sorts. She writes, ‘some are assumed to be inherently broken as if their fate is to break’. 23 If we die, things go on as if nothing happened. Indeed, some die so that ‘the nothing’ can happen. Those that do not neatly or properly enflesh the human as such occupy the social as if they were always-already missing something, as if they were broken beyond repair. We might ask: what does it mean to be with feelings of loss in a world in which losing things is a condition of political becoming, a world in which maintaining one’s attachments to life routinely becomes too tiring to keep up with? What does dying’s repetition do to the ordinary’s promise to keep us a part of some- thing durable? These questions point to the plight of those doomed to shoulder health’s discontents. Put differently, disease cathects indigeneity within a present that is not only not enough, but also deadly – a present which generates forms of non-sovereignty that are tasted. According to Berlant and Lee Edelman, non-sovereignty is ‘the notion of a subject’s constitutive division that keeps us, as subjects, from fully knowing or being in control of ourselves’. 24 For Berlant, love launches something of a becoming-non-sovereign, as it compels us to submit to its potentialities while rendering unpredictable the substance of the future. It is one of the few times we admit we need to change. 25 But, in my assessment, this kind of control loss is not cut and dry: perhaps non-sovereignty schematizes the condition of possibility for settler colonialism’s race-making practices, ones that produce bad types of not knowing that fray Indigenous worlds and bodies and produce seemingly normal forms of precarity. For Anna Tsing, precarity is not the exception to democracy’s march of progress. It is the ‘condition of our time’. 26 But, unlike her, I am not solely drawn to precarity’s unlikely life-building energies, but rather to its re-workings of science’s epistemology such that bad political life becomes genetically predictable. Non-sovereignty can be a bad affect when scenes of living through that are tethered to settler colonialism’s re-worldings speed up the material and symbolic decaying of indigeneity. What does it mean that our cells can anticipate our collective undoing? Perhaps the reserve is bound by an affective atmosphere within which toxic sensations and viruses proliferate, ones that alter the biochemistries of the bodies therein, consigning them to a kind of cellular frailty. As I see it, the food that does and does not make its way into this geography of slowed immiseration renders calculable the biosocial toll of colonial world-building. What follows is thus a phenomenological account of one of the ways Indigenous bodies are biopolitically generated to slowly destroy themselves from the inside. 27 ‘You get munchies’: a phenomenology of decaying worlds In The Mushroom at the End of the World, Tsing asks, rhetorically: ‘What do you do when your world starts to fall apart?’ 28 Sometimes worlds only know how to decay and fall apart. Perhaps we need a phenomenology of decaying worlds. Phenomenology is suited for the study of reserve life, as it, according to Ahmed, ‘allows us to theorize how a reality is given by becoming background, as that which is taken for granted’. 29 Following Bourdieu and Butler, phenomenology is the study of entanglements, taking the body as a ‘form of engagement with the world’, where ‘the body’ is an analytic tease both sculpted by social discourse and an accumulation of shattering encounters with others. 30 Phenomenology might provide a thicker account of what it is to be in a body that does not feel like it belongs to you, a feeling that I would wager is also the feeling of indigeneity. Following Butler, 31 I think the body is a blind spot for natives, for we cannot guarantee that we will know what it is like to be in a body without it feeling suspect. Phenomenology gets at how bodies come to feel suspect. Now, a short story about a crumbling public. The Driftpile Convenience Store is nested at the side of highway two, which runs through the Driftpile Cree Nation and deeper into the ancestral lands of the Plains Cree (Figure1). The store is independently owned and operated, and its light-green exterior is paired with the word ‘FIREWORKS’ in upper-case, pale-red print. Thinkable first via its bare-bones aesthetic, the store was built by laborers from the reserve and is one of two atrophied food publics therein, both of which vend an excess of so-called ‘junk foods’. There, a cooler is stocked with microwavable submarines and burgers, and a shabby table displays a disparate set of processed pastries and candy. In the corner sits three dried-up oranges and two bruised apples. Groceries like bread, cereal, and bananas are irregularly imported from neighboring towns, the closest of which is 25 kilometers east. Without transportation or exposable income, organic foods are worlds away. This scene is nothing if not ordinary: the lull of reserve life invests junk foods with fetishistic power, distributing value into goods that accumulatively if not heartbreakingly damage you. In a study of the Alexander First Nation northeast of Edmonton, one youth spoke of the way junk food invades your diet and of how the convenience store stymies personal agency, explaining; ‘You know what you’re going to get before you go, you know what’s there, little selection.’ And, another youth, simply: ‘you get munchies’. 32 ‘Munchies’ here do not offer up their own ‘structure of apprehension’, 33 availing themselves of a supposedly contextless and cramped place where consumer habits are of a piece with hard-fought efforts to do things under constraints not entirely of your own making. For Jill Stauffer, autonomy is something of an anthropological given for erroneously thinking political life: ‘it’s in the air and the water, you might say, to think that an uncomplicated autonomy is a natural and therefore nonnegotiable trait of human beings’. 34 But, if ‘you get munchies’ because there is ‘little selection’ and ‘little selection’ chips away at your sense of autonomy over time, then this might not be the case on the reserve. Munchies do away with the fantasy of an always-already autonomy. If, according to Kathleen Stewart, little worlds proliferate around a host of ‘conditions, practices, manias, pacings, scenes of absorption, styles of living, forms of attachment’, 35 what can be said of the bleak little worlds that ‘munchies’ manufacture on the reserve? Problems surface here when the protracted craving to eat junk food is stalled by the petty knowledge that those kinds of products are bad for you and that there is little you can do about it. To suggest that the convenience store predicts your consumer habits is to bring into focus a form of capitalism outdoing itself: before you go there, it is as if you have already started eating munchies. Perhaps your mouth starts to salivate. Habits world. Here is the statistical nightmare. According to D. DyckFehderau et al., ‘It is estimated that First Nations children living on reserves are 4.5 times more likely to be obese than Canadian children in general.’ 36 And, Health Canada admits that ‘First Nations on reserve have a rate of diabetes three to five times higher than that of other Canadians.’ 37 Diabetes mellitus or type 2 diabetes is a chronic metabolic disease characterized by high blood glucose (or hyperglycemia) and insulin resistance (or an inability to produce and/or to use insulin to keep up the body’s energetics). Symptoms included increased thirst, frequent urination, increased hunger, fatigue, and sores that refuse to heal. Long-term complications include heart disease, stroke, kidney failure, and poor blood flow. According to the World Health Organization, type 2 diabetes makes up 90% of diabetes diagnoses, 38 most of which are triggered by obesity, lack of exercise, and a so-called genetic predisposition that is fastened to the anatomies of Indigenous peoples and other racialized populations who are disproportionately made live in dodgy social worlds. There is a sociological story to be told about the genetic imagination, as the semantic pulse of ‘predisposition’ throws the raciality of illness into the tempo of normal life and away from the political. To be predisposed to something is to be stalked by the something, which waits for the right mix of conditions to rear its head. Health, then, is not merely a biological state, but also a subject’s capacity to adapt to and survive structural pressures that are felt biologically and psychologically. Perhaps predispositions are slow death’s attendant transmutations: the exacting and meticulous way non-sovereignty is made. In ‘Framework for Aboriginal-guided decolonizing research involving Métis and First Nations persons with diabetes’, Bartlett et al. make the risky claim that their interviewees do not experience diabetes ‘as a central issue or life difficulty’. 39 This claims rests on the observation that the interviewees did not consistently discuss diabetes when probed about what made being in life hard. If diabetes is a manifestation of non-sovereignty, which is a state of precarious embodiment that gets worse as time passes, then it would not collect the same kind of worry as unpaid bills or police brutality, for example. Type 2 diabetes is phenomenological evidence of a body corrupted to the point of physiological short-circuiting. But, in Indigenous publics, it loses some of its shock value. I know: it is difficult to talk about obesity, as food is where we take a stab at trying to cope with late capitalism’s anxiety publics, bad economics, and shoddy health cultures. It is where the body’s failure to adapt quickly in times of extended crisis runs up against a political history of disgust and shame. Of course these are not the only ways to experience fatness and these tensions, as Berlant sees them, are intensified by the stresses of the fantasy of the good life, the global trade in sugar, the increasing availability of fast food, the flare-up of food deserts in ghettoized neighborhoods and remote communities like reserves, the slow violence of workplace tempos, inter alia. 40 Things keep piggy-backing off of other things. Causality slips past us, but suffering still infiltrates the ordinary. The impulse is to shelve obesity’s raciality in the name of an identity politics that offers up a new type of embodied revolt (i.e. to be fat in a normatively thin world is to be a body in protest). If, according to Berlant, the so-called ‘obesity epidemic’ is also ‘a way of talking about the destruction of life, bodies, imaginaries, and environments by and under contemporary regimes of capital’, 41 what can be said of the forms of political becoming that obesity and diabetes amplify on the reserve if they are bound for worldly rupture and death? Margery Fee insists that those populations singled out as fat are rendered ‘willfully deviant’, as if they were deserving of ‘whatever misfortune befalls them’. 42 The ‘obesity epidemic’ is thus also a way of talking about how popular science empowers public thought that dedramatizes Indigenous suffering. According to Health Canada, diabetes germinates on reserves at a volume quantifiable as an epidemic. 43 It is thus easy to chalk this up as a biological tragedy waiting to happening, explained away by the so-called ‘thrifty-genotype hypothesis’. Which is to say the hypothesis that ‘the high prevalence of type 2 diabetes and obesity is a consequence of genetic variants that have undergone positive selection during historical periods of erratic food supply’. 44 The story goes: Indigenous bodies are genetically trained to store energy, an anatomical fate that runs wild in the absence of migratory periods. In short: we were meant to be hunter-gatherers, so a sedentary lifestyle becomes its own kind of death sentence. Not only did this hypothesis emerge out of a period of ‘gene hunting’ among Indigenous communities that rendered the bodies therein as objects of medical inquiry, 45 it also enlarged a small opening in the socio-medical consciousness to reroute political blame for premature death and cheapened quality of life to the people and communities who are somehow both doing it to themselves and defenseless against their bodies’ stubborn genetic makeup. For the medical researchers of that fad, Indigenous peoples were at the mercy of genes mismatched for life in contemporary times. In this scenario, indigeneity is nothing if not self-destructive. Fee put it like this: The stories emerging around the ‘thrifty gene’ can be seen as…situating the source of the problem in Aboriginal peoples, rather than in ‘civilization’ or ‘progress’. Indeed, diabetes has been figured as the price Aboriginal people have paid for civilization, rather than the penalty exacted by colonization. 46 The thrifty-gene hypothesis, then, is how scientists give name to the imperative that Indigenous peoples fall out of the world. For Haraway, biomedical language does disastrous things, as it shapes ‘the unequal experience of sickness and death for millions’. 47 How we talk about disease and race is a life-or-death matter. Berlant contends that ‘the epidemic concept …[is] inevitably part of an argument about classification, causality, responsibility, degeneracy, and the imaginable and pragmatic logics of cure’. 48 Sickness has a discursive grip on some bodies more than others. The reserve’s ‘diabetes epidemic’ is one that is not up for interpretation, as social theory is dodged in favor of biomedical readings that fix diabetes to indigeneity in the public health imaginary. It is as if the reserve were an incubator of epidemics, a place where disease always-already teeters on the verge of unmanageability. If so, life is never sure-fire, as an outbreak points to the possibility of mass death. Importantly, the ‘epidemic concept’ also carries with it a temporal form. It containerizes the disease within a shortened time frame, missing the historicity and social fields that characterize structural violence in settler states. Before we know it, it is as if things have already fallen out of our control. To say that Indigenous peoples are genetically hardwired to make worlds that are fated to proliferate diabetes is to write our obituaries before we are born. Biomedical language is representational, working up a semiotics of indigeneity that writes us off as undeserving of the good life. Indeed, indigeneity’s racial matter – articulated at the level of genetics, the endocrine system, and health – is made inseparable from the bad life. The body might be plotting to hurt itself, but this is a matter of colonial science, of cheapened ethical and economic investment, and of statecraft that messies the body’s ability to adjust to even the smallest headwinds. What kinds of epistemologies and political action might we rouse if we understand the reserve’s sick socialities as emanating from the carceral tempos of legislation like the Indian Act? Which is to say that when a population is corralled in land-bases not entirely their own and legally forced to make do with very little therein, bodies will revolt and sometimes shut down. The epidemic is a social concept where some forms of life are readied for premature death. Put differently, biology is where Indigenous suffering is tethered to the future.

#### Settler humanitarianism kills natives – the politics of care and healing endorsed by the affirmative are not benign interventions but rather actively genocidal disruptions of indigenous care and medicine – your medicine makes indigenous people sicker.

**Maxwell 17** – Krista Maxwell’s research centers on Indigenous social and political organising around wellness and healing, health care and child welfare, from mid-20th century to the present. She is a professor of medical anthropology at the University of Toronto

Krista Maxwell, Settler Humanitarianism: healing the indigenous child-victim. Comparative Studies in Society and History 59(4): 974-1007 // sam :)

In her ethnography of how Canadian humanitarianism affects Inuit, Lisa Stevenson (2014) makes a provocative observation. She notes that Inuit do not experience settler-state interventions aimed at making them live, such as mid-twentieth-century sanatorium-based tuberculosis treatment, and contemporary suicide-prevention programs, as forms of care, but rather as erasures of their identities, cultures, and histories. She analyses this disjuncture as flowing from “the psychic life of biopolitics” in the settler-colonial context: “In the psychic lives of both the colonizer and the colonized, the biopolitical commandment to stay alive at all costs is haunted by the desire on the part of the colonist to murder the colonized, and also by the recurring sense the colonized have that what appear to be the most benign public health programs are, in fact, genocidal” (2014: 44). Stevenson’s account depicts how Indigenous peoples, in their everyday lives, must grapple with the settler-state’s efforts to ameliorate the effects of ongoing dispossession through paternalistic care. The case of Aboriginal healing shows how settler-humanitarianism shapes such settler-state interventions and also how Indigenous people experience the after-effects. In the process of producing Canadian Aboriginal healing policy, a host of Indigenous and non-Indigenous political actors transmuted “healing” from a collective, social process with anticolonial underpinnings into an individualized, marketized set of biopolitical interventions. We should not be surprised, then, that many residential school survivors, and their families and communities, have experienced the psychic life of these ostensibly benevolent “healing” interventions as ongoing settler-colonial violence that reinforces the political status quo. Here I consider the psychic life and troubling social effects of, first, the regime for implementing the Settlement Agreement (IRSSA), and second, the discourse on historical trauma that has become central to Aboriginal healing in Canada. Some close observers of the social effects of the Common Experience Payment (that made to all claimants able to prove attendance at an institution recognized by the state as a residential school), found their assessment complicated by the belief that the payments constituted a form of wealth redistribution, benefitting the most marginalized (see also de Costa 2009). One such observer is Leslie Saunders, long-time coordinator of the Meeting Place, a Toronto drop-in center serving homeless and marginally-housed people, many of whom struggle with addictions. They include many residential school survivors, mostly Cree and Anishinaabeg from northern Ontario, who submitted claims under the Settlement Agreement. Commencing her account to me of how participation in this process had affected many regular users of the Meeting Place, Leslie stated, “I think the Aboriginal school money is a positive thing, generally speaking, because it does give some money to people that previously didn’t have any money at all.” Like many commentators, she applauded the Common Experience Payment as a form of wealth redistribution, and hoped the settlement would redress the racialized socio-economic inequities that characterize contemporary Indigenous-settler relations in Canada. But this was neither the purpose nor the effect of the compensation. Rather, these payments were embedded in a continuing colonial relationship, and they stamped the recipients with an enduring label of “damaged goods.” Leslie made this clear as she elaborated: However, having said that, it has also spiked the addictions and the suicides, because people are drinking themselves to death with this money. Some of them are so re-traumatized by the process that is required to get that money that it’s putting them in a terrible mental state, because they’re forced to dredge up all these horrible memories that they’ve worked so hard to try to numb out.50 And then after they’ve been re-traumatized, they’re handed this cheque, and so, of course, they do the only thing many of them know how to do, and that’s numb out the pain with more drugs and alcohol. So, I really wished that they could have come up with a different process.51 Cree and Anishinaabe residential school survivors using the Meeting Place are arguably among the most socially and economically marginalized of claimants. But research with a broader range of survivors confirms that their experiences were not atypical (Reimer 2010a; 2010b). For many, seeking reparations under the Settlement Agreement has been harmful in itself, entrenching their victim status and exacerbating everyday forms of suffering. Many claimants struggled to obtain the required evidence of attendance due to inconsistent church and government record-keeping. Nearly twenty-five thousand endured the distress of having their Common Experience Payment applications dismissed when their claims of suffering were judged illegitimate, and many of them initiated appeals.52 Those seeking compensation became entangled in state bureaucratic procedures “in which they carry the burden of proof of their … damage while experiencing the risk of being delegitimised in legal, welfare, and medical institutional contexts” (Petryna 2002: 216). Residential school survivors’ responses to the Settlement Agreement underscore the inherently anti-political effects of humanitarian interventions, which work to bolster, rather than transform, the established, settler-colonial political order (see Ticktin 2011). Many beneficiaries rejected the assumption, fundamental to the Settlement Agreement, that cash payments would be healing, and instead equated acceptance of them with capitulation to dominant interests (Reimer 2010a). Some concluded that “to settle for individual monetary compensation was misguided and insufficient” (Reimer 2010a: 93–94). Only about one-quarter of recipients described the payment in terms suggesting the possibility for positive transformation, for example, as a meaningful symbol of public recognition of their suffering and admission of government wrongdoing, or an important step towards reconciliation (ibid.). Infrequent but powerful Indigenous challenges to settler-humanitarianism continued in public events organized by the Truth and Reconciliation Commission. While anthropologists have documented how the workings of the TRC generated significant momentum for “historical trauma” discourse, some exceptional contributions deviated from the TRC’s “template” for survivor testimonies, which centered on traumatic experience and suffering, counterbalanced by a measure of hope (Niezen 2016; see also Molema 2016). Instead, some former students used this forum to condemn the “retraumatizing and dehumanizing” effects of the Independent Assessment Process (IAP), which those seeking compensation for sexual and physical abuse must undergo (Molema 2016: 141). Speaking at an event in Vancouver, residential school survivor and former chief Jillian Harris reported that “a family member had hung himself the day before his IAP adjudication, and that over the course of the IAP, it was ‘like the spirit of suicide roared through our community’” (ibid.). In his ethnographic account, Arie Molema further documents how some survivors vociferously disrupted presentations to the Commission by Indigenous and settler political leaders. At one event, during a presentation from British Columbia Premier Christy Clark, a group of Indigenous protestors53 brandished a banner proclaiming “We Are Walking Dollars,” and threw bags marked with dollar signs onto the stage where Clark stood (ibid.). The administration of the Settlement Agreement is virtually completed at the time of this writing, but “historical trauma” discourse continues to gain momentum. Canadian health and social work professionals increasingly employ historical trauma as shorthand for Indigenous communities’ psychosocial damage, understood as originating in residential school experiences and transmitted inter-generationally within families. In health and child development literatures, a family history of residential school attendance is now an individual “risk factor” that explains a range of complex social phenomena in Indigenous communities, from lack of parenting skills (Ball 2008) to sexual assault (Patterson et al. 2008), Hepatitis C infection (Craib et al. 2009), and suicide (Elias 2012). These theorized relationships are, of course, impossible to prove empirically and can only be demonstrated as correlations. Invoking “historical trauma” to explain contemporary Indigenous social suffering has problematic, if unintended, corollaries, echoing settler humanitarianism. First, historical trauma discourse perpetuates settler-colonial assumptions about the inherent dysfunction of Indigenous families, assumptions that date to the imperial child-rescue movement’s universalization of middle-class British values. The persistence of these assumptions among health and social service professionals contributes to the continuing, disproportionate apprehension of Indigenous children by child welfare authorities (Blackstock 2008; de Leeuw et al. 2010; Richardson and Nelson 2007). Second, privileging past experiences of abuse diverts attention from how contemporary (neo)liberal settler-colonialism over-determines Indigenous social suffering. Finally, historical trauma discourse legitimates the indefinite deferral of Indigenous sovereignty over social reproduction, pending attainment of “capacity” (see also Irlbacher-Fox 2009) that is to be built through a host of behavioral interventions such as early childhood education and parenting programs, which themselves constitute assimilationist projects. CONCLUSION Indigenous healing has been co-opted by the Canadian state and reworked as settler-humanitarianism, partially displacing the critical, collectivist analyses of earlier Native healing activists. While some Indigenous leaders and professionals have enabled this process, many Indigenous intellectuals continue to advance alternative frameworks in public discourse. These link contemporary Indigenous experiences of social suffering—including interpersonal violence, substance abuse, and suicide—with collective, historical experiences of dispossession and violence, and ongoing racism, marginalization, and violent assaults on the land. Recent writings by Indigenous feminist environmental and sovereignty scholars and activists, for example, offer analyses comparable to those characterizing earlier understandings of Native healing praxis.54 Time will tell how such analyses may resist co-option; the case of Aboriginal healing as settler-humanitarianism offers trenchant lessons in this regard. Meanwhile, “reconciliation” is supplanting “healing” as the keyword for contemporary Canadian settler-humanitarianism. On 5 December 2015, recently elected Prime Minister Justin Trudeau publicly responded to the Truth and Reconciliation Commission’s final report. Having delivered brief remarks promising a “national reconciliation framework,” Trudeau conspicuously wiped his eyes with a tissue. This widely circulated image was later pronounced by the Huffington Post as one of “The 30 Best Canadian Political Photos of 2015.” As I observed in the introduction, the work of the Commission has enabled the Canadian settler-state to redeem itself in humanitarian terms, while failing to reckon with the implications of the residential school system as a settler-humanitarian project that continues to have not only psychosocial effects but also systemic continuities in the present. Trudeau’s compelling performance of settler sympathy (including the latest official apology for residential schools) is consistent with his government’s continuing disregard for Indigenous sovereignty, exemplified by its support for oil-pipeline construction on Indigenous territory and its failure to allocate adequate resources to redress gross inequities in public services funding on First Nations reserves. As I have argued here, settler expressions of sympathy for Indigenous suffering, and the interventions they justify, serve to simultaneously enable and conceal ongoing Indigenous dispossession. As the current Canadian government moves to develop a national reconciliation framework, critical observers should scrutinize the resulting discourses and interventions for settler humanitarianism

#### Settler subjectivity is inevitably concerned with the construction of a smooth wholeness – a coherent imago, which the settler constructs through disidentification with the violence of their origins. The alternative is reidentification – this is an iterative process that requires the refusal and disruption of settler spaces of coherence – you should refuse the research project of the affirmative as a method of subject formation.

**Henderson 15** – professor of political science at the University of Victoria

Phil Henderson, “Imagoed communities: the psychosocial space of settler colonialism”, Settler Colonial Studies, Special Issue on Globalizing Unsettlement, 2015 // sam :)

Goeman writes as an explicit challenge to other indigenous peoples, but this holds true to settler-allies as well, that decolonization must include an analysis of the dominant ‘self-disciplining colonial subject’.73 However, as this discussion of subjective precarity demonstrates, the degree of to which these disciplinary or phenomenological processes are complete should not be overstated. For settler-allies must also examine and cultivate the ways in which settler subjects fail to be totally disciplined. Evidence of this incompletion is apparent in the subject's arrested state of development. Discovering the instability at the core of the settler subject, indeed of all subjects, is the central conceit of psychoanalysis. This exception of at least partial failure to fully subjectivize the settler is also what sets my account apart from Rifkin's. His phenomenology falls into the trap that Jacqueline Rose observes within many sociological accounts of the subject: that of assuming a successful internalization of norms. From the psychoanalytical perspective, the ‘unconscious constantly reveals the “failure”’ of internalization.74 As we have seen, within settler subjects this can be expressed as an irrational anxiety that expresses itself whenever a settler is confronted with the facts regarding their colonizing status. Under conditions of total subjectification, such charges ought to be unintelligible to the settler. Thus, the process of subject formation is always in slippage and never totalized as others might suggest.75 Because of this precarity, the settler subject is prone to violence and lashing out; but the subject in slippage also provides an avenue by which the process of settler colonialism can be subverted – creating cracks in a phantasmatic wholeness which can be opened wider. Breakages of this sort offer an opportunity to pursue what Paulette Regan calls a ‘restorying’ of settler colonial history and culture, to decenter settler mythologies built upon and within the dispossession of indigenous peoples.76 The cultivation of these cracks is a necessary part of decolonizing work, as it continues to panic and thus to destabilize settler subjects. Resistance to settler colonialism does not occur only in highly visible moments like the famous conflict at Kanesatake and Kahnawake,77 it also occurs in reiterative and disruptive practices, presences, and speech acts. Goeman correctly observes that the ‘repetitive practices of everyday life’ are what give settler spaces their meaning, as they provide a degree of naturalness to the settler imago and its psychic investments.78 As such, to disrupt the ease of these repetitions is at once to striate radically the otherwise smooth spaces of settler colonialism and also to disrupt the easy (re)production of the settler subject. Goeman calls these subversive acts the ‘micro-politics of resistance', which historically took the form of ‘moving fences, not cooperating with census enumerators, sometimes disrupting survey parties’ amongst other process.79 These acts panic the subject that is disciplined as a product of settler colonial power, by forcing encounters with the sovereign indigenous peoples that were imagined to be gone. This reveals to the settler, if only fleetingly, the violence that founds and sustains the settler colonial relationship. While such practices may not overthrow the settler colonial system, they do subvert its logics by insistently drawing attention to the ongoing presence of indigenous peoples who refuse erasure. Today, we can draw similar inspiration from the variety of tactics used in movements like Idle No More. From flash mobs in major malls, to round dances that block city streets, and even projects to rename Toronto locations, Idle No More is engaged in a series of micro-political projects across Turtle Island. 80 The micro-politics of the movement strengthen indigenous subjects and their spatialities, while leaving an indelible imprint in the settler psyche. Predictably, rage and resentment were provoked in some settlers; 81 however, Idle No More also drew thousands of settler-allies into the streets and renewed conversations about the necessity of nation-to-nation relationships. With settler colonial spaces disrupted and a relationship of domination made impossible to ignore, in the tradition of centuries of indigenous resistance, Idle No More put the settler subject into serious flux once more.

#### We are living in the crisis of modernity – civilizational collapse is imminent, brought on by the settler colonial present – only immediate commitment to decolonization can prevent human extinction – laundry list of scenarios.

**Paradies 20** – researcher at Deakin University

Yin Paradies, “Unsettling truths: modernity, (de-)coloniality and Indigenous futures”, Postcolonial Studies, [https://www.tandfonline.com/doi/full/10.1080/13688790.2020.1809069 //](https://www.tandfonline.com/doi/full/10.1080/13688790.2020.1809069%20//) sam :)

In CANZUS3 settler-colonial societies, interest in colonisation is often focused on relatively distant colonial pasts where Indigenous4 peoples were ‘displaced’ (and other euphemisms for slavery, rape, torture, murder and genocide), with relatively scant attention paid to ongoing colonial presence/presents in which systemic, structural, physical, epistemic and ontological violence continue to oppress, assimilate and eradicate Indigenous peoples. This has resulted in vast over-representation of Indigenous peoples among, for example, the impoverished, unhealthy, imprisoned and homeless,5 as well as even greater under-representation among politicians, administrators, the wealthy, influential and famous. For Indigenous peoples from around the world, the ‘slow violence’ 6 of colonisation exists alongside violent assaults and fatal neglect. There is also a growing realisation of the impossibility of justice through the law,7 of reconciliation,8 or of any answers at all from within settler-colonial states.9 Even in scholarship focused on contemporary manifestations of settler colonialism, the broader conditions of modernity10 are often neglected. These include the fact that 60% of people globally live on less than $5 a day, eight people have more wealth than half the world’s population,11 1.6 billion people are without adequate housing,12 one in four children worldwide are stunted from malnutrition, real Gross Domestic Product has tripled since 1980 while a billion more people now live in poverty,13 devastating wars and brutal dictatorships continue unchecked,14 an epidemic of loneliness is sweeping the Western world,15 and the United States is experiencing the longest consecutive decline in life expectancy for a century,16 with similar trends in the United Kingdom.17 Today, modern nation states, especially in the ‘West’, have become hyper-individualist, atomised, securitised societies existing within a deepening crisis of climate change and the sixth mass extinction.18 This includes toxic chemicals in everything from Antarctic ice19 to human breast milk;20 microplastics throughout our bodies and environments; rising sea levels; extreme wildfires; super-typhoons; global pandemics; a 60% decline in vertebrate numbers since 1970;21 grave concern for insect populations;22 indiscriminate deforestation; extensive soil erosion; acidic oceans; toxic air; fresh-water shortages; and catastrophic global warming that will likely reach 4 degrees Celsius by century’s end.23 This is a consumptive world of rapidly dwindling fossil-fuel resources in which many human societies are dependent on highly vulnerable just-in-time global supply chains.24 Despite this, there exists scant political will to steer away from civilisational collapse, an outcome now more certain than any alternative.25 In such a world, truth telling means telling the unsettling26 truth about the dangers of modernity for global life, including its deeply atrophied capacity to provide people with a collective existential purpose.27 If ‘truth is about the future as much as it is about the past’, 28 then it is also equally about the present. Like most Indigenous political activists, I will consider the past, present and future as nested and folded together, encircling linear goal-centred dissected ‘clock’ time29 through rhythmic, cyclical, spiral sensing30 that necessitates ‘a careful remembering of the future’. 31 An understanding of modernity’s wrongs means not only knowledge of its past impacts but also apprehending how it continues to destroy our present/futures, and then acting to prevent this in ways that are more than merely metaphorical.32 Only 500 years ago, almost half the world’s land remained unclaimed by nation states.33 Since then, modernity has grown near-ubiquitous through the creation of national(ised) territory. This was achieved through the creation of property by the violent enclosure of peasants’ land in Europe (i.e. the commons) as well as colonial usurping of Indigenous land throughout the world. It also involved concentration of the means of production into the hands of a small minority and the extraction of resources from the majority via industrialisation and wage labour. This process was also characterised by the development of, for example, fossil capitalism, bureaucracy,34 monogamy and the nuclear family, unrealistic beauty35 and success ideals,36 and further enclosure of many individuals within hermeneutically sealed buildings, often to undertake ‘bullshit jobs’. 37 Over longer timescales, the origins of modernity can be traced back to the formation of sovereign states (e.g. chiefdoms, kingdoms and empires) and the invention of institutions (e.g. religious, legal, military), patriarchy,38 slavery and debt. These events, which I take as the birth of modernity, occurred in what is now the Middle East predominantly around 5000 years ago,39 with the earliest trends evident up to 10,000 years ago.40

### 1nc – Framing

#### Our interpretation is that the affirmative should be responsible for their representations – you get to read the aff and weigh the consequences of the plan, but we get to weigh the consequences of the affirmative’s epistemology.

#### Prefer:

#### Accountability DA – “weigh the aff” in a vacuum is violent – their model of debate encourages irresponsible argumentation because it doesn’t allow for any engagement with the affirmative outside the fiated implications of the plan text – only our model ensures accountability.

#### Academy DA – the academy is built on land theft and exploitation – whether via land grants or biopiracy, academic spaces are constructed and solidified via the technologies of settler colonialism – this origin ensures investment in genocide absent direct engagement with the violent origins of the university the academy will never be capable of meaningful change.

### 1nc – Util

#### Pain and pleasure fail as ethical starting points –

#### Ontology Outweighs – violence against the native is infinite and accumulates each day of occupation via the structural condition of sickness – the inevitable 1ar framing push won’t be able to account for or understand this violence – this means if we win our thesis claims we will win the framing debate.

## case

### Econ decline

#### Their econ impact evidence is ridiculously old and doesn’t take into account CoVID economic decline – that should have triggered the impact.

#### Growth is unsustainable AND innovation can’t solve---shifting away from productivism is key to avoid extinction.

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As the previous chapters have shown, economic growth is regarded as a prime policy aim by policy makers and economists because it is thought to be essential for reducing poverty and generating rising living standards and stable levels of employment (Ben-Ami 2010: 19–20). More generally, support for economic growth is usually intertwined with advocating social progress based on scientific rationality and reason and hence with an optimistic view of humans’ ingenuity to solve problems (ibid.: 17, 20, Chap. 5). Growth criticism thus tends to be portrayed as anti-progress and inherently conservative (ibid.: Chap. 8). While it is important to acknowledge and discuss this view, it needs to be emphasised that growth criticism is formulated with long-term human welfare in mind which advocates alternative types of social progress (Barry 1998). This chapter first outlines ecological and social strands of growth critiques and then introduces relevant concepts of and positions within the postgrowth debate. Ecological Critiques of G rowth Generally speaking, two types of growth criticism can be distinguished: the first focuses on limitations of GDP as a measure of economic performance; the second goes beyond this by highlighting the inappropriateness of growth as the ultimate goal of economic activity and its negative implications for environment and society. Since GDP measures the monetary value of all final goods and services in an economy, it excludes the environmental costs generated by production. For instance, as long as there is no cost associated with emitting greenhouse gases , the cost for the environmental and social damage following from this is not reflected in GDP figures. Worse even, GDP increases as a consequence of some types of environmental damage: if deforestation and timber trade increase or if natural disasters or industrial accidents require expenditures for clean-up and reconstruction, GDP figures will rise (Douthwaite 1999: 18; Leipert 1986). Several critics of GDP as a measure of progress have proposed alternative indicators of welfare such as the Genuine Progress Indicator, Green GDPs or other approaches which factor in environmental costs (see Chap. 5 for more details), but they do not necessarily object to economic growth being the primary goal of economic activity (van den Bergh 2011). In contrast, the idea of ecological limits to growth goes beyond the critique of GDP as a measure of economic performance. Instead, it maintains that economic growth should not, and probably cannot, be the main goal of economic activity because it requires increasing resource inputs, some of which are non-renewable, and generates wastes, including greenhouse gases, that disturb various ecosystems, severely threatening human and planetary functioning in the short and long term. 4 CRITIQUES OF GROWTH 41 Resources are regarded as non-renewable if they cannot be naturally replaced at the rate of consumption (Daly and Farley 2011: 75–76). Examples include fossil fuels, earth minerals and metals, and some nuclear materials like uranium (Daly and Farley 2011: 77; Meadows et al. 2004: 87–107). Based on work by Georgescu-Roegen (1971), many ecological economists also assume that non-renewable resources cannot be fully recycled because they become degraded in the process of economic activity. Historically speaking, economic growth is a fairly recent phenomenon (Fig. 2.1). Since its onset in the late seventeenth century in Europe and mid-eighteenth century in the US (Gordon 2012), it has gone hand in hand with an exponentially increasing use of non-renewable resources such as fossil fuels (Fig. 4.1). While we are not yet close to running out of non-renewable resources, over time they will become more difficult and hence more expensive to recover. This idea is captured by the concept of “energy returned on energy invested” (EROEI). In relation to oil for instance, it has been shown that the easily recoverable fields have been targeted first and that therefore greater energy (and hence financial) inputs will be required to produce more oil. Over time, the ratio of energy returned on energy invested will decrease, reducing the financial incentive to invest further in the recovery of these non-renewable resources (Dale et al. 2011; Brandt et al. 2015: 2). Relevant to this is also the debate about peak oil—a concept coined by Shell Oil geologist Marion King Hubbert in the 1950s—the point at which the rate of global conventional oil production reaches its maximum which is expected to take place roughly once half of global oil reserves have been produced. There is still controversy about whether global peak oil will occur, and if so when, as it is difficult to predict, or get reliable data on, the rate at which alternative types of energy will replace oil (if this was to happen fast enough, peak oil might not be reached, if it has not yet occurred), the size of remaining oil reserves and the future efficiency of oil extraction technologies (Chapman 2014). However, it is plausible to assume that oil prices will rise in the long term if conventional oil availability diminishes, while global demand for oil increases with continuing economic and population growth. Since economic growth in the second half of the twentieth century required increasing inputs of conventional oil, higher oil prices would have a negative impact on growth unless alternative technologies are developed that can generate equivalent liquid fuels at lower prices (Murphy and Hall 2011). Some scholars have criticised the focus on physical/energy resource limitations as initially highlighted in the “limits to growth” debate (Meadows et al. 1972) and state that instead catastrophic climate change is likely to be a more serious and immanent threat to humanity (Schwartzman 2012). The main arguments here are first that much uncertainty remains about the potential and timing of peak oil, future availability of other fossil fuels and development of alternative low energy resources, while the impacts of climate change are already immanent and may accelerate within the very near future. Second, even if peaks in fossil fuel production occurred in the near future, remaining resources could still be exploited to their maximum. However, this would be devastating from a climate change perspective as, according to the latest IPCC scenarios, greenhouse gas emissions need to turn net-zero by the second half of this century for there to be a good chance to limit global warming to 2° Celsius (and ideally, below that) (Anderson and Peters 2016). It is telling that some of the more recent debates about ecological limits to growth put much more emphasis on environmental impacts of growth, rather than on peak oil or other resource limitations (Dietz and O’Neill 2013). Differently put, limits of sinks, especially to absorb greenhouse gases, and to the regeneration of vital ecosystems are now attracting greater concern, compared to limits of resources. Growing economic production generates increasing pressures on the environment due to pollution of air, water and soil, the destruction of natural habitats and landscapes, for instance, through deforestation and the extraction of natural resources. Therefore, growth often also threatens the regeneration of renewable resources such as healthy soil, freshwater and forests, as well as the functioning of vital ecosystems and ecosystems services such as the purification of air and water, water absorption and storage and the related mitigation of droughts and floods, decomposition and detoxification and absorption of wastes, pollination and pest control (Meadows et al. 2004: 83–84). Recent research on planetary boundaries has started to identify thresholds of environmental pollution or disturbance of a range of ecosystems services beyond which the functioning of human life on earth will be put at risk. Rockström and colleagues have identified nine such “planetary boundaries”—“climate change; rate of biodiversity loss (terrestrial and marine); interference with the nitrogen and phosphorus cycles; stratospheric ozone depletion; ocean acidification; global freshwater use; change in land use; chemical pollution; and atmospheric aerosol loading” (Rockström et al. 2009: 472). They also present evidence according to which three of these boundaries—climate change, rate of biodiversity loss and the nitrogen cycle—have already reached their limits (Rockström et al. 2009). Of those three thresholds, climate change has received most attention. The 5th Assessment Report of the Intergovernmental Panel on Climate Change (IPCC 2014) concluded that global temperatures have risen by an average of 0.85° since the 1880s (while local temperature increases can be much higher than that) and that the concentration of greenhouse gases in the atmosphere has reached unprecedented levels over the last 800,000 years—that of CO2 has now reached 405.6 parts per million (NASA, January 2017, Fig. 4.2), far surpassing the level of 350 ppm which is considered safe by many scientists (Rockström et al. 2009). The IPCC report also maintained that humans very likely contributed to at least 50% of global warming that occurred since the 1950s (IPCC 2014: 5). A range of climate change impacts can already be observed, including a 26% increase of ocean acidification since industrialisation; shrinking of glaciers, Greenland and Antarctic ice sheets, as well as arctic sea ice; and the rise of sea levels of 19 cm since 1901. This is projected to increase by an additional 82 cm by the end of this century at current levels of greenhouse gas emissions (ibid.: 13). Climate change impacts are already felt with increased occurrences of heat waves, heavy rain fall, increased risk of flooding and impacts on food and water security in a number of regions around the world. It is projected that with a rise of 2° of global temperatures, 280 million people worldwide (with greatest numbers in China, India and Bangladesh) would be affected by sea level rise, escalating to a projected 627 million people under a 4° scenario (Strauss et al. 2015: 10). At the 21st Conference of Parties of the United Nations Framework Convention on Climate Change in Paris in 2015, representatives agreed that action should be taken to limit rise of global temperatures to 2° and Fig. 4.2 Concentration of CO2 in the atmosphere. Source NASA, available from https://climate.nasa.gov/vital-signs/carbon-dioxide/. The CO2 levels have been reconstructed from measures of trapped air in polar cap ice cores 4 CRITIQUES OF GROWTH 45 to “pursue efforts” to limit it to 1.5°. This has been adopted by 196 countries, but immense efforts and very radical reductions of greenhouse gas emissions will be required to comply with the agreement. Even if net greenhouse gas emissions were reduced to zero, surface temperatures would remain constant at their increased levels for hundreds of years to come and climate change impacts such as ocean acidification and rising sea levels would continue for hundreds or even thousands of years once global temperatures are stabilised; moreover, a range of climate change impacts are deemed irreversible (IPCC 2014: 16). One controversial question in the debate about economic growth and environmental impacts has been whether growth can be decoupled from the damage it causes. Important to this debate is the theory of the Environmental Kuznets Curve which applies Simon Kuznets’ hypothesised inverted u-shaped relationship between economic development and income inequality to the relationship between economic development and environmental degradation. According to this theory, environmental degradation is low in the early phases of economic development, then rises with increasing development up to a certain point, beyond which it falls again with advancing development because more resources can be invested to render production and consumption more efficient and less polluting. Therefore, this theory suggests that it is possible to decouple economic growth (measured in GDP) from its environmental implications. The counter-argument to this theory is that it does not take into account the difference between relative and absolute decoupling. Relative decoupling refers to the environmental impacts generated over time per unit of economic output, for instance CO2 emissions per million of US$. In contrast, absolute decoupling would examine aggregate environmental impact, compared to total economic output over time. Here it has been argued that while relative decoupling may be possible as the environmental impact per unit of economic output decreases over time due to efficiency gains, absolute decoupling is much harder to achieve while growth continues. Indeed, there is no evidence for absolute decoupling as total environmental impacts, for instance total global CO2 emissions, are still rising with rising global GDP (Jackson 2011: 67–86). This is partly due to rebound effects which we discussed in Chap. 2: rising consumption because the increase in efficiency has made it cheaper to produce/consume (Jackson 2011: 67–86; see also Czech 2013: Chap. 8 criticising “green growth”). Furthermore, if decoupling is examined at the country level, one would need to take consumptionbased resource use/emissions into account rather than productionbased impacts. Substantial environmental impacts related to everything that is consumed in rich countries occur in developing countries from which goods are imported. A focus on production-based environmental impacts would hence be misleading as it ignores the [and] environmental impacts that relate to a country’s living standards and that occur outside of that country. Social Critiques of Growth Economic growth has not only been criticised from an ecological perspective, but also from an individual and social wellbeing point of view. Here, we can again distinguish a critique of GDP as a measure of wellbeing and a wider critique which highlights potential negative consequences of economic growth for human wellbeing. Several scholars have argued that GDP is an inadequate measure of prosperity or wellbeing because it only includes market transactions and ignores activities of the informal economy in households and the volunteering sector which make an important contribution to individual and social wellbeing (Stiglitz et al. 2011; van den Bergh 2009; Jackson 2011). It also excludes the contribution of certain government services that are provided for free (Douthwaite 1999: 14; Stiglitz et al. 2011: 23), and the roles of capital stocks and of leisure in generating welfare (Costanza et al. 2015: 137). Furthermore, all market transactions make a positive contribution to GDP, regardless of whether expenditures increase or decrease welfare. Similar to the way in which environmental costs of growth are either excluded from GDP or even increase it, expenditures that arise from road accidents, divorces, crime, etc., contribute positively to GDP (ibid.: 133). The focus on market transactions also means that an increasing marketisation (or “commodification”) of an economy will be reflected in a rise of GDP, which may or may not be related to actual “welfare” outcomes (Stiglitz et al. 2011: 49). It also implies that GDP is an insufficient cross-national comparator for the quality of life, as it does not take into account the different sizes of the informal economy across countries (ibid.: 15). Furthermore, GDP does not indicate how income and consumption are distributed in society (Stiglitz et al. 2011: 44). This implies that a rise of GDP can be consistent with a rise of inequality of income and wealth. 4 CRITIQUES OF GROWTH 47 However, if greater inequality has negative impacts on social wellbeing (Wilkinson and Pickett 2009), this would be masked by rising GDP figures (Douthwaite 1999: 17). An even more fundamental criticism of GDP as a measure of wellbeing is that it focuses on the accumulation of money or wealth and thus on the material aspects of wellbeing. Such a narrow conception of the goals of economic activity and wellbeing has been criticised early on in the history of economic thought, e.g. by Aristotle’s distinction between oikonomia and chrematistics. The latter refers to the accumulation of wealth and was regarded by him as an “unnatural” activity which did not contribute to the generation of use value and wellbeing (Cruz et al. 2009: 2021). The argument that wider conceptions of wellbeing and prosperity are required has also become relevant for contemporary critiques of economic growth (Jackson 2011; Paech 2013; Schneider et al. 2010) as we will discuss this in more detail in Chap. 5. Arguments About the Psychological and S ocial Costs of G rowth The broader social critique of economic growth highlights potential “social limits” to or even negative consequences of economic growth for individual and collective wellbeing. The term “social limits to growth” was coined by Fred Hirsch (1976). He argued that the benefits of growth are initially exclusive to small elites and that these benefits disappear as soon as they spread more widely through mass consumption. For instance, only few people can own a Rembrandt painting; holiday destinations are more enjoyable when they are not overrun by hordes of other tourists; there are only few leadership positions, etc. From this perspective, there are “social limits” to the extent to which the benefits of growth can be socially expanded and equally shared. Other scholars have expressed concern about individual and collective social costs of economic growth. First, there is the argument that the need to keep up with ever-rising living standards and new consumer habits, “keeping up with the Joneses”—a lot of which is seen to be driven by advertisement and social pressure rather than real needs, for instance fashionable clothing or gadgets—can generate stress and increase the occurrence of mental disorders (James 2007; Offer 2006; Kasser 2002). 48 M. BÜCHS AND M. KOCH Second, it has been argued that economic growth can imply wider social costs. For instance, with its emphasis on individual gain, market relations and competition, and the need that it generates for spatial mobility (e.g. for successful participation in education and labour markets), it is feared to undermine moral and social capital and put a strain on family and community relations, potentially even leading to increasing divorce and crime rates (Douthwaite 1999; Daly and Cobb 1989: 50–51; Hirsch 1976). Social costs of technological development and industrialisation also include industrial workplace and traffic accidents and time lost in traffic jams and for commuting (Czech 2013: Chap. 2; Stiglitz et al. 2011: 24). Technological innovation which arises from growth can also act as a factor for job losses and increasing job insecurity (Douthwaite 1999), especially if growth rates are not sufficiently high to compensate gains in productivity. It is often assumed that growth will benefit the many because of assumed “trickle-down” effects which promise to improve the lot of the poor simply because the “cake” of available wealth is growing. While progress has been made in reducing extreme global poverty and inequality (Sala-i-Martin 2006; Rougoor and van Marrewijk 2015), the number of people living in poverty across the globe remains high.1 At the same time, income inequality in a range of countries has been rising and the situation of many of the people living in extreme poverty is not improving which means the fruits of economic growth remain to be unequally distributed (Collier 2007; Piketty and Saez 2014). The post-development debate goes even further than that in arguing that not only may growth not have reached the global poor to the extent that had been predicted by neoclassical economists, but that it can also have negative impacts on indigenous communities in developing countries, especially those who rely on local natural resources for their livelihoods which often suffer exploitation, pollution or even destruction through the inclusion of local economies into global value chains (Rahnema and Bawtree 1997). While the distinction between critiques of growth that focus on its problematic ecological and social consequences is useful for analytic purposes, the two dimensions are of course closely linked. Ecological consequences of growth have the potential to severely impact or even undermine human wellbeing. Local livelihoods are already affected by current climate change impacts such as ocean acidification and its impact on marine organisms, draughts, floods and severe weather events, the 4 CRITIQUES OF GROWTH 49 frequency of which has been rising. Accordingly, it is estimated that crop and fish yields are already diminishing in several regions (Stern 2015; IPCC 2014) and that millions of people are already being displaced and forced to migrate due to climate change and other environmental impacts (Black et al. 2011). While the overall long-term impacts of climate change and the surpassing of other planetary boundaries are difficult to predict, they clearly have the potential to substantially undermine human wellbeing. Since greenhouse gas emissions are driven by economic growth, the development of alternative economic models that do not depend on growth is urgent since continued growth “threatens to alter the ability of the Earth to support life” (Daly and Farley 2011: 12).

### Patents

#### The Disease Impact –

#### 1] No extinction- burnout

Adalja 16—infectious-disease physician at the University of Pittsburgh [Amesh, “Why Hasn't Disease Wiped out the Human Race?” 6/17/2016, https://www.theatlantic.com/health/archive/2016/06/infectious-diseases-extinction/487514/ Accessed 5 July 2017]

In Michael Crichton’s The Andromeda Strain, the canonical book in the disease-outbreak genre, an alien microbe threatens the human race with extinction, and humanity’s best minds are marshaled to combat the enemy organism. Fortunately, outside of fiction, there’s no reason to expect alien pathogens to wage war on the human race any time soon, and my analysis suggests that any real-life domestic microbe reaching an extinction level of threat probably is just as unlikely. When humans began to focus their minds on the problems posed by infectious disease, human life ceased being nasty, brutish, and short. Any apocalyptic pathogen would need to possess a very special combination of two attributes. First, it would have to be so unfamiliar that no existing therapy or vaccine could be applied to it. Second, it would need to have a high and surreptitious transmissibility before symptoms occur. The first is essential because any microbe from a known class of pathogens would, by definition, have family members that could serve as models for containment and countermeasures. The second would allow the hypothetical disease to spread without being detected by even the most astute clinicians. The three infectious diseases most likely to be considered extinction-level threats in the world today—influenza, HIV, and Ebola—don’t meet these two requirements. Influenza, for instance, despite its well-established ability to kill on a large scale, its contagiousness, and its unrivaled ability to shift and drift away from our vaccines, is still what I would call a “known unknown.” While there are many mysteries about how new flu strains emerge, from at least the time of Hippocrates, humans have been attuned to its risk. And in the modern era, a full-fledged industry of influenza preparedness exists, with effective vaccine strategies and antiviral therapies. HIV, which has killed 39 million people over several decades, is similarly limited due to several factors. Most importantly, HIV’s dependency on blood and body fluid for transmission (similar to Ebola) requires intimate human-to-human contact, which limits contagion. Highly potent antiviral therapy allows most people to live normally with the disease, and a substantial group of the population has genetic mutations that render them impervious to infection in the first place. Lastly, simple prevention strategies such as needle exchange for injection drug users and barrier contraceptives—when available—can curtail transmission risk. Ebola, for many of the same reasons as HIV as well as several others, also falls short of the mark. This is especially due to the fact that it spreads almost exclusively through people with easily recognizable symptoms, plus the taming of its once unfathomable 90 percent mortality rate by simple supportive care. Beyond those three, every other known disease falls short of what seems required to wipe out humans—which is, of course, why we’re still here. And it’s not that diseases are ineffective. On the contrary, diseases’ failure to knock us out is a testament to just how resilient humans are. Part of our evolutionary heritage is our immune system, one of the most complex on the planet, even without the benefit of vaccines or the helping hand of antimicrobial drugs. This system, when viewed at a species level, can adapt to almost any enemy imaginable. Coupled to genetic variations amongst humans—which open up the possibility for a range of advantages, from imperviousness to infection to a tendency for mild symptoms—this adaptability ensures that almost any infectious disease onslaught will leave a large proportion of the population alive to rebuild, in contrast to the fictional Hollywood versions. While the immune system’s role can never be understated, an even more powerful protector is the faculty of consciousness. Humans are not the most prolific, quickly evolving, or strongest organisms on the planet, but as Aristotle identified, humans are the rational animals—and it is this fundamental distinguishing characteristic that allows humans to form abstractions, think in principles, and plan long-range. These capacities, in turn, allow humans to modify, alter, and improve themselves and their environments. Consciousness equips us, at an individual and a species level, to make nature safe for the species through such technological marvels as antibiotics, antivirals, vaccines, and sanitation. When humans began to focus their minds on the problems posed by infectious disease, human life ceased being nasty, brutish, and short. In many ways, human consciousness became infectious diseases’ worthiest adversary.