# 1nc vs imac ss

## 1

### 1nc – t

#### Insert definition of medicine

#### Interp – “medicines” treat or cure,

Vecchio 7/22 (Christopher Vecchio, [CFA, Senior Strategist,], 7-22-2021, “Delta Variant Concerns Won't Cripple Markets, US Economy“, DailyFX, accessed: 8-9-2021, https://www.dailyfx.com/forex/video/daily\_news\_report/2021/07/22/market-minutes-delta-variant-concerns-wont-cripple-markets-us-economy.html) ajs

Let’s stick to the facts. The COVID-19 vaccines are not medicines, which by definition “treat or cure diseases.” Vaccines “help prevent diseases,” an important distinction. Why does this matter? Because data coming out of some of the world’s developed economies with high adult vaccination rates suggest that the vaccines are working as intended: tail-risks have been reduced, with hospitalizations and deaths falling relative to the recent spike in infections (which have been occurring primarily among the unvaccinated at this point). Put another way, vaccines are like a Kevlar vest for the immune system; while they don’t make you bulletproof, they dramatically increase the odds of surviving an adverse event.

#### Violation – CRISPR is a platform technology, not a medicine – being relevant for other medical research isnt sufficient

Editas n/d [Editas Medicine, transnational medical organization focused on gene research and medical innovation. “CRISPR Gene Editing” https://www.editasmedicine.com/crispr-gene-editing/]

CRISPR (pronounced “crisper”) is an acronym for “Clustered, Regularly Interspaced, Short Palindromic Repeats,” and refers to a recently developed gene editing technology that can revise, remove, and replace DNA in a highly targeted manner. CRISPR is a dynamic, versatile tool that allows us to get to and edit nearly any location in the genome, and has the potential to help us develop medicines for people with a wide variety of diseases. We view CRISPR as a “platform” technology because of its ability to target DNA in any cell or tissue.

#### Negate –

#### 1] Limits – expanding the topic to preventative treatment or medical interventions allows anything from surgery to medical devices to education strategies or mosquito repellent to prevent malaria. Destroys core generics like innovation which are exclusive to disease curing – core of the topic is about proprietary information.

#### Voters:

#### Topicality is a voting issue that should be evaluated through competing interpretations – it tells the negative what they do and do not have to prepare for—there’s no way for the negative to know what constitutes a “reasonable interpretation” when we do prep – reasonability is arbitrary and causes a race to the bottom, proliferating abuse

#### No RVIs—it’s your burden to be topical.

#### Evaluate T before 1AR theory – norms – we only have a couple months to set T norms but can set 1AR theory norms anytime

## 2

### 1nc – t

#### Interpretation—the aff may not specify medicines

#### Bare plurals imply a generic “rules reading” in the context of moral statements

Cohen 1 — (Ariel Cohen, Professor of Linguistics @ Ben-Gurion University of the Negev, PhD Computational Linguistics from Carnegie Mellon University, “On the Generic Use of Indefinite Singulars”. Journal of Semantics 18: 183-209, Oxford University Press, 2001, accessed 12-7-20, HKR-AM) \*\*BP = bare plurals

According to the rules and regulations view, on the other hand, generic sentences do not get their truth or falsity as a consequence of properties of individual instances. Instead, generic sentences are evaluated with regard to rules and regulations, which are basic, irreducible entities in the world. Each generic sentence denotes a rule; if the rule is in effect, in some sense (different theories suggest different characterizations of what it means for a rule to be in effect), the sentence is true, otherwise it is false. The rule may be physical, biological, social, moral, etc. The paradigmatic cases for which this view seems readily applicable are sentences that refer to conventions, i.e. man-made, explicit rules and regulations, such as the following example (Carlson 1995: 225):

(40) Bishops move diagonally.

Carlson describes the two approaches as a dichotomy: one has to choose one or the other, but not both. One way to decide which approach to choose is to consider a case where the behavior of observed instances conflicts with an explicit rule. Indeed, Carlson discusses just such a case. He describes a supermarket where bananas sell for $0.49/lb, so that (41a) is true. One day, the manager decides to raise the price to $1.00/lb. Immediately after the price has changed, claims Carlson, sentence (41a) becomes false and sentence (41b) becomes true, although the overwhelming majority of sold bananas were sold for $0.49/lb.

(41) a. Bananas sell for $0.49/lb.

b. Bananas sell for $1.00/lb.

Consequently, Carlson reaches the conclusion that the rules and regulations approach is the correct one, whereas the inductivist view is wrong.

While I share Carlson’s judgements, I do not accept the conclusion he draws from them. Suppose the price has, indeed, changed, but the supermarket employs incompetent cashiers who consistently use the old price by mistake, so that customers are still charged $0.49/lb. In this case, I think there is a reading of (41a) which is true, and a reading of (41b) which is false. These readings are more salient if the sentence is modified by expressions such as actually or in fact:

(42) a. Bananas actually sell for $0.49/lb.

b. In fact, bananas sell for $1.00/lb.

BP generics, I claim, are ambiguous: on one reading they express a descriptive generalization, stating the way things are. Under the other reading, they carry a normative force, and require that things be a certain way. When they are used in the former sense, they should be analysed by some sort of inductivist account; when they are used in the latter sense, they ought to be analysed as referring to a rule or a regulation. The respective logical forms of the two readings are different; whereas the former reading involves, in some form or another, quantification, the latter has a simple predicate-argument structure: the argument is the rule or regulation, and the predicate holds of it just in case the rule is ‘in effect’.

#### Rules readings are always generalized – specific instances are not consistent. Cohen 01

Ariel Cohen (Ben-Gurion University of the Negev), “On the Generic Use of Indefinite Singulars,” Journal of Semantics 18:3, 2001 https://core.ac.uk/download/pdf/188590876.pdf

In general, as, again, already noted by Aristotle, rules and definitions are not relativized to particular individuals; it is rarely the case that a specific individual¶ forms part of the description of a general rule.¶ Even DPs of the form a certain X or a particular X, which usually receive¶ a wide scope interpretation, cannot, in general, receive such an interpretation in the context of a rule or a definition. This holds of definitions in general, not¶ only of definitions with an IS subject. The following examples from the Cobuild¶ dictionary illustrate this point:¶ (74) a. A fanatic is a person who is very enthusiastic about a particular¶ activity, sport, or way of life.¶ b. Something that is record-breaking is better than the previous¶ record for a particular performance or achievement.¶ c. When a computer outputs something it sorts and produces information as the result of a particular program or operation.¶ d. If something sheers in a particular direction, it suddenly changes¶ direction, for example to avoid hitting something.

#### That outweighs—only our evidence speaks to how bare plurals are interpreted in the context of normative statements like the resolution. This means throw out aff counter-interpretations that are purely descriptive

#### The upward entailment and adverb quantification determine whether a bare plural is generic or existential

Leslie and Lerner 16 [Sarah-Jane, PhD Princeton director of the Program in Linguistics, and Adam, Postgraduate Research Associate in the Department of Philosophy at Princeton] "Generic Generalizations (Stanford Encyclopedia of Philosophy)," No Publication, https://plato.stanford.edu/entries/generics/ 4-24-2016 RE

Consider the following pairs of sentences:

(1) a. Tigers are striped.

b. Tigers are on the front lawn.

(2) a. A tiger is striped.

b. A tiger is on the front lawn.

(3) a. The tiger is striped.

b. The tiger is on the front lawn.

The sentence pairs above are prima facie syntactically parallel—both are subject-predicate sentences whose subjects consist of the same common noun coupled with the same, or no, article. However, the interpretation of first sentence of each pair is intuitively quite different from the interpretation of the second sentence in the pair. In the second sentences, we are talking about some particular tigers: a group of tigers in (1b), some individual tiger in (2b), and some unique salient or familiar tiger in (3b)—a beloved pet, perhaps. In the first sentences, however, we are saying something general. There is/are no particular tiger or tigers that we are talking about.

The second sentences of the pairs receive what is called an existential interpretation. The hallmark of the existential interpretation of a sentence containing a bare plural or an indefinite singular is that it may be paraphrased with “some” with little or no change in meaning; hence the terminology “existential reading”. The application of the term “existential interpretation” is perhaps less appropriate when applied to the definite singular, but it is intended there to cover interpretation of the definite singular as referring to a unique contextually salient/familiar particular individual, not to a kind.

There are some tests that are helpful in distinguishing these two readings. For example, the existential interpretation is upward entailing, meaning that the statement will always remain true if we replace the subject term with a more inclusive term. Consider our examples above. In (1b), we can replace “tiger” with “animal” salva veritate, but in (1a) we cannot. If “tigers are on the lawn” is true, then “animals are on the lawn” must be true. However, “tigers are striped” is true, yet “animals are striped” is false. (1a) does not entail that animals are striped, but (1b) entails that animals are on the front lawn (Lawler 1973; Laca 1990; Krifka et al. 1995).

Another test concerns whether we can insert an adverb of quantification with minimal change of meaning (Krifka et al. 1995). For example, inserting “usually” in the sentences in (1a) (e.g., “tigers are usually striped”) produces only a small change in meaning, while inserting “usually” in (1b) dramatically alters the meaning of the sentence (e.g., “tigers are usually on the front lawn”). (For generics such as “mosquitoes carry malaria”, the adverb “sometimes” is perhaps better used than “usually” to mark off the generic reading.)

#### This applies to the res – 1] Upward entailment test – “The WTO ought to reduce intellectual property protections for medicines” doesn’t entail that “The WTO ought to reduce intellectual property protections for health treatments” because there are orthopedics, etc that perhaps shouldn’t shouldn’t do the plan 2]Adverb test – "nations generally ought to reduce IPP for medicines" doesn't substantially change the meaning

#### They have to win counter-definitions to both our Cohen and Leslie evidence—if we win a violation for either it proves they are outside the bounds of the topic

#### Violation—they specified CRISPRs—

#### Vote neg:

#### 1] Precision – if we win definitions the aff is not topical. The resolution is the only predictable stasis point for dividing ground—any deviation justifies the aff arbitrarily jettisoning words in the resolution at their whim which decks negative ground and preparation because the aff is no longer bounded by the resolution.

**2] Limits:**

**A] Quantitative –– unlimited topics incentivize obscure affs that negs won’t have prep on – limits are key to reciprocal prep burden**

**B] Qualitative – they take away generic turns like the Innovation DA and functionally jettison medicines from the topic, which shifts away from the core topic lit of property protections – also means there is no universal DA to spec affs**

**3] TVA solves – read the aff as advantage – most authors advocate for a change in WTO policy and reading CRIPSr as an advantage solves all their offense – their second advantage is literally a whole res one**

**4] No PICs offense – potential neg abuse doesn’t justify aff abuse because that would permit infinite 1AC abuse**

**c/a paradigm issues**

## 3

### 1nc – k

#### Settler colonialism is the permeating structure of the nation-state which requires the elimination of indigenous life and land via the occupation of settlers. The appropriation of land turns Natives into ghosts and chattel slaves into excess labor.

Tuck and Yang 12

(Eve Tuck, Unangax, State University of New York at New Paltz K. Wayne Yang University of California, San Diego, Decolonization is not a metaphor, Decolonization: Indigeneity, Education & Society Vol. 1, No. 1, 2012, pp. 1-40, JKS)

Our intention in this descriptive exercise is not be exhaustive, or even inarguable; instead, we wish to emphasize that (a) decolonization will take a different shape in each of these contexts - though they can overlap - and that (b) neither external nor internal colonialism adequately describe the form of colonialism which operates in the United States or other nation-states in which the colonizer comes to stay. Settler colonialism operates through internal/external colonial modes simultaneously because there is no spatial separation between metropole and colony. For example, in the United States, many Indigenous peoples have been forcibly removed from their homelands onto reservations, indentured, and abducted into state custody, signaling the form of colonization as simultaneously internal (via boarding schools and other biopolitical modes of control) and external (via uranium mining on Indigenous land in the US Southwest and oil extraction on Indigenous land in Alaska) with a frontier (the US military still nicknames all enemy territory “Indian Country”). The horizons of the settler colonial nation-state are total and require a mode of total appropriation of Indigenous life and land, rather than the selective expropriation of profit-producing fragments. Settler colonialism is different from other forms of colonialism in that settlers come with the intention of making a new home on the land, a homemaking that insists on settler sovereignty over all things in their new domain. Thus, relying solely on postcolonial literatures or theories of coloniality that ignore settler colonialism will not help to envision the shape that decolonization must take in settler colonial contexts. Within settler colonialism, the most important concern is land/water/air/subterranean earth (land, for shorthand, in this article.) Land is what is most valuable, contested, required. This is both because the settlers make Indigenous land their new home and source of capital, and also because the disruption of Indigenous relationships to land represents a profound epistemic, ontological, cosmological violence. This violence is not temporally contained in the arrival of the settler but is reasserted each day of occupation. This is why Patrick Wolfe (1999) emphasizes that settler colonialism is a structure and not an event. In the process of settler colonialism, land is remade into property and human relationships to land are restricted to the relationship of the owner to his property. Epistemological, ontological, and cosmological relationships to land are interred, indeed made pre-modern and backward. Made savage. In order for the settlers to make a place their home, they must destroy and disappear the Indigenous peoples that live there. Indigenous peoples are those who have creation stories, not colonization stories, about how we/they came to be in a particular place - indeed how we/they came to be a place. Our/their relationships to land comprise our/their epistemologies, ontologies, and cosmologies. For the settlers, Indigenous peoples are in the way and, in the destruction of Indigenous peoples, Indigenous communities, and over time and through law and policy, Indigenous peoples’ claims to land under settler regimes, land is recast as property and as a resource. Indigenous peoples must be erased, must be made into ghosts (Tuck and Ree, forthcoming). At the same time, settler colonialism involves the subjugation and forced labor of chattel slaves, whose bodies and lives become the property, and who are kept landless. Slavery in settler colonial contexts is distinct from other forms of indenture whereby excess labor is extracted from persons. First, chattels are commodities of labor and therefore it is the slave’s person that is the excess. Second, unlike workers who may aspire to own land, the slave’s very presence on the land is already an excess that must be dis-located. Thus, the slave is a desirable commodity but the person underneath is imprisonable, punishable, and murderable. The violence of keeping/killing the chattel slave makes them deathlike monsters in the settler imagination; they are reconfigured/disfigured as the threat, the razor’s edge of safety and terror. The settler, if known by his actions and how he justifies them, sees himself as holding dominion over the earth and its flora and fauna, as the anthropocentric normal, and as more developed, more human, more deserving than other groups or species. The settler is making a new "home" and that home is rooted in a homesteading worldview where the wild land and wild people were made for his benefit. He can only make his identity as a settler by making the land produce, and produce excessively, because "civilization" is defined as production in excess of the "natural" world (i.e. in excess of the sustainable production already present in the Indigenous world). In order for excess production, he needs excess labor, which he cannot provide himself. The chattel slave serves as that excess labor, labor that can never be paid because payment would have to be in the form of property (land). The settler's wealth is land, or a fungible version of it, and so payment for labor is impossible.6 The settler positions himself as both superior and normal; the settler is natural, whereas the Indigenous inhabitant and the chattel slave are unnatural, even supernatural. Settlers are not immigrants. Immigrants are beholden to the Indigenous laws and epistemologies of the lands they migrate to. Settlers become the law, supplanting Indigenous laws and epistemologies. Therefore, settler nations are not immigrant nations (See also A.J. Barker, 2009). Not unique, the United States, as a settler colonial nation-state, also operates as an empire - utilizing external forms and internal forms of colonization simultaneous to the settler colonial project. This means, and this is perplexing to some, that dispossessed people are brought onto seized Indigenous land through other colonial projects. Other colonial projects include enslavement, as discussed, but also military recruitment, low-wage and high-wage labor recruitment (such as agricultural workers and overseas-trained engineers), and displacement/migration (such as the coerced immigration from nations torn by U.S. wars or devastated by U.S. economic policy). In this set of settler colonial relations, colonial subjects who are displaced by external colonialism, as well as racialized and minoritized by internal colonialism, still occupy and settle stolen Indigenous land. Settlers are diverse, not just of white European descent, and include people of color, even from other colonial contexts. This tightly wound set of conditions and racialized, globalized relations exponentially complicates what is meant by decolonization, and by solidarity, against settler colonial forces. Decolonization in exploitative colonial situations could involve the seizing of imperial wealth by the postcolonial subject. In settler colonial situations, seizing imperial wealth is inextricably tied to settlement and re-invasion. Likewise, the promise of integration and civil rights is predicated on securing a share of a settler-appropriated wealth (as well as expropriated ‘third-world’ wealth). Decolonization in a settler context is fraught because empire, settlement, and internal colony have no spatial separation. Each of these features of settler colonialism in the US context - empire, settlement, and internal colony - make it a site of contradictory decolonial desires7. Decolonization as metaphor allows people to equivocate these contradictory decolonial desires because it turns decolonization into an empty signifier to be filled by any track towards liberation. In reality, the tracks walk all over land/people in settler contexts. Though the details are not fixed or agreed upon, in our view, decolonization in the settler colonial context must involve the repatriation of land simultaneous to the recognition of how land and relations to land have always already been differently understood and enacted; that is, all of the land, and not just symbolically. This is precisely why decolonization is necessarily unsettling, especially across lines of solidarity. “Decolonization never takes place unnoticed” (Fanon, 1963, p. 36). Settler colonialism and its decolonization implicates and unsettles everyone.

#### The WTO is a eurocentric notion used to objectify and make dispensible non-european subjects

Mignolo 9 (Walter, Professor of Literature and Romance Studies at Duke University,Dispensible and Bare Lives. Coloniality and the Hidden Political/Economic Agenda of Modernity. HUMAN ARCHITECTURE: JOURNAL OF THE SOCIOLOGY OF SELF-KNOWLEDGE, VII, 2, SPRING 2009, 69-88)

International Law is an integral part of¶ coloniality: it legalizes the rhetoric of modernity while simultaneously enforcing the¶ logic of coloniality. It was prompted by the¶ “discovery” of unknown lands and unknown people; and by trafﬁc of enslaved¶ Africans to the New World. In 1979, U.O.¶ Umozurike, from the University of Nigeria,¶ published a report on International Law and¶ Colonialism in Africa. The book was published by Nwamife Publisher Limited, in¶ Enugu, Nigeria. Given the book-market¶ and the trade-names of European and US¶ scholars and intellectual, the book did not¶ get much attention, beyond a numerical¶ minority interested in the topic. In the¶ 1990s Siba N’Zatioula Grovogui, an African¶ political theorist based at John Hopkins¶ University, followed up on the issue re viewing international law in the modern/¶ colonial world from the histories of colonial¶ Africa and the colonial experience of Africans. For the purpose at hand, here is a¶ lengthy paragraph that would help us in¶ unveiling the interconnections between international law, dispensable and bare lives: ¶ As a constituent element of Western culture, the law of nations has¶ been integral to a discourse of inclusion and exclusion. In this regard, international law has formed¶ its subject and objects through an¶ arbitrary system of signs. As rhetoric of identity, it has depended¶ upon metaphysical associations¶ grounded on religious, cultural, or¶ racial similarities and differences.¶ The legal subject, for the most part,¶ has been composed of a Christian/¶ European self. In contrast, the European founders of the law of nations created an opposite image of¶ the self (the other) as a legal object.¶ They materialized this legal objectiﬁcation of non-Europeans¶ through a process of alterity. The¶ other has comprised, at once, nonEuropean communities that Europe has accepted as its mirror image and those it has considered to¶ be either languishing in a developmental stage long since surpassed¶ by Europe or moving in historical¶ progression toward the model provided by the European self (Grovogui, 1996, 65). ¶ The simultaneous epistemic process of¶ inclusion/exclusion, led ﬁrst by Christian¶ theology, later on by philosophy and science, and lately by political economy supported by political theory, of which¶ international law was and continues to be a¶ key instrument, is at the historical foundation of the modern/colonial world, of modernity/coloniality and of imperial¶ capitalism. Francisco de Vitoria in Salamanca, Spain, in the mid sixteenth century;¶ Hugo Grotius in the Netherland at the beginning of the seventeenth century; and¶ Seraphin de Freitas, in Portugal, critically¶ responding to Hugo Grotious, constitute¶ three pillars of International Law in the historical foundation of the modern/colonial¶ world. Subjects whose subjectivities and¶ sensibilities have not been formed by the¶ European memories of Greece and Rome,¶ of Greek and Latin, and by its modern imperial languages (Italian, Portuguese,¶ Spanish, French, German and English), began to be constructed, in the European discourse of international law, as legal objects.¶ “Legal objects” have been stripped of their¶ language, religions, families, communities,¶ sensibilities, memories—in sum, legal objects became, for European international¶ law, not only bare but above all dispensable¶ lives. If non-European people were and are¶ targets of commodiﬁcation of human lives,¶ they are also targets to be outlawed. As legal objects, non-European subjects had no¶ say in International Law, unless they¶ agreed with the terms stipulated by European law-makers

#### The 1AC finalizes a project of colonial informatic capture whereby humanity is reduced to a series of blips on a screen for digital manipulation – this makes unending surveillance and structural violence inevitable

**Pellizzoni 15.** Luigi, Associate Professor of Environmental and Political Sociology at the University of Trieste, Italy and co-editor of Neoliberalism and Technoscience. “Ontological Politics in a Disposable World: The New Mastery of Nature.” 2015

Blurred Distinctions In an insightful study Eugene Thacker (2006) stresses that **biotechnology is indissociable from globalization,** understood as a complex process of intensification and rescaling of relations. This regards **not only the biotech industry but also ‘big science’ projects, such as the mapping of the human genome or the emergence of, and response to, new infectious diseases** such as the SARS (Severe Acute Respiratory Syndrome). It is therefore sensible to talk of the exchange, circulation and distribution of biological information and materials as an additional dimension to the three main types of exchange (economic, political and cultural) characterizing globalization. The way genomics has developed is emblematic. Genomics relies on computer and biological databases that are networked across the world. **The human genome**, Thacker contends, **is global** in a threefold sense: **technological** (**online database accessible all over the world); scientific (through access and distribution of data scientific knowledge can be shared worldwide) and economic (data in the genome database are connected to patent databases, with consequent creation of worldwide proprietary networks of information-sharing).** As other aspects of globalization, biological exchange does not erase but rather restructures spatial relations, creating new centralities, localities and exclusions. **This applie**s for example **to bioprospecting (the collection, usually from developing countries, of forms of life and related traditional knowledge for their scientific interest and economic potentials**)16 **and** **biopiracy (the commercial exploitation of biodiversity and local knowledge without permission and compensation)**, as well as to ‘big science’ enterprises, such as the Human Genome Project, which involves only a selected number of countries and research centres.

Thacker contends that, to understand the actual character of current biotechnologies it is crucial to consider their inbuilt tensions. The fundamental feature of biotech is the combination of biology and informatics – the simultaneous growth of, and interaction between, biosciences and ICTs. **Biotechnology**, he says, **is first and foremost bioinformatics**. It is in the context of this synergy that the core tension of biotech emerges. ‘**Life** itself’ **is** at the same time **matter and information,** presence and pattern, wet’ and ‘dry’, **real and virtual**. It is **this tension** – I would call it an ambivalence – that **enables a worldwide biological exchange, as ‘the circulation and distribution of biological information**, be it in a material or immaterial instantiation, that is mediated by one or more value systems’ (Thacker 2006: 7). Information moves fluidly across media, from a living cell to a test tube, to a digital database. **DNA**, for example, exists in the nucleus of cells; it **can be extracted** and kept in vitro for diagnostics and analysis; it can be transferred from one cell to another or from one organism to another; it can be digitized or encoded and stored as a sequence on a computer database; **it can be synthesized using the digital form in databases; it can be re-materialized as a biological molecule, then as drugs, GMOs and so on; it can become an intellectual property.**

Hence, Thacker stresses, biological exchanges informationalize without dematerializing. It is possibly more accurate to say that the difference between matter and information becomes irrelevant, or gains salience according to context and purpose. Consider, for example, the issue of ‘big data’. The expression refers to the fact that research is increasingly driven by data mining and processing. This has major effects on its outcomes (Mitchell and Thurtle 2004, Calvert and Fushimura 2011, Calvert 2012). Unforeseen insights are generated, where knowledge and production of reality, discovery (of interesting relationships within the data) and invention (of meaningful associations among data), can hardly be distinguished. Similarly, **biometric profiling for purposes of surveillance, research, diagnostics and design of ‘smart environments’ (online-offline environments that anticipate the inhabitants), applies algorithms that associate huge amounts of data, often of disparate type (biological traits, places, events, individual and collective behaviours, etc.), generating unforeseen knowledge, thus in a sense answering questions that users did not know to ask** (Hildebrand 2008, Amoore 2009, Mattelart 2010, Mitchell and Waldby 2010). Moreover, **it is unclear whether this is just knowledge or rather the production of reality – for example a forthcoming disease, or a user-tailored socio-technical environment.**

In short, we are confronted with a fluid or ambivalent state of affairs, where the distinction between matter and information, discovery and invention, real and virtual, natural and artificial, blurs. Also the difference between the organic and the inorganic: as Evelyn Fox Keller (2007, 2011) remarks, with the advent of cybernetics and non-linear dynamical systems theory self-organization – the distinctive feature of life, since Aristotle – has been increasingly understood in physical, rather than biological, terms. Thus, it is no longer organic life that, as usual in modernity, is depicted in mechanistic ways (that is, as an assembly of elements governed by efficient causality)17 It is the inorganic realm that is regarded as having ‘vital’ connotations. For example, in the field of supramolecular chemistry, scholars talk of ‘informed matter’, referring to the spontaneous self-organization of molecular systems out of components, through molecular recognition (Lehn 2004). Simultaneously, life is infused with characterizations like textuality, information and codification, which are foreign to traditional descriptions of organisms as eminently material entities.”

#### Thus, the only alternative is decolonization.

Tuck and Yang 12

(Eve Tuck, Unangax, State University of New York at New Paltz K. Wayne Yang University of California, San Diego, Decolonization is not a metaphor, Decolonization: Indigeneity, Education & Society Vol. 1, No. 1, 2012, pp. 1-40, JKS)

An ethic of incommensurability, which guides moves that unsettle innocence, stands in contrast to aims of reconciliation, which motivate settler moves to innocence. Reconciliation is about rescuing settler normalcy, about rescuing a settler future. Reconciliation is concerned with questions of what will decolonization look like? What will happen after abolition? What will be the consequences of decolonization for the settler? Incommensurability acknowledges that these questions need not, and perhaps cannot, be answered in order for decolonization to exist as a framework. We want to say, first, that decolonization is not obliged to answer those questions - decolonization is not accountable to settlers, or settler futurity. Decolonization is accountable to Indigenous sovereignty and futurity. Still, we acknowledge the questions of those wary participants in Occupy Oakland and other settlers who want to know what decolonization will require of them. The answers are not fully in view and can’t be as long as decolonization remains punctuated by metaphor. The answers will not emerge from friendly understanding, and indeed require a dangerous understanding of uncommonality that un-coalesces coalition politics - moves that may feel very unfriendly. But we will find out the answers as we get there, “in the exact measure that we can discern the movements which give [decolonization] historical form and content” (Fanon, 1963, p. 36). To fully enact an ethic of incommensurability means relinquishing settler futurity, abandoning the hope that settlers may one day be commensurable to Native peoples. It means removing the asterisks, periods, commas, apostrophes, the whereas’s, buts, and conditional clauses that punctuate decolonization and underwrite settler innocence. The Native futures, the lives to be lived once the settler nation is gone - these are the unwritten possibilities made possible by an ethic of incommensurability.

*when you take away the punctuation*

*he says of*

*lines lifted from the documents about*

*military-occupied land*

*its acreage and location*

*you take away its finality*

*opening the possibility of other futures*

-Craig Santos Perez, Chamoru scholar and poet (as quoted by Voeltz, 2012)

Decolonization offers a different perspective to human and civil rights based approaches to justice, an unsettling one, rather than a complementary one. Decolonization is not an “and”. It is an elsewhere.

#### The role of the ballot is to center indigenous scholarship and resistance-- Any ethical commitment requires that the aff place themselves in the center of Native scholarship and demands.

Carlson 16

(Elizabeth Carlson, PhD, is an Aamitigoozhi, Wemistigosi, and Wasicu (settler Canadian and American), whose Swedish, Saami, German, Scots-Irish, and English ancestors have settled on lands of the Anishinaabe and Omaha Nations which were unethically obtained by the US government. Elizabeth lives on Treaty 1 territory, the traditional lands of the Anishinaabe, Nehiyawak, Dakota, Nakota, and Red River Metis peoples currently occupied by the city of Winnipeg, the province of Manitoba, (2016): Anti-colonial methodologies and practices for settler colonial studies, Settler Colonial Studies, DOI: 10.1080/2201473X.2016.1241213, JKS)

Arlo Kempf says that ‘where anticolonialism is a tool used to invoke resistance for the colonized, it is a tool used to invoke accountability for the colonizer’.42 Relational accountability should be a cornerstone of settler colonial studies. I believe settler colonial studies and scholars should ethically and overtly place themselves in relationship to the centuries of Indigenous oral, and later academic scholarship that conceptualizes and resists settler colonialism without necessarily using the term: SCT may be revelatory to many settler scholars, but Indigenous people have been speaking for a long time about colonial continuities based on their lived experiences. Some SCTs have sought to connect with these discussions and to foreground Indigenous resistance, survival and agency. Others, however, seem to use SCT as a pathway to explain the colonial encounter without engaging with Indigenous people and experiences – either on the grounds that this structural analysis already conceptually explains Indigenous experience, or because Indigenous resistance is rendered invisible.43 Ethical settler colonial theory (SCT) would recognize the foundational role Indigenous scholarship has in critiques of settler colonialism. It would acknowledge the limitations of settler scholars in articulating settler colonialism without dialogue with Indigenous peoples, and take as its norm making this dialogue evident. In my view, it is critical that we not view settler colonial studies as a new or unique field being established, which would enact a discovery narrative and contribute to Indigenous erasure, but rather take a longer and broader view. Indigenous oral and academic scholars are indeed the originators of this work. This space is not empty. Of course, powerful forces of socialization and discipline impact scholars in the academy. There is much pressure to claim unique space, to establish a name for ourselves, and to make academic discoveries. I am suggesting that settler colonial studies and anti-colonial scholars resist these hegemonic pressures and maintain a higher anti-colonial ethic. As has been argued, ‘the theory itself places ethical demands on us as settlers, including the demand that we actively refuse its potential to re-empower our own academic voices and to marginalize Indigenous resistance’.44 As settler scholars, we can reposition our work relationally and contextually with humi- lity and accountability. We can centre Indigenous resistance, knowledges, and scholarship in our work, and contextualize our work in Indigenous sovereignty. We can view oral Indigenous scholarship as legitimate scholarly sources. We can acknowledge explicitly and often the Indigenous traditions of resistance and scholarship that have taught us and pro- vided the foundations for our work. If our work has no foundation of Indigenous scholarship and mentorship, I believe our contributions to settler colonial studies are even more deeply problematic.

## Case

### Framework

#### Extinction impacts are fabricated by the settler death drive - settlers have a psychological investment in imagining the end of the world to create a sense of white vulnerability at the expense of enacting decolonization.

Dalley 16

(Hamish Dalley received his Ph.D. from the Australian National University in 2013, and is now an Assistant Professor of English at Daemen College, Amherst, New York, where he is responsible for teaching in World and Postcolonial Literatures., (2016): The deaths of settler colonialism: extinction as a metaphor of decolonization in contemporary settler literature, Settler Colonial Studies, DOI: 10.1080/2201473X.2016.1238160, JKS)

Settlers love to contemplate the possibility of their own extinction; to read many contemporary literary representations of settler colonialism is to find settlers strangely satisfied in dreaming of ends that never come. This tendency is widely prevalent in English-language representations of settler colonialism produced since the 1980s: the possibility of an ending – the likelihood that the settler race will one day die out – is a common theme in literary and pop culture considerations of colonialism’s future. Yet it has barely been remarked how surprising it is that this theme is so present. For settlers, of all people, to obsessively ruminate on their own finitude is counterintuitive, for few modern social formations have been more resistant to change than settler colonialism. With a few excep- tions (French Algeria being the largest), the settler societies established in the last 300 years in the Americas, Australasia, and Southern Africa have all retained the basic features that define them as settler states – namely, the structural privileging of settlers at the expense of indigenous peoples, and the normalization of whiteness as the marker of pol- itical agency and rights – and they have done so notwithstanding the sustained resistance¶ that has been mounted whenever such an order has been built. Settlers think all the time that they might one day end, even though (perhaps because) that ending seems unlikely ever to happen. The significance of this paradox for settler-colonial literature is the subject of this article.¶ Considering the problem of futurity offers a useful foil to traditional analyses of settler- colonial narrative, which typically examine settlers’ attitudes towards history in order to highlight a constitutive anxiety about the past – about origins. Settler colonialism, the argument goes, has a problem with historical narration that arises from a contradiction in its founding mythology. In Stephen Turner’s formulation, the settler subject is by definition one who comes from elsewhere but who strives to make this place home. The settlement narrative must explain how this gap – which is at once geographical, historical, and existential – has been bridged, and the settler transformed from outsider into indigene. Yet the transformation must remain constitutively incomplete, because the desire to be at home necessarily invokes the spectre of the native, whose existence (which cannot be disavowed completely because it is needed to define the settler’s difference, superior- ity, and hence claim to the land) inscribes the settler’s foreignness, thus reinstating the gap between settler and colony that the narrative was meant to efface.1 Settler-colonial narrative is thus shaped around its need to erase and evoke the native, to make the indigene both invisible and present in a contradictory pattern that prevents settlers from ever moving on from the moment of colonization.2 As evidence of this constitutive contradiction, critics have identified in settler-colonial discourse symptoms of psychic distress such as disavowal, inversion, and repression.3 Indeed, the frozen temporality of settler-colonial narrative, fixated on the moment of the frontier, recalls nothing so much as Freud’s description of the ‘repetition compulsion’ attending trauma.4 As Lorenzo Veracini puts it, because:¶ ‘settler society’ can thus be seen as a fantasy where a perception of a constant struggle is juxtaposed against an ideal of ‘peace’ that can never be reached, settler projects embrace and reject violence at the same time. The settler colonial situation is thus a circumstance where the tension between contradictory impulses produces long-lasting psychic conflicts and a number of associated psychopathologies.5¶ Current scholarship has thus focused primarily on settler-colonial narrative’s view of the past, asking how such a contradictory and troubled relationship to history might affect present-day ideological formations. Critics have rarely considered what such narratological tensions might produce when the settler gaze is turned to the future. Few social formations are more stubbornly resistant to change than settlement, suggesting that a future beyond settler colonialism might be simply unthinkable. Veracini, indeed, suggests that settler-colonial narrative can never contemplate an ending: that settler decolonization is inconceivable because settlers lack the metaphorical tools to imagine their own demise.6 This article outlines why I partly disagree with that view. I argue that the narratological paradox that defines settler-colonial narrative does make the future a problematic object of contemplation. But that does not make settler decolonization unthinkable per se; as I will show, settlers do often try to imagine their demise – but they do so in a way that reasserts the paradoxes of their founding ideology, with the result that the radical potentiality of decolonization is undone even as it is invoked.¶ I argue that, notwithstanding Veracini’s analysis, there is a metaphor via which the end of settler colonialism unspools – the quasi-biological concept of extinction, which, when deployed as a narrative trope, offers settlers a chance to consider and disavow their demise, just as they consider and then disavow the violence of their origins. This article traces the importance of the trope of extinction for contemporary settler-colonial litera- ture, with a focus on South Africa, Canada, and Australia. It explores variations in how the death of settler colonialism is conceptualized, drawing a distinction between his- torio-civilizational narratives of the rise and fall of empires, and a species-oriented notion of extinction that draws force from public anxiety about climate change – an invocation that adds another level of ambivalence by drawing on ‘rational’ fears for the future (because climate change may well render the planet uninhabitable to humans) in order to narrativize a form of social death that, strictly speaking, belongs to a different order of knowledge altogether. As such, my analysis is intended to draw the attention of settler- colonial studies toward futurity and the ambivalence of settler paranoia, while highlighting a potential point of cross-fertilization between settler-colonial and eco-critical approaches to contemporary literature.¶ That ‘extinction’ should be a key word in the settler-colonial lexicon is no surprise. In Patrick Wolfe’s phrase,7 settler colonialism is predicated on a ‘logic of elimination’ that tends towards the extermination – by one means or another – of indigenous peoples.8 This logic is apparent in archetypal settler narratives like James Fenimore Cooper’s The Last of the Mohicans (1826), a historical novel whose very title blends the melancholia and triumph that demarcate settlers’ affective responses to the supposed inevitability of indigenous extinction. Concepts like ‘stadial development’ – by which societies progress through stages, progressively eliminating earlier social forms – and ‘fatal impact’ – which names the biological inevitability of strong peoples supplanting weak – all contribute to the notion that settler colonialism is a kind of ‘ecological process’ that necessitates the extinction of inferior races. What is surprising, though, is how often the trope of extinction also appears with reference to settlers themselves; it makes sense for settlers to narrate how their presence entails others’ destruction, but it is less clear why their attempts to imagine futures should presume extinction to be their own logical end as well.¶ The idea appears repeatedly in English-language literary treatments of settler colonial- ism. Consider, for instance, the following rumination on the future of South African settler society, from Olive Schreiner’s 1883 Story of an African Farm:¶ It was one of them, one of those wild old Bushmen, that painted those pictures there. He did not know why he painted but he wanted to make something, so he made these. [...] Now the Boers have shot them all, so that we never see a yellow face peeping out among the stones. [...] And the wild bucks have gone, and those days, and we are here. But we will be gone soon, and only the stones will lie on, looking at everything like they look now.10¶ In this example, the narrating settler character, Waldo, recognizes prior indigenous inha- bitation but his knowledge comes freighted with an expected sense of biological super- iority, made apparent by his description of the ‘Bushman’s’ ‘yellow face’, and lack of mental self-awareness. What is not clear is why Waldo’s contemplation of colonial geno- cide should turn immediately to the assumption that a similar fate awaits his people as well. A similar presumption of racial vulnerability permeates other late nineteenth- century novels from the imperial metropole, such as Dracula and War of the Worlds,¶ which are plotted around the prospect of invasions that would see the extinction of British imperialism, and, in the process, the human species.¶ Such anxieties draw energy from a pattern of settler defensiveness that can be observed across numerous settler-colonial contexts. Marilyn Lake’s and Henry Reynold’s account of the emergence of transnational ‘whiteness’ highlights the paradoxical fact that while white male settlers have been arguably the most privileged class in history, they have routinely perceived themselves to be ‘under siege’, threatened with destruction to the extent that their very identity of ‘whiteness was born in the apprehension of immi- nent loss’.11 The fear of looming annihilation serves a powerful ideological function in settler communities, working to foster racial solidarity, suppress dissent, and legitimate violence against indigenous populations who, by any objective measure, are far more at risk of extermination than the settlers who fear them. Ann Curthoys and Dirk Moses have traced this pattern in Australia and Israel-Palestine, respectively.12 This scholarship suggests that narratives of settler extinction are acts of ideological mystification, obscuring the brutal inequalities of the frontier behind a mask of white vulnerability – an argument with which I sympathize. However, this article shows how there is more to settler-colonial extinction narratives than bad faith. I argue that we need a more nuanced understanding of how they encode a specifically settler-colonial framework for imagining the future, one that has implications for how we understand contemporary literatures from settler societies, and which allows us to see extinction as a genuine, if flawed, attempt to envisage social change.¶ In the remainder of this paper I consider extinction’s function as a metaphor of decolonization. I use this phrase to invoke, without completely endorsing, Tuck and Yang’s argu- ment that to treat decolonization figuratively, as I argue extinction narratives do, is necessarily to preclude radical change, creating opportunities for settler ‘moves to innocence’ that re-legitimate racial inequality.13 The counterview to this pessimistic perspec- tive is offered by Veracini, who suggests that progressive change to settler-colonial relationships will only happen if narratives can be found that make decolonization think- able.14 This article enters the debate between these two perspectives by asking what it means for settler writers to imagine the future via the trope of extinction. Does extinction offer a meaningful way to think about ending settler colonialism, or does it re-activate settler-colonial patterns of thought that allow exclusionary social structures to persist?¶ I explore this question with reference to examples of contemporary literary treatments of extinction from select English-speaking settler-colonial contexts: South Africa, Australia, and Canada.15 The next section of this article traces key elements of extinction narrative in a range of settler-colonial texts, while the section that follows offers a detailed reading of one of the best examples of a sustained literary exploration of human finitude, Margaret Atwood’s Maddaddam trilogy (2003–2013). I advance four specific arguments. First, extinc- tion narratives take at least two forms depending on whether the ‘end’ of settler society is framed primarily in historical-civilizational terms or in a stronger, biological sense; the key question is whether the ‘thing’ that is going extinct is a society or a species. Second, biologically oriented extinction narratives rely on a more or less conscious slippage between ‘the settler’ and ‘the human’. Third, this slippage is ideologically ambivalent: on the one hand, it contains a radical charge that invokes environmentalist discourse and climate-change anxiety to imagine social forms that re-write settler-colonial dynamics; on the other, it replicates a core aspect of imperialist ideology by normalizing whiteness as¶ equivalent to humanity. Fourth, these ideological effects are mediated by gender, insofar as extinction narratives invoke issues of biological reproduction, community protection, and violence that function to differentiate and reify masculine and feminine roles in the putative de-colonial future. Overall, my central claim is that extinction is a core trope through which settler futurity emerges, one with crucial narrative and ideological effects that shape much of the contemporary literature emerging from white colonial settings.

### Advantage 1

#### Crispr doesn’t exist yet so vote neg on presumption – they cant solve the vast majority of their offense

#### No solvency

#### No extinction from disease

#### Resilience and countermeasures prevent spread – distinct from burnout

Adalja 16

Amesh Adalja is an infectious-disease physician at the University of Pittsburgh, The Atlantic, June 17, 2016, “Why Hasn't Disease Wiped out the Human Race?”, https://www.theatlantic.com/health/archive/2016/06/infectious-diseases-extinction/487514/

But when people ask me if I’m worried about infectious diseases, they’re often not asking about the threat to human lives; they’re asking about the threat to human life. With each outbreak of a headline-grabbing emerging infectious disease comes a fear of extinction itself. The fear envisions a large proportion of humans succumbing to infection, leaving no survivors or so few that the species can’t be sustained.

I’m not afraid of this apocalyptic scenario, but I do understand the impulse. Worry about the end is a quintessentially human trait. Thankfully, so is our resilience.

For most of mankind’s history, infectious diseases were the existential threat to humanity—and for good reason. They were quite successful at killing people: The 6th century’s Plague of Justinian knocked out an estimated 17 percent of the world’s population; the 14th century Black Death decimated a third of Europe; the 1918 influenza pandemic killed 5 percent of the world; malaria is estimated to have killed half of all humans who have ever lived.

Any yet, of course, humanity continued to flourish. Our species’ recent explosion in lifespan is almost exclusively the result of the control of infectious diseases through sanitation, vaccination, and antimicrobial therapies. Only in the modern era, in which many infectious diseases have been tamed in the industrial world, do people have the luxury of death from cancer, heart disease, or stroke in the 8th decade of life. Childhoods are free from watching siblings and friends die from outbreaks of typhoid, scarlet fever, smallpox, measles, and the like.

**b. Intervening actors check**

**Zakaria 9—**Editor of Newsweek, BA from Yale, PhD in pol sci, Harvard. He serves on the board of Yale University, The Council on Foreign Relations, The Trilateral Commission, and Shakespeare and Company. Named "one of the 21 most important people of the 21st Century" (Fareed, “The Capitalist Manifesto: Greed Is Good,” 13 June 2009, http://www.newsweek.com/id/201935)

Note—Laurie Garrett=science and health writer, winner of the Pulitzer, Polk, and Peabody Prize

It certainly looks like another example of crying wolf. **After bracing ourselves for a global pandemic, we've suffered** something more like **the usual seasonal influenza**. Three weeks ago the World Health Organization declared a health emergency, warning countries to "prepare for a pandemic" and said that the only question was the extent of worldwide damage. **Senior officials prophesied that millions could be infected** by the disease. **But as of last week, the WHO had confirmed only 4,800 cases** of swine flu, with 61 people having died of it. Obviously, these low numbers are a pleasant surprise, but it does make one wonder, what did we get wrong? **Why did** the **predictions of a pandemic turn out to be so exaggerated**? Some people blame an overheated media, but it would have been difficult to ignore major international health organizations and governments when they were warning of catastrophe. I think **there is a** broader **mistake in the way we look at the world.** Once we see a problem, we can describe it in great detail, extrapolating all its possible consequences. But **we** can **rarely anticipate the human response to that crisis. Take** **swine flu. The virus** **had crucial characteristics** **that led researchers to worry that it could spread far and fast**. They described—and the media reported—what would happen if it went unchecked. **But it did not go unchecked**. **In fact, swine flu was met by an extremely vigorous response at its epicenter**, **Mexico. The Mexican government reacted quickly** and massively, quarantining the infected population, testing others, providing medication to those who needed it. **The noted expert on this subject,** Laurie **Garrett, says, "**We should all stand up and scream, **'Gracias, Mexico**!' because the Mexican people and the Mexican government have sacrificed on a level that I'm not sure as Americans we would be prepared to do in the exact same circumstances. They shut down their schools. They shut down businesses, restaurants, churches, sporting events. **They** basically paralyzed their own economy. They've suffered billions of dollars in financial losses still being tallied up, and thereby **really brought transmission to a halt." Every time one of these viruses is detected**, writers and **officials bring up the Spanish influenza** epidemic **of 1918** in which millions of people died. Indeed, during the last pandemic scare, in 2005, President George W. Bush claimed that he had been reading a history of the Spanish flu to help him understand how to respond. **But the world we live in today looks nothing like 1918. Public health-care systems are far better** and more widespread than anything that existed during the First World War. **Even Mexico, a developing country, has a first-rate public-health system**—far better than anything Britain or France had in the early 20th century.

### Advantage 2

#### No reason why CRISPr is key to heg – the aff internal link is general and not about one specific disease so reject it

#### DB – their cards are extremely generic, not in the context of CRISPr so their solvency is either inevitable or a drop in the bucket

#### Focus on nuclear war as a static event is a practice of the strategic gaze that makes the destruction of the periphery inevitable, it wipes out and obscures knowledge of the ongoing and perpetual war against indigenous peoples

Kato 93

(Masahide, Professor in Department of Political Science, University of Hawaii, Honolulu; “Nuclear Globalism: Traversing Rockets, Satellites, and Nuclear War via the Strategic Gaze,” Alternatives, Volume 18, Number 3, Summer 1993, pg. 347-349, ISSN 0304-3754.)

The vigorous invasion of the logic of capitalist accumulation into the last vestige of relatively autonomous space in the periphery under late capitalism is propelled not only by the desire for incorporating every fabric of the society into the division of labor but also by the desire for "pure" destruction/extermination of the periphery." The penetration of capital into the social fabric and the destruction of nature and preexisting social organizations by capital are not separable. However, what we have witnessed in the phase of late capitalism is a rapid intensification of the destruction and extermination of the periphery. In this context, capital is no longer interested in incorporating some parts of the periphery into the international division of labor. The emergence of such "pure" destruction/extermination of the periphery can be explained, at least partially, by another problematic of late capitalism formulated by Ernest Mandel: the mass production of the means of destruction." Particularly, the latest phase of capitalism distinguishes itself from the earlier phases in its production of the "ultimate" means of destruction/extermination, i.e., nuclear weapons. Let us recall our earlier discussion about the critical historical conjuncture where the notion of "strategy" changed its nature and became deregulated/dispersed beyond the boundaries set by the interimperial rivalry. Herein, the perception of the ultimate means of destruction can be historically contextualized. The only instances of real nuclear catastrophe perceived and thus given due recognition by the First World community are the explosions at Hiroshima and Nagasaki, which occurred at this conjuncture. Beyond this historical threshold, whose meaning is relevant only to the interimperial rivalry, the nuclear catastrophe is confined to the realm of fantasy, for instance, apocalyptic imagery. And yet how can one deny the crude fact that nuclear war has been taking place on this earth in the name of "nuclear testing" since the first nuclear explosion at Alamogordo in 1945? As of 1991, 1,924 nuclear explosions have occurred on earth." The major perpetrators of nuclear warfare are the United States (936 times), the former Soviet Union (715 times), France (192times), the United Kingdom (44 times), and China (36 times)." The primary targets of warfare ("test site" to use Nuke Speak terminology) have been invariably the sovereign nations of Fourth World and Indigenous Peoples. Thus history has already witnessed the nuclear wars against the Marshall Islands (66 times), French Polynesia (175 times), Australian Aborigines (9 times), Newe Sogobia (the Western Shoshone Nation) (814 times), the Christmas Islands (24 times), Hawaii (Kalama Island, also known as Johnston Island) (12 times), the Republic of Kazakhstan (467 times), and Uighur (Xinjian Province, China) (36 times)." Moreover, although I focus primarily on "nuclear tests" in this article, if we are to expand the notion of nuclear warfare to include any kind of violence accrued from the nuclear fuel cycle (particularly uranium mining and disposition of nuclear wastes), we must enlist Japan and the European nations as perpetrators and add the Navaho, Havasupai and other Indigenous Nations to the list of targets. Viewed as a whole, nuclear war, albeit undeclared, has been waged against the Fourth World, and Indigenous Nations. The dismal consequences of "intensive exploitation," "low intensity intervention," or the "nullification of the sovereignty" in the Third World produced by the First World have taken a form of nuclear extermination in the Fourth World and Indigenous Nations. Thus, from the perspectives of the Fourth World and Indigenous Nations, the nuclear catastrophe has never been the "unthinkable" single catastrophe but the real catastrophe of repetitive and ongoing nuclear explosions and exposure to radioactivity. Nevertheless, ongoing nuclear wars have been subordinated to the imaginary grand catastrophe by rendering them as mere preludes to the apocalypse. As a consequence, the history and ongoing processes of nuclear explosions as war have been totally wiped out from the history and consciousness of the First World community. Such a discursive strategy that aims to mask the "real" of nuclear warfare in the domain of imagery of nuclear catastrophe can be observed even in Stewart Firth's Nuclear Playground, which extensively covers the history of "nuclear testing" in the Pacific: Nuclear explosions in the atmosphere . . . were global in effect. The winds and seas carried radioactive contamination over vast areas of the fragile ecosphere on which we all depend for our survival and which we call the earth. In preparing for war, we were poisoning our planet and going into battle against nature itself. Although Firth's book is definitely a remarkablde study of the history of "nuclear testing" in the Pacific, the problematic division/distinction between the "nuclear explosions" and the nuclear war is kept intact. The imagery of final nuclear war narrated with the problematic use of the subject ("we") is located higher than the "real" of nuclear warfare in terms of discursive value. This ideological division/hierarchization is the very vehicle through which the history and the ongoing processes of the destruction of the Fourth World and Indigenous Nations by means of nuclear violence are obliterated and hence legitimatized. The discursive containment/obliteration of the "real" of nuclear warfare has been accomplished, ironic as it may sound, by nuclear criticism. Nuclear criticism, with its firm commitment to global discourse, has established the unshakable authority of the imagery of nuclear catastrophe over the real nuclear catastrophe happening in the Fourth World and Indigenous Nations almost on a daily basis.

#### No credible scenario for extinction—outdated fringe science and well-meaning threat inflation

Scouras 19 (James Scouras, Johns Hopkins University Applied Physics Laboratory, formerly served on the congressionally established Comission to Assess the Threat to the United States from Electromagnetic Pulse (EMP) Attack, “Nuclear War as a Global Catastrophic Risk”, Cambridge Core, 9-2-2019, available at https://www.cambridge.org/core/journals/journal-of-benefit-cost-analysis/article/nuclear-war-as-a-global-catastrophic-risk/EC726528F3A71ED5ED26307677960962, accessed 12-1-2019, HKR-cjh)

\*footnotes 2 and 4 included

It might be thought that we know enough about the risk of nuclear war to appropriately manage that risk. The consequences of unconstrained nuclear attacks, and the counterattacks that would occur until the major nuclear powers exhaust their arsenals, would far exceed any cataclysm humanity has suffered in all of recorded history. The likelihood of such a war must, therefore, be reduced as much as possible. But this rather simplistic logic raises many questions and does not withstand close scrutiny. Regarding consequences, does unconstrained nuclear war pose an existential risk to humanity? The consequences of existential risks are truly incalculable, including the lives not only of all human beings currently living but also of all those yet to come; involving not only Homo sapiens but all species that may descend from it. At the opposite end of the spectrum of consequences lies the domain of “limited” nuclear wars. Are these also properly considered global catastrophes? After all, while the only nuclear war that has ever occurred devastated Hiroshima and Nagasaki, it was also instrumental in bringing about the end of the Pacific War, thereby saving lives that would have been lost in the planned invasion of Japan. Indeed, some scholars similarly argue that many lives have been saved over the nearly threefourths of a century since the advent of nuclear weapons because those weapons have prevented the large conventional wars that otherwise would likely have occurred between the major powers. This is perhaps the most significant consequence of the attacks that devastated the two Japanese cities. Regarding likelihood, how do we know what the likelihood of nuclear war is and the degree to which our national policies affect that likelihood, for better or worse? How much confidence should we place in any assessment of likelihood? What levels of likelihood for the broad spectrum of possible consequences pose unacceptable levels of risk? Even a very low (nondecreasing) annual likelihood of the risk of nuclear war would result in near certainty of catastrophe over the course of enough years. Most fundamentally and counterintuitively, are we really sure we want to reduce the risk of nuclear war? The successful operation of deterrence, which has been credited – perhaps too generously – with preventing nuclear war during the Cold War and its aftermath, depends on the risk that any nuclear use might escalate to a nuclear holocaust. Many proposals for reducing risk focus on reducing nuclear weapon arsenals and, therefore, the possible consequences of the most extreme nuclear war. Yet, if we reduce the consequences of nuclear war, might we also inadvertently increase its likelihood? It’s not at all clear that would be a desirable trade-off. This is all to argue that the simplistic logic described above is inadequate, even dangerous. A more nuanced understanding of the risk of nuclear war is imperative. This paper thus attempts to establish a basis for more rigorously addressing the risk of nuclear war. Rather than trying to assess the risk, a daunting objective, its more modest goals include increasing the awareness of the complexities involved in addressing this topic and evaluating alternative measures proposed for managing nuclear risk. I begin with a clarification of why nuclear war is a global catastrophic risk but not an existential risk. Turning to the issue of risk assessment, I then present a variety of assessments by academics and statesmen of the likelihood component of the risk of nuclear war, followed by an overview of what we do and do not know about the consequences of nuclear war, emphasizing uncertainty in both factors. Then, I discuss the difficulties in determining the effects of risk mitigation policies, focusing on nuclear arms reduction. Finally, I address the question of whether nuclear weapons have indeed saved lives. I conclude with recommendations for national security policy and multidisciplinary research. 2 Why is nuclear war a global catastrophic risk? One needs to only view the pictures of Hiroshima and Nagasaki shown in figure 1 and imagine such devastation visited on thousands of cities across warring nations in both hemispheres to recognize that nuclear war is truly a global catastrophic risk. Moreover, many of today’s nuclear weapons are an order of magnitude more destructive than Little Boy and Fat Man, and there are many other significant consequences – prompt radiation, fallout, etc. – not visible in such photographs. Yet, it is also true that not all nuclear wars would be so catastrophic; some, perhaps involving electromagnetic pulse (EMP) attacks 2 Many mistakenly believe that the congressionally established Commission to Assess the Threat to the United States from Electromagnetic Pulse (EMP) Attack concluded that an EMP attack would, indeed, be catastrophic to electronic systems and consequently to people and societies that vitally depend on those systems. However, the conclusion of the commission, on whose staff I served, was only that such a catastrophe could, not would, result from an EMP attack. Its executive report states, for example, that “the damage level could be sufficient to be catastrophic to the Nation.” See www.empcommision.org for publicly available reports from the EMP Commission. See also Frankel et al., (2015).2 using only a few high-altitude detonations or demonstration strikes of various kinds, could result in few casualties. Others, such as a war between Israel and one of its potential future nuclear neighbors, might be regionally devastating but have limited global impact, at least if we limit our consideration to direct and immediate physical consequences. Nevertheless, smaller nuclear wars need to be included in any analysis of nuclear war as a global catastrophic risk because they increase the likelihood of larger nuclear wars. This is precisely why the nuclear taboo is so precious and crossing the nuclear threshold into uncharted territory is so dangerous (Schelling, 2005; see also Tannenwald, 2007). While it is clear that nuclear war is a global catastrophic risk, it is also clear that it is not an existential risk. Yet over the course of the nuclear age, a series of mechanisms have been proposed that, it has been erroneously argued, could lead to human extinction. The first concern3 arose among physicists on the Manhattan Project during a 1942 seminar at Berkeley some three years before the first test of an atomic weapon. Chaired by Robert Oppenheimer, it was attended by Edward Teller, Hans Bethe, Emil Konopinski, and other theoretical physicists (Rhodes, 1995). They considered the possibility that detonation of an atomic bomb could ignite a self-sustaining nitrogen fusion reaction that might propagate through earth’s atmosphere, thereby extinguishing all air-breathing life on earth. Konopinski, Cloyd Margin, and Teller eventually published the calculations that led to the conclusion that the nitrogen-nitrogen reaction was virtually impossible from atomic bomb explosions – calculations that had previously been used to justify going forward with Trinity, the first atomic bomb test (Konopinski et al., 1946). Of course, the Trinity test was conducted, as well as over 1000 subsequent atomic and thermonuclear tests, and we are fortunately still here. After the bomb was used, extinction fear focused on invisible and deadly fallout, unanticipated as a significant consequence of the bombings of Japan that would spread by global air currents to poison the entire planet. Public dread was reinforced by the depressing, but influential, 1957 novel On the Beach by Nevil Shute (1957) and the subsequent 1959 movie version (Kramer, 1959). The story describes survivors in Melbourne, Australia, one of a few remaining human outposts in the Southern Hemisphere, as fallout clouds approached to bring the final blow to humanity. In the 1970s, after fallout was better understood to be limited in space, time, and magnitude, depletion of the ozone layer, which would cause increased ultraviolet radiation to fry all humans who dared to venture outside, became the extinction mechanism of concern. Again, one popular book, The Fate of the Earth by Jonathan Schell (1982), which described the nuclear destruction of the ozone layer leaving the earth “a republic of insects and grass,” promoted this fear. Schell did at times try to cover all bases, however: “To say that human extinction is a certainty would, of course, be a misrepresentation – just as it would be a misrepresentation to say that extinction can be ruled out” (Schell, 1982). Finally, the current mechanism of concern for extinction is nuclear winter, the phenomenon by which dust and soot created primarily by the burning of cities would rise to the stratosphere and attenuate sunlight such that surface temperatures would decline dramatically, agriculture would fail, and humans and other animals would perish from famine. The public first learned of the possibility of nuclear winter in a Parade article by Sagan (1983), published a month or so before its scientific counterpart by Turco et al. (1983). While some nuclear disarmament advocates promote the idea that nuclear winter is an extinction threat, and the general public is probably confused to the extent it is not disinterested, few scientists seem to consider it an extinction threat. It is understandable that some of these extinction fears were created by ignorance or uncertainty and treated seriously by worst-case thinking, as seems appropriate for threats of extinction. But nuclear doom mongering also seems to be at play for some of these episodes. For some reason, portions of the public active in nuclear issues, as well as some scientists, appear to think that arguments for nuclear arms reductions or elimination will be more persuasive if nuclear war is believed to threaten extinction, rather than merely the horrific cataclysm that it would be in reality (Martin, 1982). 4 As summarized by Martin, “The idea that global nuclear war could kill most or all of the world’s population is critically examined and found to have little or no scientific basis.” Martin also critiques possible reasons for beliefs or professed beliefs about nuclear extinction, including exaggeration to stimulate action.4 To summarize, nuclear war is a global catastrophic risk. Such wars may cause billions of deaths and unfathomable suffering, as well set civilization back centuries. Smaller nuclear wars pose regional catastrophic risks and also national risks in that the continued functioning of, for example, the United States as a constitutional republic is highly dubious after even a relatively limited nuclear attack. But what nuclear war is not is an existential risk to the human race. There is simply no credible scenario in which humans do not survive to repopulate the earth.