# Greenhill RR R3 Neg vs Immac BC

# 1NC

## Offs

### 1

#### Interpretation: The aff may not defend WTO member nations reducing intellectual property protections for a subset of medicines.

#### **Violation – they only defend CRISPR**

#### Vote neg:

#### 1] Limits – you can pick anything from COVID vaccines to HIV/AIDS to random biotech to insulin treatments and there’s no universal disad since each one has a different function and implication for health, tech, and relations – explodes neg prep and leads to random medicine of the week affs which makes cutting stable neg links impossible.

FDA 20 [(U.S. Food and Drug Administration, federal agency of the Department of Health and Human Service) “Fact Sheet: FDA at a Glance,” 11/18/2020] JL

There are over 20,000 prescription drug products approved for marketing.

FDA oversees over 6,500 different medical device product categories.

There are over 1,600 FDA-approved animal drug products.

There are about 300 FDA-licensed biologics products.

#### 2] TVA – read the aff as an advantage to a whole rez aff.

### 2

#### Settlerism is an everyday process shaped by affective investments in institutions that claim jurisdiction over native land.

Mark Rifkin, PhD, Director of the Women's and Gender Studies Program and Professor of English at the University of North Carolina, Greensboro. “Settler common sense.” Settler Colonial Studies, 2013 Vol. 3, Nos. 3–4, 322–340, http://dx.doi.org/10.1080/2201473X.2013.810702. JJN

In Walden (1854), Henry David Thoreau offers a vision of personhood divorced from the state, characterizing his experience of “Nature” during his time at Walden Pond as providing him with a sense of his own autonomous embodiment and a related set of ethical resources that enable him to reject the demands of contemporary political economy.1 The invocation of “Nature” appears to bracket the question of jurisdiction, opening into a different conceptual and phenomenological register that displaces the problem of locating oneself in relation to the boundaries of the state. However, the very feeling that one has moved beyond geopolitics, that one has entered a kind of space that suspends questions of sovereignty or renders them moot, depends on the presence of an encompassing sovereignty that licenses one’s access to that space. If the idea of “Nature” holds at bay the question of jurisdiction so as to envision a kind of place for cultivating a selfhood that can oppose state logics/politics, it also effaces the ways that experience/vision of personhood itself may arise out of the legal subjectivities put in play by the jurisdictional claiming/clearing of that space as against geopolitical claims by other polities, specifically Native peoples. Thoreau offers an example of how settlement – the exertion of control by non-Natives over Native peoples and lands – gives rise to modes of feeling, generating kinds of affect through which the terms of law and policy become imbued with a sensation of everyday certainty. This affective experience productively can be characterized as an instantiation of what more broadly may be characterized as settler common sense. The phrase suggests the ways the legal and political structures that enable non-Native access to Indigenous territories come to be lived as given, as simply the unmarked, generic conditions of possibility for occupancy, association, history, and personhood. Addressing whiteness in Australia, Fiona Nicoll argues that “rather than analysing and evaluating Indigenous sovereignty claims…, we have a political and intellectual responsibility to analyse and evaluate the innumerable ways in which White sovereignty circumscribes and mitigates the exercise of Indigenous sovereignty”, and she suggests that “we move towards a less coercive stance of reconciliation with when we fall from perspective into an embodied recognition that we already exist within Indigenous sovereignty”. 2 Addressing the question of how settlement as a system of coercive incorporation and expropriation comes to be lived as quotidian forms of non-Native being and potential, though, may require tactically shifting the analytical focus such that Indigenous sovereignties are not at the center of critical attention, even as they remain crucial in animating the study of settler colonialism and form its ethical horizon. “An embodied recognition” of the enduring presence of settler sovereignty, as well as of quotidian non-Native implication in the dispossession, effacement, and management of indigeneity, needs to attend to everyday experiences of non-relation, of a perceptual engagement with place, various institutions, and other people that takes shape around the policies and legalities of settlement but that do not specifically refer to them as such or their effects on Indigenous peoples. In order to conceptualize the mundane dynamics of settler colonialism, the quotidian feelings and tendencies through which it is continually reconstituted and experienced as the horizon of everyday potentiality, we may need to shift from an explicit attention to articulations of Native sovereignty and toward an exploration of the processes through which settler geographies are lived as ordinary, non-reflexive conditions of possibility. In Marxism and Literature, Raymond Williams argues for the necessity of approaching “relations of domination and subordination” as “practical consciousness” that saturat[es] … the whole substance of lived identities and relationships, to such a depth that the pressures and limits of what can ultimately be seen as a specific economic, political, and cultural system seem to most of us the pressures and limits of simple experience and common sense.3 Understanding settlement as, in Williams’s terms, such a “structure of feeling” entails asking how emotions, sensations, psychic life take part in the (ongoing) process of realizing the exertion of non-Native authority over Indigenous peoples, governance, and territoriality in ways that saturate quotidian life but are not necessarily present to settlers as a set of political propositions or as a specifically imperial project of dispossession. In the current scholarly efforts to characterize settler colonialism, the contours of settlement often appear analytically as clear and coherent from the start, as a virtual totality, and in this way, the ongoing processes by which settler dominance actively is reconstituted as a set of actions, occupations, deferrals, and potentials slide from view. We need to ask how the regularities of settler colonialism are materialized in and through quotidian non-Native sensations, inclinations, and trajectories. Moreover, administrative initiatives and legalities become part of everyday normalizations of state aims and mappings but in ways that also allow for an exceeding of state interests that potentially can be turned back against the state, giving rise to oppositional projects still given shape and momentum by the framings that emerge out of the ongoing work of settler occupation – such as in Walden. The essay will close with a brief reading of Thoreau’s text that illustrates how its ethical framing emerges out of, and indexes, everyday forms of settler feeling shaped by state policy but not directly continuous with it. 1. The figure of the vanishing Indian still remains prominent within US popular and scholarly discourses, both explicitly and implicitly. Within this narrative, Native peoples may have had prior claims to the land, but they, perhaps tragically, were removed from the area, or died out, or ceased to be “really” Indian, or simply disappeared at some point between the appearance of the “last” one and the current moment, whenever that may be.4 As against this tendency, scholars who seek to track the workings of settler colonialism face an entrenched inattention to the ways non-Native conceptions and articulations of personhood, place, property, and political belonging coalesce around and through the dispossession of Native peoples and normalization of (the) settler (-state’s) presence on Native lands. Insistence on the systemic quality of such settler seizures, displacements, identifications responds to this relative absence of acknowledgment by emphasizing its centrality and regularity, arguing that the claiming of a naturalized right to Indigenous place lies at the heart of non-Native modes of governance, association, and identity. However, such figurations of the pervasive and enduring quality of settler colonialism may shorthand its workings, producing accounts in which it appears as a fully integrated whole operating in smooth, consistent, and intentional ways across the socio-spatial terrain it encompasses. Doing so, particularly in considering the exchange between the domains of formal policy and of everyday life, may displace how settlement’s histories, brutalities, effacements, and interests become quotidian and common-sensical. Looking at three different models, I want to sketch varied efforts to systemize settler colonialism, highlighting some questions that emerge when they are read in light of issues of process and affect. In Settler Colonialism and the Transformation of Anthropology, Patrick Wolfe argues, “Settler colonies were (are) premised on the elimination of native societies. The split tensing reflects a determinate feature of settler colonization. The colonizers come to stay – invasion is a structure not an event.” 5 Offering perhaps the most prominent definition of settler colonialism, Wolfe’s formulation emphasizes the fact that it cannot be localized within a specific period of removal or extermination and that it persists as a determinative feature of national territoriality and identity. He argues that a “logic of elimination” drives settler governance and sociality, describing “the settler-colonial will” as “a historical force that ultimately derives from the primal drive to expansion that is generally glossed as capitalism” (167), and in “Settler Colonialism and the Elimination of the Native,” he observes that “elimination is an organizing principle of settler-colonial society rather than a one-off (and superceded) occurrence”, adding, “Settler colonialism destroys to replace.” 6 Rather than being superseded after an initial moment/period of conquest, however, colonization persists since “the logic of elimination marks a return whereby the native repressed continues to structure settler-colonial society” (390), and “the process of replacement maintains the refractory imprint of the native counter-claim” (389). Yet, when and how do projects of elimination and replacement become geographies of everyday non-Native occupancy that do not understand themselves as predicated on colonial occupation or on a history of settler-Indigenous relation (even though they are), and what are the contours and effects of such experiences of inhabitance and belonging? In characterizing settlement as a “structure”, “logic”, and a “will”, Wolfe seeks to integrate the multivalent aspects of ongoing processes of non-Native expropriation and superintendence, but doing so potentially sidesteps the question of how official governmental initiatives and framings become normalized as the setting for everyday non-Native being and action in ways that cannot be captured solely by reference to “the murderous activities of the frontier rabble” (392–3).

#### The aff’s *gnaritas nullius* assumption that knowledge belongs to the public is incompatible with indigenous autonomy. Shifting medicine from intellectual property to the public domain reconfigures the Western system of IPR and stands in direct contradiction with native sovereignty.

Younging 10 “Intergovernmental Committee On Intellectual Property And Genetic Resources Traditional Knowledge And Folklore” Seventeenth Session Geneva, December 6-10, 2010 Wipo Indigenous Panel On The Role Of The Public Domain Concept: Experiences In The Fields Of Genetic Resources, Traditional Knowledge And Traditional Cultural Expressions: Experiences From Canada Document prepared by Mr. Gregory Younging [Creative Rights Alliance, Kelowna, Canada, Opaskwayak Cree Nation-Canada] <https://www.wipo.int/edocs/mdocs/tk/en/wipo_grtkf_ic_17/wipo_grtkf_ic_17_inf_5_a.pdf> SM

Under the IPR system, knowledge and creative ideas that are not “protected” are in the Public

Domain (i.e. accessible by the public). Generally, Indigenous peoples have not used IPRs to protect their knowledge; and so TK is often treated as if it is in the Public Domain – without regard for Customary Laws. Another key problem for TK is that the IPR system’s concept of the Public Domain is based on the premise that the author/creator deserves recognition and compensation for his/her work because it is the product of his/her genius; but that all of society must eventually be able to benefit from that genius. Therefore, according to this aspect of IPR theory, all knowledge and creative ideas must eventually enter the Public Domain. Under IPR theory, this is the reasoning behind the time period limitations associated with copyright, patents and trademarks.

The precept that all Intellectual Property, including TK, is intended to eventually enter the Public Domain is a problem for Indigenous peoples because Customary Law dictates that certain aspects of TK are not intended for external access and use in any form. As a response to this, there have been circumstances where indigenous people have argued that some knowledge should be withdrawn from circulation and that for specific kinds of knowledge, protection should be granted in perpetuity. 29 Examples of this include, sacred ceremonial masks, songs and dances, various forms of shamanic art, sacred stories, prayers, songs, ceremonies, art objects with strong spiritual significance such as scrolls, petroglyphs, and decorated staffs, rattles, blankets, medicine bundles and clothing adornments, and various sacred symbols, designs, crests, medicines and motifs. However, the present reality is that TK is, or will be, in the Public Domain (i.e., the IPR system overrides Customary Law.)

Certain aspects of TK should not enter the public domain (as deemed under Customary Law) and should remain protected as such into perpetuity, which could be expressed as a form of “Indigenous private domain.” (Younging 2007). Indigenous peoples’ historical exclusion from the broad category of ‘public’ feeds part of the differences in objectives. Indigenous peoples also present different perceptions of knowledge, the cultural and political contexts from which knowledge emerges, and the availability, or perceived benefits of the availability, of all kinds of cultural knowledge. 30

Copyright Case Study: The Cameron Case

In 1985 the Euro-Canadian author Anne Cameron began publishing a series of children’s books though Harbour Publications based on Westcoast Indigenous traditional stories. These books include: The Raven, Raven and Snipe, Keeper of the River, How the Loon Lost Her Voice, Orca’s Song, Raven Returns the Water, Spider Woman, Lazy Boy and Raven Goes Berrypicking. Cameron had been told the traditional stories by Indigenous storytellers and/or had been present at occasions where the stories were recited. The original printing of the books granted Anne Cameron sole authorship, copyright and royalty beneficiary, and gave no credit to the Indigenous origins of the stories. As the discourse around Indigenous cultural appropriation emerged in the 1990s, Cameron’s books came under severe Indigenous criticism; not only on the grounds of cultural appropriation, but the Indigenous TK holders asserted that some of the stories and aspects of the stories were incorrect.

This led to a major confrontation with Indigenous women authors at a women writer’s conference in Montreal in 1990. At the end of the confrontation Cameron agreed not to publish any more Indigenous stories in the series: however, she did not keep her word and the books continued to be reprinted and new books in the series continued to be published (Armstrong and Maracle1992). Some minor concessions have been made in subsequent reprints of books in the series and new additions. Reprints of the books that were produced after around 1993/94 contained the disclaimer: “When I was growing up on Vancouver Island I met a woman who was a storyteller. She shared many stories with me and later gave me permission to share them with others… the woman’s name was Klopimum.” However, Cameron continued to maintain sole author credit, copyright and royalties payments. In a further concession, the 1998 new addition to the series T’aal: the One Who Takes Bad Children is co-authored by Anne Cameron and the Indigenous Elder/storyteller Sue Pielle who also shares copyright and royalties.

Patent Case Study: The Igloolik Case

An example of the failure of the Patent Act In Canada to respond to Inuit designs is the Igloolik Floe Edge Boat Case.31 A floe edge boat is a traditional Inuit boat used to retrieve seals shot at the floe edge (the edge of the ice floe), to set fishing nets in summer, to protect possessions on sled when travelling by snowmobile or wet spring ice, and to store hunting or fishing equipment. In the late 1980’s the Canadian government sponsored the Eastern Arctic Scientific Research Center to initiate a project to develop a floe edge boat that combined the traditional design with modern materials and technologies. In 1988 the Igloolik Business Association (IBA) sought to obtain a patent for the boats. The IBA thought that manufactured boats using the floe edge design would have great potential in the outdoor recreation market. To assist the IBA with its patent application the agency, the Canadian Patents and Developments Limited (CPDL) initiated a pre-project patent search that found patents were already held by a non-Inuit company for boats with similar structures. The CPDL letter to the IBA concluded that it was difficult for the CPDL to inventively distinguish the design from previous patents and, therefore, the IBA patent would not be granted. The option of challenging the pre-existing patent was considered by the IBA, however, it was decided that it would not likely be successful due to the high financial cost and risk involved in litigation.

Trademark Case: The Snumeymux Case

As most Indigenous communities are far behind in terms of establishing businesses most trademarking of TK involves a non-Indigenous corporation trademarking an Indigenous symbol, design or name. Again, many cases could have been examined in this section but only two have been chosen: one case involving the Snumeymux Band trade marking petroglyphs through the Canadian Patent Office, and one involving an international corporation’s patent licence being the subject of an intense international Indigenous lobbying effort.

The Snumeymux people have several ancient petroglyphs located off their reserve lands near False Narrows on Gabriola Island, BC. In the early 1990s non-Indigenous residents of Gabriola Island began using some of the petroglyph images in coffee shops and various other business logos. In the mid-1990s the Island’s music festival named itself after what had become the local name of the most well known petroglyph image, the dancing man. The Dancing Man Music Festival then adopted the image of the dancing man as the festival logo and used it on brochures, posters, advertisements and T-shirts.

The Snuneymux Band first made unsuccessful appeals to the festival, buisnesses and the Gabriola community to stop using the petroglyph symbols. In 1998 the Snuneymux Band hired Murry Brown as legal counsel to seek protection of the petroglyphs (Manson-2003). At a 1998 meeting with Brown, Snuneymux Elders and community members on the matter, The Dancing Man Festival and Gabriola business’ and community representatives were still defiant that they had a right to use the images from the petroglyphs (Brown-2003).

On the advice of Murry Brown, The Snuneymux Band filed for a Section 91(n) Public Authority Trademark for eight petroglyphs and was awarded the trademark in October of 1998 (Brown2003). The trademark protects the petrogylphs from “all uses” by non-Snuneymux people and, therefore the Dancing Man Festival and Gabriola Island business and community representatives were forced to stop using images derived from the petroglyphs. In the Snuneymux case the petroglyphs were trademarked for “defensive” purposes. The Snuneymux case represents an innovative use of the IPR system that negotiated within the systems limitations and found a way to make it work to protect TK.

Case Studies Summary

The case studies have shown that serious conflicts exist between the IPR and TK systems and lead to the conclusion that it constitutes a major problem which Indigenous peoples must work out with the modern states they are within and the international community. In contrast to Eurocentric thought, almost all Indigenous thought asserts that property is a sacred ecological order and manifestations of that order should not be treated as commodities.32 It is clear that there are pressing problems in the regulation of TK. It is also clear that IPR system and other Eurocentric concepts do not offer a solution to some of the problems. There have been cases of Indigenous people using the IPR system to protect their TK. However, the reality is that there are many more cases of non-Indigenous people using the IPR system to take ownership over TK using copyright, trademark, patents and the Public Domain. In many such cases this had created a ridiculous situation whereby Indigenous peoples cannot legally access their own knowledge. A study undertaken on behalf of the Intellectual Property Policy Directorate (IPPD) of Industry Canada and the Canadian Working Group on Article 8(j) concluded: “There is little in the cases found to suggest that the IP system has adapted very much to the unique aspects of Indigenous knowledge or heritage. Rather, Indigenous peoples have been required to conform to the legislation that was designed for other contexts and purposes, namely western practices and circumstances. At the same time, there is little evidence that these changes have been promoted within the system, i.e., from failed efforts to use it that have been challenged” (IPPD-2002). Such conclusions, along with other conclusions being drawn in other countries and international forums, and the case study examples discussed, appear to support the argument that new systems of protection need to be developed. Sui Generis models based on and/or incorporating Customary Laws have been proposed and developed in many countries and are being discussed in the WIPO IGC.

Gnaritas Nullius (Nobody’s Knowledge)

Just as Indigenous territories were declared as Terra Nullius in the colonization process, so too has TK been treated as Gnaritas Nullius (Nobody’s Knowledge) by the IPR system and consequently flowed into the public domain along with Western knowledge. This has occurred despite widespread Indigenous claims of ownership and breech of Customary Law. The problem is that advocates for the public domain seem to see knowledge as the same concept across cultures, and impose the liberal ideals of freedom and equality to Indigenous peoples knowledge systems. Not all knowledge has the same role and significance within diverse epistemologies, nor do diverse worldviews all necessarily incorporate a principle that knowledge can be universally accessed. Neither can all knowledge fit into a Western paradigms and legal regimes. A central dimension of Indigenous knowledge systems is that knowledge is shared according to developed rules and expectations for behavior within frameworks that have been developed and practiced over centuries and millennium. Arguments for a public domain of Indigenous knowledge again reduces the capacity for Indigenous control and decision making (Anderson 2010) and can not be reasonably made outside the problematic frameworks of the colonization of TK and Gnaritas Nullius.

#### Extinction impacts are fabricated by the logic of elimination - 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, extinction 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.

#### Genomic research is predicated off the stigmatization and erasure of native sovereignty. The aff’s removal of IP stands in direct opposite to indigenous mechanism for cultural protection that undergird ethical genomic research.

Garrison et al 19 Annual Review of Genomics and Human Genetics Genomic Research Through an Indigenous Lens: Understanding the Expectations [Nanibaa’ A. Garrison,1,2 Maui Hudson, ¯ 3 Leah L. Ballantyne,4 Ibrahim Garba,5,6 Andrew Martinez,6 Maile Taualii,7 Laura Arbour,4,8 Nadine R. Caron,9,10,11 and Stephanie Carroll Rainie6,12] March 20, 2019 <https://www.annualreviews.org/doi/pdf/10.1146/annurev-genom-083118-015434> SM

Genomic research has long-standing problems with diversity, especially for Indigenous peoples. Indigenous populations face health and socioeconomic inequities and barriers to health care that result in poorer health outcomes compared with those of non-Indigenous groups (3). While genomic research has advanced health outcomes in mainstream populations, the dearth of relevant genomic research for Indigenous peoples stands to increase health and health-care inequities. Indigenous people are underrepresented in genome-wide association studies conducted worldwide, estimated at 0.06% in 2009, 0.05% in 2016, and 0.02% in 2019 (10, 59, 68, 74). Furthermore, there is a lack of reference variant data from these populations for the interpretation of targeted gene panels and genomic sequencing. For example, the Genome Aggregation Database (gnomAD; http://gnomad.broadinstitute.org/about) includes reference exome and genome variant information on more than 141,000 individuals globally (29) and is often utilized to assist in clinical genomic variant analysis, but it lacks information about Indigenous populations. Consequently, the population frequency of variants detected in sequencing is not known for Indigenous populations, resulting in potentially less precise diagnostic results compared with those for well-represented populations. Unequal access to genomic technologies, negative socioeconomic determinants, and lack of relevant population genetic variation data all contribute to the limited relevance and reduced effectiveness of genetic and genomic research for Indigenous peoples.

Indigenous communities have been the subject of western science and research for centuries. Unethical behavior, lack of clear communication, disrespect of cultural and spiritual beliefs, and a failure to address the interests and priorities of particular Indigenous communities and their membership have created an environment of mistrust between researchers and Indigenous communities (101). In addition to mistrust, fatigue from years of being studied with no benefit or return of results, exploitation of potentially patentable genetic material, and co-optation and theft of traditional knowledge (e.g., medicinal plants) and other intellectual property (19, 35) have resulted in Indigenous peoples’ hesitancy to participate in genetic and genomic research and clinical testing when it is available. Harms from research also create a barrier to involvement, as tribes have experienced disrespect and harm to their dignity, lack of community benefits (e.g., health care), and injustices in the misuse of samples and protected information (84). For example, some Indigenous communities have experienced harms from genetic research that traces human origins or interprets results in ways that stigmatize groups. For tribes that have not participated in research, obstacles include limited resources to recruit ethical scientists for their projects, lack of experience with research, and limited health literacy to evaluate risks and benefits of research participation.

How do we bridge between the lessons of past flawed genomic research practices and a future with better practices? Recognition and understanding of sovereignty is fundamental for relationship building and must be reflected in genetic and genomic research frameworks. Sovereignty, or self-determination, is the inherent right and capacity of Indigenous peoples to develop culturally, socially, and economically along lines consistent with their respective histories and values. Through efforts such as community-engaged research, effective guidelines, and policies assuring Indigenous communities that their interests are protected, more Indigenous leaders, communities, and individuals may participate. Resources are emerging to help tribal communities make decisions about genetic research (14, 61, 63, 85), resulting in the establishment of tribal research review boards to evaluate research studies. Systematic efforts to fully engage Indigenous groups can promote equity in genomic research by creating ways for Indigenous peoples and researchers to collaborate in developing ethical research practices and honoring community interests. The emergence of large-scale projects that plan to recruit large numbers of people in order to study genetic diversity and address medical issues, such as the All of Us Research Program in the United States (20) and the UK Biobank resource (11), presents grand challenges for the active inclusion of Indigenous peoples in genomic research.

Indigenous peoples have been subjected to genetic and genomic research for decades. In recent years, they have begun to establish stronger mechanisms for protecting their rights and interests. The issues and concerns that Indigenous peoples have faced in genomic research are strikingly similar around the world. Throughout Canada, New Zealand, Australia, and the United States, Indigenous scholars and policy advocates are leading initiatives to improve access to genetic and genomic research and health care based on their unique cultural context and within governance models acceptable to their peoples. These countries have also endorsed the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). UNDRIP acts as a framework for recognizing and respecting both the human rights and the self-determination of Indigenous communities (94). UNDRIP does not create new rights for Indigenous peoples; rather, it elaborates on existing human rights instruments while clarifying their application to Indigenous peoples to include genetic and genomic research. For example, Article 31 states, “Indigenous peoples have the right to maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions, including human and genetic resources” (94). In this article, we aim to identify the common challenges that Indigenous peoples face in genomic research and how to address them.

#### Thus, the only alternative is one of 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 aff’s understanding of public knowledge also requires an epistemic alternative – vote negative for a sui generis moral rights framework that emphasizing guardianship over ownership. The link turn assumes a settler notion of personhood which proves our argument.

Vézina 20 “Ensuring Respect for Indigenous Cultures A Moral Rights Approach” Brigitte Vézina [fellow at the Canadian think tank Centre for International Governance Innovation. She holds a bachelor’s degree in law from the Université de Montréal and a master’s in law from Georgetown University], Centre for International Governance Innovation Papers No. 243 — May 2020, <https://www.cigionline.org/static/documents/documents/vezina-paper_1.pdf> SM

Features of a Sui Generis Moral Rights-type Framework

Subject Matter and Beneficiaries

TCEs that maintain a current and significant relationship with the Indigenous peoples who hold them would be protected. As long as a community, as a whole and by virtue of its own internal cultural rules, identifies with a specific form of expression and can establish a particular relationship with it, it can claim protection over it. As Susy Frankel points out, the key rationale in favour of protecting TCEs is the guardianship relationship, from which proportionate moral rights flow.155 Guardianship is to be contrasted with ownership, which is the concept buttressing most IP law systems, with the notable exception of moral rights. To wit, the Waitangi Tribunal did not recommend that TCEs be treated as owned, lest that would amount to building a legal wall around TCEs and end up choking culture.156 At any rate, cultural boundaries are porous and fluid, and it follows that blending, intermixing, hybridization or even “contamination” of cultures can be promoted.157

Obviously, cultures are seldom unique to a people. TCEs might be shared among different Indigenous groups that all identify and hold a guardianship relationship with them. In such cases, procedures should be in place to facilitate cooperation and settlement of disputes. What is more, no people are monolithic, a reality that is rendered in one illustrative phrase: “The Sámi people are one, but multiple.”158 Some communities might have distinct TCEs that have been part of their culture for a long time, with little or no outside influence. Others might have experienced contact with other cultures and incorporated various elements over the generations that have substantially modified previous iterations. For example, in the case of Mixe huipil at stake in the Isabel Marant case, some were quick to point out that the embroideries had, in the upshot of the Spanish conquest, incorporated European elements.159 Hence, when considering a relationship between a TCE and its holder, one should not exact uniqueness or exclusiveness, but embrace the fact that a group can identify with TCEs that are dynamic and kaleidoscopic, all the while remaining authentic.

Beneficiaries of protection should be TCE holding Indigenous communities as a whole, such that moral rights would be afforded to the entire community as group rights. Recognition of beneficiaries as well as determination of the authority to exercise the rights would have to be done from within the community, by way of application of customary law160 or be captured under the legal constructs of trusts, associations, or other legal entities holding the rights.161 Indigenous communities need to have the autonomy to exercise control over and make their own decisions regarding the management of their moral rights in their TCEs.162

Scope of Protection

At first glance, it is difficult to reconcile the notion of personhood, the cornerstone of moral rights, with the pluralistic conception of a community, by definition made up of several persons with their own individual personalities. In response, some scholars have wrought the concept of “peoplehood” to encapsulate the personality of a people in its entirety and provide a justification for granting a personality right to a group.163 As mentioned, TCEs often encompass cultural elements that are integral to Indigenous peoples’ sense of identity, that bear the distinct mark of their holders and, indeed, that reflect their peoplehood. Moral rights can therefore fulfill the duty, arising out of human rights law, to protect the identity of Indigenous peoples.164

Forasmuch as TCEs are collectively and communally held, so too must the moral rights of Indigenous peoples be communal.165 In fact, even conventional moral rights are not purely individualistic, and there has been a recognition of a “socially-informed view of the author” and “the social gestation of authorship... the social womb from which authors brought forth their works.”166 This strand of moral rights theory might be more congruent to accepting a group right for a community than the classic individual theory underpinning moral rights.167

Moral rights would only regulate the relationship between the community and the outside world; use in a traditional and customary context would not be affected. Just as moral rights vest automatically in the author (without any need for registration or any other form of assertion), so too would sui generis moral rights vest in the community.

Communal moral rights would include, at a minimum, the right of attribution, including false attribution (to ensure proper recognition of the community as the source and to prevent others from falsely claiming a guardianship over a TCE) and integrity (to protect TCEs against inappropriate, derogatory, or culturally insensitive use). It could be considered to also include the rights of disclosure (to make, where desired, TCEs known to the world and to retain the power to keep TCEs out of “public” reach, for example, in the case of sacred or secret TCEs) and withdrawal (to allow TCE holders to remove from circulation the TCEs that they no longer wish to make publicly available).

In most national laws, moral rights are inalienable or non-transferable. In other words, they cannot be divested from the author — they cannot be assigned, licensed or given away. As mentioned, if an author transfers all their economic rights to a third party, the author retains their moral rights in the work.168 As such, sui generis moral rights in TCEs would be independent from any economic rights that might arise and be held and exercised separately, regardless of who might hold these economic rights (in cases, for example, where communities would commercialize their TCEs and grant licences) or who might have physical ownership of a TCE (such as a cultural institution). However, in some jurisdictions, such as Canada, the United States and the United Kingdom (but not Australia and France), moral rights can be waived, irreversibly, in whole or in part, explicitly, by contract, at the discretion of the author. In order to ensure flexible protection to TCEs, it could be envisaged that sui generis moral rights be made waivable.

When applying the right of integrity, the determination of what is offensive should not be narrowly prescribed but based on the facts at hand. Assessment should be done both subjectively, from the point of view of the community that claims violation, and objectively, by the court, within the framework of guidelines to be developed legislatively or through case law, as informed by Indigenous customary laws, practices and protocols. Reliance on particular facts may be difficult to reconcile with the need for certainty and predictability, but flexibility trumps these concerns, as no use should be considered offensive per se.

#### Representations and epistemology perpetuate settler practices – the way we understand and discuss the structures around us overdetermines our praxis

Seawright 14 Gardner Seawright is a doctoral candidate in the Education, Culture, and Society department at the University of Utah. “Settler Traditions of Place: Making Explicit the Epistemological Legacy of White Supremacy and Settler Colonialism for Place-Based Education.” EDUCATIONAL STUDIES, 50: 554–572, 2014, American Educational Studies Association. JJN

Situating Settler Traditions Settler traditions of place are an epistemic genealogy—the ethics, logics, and ideologies foundational to a knowledge system that have been passed down across generations, a knowledge framework that establishes what is known (the socially constructed commonsense of a culture), how things come to be known (the process of attaining new knowledge), how the world is to be interpreted according to what is known (the social construction of reality), and how the self is known in relation to perceived reality (the politics of self). Tradition is used as a conceptual tool allowing for domination to be empha- sized as an on-going historical process, while also allowing for epistemology as tradition to simultaneously be evolutionary and a cherished cultural artifact. As a cultural product, settler traditions of place are transmitted across generations through discipline, teaching, modeling and other forms of direct and subtle so- cial communication resulting in normalized habits, beliefs, values, and practices. In speaking about “western cultural traditions,” Val Plumood (2002) argues that there are “epistemic and moral limitations” embedded in these traditions—these normalized habits—that perpetuate hierarchized notions of the world that privi- lege white-hetero-landowning males (99). As Martusewicz et al. (2011) explain, these subtle discourses manifest as taken-for-granted cultural assumptions that are rooted in racism, sexism, classism that intertwine with and reflect the cultivation of violent relationships with the more-than-human world and natural systems that we depend on for life (119). The tradition in question here is the social air that penetrates the Western world, interacting with human beings whether they want it to or not. Using tradition as a metaphor for epistemology allows me to emphasize the way epistemology can im- pact every aspect of life while remaining removed from a deterministic position. Embedded in discourse, tradition appears as ever-present; despite this, individual social actors have the agency to break tradition. Consequently, in the same way that an individual breaks from familial, cultural, or religious tradition and faces the ramifications for transgressing, epistemic transgression can also incur social fallout and cause friction. When an individual epistemically transgresses, they employ an epistemic praxis (the operationalization of an alternative or critical epistemology) that goes against the grain and is counter to the tradition that defines the social environment. For conversations concerning the cultivation of criticality (like the one herein) this break in tradition is absolutely desirable and can inspire what Jose ́ Medina (2013) calls epistemic friction. Epistemic friction is contained in those uncomfortable moments in which our taken-for-granted assumptions about the world begin to crack. These moments can be transformative and cat- alyze critical consciousness to imagine and hopefully actualize an alternative epistemology.

### 3

#### Eliminating CRISPR patents causes biohacking.

Zettler 19, Patricia J., Christi J. Guerrini, and Jacob S. Sherkow. "Regulating genetic biohacking." Science 365.6448 (2019): 34-36. (Ohio State University Moritz School of Law)//Elmer

Genetic **biohacking** is also potentially **subject to U.S. laws that are enforced by private** rather than government **actors**. These may fill some of the gaps in public regulators’ ambit (9). **Patent owners**, for example, **can impose ethical restrictions on licensees,** such as the Broad Institute’s licenses for its CRISPR patents to Bayer (formerly Monsanto), **with conditions that** Bayer **avoid research activities that are potentially harmful to public health**, **including** **tobacco research and germline editing** (10). **Such license restrictions can**—and should—**be used to police commercial manufacturers of genome-editing kits and reagents popular in biohacking communities**, just as they have previously been used to prevent activities that pose national security, environmental, or public health risks (11). Even without a license in place, **patent owners can enforce restrictions through threats of patent infringement litigation against any recalcitrant biohackers or manufacturers of biohacking products**. A similar model was proposed as an attempt to restrict the use of “gene drive technology”—inheritable versions of CRISPR designed to drive a specific allele through generations of a population (12). Beyond patents, people injured by genetic biohacking materials could potentially bring tort law claims against biohackers and component suppliers to seek compensation for their injuries. A person injured while using a DIY CRISPR kit, for example, would likely be able to sue the seller of the kit —a potentially strong deterrent to marketers of unsafe biohacking materials.

#### Expanded biohacking means bioterror

Wikswo 14, J., S. Hummel, and V. Quaranta. "The Biohacker: A Threat to National Security." CTC Sentinel 7.1 (2014). (a biological physicist at Vanderbilt University. He was born in Lynchburg, Virginia, United States. Wikswo is noted for his work on biomagnetism and cardiac electrophysiology.)//Elmer

The **ability of non-scientists to create** and deploy **a biological weapon** highlights the emergence of **a new threat, the “biohacker.”** “Biohacking” is not necessarily malicious and could be as innocent as a beer enthusiast altering yeast to create a better brew. Yet the **same technology** **used by** a benign **biohacker** **could** easily **be transformed into** a tool for the disgruntled and disenfranchised12 to modify existing or emerging **biological warfare agents** **and employ them as bioterrorism**. A 2005 Washington Post article by Steve Coll and Susan Glasser presciently stated that “one can find on the web how to inject animals, like rats, with pneumonic plague and how to extract microbes from infected blood…and how to dry them so that they can be used with an aerosol delivery system, and thus how to make a biological weapon. If this information is readily available to all, is it possible to keep a determined terrorist from getting his hands on it?”13 This article argues that the biohacker is a real and existing threat by examining evasive biohacking strategies and limitations of current detection methods. The article finds that more active measures are required to stem the growing, long-term threat of modified BW agents employed by individuals. The **biohacker is** not only **a credible threat**, but also one that can be checked through improved detection and by disrupting BW agent delivery methods.

#### Cross apply their disease terminal

### 4

#### CP: Member nations of the World Trade Organization, for CRISPR and genomic medicines, ought to:

#### Fund development and distribution.

#### Provide funding and stipends for university collaboration.

#### Clarify and spread information about licensing and litigation in patent rights.

#### The European Union ought to eliminate their trade restrictions on genome editing.

## Case

### Adv – Innovation/CRISPR

#### 1] They don't solve their advantage

#### A] CRISPR tech is so much more than medicine – it can also be used for cosmetic gene editing or warfare which means they don’t solve or are extra T which is a voter bc it explodes neg prep.

#### B] CRISPR is a platform technology, not a medicine – answers their ev bc assisting in developing medicine is different from being a medicine

Editas Medicine [(a clinical-stage biotechnology company which is developing therapies based on CRISPR–Cas9 gene editing technology)., No Date, CRISPR Gene Editing, <https://www.editasmedicine.com/crispr-gene-editing/>] Justin

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.

#### 2] Patents are good.

**Sherkow 17** [(Jacob, Professor of Law at the College of Law and Affiliate of the Carl R. Woese Institute for Genomic Biology at the University of Illinois, where his research focuses on the legal and ethical implications of advanced biotechnologies, especially as related to intellectual property. He is a leading expert on IP protection for genome-editing technologies, including CRISPR. He is the author of over 60 articles published in both scientific journals and traditional law reviews, including Science, Nature, the Yale Law Journal, and the Stanford Law Review. Since 2018, Sherkow has also been a Permanent Visiting Professor at the Center for Advanced Studies in Biomedical Innovation Law (“CeBIL”) at the University of Copenhagen Faculty of Law) “Patent protection for CRISPR: an ELSI review” Journal of Law and the Biosciences 12/7/2017 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5965580/>] // Re-Cut Justin

Most of the commentary on the CRISPR patents has been negative—and, in particular, the negative side of patenting the products of academic research.[59](javascript:;) But—aside from money—there are some significant social positives as well. At their core, patents are rights to exclude others from practicing the claimed invention.[60](javascript:;) The corollary to this axiom is that patents therefore allow their owners to dictate to the rest of the world *how* to use the inventors’ technology.[61](javascript:;) This power to direct others’ research can be harnessed for societal good.[62](javascript:;) Where the claimed technology raises ethical or social concerns, patent holders have the right to tell their technologies’ users to behave ethically and to provide access to downstream inventions.[63](javascript:;) In this sense, patents—when used well—can function as a powerful form of private governance.[64](javascript:;)

This is certainly the case with CRISPR, the ethical and social issues of which have been explored at length.[65](javascript:;) One potentially problematic use of CRISPR is its use in ‘gene drives’, a daisy chain of genetic editing that essentially forces future generations to inherit and subsequently pass on only a single variant of a particular gene.[66](javascript:;) The concern, as detailed by Kevin Esvelt, is that gene drives, because they are forcibly heritable, become difficult to control once put in place.[67](javascript:;) Should later research find negative, unintended effects of the particular genetic variant driven through the population, it may simply be too late.[68](javascript:;) To that end, Esvelt and others have proposed patenting the use of CRISPR-based gene drives to, essentially, prevent others from using the technology without rigorous scientific and ethical controls.[69](javascript:;) The legal mechanics of enforcing patent protection in this manner leave some gaps that likely need to be addressed. But Esvelt's proposal suggests, at a minimum, that patenting controversial technologies is one possible tool to further their ethical use.

In other cases, rather than using patents to ethically *restrict* access to controversial technologies, patents can be used to ethically promote access to the same. That is, patent holders can demand licensees promise that they make their technology available to broad segments of society, and on fair terms.[70](javascript:;) This is largely the case with Monsanto's license from the Broad Institute covering the use of CRISPR-Cas9 for a variety of agricultural purposes. That license essentially requires Monsanto to allow its farmer customers to save and resew seed from one season to the next, in contrast to some of Monsanto's past practices.[71](javascript:;) Requiring this of Monsanto provides greater access to the fruits of CRISPR technology to farmers, who would otherwise be required to purchase expensive new seed each year from Monsanto.[72](javascript:;) In the therapeutics context, similar license restrictions could be used, in theory, to require price controls, access plans, or that research and development funds be used, in part, to develop treatments for neglected diseases.[73](javascript:;)

And, perhaps counterintuitively, patents could also be used to ensure research access to a variety of technologies. Patent holders can publicly commit to refuse to enforce their patents against researchers or academic institutions. In the USA, these frequently take the form of ‘patent pledges’—‘commitments made voluntarily by patent holders to limit the enforcement or other exploitation of their patents’.[74](javascript:;) Doing so both prevents others from patenting—and suing others—on the same technology, and dissuades less ethically minded competitors from entering the field.[75](javascript:;) Patent holders can also use open licensing systems to researchers interesting in developing and sharing the technology for the public good. In the CRISPR context, this non-commercial use is mediated through a non-profit organization, AddGene, a company that provides access to CRISPR constructs and plasmids through a standardized Biological Materials Transfer Agreement (BMTA). AddGene's BMTA’s contains patent licenses for academic use of the underlying technology.[76](javascript:;)

#### 3] CRISPR fails – their preempt isn’t responsive because they haven’t fiated a collaborative approach

CUMC 17, Columbia University Medical Center, 5-30-2017, "CRISPR Gene Editing Can Cause Hundreds of Unintended Mutations," http://newsroom.cumc.columbia.edu/blog/2017/05/30/crispr-gene-editing-can-cause-hundreds-of-unintended-mutations/

As CRISPR-Cas9 starts to move into clinical trials, a new study published in Nature Methods has found that the gene-editing technology can introduce hundreds of unintended mutations into the genome. “We feel it’s critical that the scientific community consider the potential hazards of all off-target mutations caused by CRISPR, including single nucleotide mutations and mutations in non-coding regions of the genome,” says co-author Stephen Tsang, MD, PhD, the Laszlo T. Bito Associate Professor of Ophthalmology and associate professor of pathology & cell biology in the Institute of Genomic Medicine and the Institute of Human Nutrition at Columbia University Medical Center. CRISPR-Cas9 editing technology—by virtue of its speed and unprecedented precision—has been a boon for scientists trying to understand the role of genes in disease. The technique also has raised hope for more powerful gene therapies that can delete or repair flawed genes, not just add new genes. The first clinical trial to deploy CRISPR is now underway in China, and a U.S. trial is slated to start next year. But even though CRISPR can precisely target specific stretches of DNA, it sometimes hits other parts of the genome. Most studies that search for these off-target mutations use computer algorithms to identify areas most likely to be affected and then examine those areas for deletions and insertions. “These predictive algorithms seem to do a good job when CRISPR is performed in cells or tissues in a dish, but whole genome sequencing has not been employed to look for all off-target effects in living animals,” says co-author Alexander Bassuk, MD, PhD, professor of pediatrics at the University of Iowa. In the new study, the researchers sequenced the entire genome of mice that had undergone CRISPR gene editing in the team’s previous study and looked for all mutations, including those that only altered a single nucleotide. The researchers determined that CRISPR had successfully corrected a gene that causes blindness, but Kellie Schaefer, a PhD student in the lab of Vinit Mahajan, MD, PhD, associate professor of ophthalmology at Stanford University, and co-author of the study, found that the genomes of two independent gene therapy recipients had sustained more than 1,500 single-nucleotide mutations and more than 100 larger deletions and insertions. None of these DNA mutations were predicted by computer algorithms that are widely used by researchers to look for off-target effects. “Researchers who aren’t using whole genome sequencing to find off-target effects may be missing potentially important mutations,” Dr. Tsang says. “Even a single nucleotide change can have a huge impact.”

#### 4] CRISPR’s useless OR mutations are inev regardless

Fu et al 13 [Yanfang Fu, Molecular Pathology Unit at Mass General Hospital, Department of Pathology, Harvard Medical School.] “High-frequency off-target mutagenesis induced by CRISPR-Cas nucleases in human cells” Nature Biotechnology volume 31, pages 822–826 (2013) (https://www.nature.com/articles/nbt.2623) – MZhu

Clustered, regularly interspaced, short palindromic repeat (CRISPR) RNA-guided nucleases (RGNs) have rapidly emerged as a facile and efficient platform for genome editing. Here, we use a human cell–based reporter assay to characterize off-target cleavage of CRISPR-associated (Cas)9-based RGNs. We find that single and double mismatches are tolerated to varying degrees depending on their position along the guide RNA (gRNA)-DNA interface. We also readily detected off-target alterations induced by four out of six RGNs targeted to endogenous loci in human cells by examination of partially mismatched sites. The off-target sites we identified harbored up to five mismatches and many were mutagenized with frequencies comparable to (or higher than) those observed at the intended on-target site. Our work demonstrates that RGNs can be highly active even with imperfectly matched RNA-DNA interfaces in human cells, a finding that might confound their use in research and therapeutic applications.

#### 5] No impact – even their authors know disease is threatcon and they haven’t won a uniqueness argument that groups develop or use biotech now – inserted lines from AC Milett

While these arguments point to a very small risk of human extinction, they do not rule the possibility out entirely. Although rare, there are recorded instances of species going extinct due to disease—primarily in amphibians, but also in 1 mammalian species of rat on Christmas Island.

### Adv – WTO/EU – Defense

#### 1] COVID and Appellate Body thump cred – biggest internal link. Independently, no Appellate Body means no dispute resolution so the aff gets circumvented.

Meyer 21 [(David Meyer is the Editor of CEO Daily and a senior writer on Fortune’s European team. Author of the digital rights primer, Control Shift: How Technology Affects You and Your Rights. “The WTO’s survival hinges on the COVID-19 vaccine patent debate, waiver advocates warn,” Fortune, June 18, 2021. <https://fortune.com/2021/06/18/wto-covid-vaccines-patents-waiver-south-africa-trips/>] TDI

The World Trade Organization knows all about crises. Former U.S. President Donald Trump threw a wrench into its core function of resolving trade disputes—a blocker that President Joe Biden has not yet removed—and there is widespread dissatisfaction over the fairness of the global trade rulebook. The 164-country organization, under the fresh leadership of Nigeria's Ngozi Okonjo-Iweala, has a lot to fix. However, one crisis is more pressing than the others: the battle over COVID-19 vaccines, and whether the protection of their patents and other intellectual property should be temporarily lifted to boost production and end the pandemic sooner rather than later. According to some of those pushing for the waiver—which was originally proposed last year by India and South Africa—the WTO's future rests on what happens next. "The credibility of the WTO will depend on its ability to find a meaningful outcome on this issue that truly ramps-up and diversifies production," says Xolelwa Mlumbi-Peter, South Africa's ambassador to the WTO. "Final nail in the coffin" The Geneva-based WTO isn't an organization with power, as such—it's a framework within which countries make big decisions about trade, generally by consensus. It's supposed to be the forum where disputes get settled, because all its members have signed up to the same rules. And one of its most important rulebooks is the Agreement on Trade-Related Aspects of Intellectual Property Rights, or TRIPS, which sprang to life alongside the WTO in 1995. The WTO's founding agreement allows for rules to be waived in exceptional circumstances, and indeed this has happened before: its members agreed in 2003 to waive TRIPS obligations that were blocking the importation of cheap, generic drugs into developing countries that lack manufacturing capacity. (That waiver was effectively made permanent in 2017.) Consensus is the key here. Although the failure to reach consensus on a waiver could be overcome with a 75% supermajority vote by the WTO's membership, this would be an unprecedented and seismic event. In the case of the COVID-19 vaccine IP waiver, it would mean standing up to the European Union, and Germany in particular, as well as countries such as Canada and the U.K.—the U.S. recently flipped from opposing the idea of a waiver to supporting it, as did France. It's a dispute between countries, but the result will be on the WTO as a whole, say waiver advocates. "If, in the face of one of humanity's greatest challenges in a century, the WTO functionally becomes an obstacle as in contrast to part of the solution, I think it could be the final nail in the coffin" for the organization, says Lori Wallach, the founder of Public Citizen's Global Trade Watch, a U.S. campaigning group that focuses on the WTO and trade agreements. "If the TRIPS waiver is successful, and people see the WTO as being part of the solution—saving lives and livelihoods—it could create goodwill and momentum to address what are still daunting structural problems." Those problems are legion. Reform needs Top of the list is the WTO's Appellate Body, which hears appeals in members' trade disputes. It's a pivotal part of the international trade system, but Trump—incensed at decisions taken against the U.S. —blocked appointments to its seven-strong panel as judges retired. The body became completely paralyzed at the end of 2019, when two judges' terms ended and the panel no longer had the three-judge quorum it needs to rule on appeals. Anyone who hoped the advent of the Biden administration would change matters was disappointed earlier this year when the U.S. rejected a European proposal to fill the vacancies. "The United States continues to have systemic concerns with the appellate body," it said. "As members know, the United States has raised and explained its systemic concerns for more than 16 years and across multiple U.S. administrations." At her confirmation hearing in February, current U.S. Trade Representative Katherine Tai reiterated those concerns—she said the appellate body had "overstepped its authority and erred in interpreting WTO agreements in a number of cases, to the detriment of the United States and other WTO members," and accused it of dragging its heels in settling disputes. "Reforms are needed to ensure that the underlying causes of such problems do not resurface," Tai said. "While the U.S. [has] been engaging [with the WTO] it hasn't indicated it would move quickly on allowing appointments to the Appellate Body," says Bryan Mercurio, an economic-law professor at the Chinese University of Hong Kong, who opposes the vaccine waiver. "This is not a good sign. In terms of WTO governance, it's a much more important step than supporting negotiations on an [intellectual property] waiver." It's not just the U.S. that wants to see reform at the WTO. In a major policy document published in February, the EU said negotiations had failed to modernize the organization's rules, the dispute-resolution system was broken, the monitoring of countries' trade policies was ineffective, and—crucially—"the trade relationship between the U.S. and China, two of the three largest WTO members, is currently largely managed outside WTO disciplines." China is one of the key problems here. It became a WTO member in 2001 but, although this entailed significant liberalization of the Chinese economy, it did not become a full market economy. As the European Commission put it in February: "The level at which China has opened its markets does not correspond to its weight in the global economy, and the state continues to exert a decisive influence on China's economic environment with consequent competitive distortions that cannot be sufficiently addressed by current WTO rules." "China is operating from what it sees as a position of strength, so it will not be bullied into agreeing to changes which it sees as not in its interests," says Mercurio. China is at loggerheads with the U.S., the EU and others over numerous trade-related issues. Its rivals don't like its policy of demanding that Chinese citizens' data is stored on Chinese soil, nor do they approve of how foreign investors often have to partner with Chinese firms to access the country's market, in a way that leads to the transfer of technological knowhow. They also oppose China's industrial subsidies. Mercurio thinks China may agree to reforms on some of these issues, particularly regarding subsidies, but "only if it is offered something in return." All these problems won't go away if the WTO manages to come up with a TRIPS waiver for COVID-19 vaccines and medical supplies, Wallach concedes. "But," she adds, "the will and the good faith to tackle these challenges is increased enormously if the WTO has the experience of being part of the solution, not just an obstacle." Wallach points to a statement released earlier this month by Asia Pacific Economic Cooperation (APEC) trade ministers, which called for urgent discussions on the waiver. "The WTO must demonstrate that global trade rules can help address the human catastrophe of the COVID-19 pandemic and facilitate the recovery," the statement read in its section about WTO reform. Okonjo-Iweala's role The WTO's new director general, whose route to the top was unblocked in early 2021 with the demise of the Trump administration, is certainly keen to fix the problems that contributed to the early departure of her predecessor, Brazil's Robert Azevedo. "We must act now to get all our ambassadors to the table to negotiate a text" on the issue of an IP waiver for COVID vaccines, Ngozi Okonjo-Iweala, director general of the World Trade Organization, has said. Dursun Aydemir—Anadolu/Bloomberg/Getty Images Earlier this week, when the U.S. and EU agreed a five-year ceasefire in a long-running dispute over Boeing and Airbus aircraft subsidies, Okonjo-Iweala tweeted: "With political will, we can solve even the most intractable problems." However, Mercurio is skeptical about her stewardship having much of an effect on the WTO's reform process. "Upon taking [over she] stated it was time for delegations to speak to each other and not simply past each other, but at the recent General Counsel meeting delegations simply read prepared statements in what some have described as the worst meeting ever," he says. "On the other hand, Ngozi is very much someone who will actively seek solutions to problems, and in this way different to her predecessor. If the role of mediator is welcomed, she could have an impact not in starting discussions but in getting deals over the finish line."

#### **2] Alt causes to WTO cred—rules ignored, protectionism, no dispute settlement, lack of US commitment.**

3] Schott 20 [Jeffrey J. Schott is a senior fellow at the Peterson Institute for International Economics. He is a member of the State Department’s Advisory Committee on International Economic Policy and was previously cochairman of the Trade and Environment Policy Advisory Committee for the U.S. Trade Representative. 5-4-2020 The WTO is Dead ... Long Live the WTO Milken Institute Review https://www.milkenreview.org/articles/the-wto-is-dead-long-live-the-wto] SW 9-5-2021

When 123 nations signed the accord creating a truly global body to oversee international commerce in 1994, the new World Trade Organization was hailed as a major step toward a modern, rules-based regime that would advance the effort of global open trade. What a difference, alas, a quarter-century made.

Now the WTO is increasingly seen as sclerotic. Its rules badly need updating and the dispute-settlement process is breaking down. Multilateral trade talks have collapsed; efforts to conclude even modest deals at the upcom-ing June 2020 meeting of trade ministers seem unlikely. Indeed, it’s no exaggeration to say that the WTO faces an existential crisis. Here, I offer some perspective on what has gone wrong and how to make it right in the face of widespread skepticism that a global rules-based trade system remains viable.

Grim Realities

There’s no getting around the fact that the WTO’s rules are widely abused or flat-out ignored. Even after the heralded U.S.-China trade deal was announced in January, the U.S. and China continue to violate WTO obligations on a grand scale, with about $425 billion of two-way merchandise trade still subject to duties that violate WTO obligations of both countries. Rules on subsidies, intellectual property and investment, last updated in the 1990s, are inadequate and in-complete, allowing countries to circumvent their market-access commitments with financial support for domestic firms and farmers, and to encourage the misappropriation of foreign technology.

Equally alarming, the exemption to the WTO rules allowing trade restrictions for compelling reasons of national security protection has been grossly misapplied by U.S. officials to protect domestic steel, aluminum and possibly auto producers — and by Japan and Korea to justify high-tech trade restrictions. If countries continue to brazenly invoke national security rationales to justify plain and simple protectionism, commitments to open markets that are central to WTO obligations will become increasingly worthless.

At the same time, the WTO’s dispute-settlement process, which has helped to resolve almost 600 cases since 1995, has been seriously impaired by the idling of its Appellate Body (AB). All countries have the right to appeal dispute-panel decisions, which are then held in abeyance pending completion of the appeal. But since last December, the AB has been reduced to only one member out of the normal complement of seven. That’s because U.S. officials have blocked the appointments of AB members until other WTO countries approve changes in dispute procedures demanded by the United States.

Now, since three members are needed to form a panel to hear appeals, the whole appeals process has been placed in suspended animation. The situation has broad-ranging implications for the multilateral trading system. Preventing new appeals of panel rulings will, of course, allow disputing parties to block implementation of the rulings. This will encourage unilateral actions by countries strong enough to pressure partners and will discourage new rule-making negotiations because of uncertainty that rules will be enforced.

What Would It Take?

Can the WTO system be put back on track? Doing so would require the recognition that its rulebook, along with the process of resolving disputes about those rules, needs substantial renovation. It also requires the recognition that the world’s key problems require global solutions, in which the top traders — the U.S., the European Union, Japan and China — work together in common cause.

That’s a tough row to hoe, especially given current U.S.-China and U.S.-EU frictions. But it is doable, if WTO members reorder their priorities and focus on narrow, pragmatic solutions. To see a way forward, it makes sense to digress a moment to see how we got here.

Throughout the postwar era, the United States led the charge to strengthen the multilateral trading system and to lower barriers to trade and investment. U.S. negotiators led by example: U.S. tariff cuts accounted for a large share of the liberalization undertaken in the first four rounds of postwar negotiations under the General Agreement on Tariffs and Trade, when tariffs were high to protect industrial recovery in war-decimated economies. U.S. officials opened and led all eight GATT rounds of more or less successful reform — plus the Doha Round (named after the city in which it was started), the first multilateral trade negotiation of the WTO era.

Almost the entire WTO rulebook was crafted in the period 1947-1994, when trans- Atlantic nations dominated world trade and China’s footprint was barely noticeable. Since then, technological developments have transformed the way we produce, transport, market and finance goods and services. The Doha Round, begun in late 2001, was meant to make WTO rules more relevant for 21st-century economies. In the event, the giant package of trade reforms developed in the Doha Round, so close to completion in 2008, was felled by the slingshot blows of India and a few other countries seeking special protection for their farmers and industries. WTO rules have been virtually unchanged since then, with the Trade Facilitation Agreement (2013) and updates to the Government Procurement Agreement (2014) the only modest changes.

The WTO’s prospects are not bright. In particular, it’s unclear whether the United States is willing to invest in a multilateral effort.

As I am writing this, the WTO’s prospects are not bright. In particular, it’s unclear whether the United States is willing to invest in a multilateral effort. Under the Trump administration, the United States, the lead architect of the postwar trading system, has been quick to criticize flaws in WTO agreements but half-hearted in its commitment to reform. The president has made no secret of his preference to deal with trading partners and allies one on one, where they are more likely to accept U.S. demands in deference to broader strategic relations.

Why is the WTO so unpopular in Washington these days? Simply put, President Trump believes past U.S. administrations paid too much and got too little in return from U.S. trading partners in previous multilateral trade agreements.

His complaints target several interrelated problems. First, largely for historical reasons alluded to above, U.S. tariffs are frozen in the WTO at lower levels than for other major trading nations. Trump is particularly galled that European auto tariffs are four times higher than U.S. auto tariffs. But under existing WTO rules, if U.S. officials want to raise these “bound” tariffs, they have to offer other WTO members something in return.

Second, too many countries avoid WTO tariff obligations, most notably by invoking special exemptions for developing countries. Any WTO member can self-designate as a developing country — as Singapore and South Korea have done in the past. And third, WTO rules weren’t designed for big economies (think China) that feel free to intervene in markets to achieve government goals. Nor were they built to accommodate the big-data world of digital trade.

Accordingly, the White House wants past WTO deals redone, with an updated rulebook to address Chinese industrial policies (especially support for state-owned enterprises). It wants a freer hand for U.S. officials to raise tariffs under WTO antidumping, safeguards and national security exceptions (where Trump’s current tariffs against China, Europe and others plainly violate current WTO norms). And it wants the removal of most developing- country trade preferences in current and prospective trade deals.

U.S. trade officials don’t want U.S. policies to be subject to binding enforcement of WTO rules. Defanging the AB permanently would enable them to achieve that result.

#### 3] No war from econ decline

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Do economic downturns generate pressure for diversionary conflict? Or might downturns encourage austerity and economizing behavior in foreign policy? This paper provides new evidence that economic stress is associated with conciliatory policies between strategic rivals. For states that view each other as military threats, the biggest step possible toward bilateral cooperation is to terminate the rivalry by taking political steps to manage the competition. Drawing on data from 109 distinct rival dyads since 1950, 67 of which terminated, the evidence suggests rivalries were approximately twice as likely to terminate during economic downturns than they were during periods of economic normalcy. This is true controlling for all of the main alternative explanations for peaceful relations between foes (democratic status, nuclear weapons possession, capability imbalance, common enemies, and international systemic changes), as well as many other possible confounding variables. This research questions existing theories claiming that economic downturns are associated with diversionary war, and instead argues that in certain circumstances peace may result from economic troubles. Defining and Measuring Rivalry and Rivalry Termination I define a rivalry as the perception by national elites of two states that the other state possesses conflicting interests and presents a military threat of sufficient severity that future military conflict is likely. Rivalry termination is the transition from a state of rivalry to one where conflicts of interest are not viewed as being so severe as to provoke interstate conflict and/or where a mutual recognition of the imbalance in military capabilities makes conflict-causing bargaining failures unlikely. In other words, rivalries terminate when the elites assess that the risks of military conflict between rivals has been reduced dramatically. This definition draws on a growing quantitative literature most closely associated with the research programs of William Thompson, J. Joseph Hewitt, and James P. Klein, Gary Goertz, and Paul F. Diehl.1 My definition conforms to that of William Thompson. In work with Karen Rasler, they define rivalries as situations in which “[b]oth actors view each other as a significant politicalmilitary threat and, therefore, an enemy.”2 In other work, Thompson writing with Michael Colaresi, explains further: The presumption is that decisionmakers explicitly identify who they think are their foreign enemies. They orient their military preparations and foreign policies toward meeting their threats. They assure their constituents that they will not let their adversaries take advantage. Usually, these activities are done in public. Hence, we should be able to follow the explicit cues in decisionmaker utterances and writings, as well as in the descriptive political histories written about the foreign policies of specific countries.3 Drawing from available records and histories, Thompson and David Dreyer have generated a universe of strategic rivalries from 1494 to 2010 that serves as the basis for this project’s empirical analysis.4 This project measures rivalry termination as occurring on the last year that Thompson and Dreyer record the existence of a rivalry.5 Why Might Economic Crisis Cause Rivalry Termination? Economic crises lead to conciliatory behavior through five primary channels. (1) Economic crises lead to austerity pressures, which in turn incent leaders to search for ways to cut defense expenditures. (2) Economic crises also encourage strategic reassessment, so that leaders can argue to their peers and their publics that defense spending can be arrested without endangering the state. This can lead to threat deflation, where elites attempt to downplay the seriousness of the threat posed by a former rival. (3) If a state faces multiple threats, economic crises provoke elites to consider threat prioritization, a process that is postponed during periods of economic normalcy. (4) Economic crises increase the political and economic benefit from international economic cooperation. Leaders seek foreign aid, enhanced trade, and increased investment from abroad during periods of economic trouble. This search is made easier if tensions are reduced with historic rivals. (5) Finally, during crises, elites are more prone to select leaders who are perceived as capable of resolving economic difficulties, permitting the emergence of leaders who hold heterodox foreign policy views. Collectively, these mechanisms make it much more likely that a leader will prefer conciliatory policies compared to during periods of economic normalcy. This section reviews this causal logic in greater detail, while also providing historical examples that these mechanisms recur in practice.