#### I affirm the resolution, Resolved: The appropriation of outer space by private entities is unjust.

### framing

#### First, prefer constitutivism over anything else. Claims can only apply to us due to our status as agents. For example, if we aren’t

#### Second, all actions taken by an agent are not only in line with reason but also with affect, in response to actions generated by their status as a member of the community with shared roles. This falls in line with the ethical community and mutual recognition.

#### Third, the only way to resolve the evil or harms that maybe presented in society is the ethical community as the ethical community is the only way in which we can recognize and respect the actions and agency of other agents. The ethical community allows us to invalidate evils that affect society. Gobsch ‘14

[Wolfram Gobsch, "The Idea of an Ethical Community: Kant and Hegel on the Necessity of Human Evil and the Love to Overcome It," Philosophical Topics, Vol. 42, No. (2014), p. 177-200.  Gobsch is research assistant at the Chair for Practical Philosophy at Universität Leibzig, studied Philosophy and Logic & Philosophy of Science in Leipzig, St Andrews and Basel, ssistant and senior assistant at the Chair for Theoretical Philosophy at the University of Basel, research stay at the University of Chicago.]rctkitkat

Because the highest good is the complete end of the activity of pure reason, the unconditioned, it is necessarily possible.20 The unity of the highest good is the unity thought in the concept of a human being. It is the unity of reason, as of itself practical, with sensibility. It is the unity of pure reason and free choice, of moral law and maxim, through pure reason alone, unconditioned by anything else. Therefore, the idea of this unity, the idea of the highest good, is none other than the idea of ethical life, the idea of a reality in which the internality that is thought in the idea of the moral law as the principle from consciousness of which alone human beings act, if all goes well, and the relationality that is thought in the idea of the power of free choice in its dependence on sensible matter coincide with necessity, and that is: through pure reason. The idea of the highest good is the idea of ethical life: it is the idea of the actuality of a community constituted by the practical law as not only the principle from consciousness of which alone its constituents act, if all goes well, but in and only in so acting from which alone they are related to one another as persons. To identify the idea of ethical life with the idea of the highest good is to conceive of pure reason as the sole ground of the satisfaction of all the conditions of its actuality, or as Hegel puts it, referring to freedom and self-consciousness, the hallmarks of rational activity: Ethical life is the concept of freedom which has become the existing world and the nature of self-consciousness.21 One of the conditions of the actuality of the idea of ethical life is the very multiplicity of the human beings who constitute an ethical community. Satisfaction of this condition, too, must eventually come to be conceived—not as a brute fact, but—as the work of nothing but pure reason. And this is to say, among other things, that the actuality of an ethical community cannot be explained within the scope of methodological individualism. Ethical life, that is, cannot be explained as the result of a contract, for example.22 This reflects back on the content of the idea of ethical life. To act from one’s consciousness of nothing but the moral law is to act autonomously, it is to give this law to oneself: it is to act in such a way as to therein also constitute and preserve oneself as a being who is acting from nothing but one’s consciousness of this law. So for me to be related to you as one person to another in my acting from such respect for the moral law is for me to give the law to both of us and to therein receive it from you who is equally giving it to both of us. So as members of our ethical community, each of us acts in such a way as to constitute and preserve herself and therein the other as a person who acts from nothing but her consciousness of the moral law. In this sense, an act from respect for the moral law, conceived as the principle of an ethical community, is a joint or general act of the will. So in ethical life, the willing itself is relational.23 In our ethical community, that is, my willing is our willing, only from my perspective, oriented toward you; and your willing is our willing, only from your perspective, oriented toward me.24 And because our willing is our acting from nothing but our consciousness of the moral law, I am, in my willing, conscious of myself as related to you in this manner, and you are, in your willing, conscious of yourself as related to me in this manner: we share the same—relational—self-consciousness. In ethical life, the willing itself is relational in its very internality, in its very character as self-consciousness.25 In ethical life, we are conscious of one another as one at heart: as one in the consciousness of the principle from which we act; we are practically conscious of one another’s hearts. Through this consciousness we constitute a sense of “we” in which “validity for every human being (universitas vel omnitudo distributiva), i.e. communality of insight” and “universal union (omnitudo collectiva)”26 coincide with necessity. This implies that for me to act merely in accordance with the moral law, conceived as the principle of our ethical community, but not from my consciousness of it alone, is to break this law and to therein wrong you. But if I do act from nothing but my consciousness of the moral law, thus conceived, I am moved by reason and, therein, by you. That is to say that ethical life is the activity of unconditionally approving of one another’s individuality in such a way as to therein constitute and preserve one another as engaged in this very activity, and that is: love. It is the rational love we know as אהב) ahābā), ἀγάπη, caritas, and solidarity.27

#### Ethical life necessitates abiding by a doctrine of duties, living a virtuous life, and being able to conduct a life free from violent subjugation. Explanation in hegel by Hypertext – in PR

[\*\*note we don’t condone sexist / male only generalizations or language\*\* ][ Self-Conscious Action, "Hegel's Philosophy of Right: Ethical Life," https://www.marxists.org/reference/archive/hegel/works/pr/prethica.htm]

On the other hand, they are not something alien to the subject. On the contrary, **his spirit bears witness to them as to its own essence, the essence in which he has a feeling of his selfhood, and in which he lives as in his own element which is not distinguished from himself. The subject is thus directly linked to the ethical order by a relation which is more like an identity than even the relation of faith or trust.** Remark: Faith and trust emerge along with reflection; they presuppose the power of forming ideas and making distinctions. For example, it is one thing to be a pagan, a different thing to believe in a pagan religion. This relation or rather this absence of relation, this identity in which the ethical order is the actual living soul of self-consciousness, can no doubt pass over into a relation of faith and conviction and into a relation produced by means of further reflection, i.e. into an insight due to reasoning starting perhaps from some particular purposes interests, and considerations, from fear or hope, or from historical conditions. But adequate knowledge of this identity depends on thinking in terms of the concept. § 148 As substantive in character, these laws and institutions are duties binding on the will of the individual, because as subjective, as inherently undetermined, or determined as particular, he distinguishes himself from them and hence stands related to them as to the substance of his own being. Remark: The 'doctrine of duties' in moral philosophy (I mean the objective doctrine, not that which is supposed to be contained in the empty principle of moral subjectivity, because that principle determines nothing — (see § 134) is therefore comprised in the systematic development of the circle of ethical necessity which follows in this Third Part. The difference between the exposition in this book and the form of a 'doctrine of duties' lies solely in the fact that, in what follows, the specific types of ethical life turn up as necessary relationships; there the exposition ends, without being supplemented in each case by the addition that 'therefore men have a duty to conform to this institution'. A 'doctrine of duties' which is other than a philosophical science takes its material from existing relationships and shows its connection with the moralist's personal notions or with principles and thoughts, purposes, impulses, feelings, &c., that are forthcoming everywhere; and as reasons for accepting each duty in turn, it may tack on its further consequences in their bearing on the other ethical relationships or on welfare and opinion. But an immanent and logical 'doctrine of duties' can be nothing except the serial exposition of the relationships which are necessitated by the Idea of freedom and are therefore actual in their entirety, to wit, in the state. § 149 The bond of duty can appear as a restriction only on indeterminate subjectivity or abstract freedom, and on the impulses either of the natural will or of the moral will which determines its indeterminate good arbitrarily. The truth is, however, that in duty the individual finds his liberation; first, liberation from dependence on mere natural impulse and from the depression which as a particular subject he cannot escape in his moral reflections on what ought to be and what might be; secondly, liberation from the indeterminate subjectivity which, never reaching reality or the objective determinacy of action, remains self-enclosed and devoid of actuality**. In duty the individual acquires his substantive freedom.** Addition: Duty is a restriction only on the self-will of subjectivity. It stands in the way only of that abstract good to which subjectivity adheres. When we say: 'We want to be free', the primary meaning of the words is simply: 'We want abstract freedom', and every institution and every organ of the state passes as a restriction on freedom of that kind. Thus duty is not a restriction on freedom, but only on freedom in the abstract, i.e. on unfreedom**. Duty is the attainment of our essence, the winning of positive freedom.** § 150 Virtue is the ethical order reflected in the individual character so far as that character is determined by its natural endowment. When virtue displays itself solely as the individual's simple conformity with the duties of the station to which he belongs, it is rectitude. Remark: In an ethical community, it is easy to say what man must do, what are the duties he has to fulfil in order to be virtuous: he has simply to follow the well-known and explicit rules of his own situation. Rectitude is the general character which may be demanded of him by law or custom. But from the standpoint of morality, rectitude often seems to be something comparatively inferior, something beyond which still higher demands must be made on oneself and others, because the craving to be something special is not satisfied with what is absolute and universal; it finds consciousness of peculiarity only in what is exceptional. The various facets of rectitude may equally well be called virtues, since they are also properties of the individual, although not specially of him in contrast with others. Talk about virtue, however, readily borders on empty rhetoric, because it is only about something abstract and indeterminate; and furthermore, argumentative and expository talk of the sort is addressed to the individual as to a being of caprice and subjective inclination. In an existing ethical order in which a complete system of ethical relations has been developed and actualised, virtue in the strict sense of the word is in place and actually appears only in exceptional circumstances or when one obligation clashes with another. The clash, however, must be a genuine one, because moral reflection can manufacture clashes of all sorts to suit its purpose and give itself a consciousness of being something special and having. made sacrifices. It is for this reason that the phenomenon of virtue proper is commoner when societies and communities are uncivilised, since in those circumstances ethical conditions and their actualisation are more a matter of private choice or the natural genius of an exceptional individual. For instance, it was especially to Hercules that the ancients ascribed virtue. In the states of antiquity, ethical life had not grown into this free system of an objective order self-subsistently developed, and consequently it was by the personal genius of individuals that this defect had to be made good. It follows that if a 'doctrine of virtues' is not a mere 'doctrine of duties', and if therefore it embraces the particular facet of character, the facet grounded in natural endowment, it will be a natural history of mind. Since virtues are ethical principles applied to the particular, and since in this their subjective aspect they are something indeterminate, there turns up here for determining them the quantitative principle of more or less. The result is that consideration of them introduces their corresponding defects or vices, as in Aristotle, who defined each particular virtue as strictly a mean between an excess and a deficiency. The content which assumes the form of duties and then virtues is the same as that which also has the form of impulses (see Remark to § 19). Impulses have the same basic content as duties and virtues, but in impulses this content still belongs to the immediate will and to instinctive feeling; it has not been developed to the point of, becoming ethical. Consequently, impulses have in common with the content of duties and virtues only the abstract object on which they are directed, an object indeterminate in itself, and so devoid of anything to discriminate them as good or evil. Or in other words, impulses, considered abstractly in their positive aspect alone, are good, while, considered abstractly in their negative aspect alone, they are evil (see § 18). Addition: To conform to the ethical order on this or that particular occasion is hardly enough to make a man virtuous; he is virtuous only when this mode of behaviour is a fixed element in his character. Virtue is rather like ethical virtuosity, [Heroes ('ethical virtuosi') lived in uncivilised conditions (see Addition to § 93) and there was no ethical life in society as they found it; but since they introduced ethical institutions for the first time (see Remarks to §§ 167 and 203), they displayed virtue as a kind of virtuosity. Nowadays, ethical life is common to everyone and consists in conformity to the existing order, not in divergence from it.] and the reason why we speak of virtue less nowadays than formerly is that ethical living is less like the form of a particular individuals character. The French are par excellence the people who speak most of virtue, and the reason is that amongst them ethical life in the individuals is more a matter of his own idiosyncrasies or a natural mode of conduct. The Germans, on the other hand, are more thoughtful, and amongst them the same content acquires the form of universality. § 151 But when individuals are simply identified with the actual order, ethical life (das Sittliche) appears as their general mode of conduct, i.e. as custom (Sitte), while the habitual practice of ethical living appears as a second nature which, put in the place of the initial, purely natural will, is the soul of custom permeating it through and through, the significance and the actuality of its existence. It is mind living and present as a world, and the substance of mind thus exists now for the first time as mind.

#### Thus the standard is consistency with abiding by ethical life and maximizing freedom through such.

Reasons why this standard is good:

Actor spec fails in context of space.

Milligan 16 - Tony Milligan, Department of Theology and Religious Studies, King’s College London in the Book “The Ethics of Space Exploration” pgs 132-133, edited by Schwartz and Milligan, published 2016 “Chapter 9: Space Ethics Without Foundations” [Space and Society, DOI 10.1007/978-3-319-39827-3] Accessed 12/14/21 SAO

If the truth of claims about ethics (including space ethics) is in some way bound up with how authoritative agents might respond, what follows? Well, at least a certain difficulty. Whereas we ordinarily have a good grasp of who might be an authoritative agent with regard to terrestrial matters, and how such agents might see, and respond to, particular actions and events, we have very little grasp of who might count as an authoritative agent in the context of distant space settlements with a range of vulnerabilities and psychological pressures that we simply cannot appreciate. Understanding what it is to be such an agent is very different from understanding a science-fiction film. Beyond accepting various important platitudes about murder, rape and cruelty (a good number of which any livable ethic would have to satisfy) we simply have very little idea of how they would see their worlds and respond to them, very little sense of what the best sort of response would involve. What this means is that the content of any account of the foundations of ethics which we could actually specify, and which might be shared between ourselves and such future agents, would have to be exceptionally thin. It would have to be a list of platitudes in the strict sense, i.e. claims of such an extremely general sort that we are all likely to affirm (and which might establish minimal adequacy conditions for a plausible ethic) but from which very little can actually be deduced. Platitudes of this sort can be very useful. We probably cannot do without them. They may certainly help us to tell if we are on roughly the right track, but they may not do much more than this sort of odd-job. As foundations in the initially specified sense of being both stable (in terms of truth or even assertability by authoritative agents at all times and in all places) and also salient to the deduction of detailed ethical judgements when considered in conjunction with various more local items of knowledge, they will simply be unfit for the task. Stability they might achieve but not stability and deductive salience. Indeed, the former will arguably be secured only at the expense of the latter. The more general they are the more stable they will be, but also the less informative. If this is right then something noteworthy follows about the proper scope of space ethics. Arguably, it has an important role in shaping our deliberations in near and medium-term contexts, the requirements of justice within the latter, what would constitute a sustainable program of activities in space and the rudimentary shape of an appropriate contemporary attitude towards space as the next frontier. This will probably cover us adequately for discussions about the ethics of early settlement but not far beyond it. At some point the frontier simply turns into more of an event horizon. Or, at least, it is not obvious that space ethics is going to be the most illuminating sort of discourse that we can currently bring to bear upon matters in the more distant future. When we attempt to stretch the discourse beyond such bounds it may remain edifying but it will begin to resemble a form of science fiction or perhaps even to constitute a form of the latter. We might also expect it to win fewer awards. (Kim Stanley Robinson and Stephen Baxter need not feel threatened.) In any case, the line between the two will become blurred and it will do so for a good reason. This is not necessarily a bad thing, but it does mean that the reliability of familiar sorts of ethical deliberation in such contexts will either be compromised or else they will function as a coded way of commenting upon the present or at least upon more proximate matters. (About which something more reliable can be said.) Here, I am drawn to think of my own faltering attempts to make sense of the ethics of life on a multigenerational ship, en route to some other star system, and how indispensable it was to couch the discussion in terms of various classic science fiction treatments of the scenario rather than to build it out of fundamental principles (Milligan 2015a, pp. 134–51). To be sure, something useful can be said in such discussions, but anything deep that is said may turn out to concern our current predicament or what it is to be human rather than space exploration as such. And this is slightly paradoxical because it means that the further we try to reach into a human future in space and understand the ethics of such a future, the more we are thrown back upon what is familiar, proximate and deep. The danger then is one of imagining that we can specify, by appeal to known and homely considerations, more than the very broadest and most general ethical features of how this more distant and troubling future might be lived.

## Contention 1: subjugation

#### 1. No such legal system exists for determining property rights to outer space; therefore private appropriation would not be abiding by the law and thus it would be uniquely anti-ethical and impeding on the freedom already decided upon.

**Tronchetti 7**

Fabio Tronchetti (International Institute of Air and Space Law, Leiden University, The Netherlands). “The Non-Appropriation Principle Under Attack: Using Article II of The Outer Space Treaty In Its Defence.” 50 PROC. L. OUTER SPACE 526, 530 (2007). JDN. https://iislweb.org/docs/Diederiks2007.pdf

However, it must be said, that **nowadays there is a general consensus on the fact that both national appropriation and private property rights are denied under the Outer Space Treaty.** Several ways of reasoning have been advanced to support this view. Sters and Tennen affirm that the argument that Article II does not apply to private entities since they are not expressly mentioned fails for the reason that they do not need to be explicitly listed in Article II to be fully subject to the non-appropriation principle8. Private entities are allowed to carry out space activities but, according to Article VI of the Outer Space Treaty, they must be authorized to conduct such activities by the appropriate State of nationality. But if the State is prohibited from engaging in certain conduct, then it lacks the authority to license its nationals or other entities subject to its jurisdiction to engage in that prohibited activity. Jenks argues that “**States bear international responsibility for national activities in space; it follows that what is forbidden to a State is not permitted to a chartered company created by a State or to one of its nationals acting as a private adventurer”**9. It has been also suggested that the prohibition of national appropriation implies prohibition of private appropriation because the latter cannot exist independently from the former10. In order to exist, indeed, private property requires a superior authority to enforce it, be in the form of a State or some other recognised entity. **In outer space, however, this practice of State endorsement is forbidden. Should a State recognise or protect the territorial acquisitions of any of its subjects, this would constitute a form of national appropriation in violation of Article II.** Moreover, it is possible to use some historical elements to support the argument that both the acquisition of State sovereignty and the creation of private property rights are forbidden by the words of Article II. During the negotiations of the Outer Space Treaty, the Delegate of Belgium affirmed that his delegation “had taken note of the interpretation of the non-appropriation advanced by several delegations-apparently without contradiction-as covering both the establishment of sovereignty and the creation of titles to property in private law”11. The French Delegate stated that: “…there was reason to be satisfied that three basic principles were affirmed, namely: the prohibition of any claim of sovereignty or property rights in space…”12. The fact that the accessions to the Outer Space Treaty were not accompanied by reservations or interpretations of the meaning of Article II, it is an evidence of the fact that this issue was considered to be settled during the negotiation phase. Thus, summing up, we may say that **prohibition of appropriation of outer space and its parts is a rule which is valid for both private and public entity.** The theory that private operators are not subject to this rule represents a myth that is not supported by any valid legal argument. Moreover, it can be also added that if any subject was allowed to appropriate parts of outer space, the basic aim of the drafters of the Treaty, namely to prevent a colonial competition in outer space 3 and to create the conditions and premises for an exploration and use of outer space carried out for the benefit of all States, would be betrayed. Therefore, the need to protect the non-appropriative nature of outer space emerges in all its relevance.

#### 2. The idea of appropriation is inherently violent since it appeals directly to power. Ashley and Plesch ‘02

[Kathleen Ashley (University of Southern Maine), Véronique Plesch (Colby College), The Cultural Processes of “Appropriation”, Journal of Medieval and Early Modern Studies 32:1, Winter 2002. <https://watermark.silverchair.com/ddjmems_32_1-01.pdf?token=AQECAHi208BE49Ooan9kkhW_Ercy7Dm3ZL_9Cf3qfKAc485ysgAAAqowggKmBgkqhkiG9w0BBwagggKXMIICkwIBADCCAowGCSqGSIb3DQEHATAeBglghkgBZQMEAS4wEQQMvFSvSdQzmSrX4y6vAgEQgIICXb_Ub8x9j9Uq-Cflg6fGcgeAXRarZuZb-hfwOmts2G-tnw1CT8ua33_9wYoDUf_meaoCQFzy4r9S60LhLs_GzEIvC_iiOX0YxwGxWS5xMFm-Oph-KclzzNuQDKsAI4HaYyFELQOoa4_0Ukk0dJ07F5DZBYJ02dCyzjou5bDojk_u8Vd7dzklHeg7R2u87lz3Te5hsdXrrC8GvG8JXodxEYCdWWeeCQCjwKvlxSp10MURiCURBy-qUBjhE0evT-WpXy4mMPZkrS1asmmiaG5se4m6RvNZbyVoxkvxDzbCCEwhYp3f2hgKW69iWJ3OPnaQ8R0uXVvGJbArEzM-abkHU932AiXysky2Adq4w1Zm0MtUGNc_ydQORBvNbwZtgGeBO18tQKqIHXEjtr-ZLTGDCT9iGfGQ9LvHCBwGOtv97vOOzfImsDkD2xCdVEIYRJeLUKG6OcotMWkFSw-r1_1kZQRZowZTkmu5qIqzXruBJBNdjxN6-t0nzg-v0BEZP_-9rn-2lbiaBc0N0RJD-RNOTHTbPawf5GjKC528y8TyFbFft1pMHpC12fPeX1mFVi_RYgXDsA3hIo35BHHtNetpS4ISlufRjaHppj3bnDFlhXhZW11Jc964OOBV4PqmuVGWaVnF_gTm-rwOHpX2jnD_rBlqZNYYyjWnYy5q9WszwuxHT3n2lHtkcCc_teRMxj6tvoZgEaAiesRdXXojA0wivT_7z7MakErOy_3Fn3-sduqMvufp1NQ9sm74KKB7nDfK7KCN-MT12KcU9GgNGCmkLIOL1a9F5sXUkSVlI1i_> ]

Because of its associations with power, the term appropriation had a negative charge when it was first popularized within cultural studies. Drawing on Foucault’s notion of social discourse as a system of regulation, theorists analyzed the production of cultural meanings that occurred through the **appropriation of an “other**.” Edward **Said’s Orientalism (1978) is the classic locus for such a description; it emphasizes the way the West used representations of “the Orient” to fulfill its own desires and consolidate its own power.** Said offered a binary model of cultural relations for which, as Nelson points out, “in every cultural appropriation there are those who act and those who are acted upon, and for those whose memories and cultural identities are manipulated by aesthetic, academic, economic, or political appropriations, the consequences can be disquieting or painful.”14 According to this concept of “appropriation,” the model is always a relationship between cultural unequals—a dominant culture that appropriates and a weaker culture that has no control over its representations or products— and it triggered a crisis within such fields as anthropology and art. These were disciplines for which other cultures and their artifacts were central objects of study, but that relationship had usually been seen as neutral or even laudatory. Whereas early anthropology had conceived of its mission as “salvage,” studying vanishing tribes and subcultures around the world, now questions were asked about the ideological implications of ethnographic practices, including the writing of ethnographies. As James Clifford observed in Writing Culture—a collection that captured the excitement and anxiety of that pivotal moment within his field—“Anthropology no longer speaks with automatic authority for others defined as unable to speak for themselves (‘primitive,’ ‘pre-literate,’ ‘without history’).”15

#### 3. Glorifying and justifying appropriation for the sake of ‘space’ or benefit strengthens the unethical and violent settler colonial story – history and Antarctica in specific proves. Howkins ‘10

[HOWKINS,J. 2010. In T. Banivanua Mar and P. Edmonds (eds); Making Settler Colonial Space: Perspectives on Race, Place and Identity. Basingstoke: Palgrave Macmillan, pp. 103–128.]

In early 1912, as part of the so-called ‘heroic era’ of Antarctic exploration, the British Naval Captain Robert Falcon Scott and his four companions trudged to their deaths across the icy wastes of the South Polar Plateau and the Ross Ice Shelf. They had reached the South Pole, only to find that Roald Amundsen’s Norwegian party had beaten them to it. On their way back to their base on the shore of the Ross Sea, the five adventurers succumbed, one by one, to hunger, cold and exposure. When news of the ‘tragedy’ reached the outside world over a year later, responses ranged from mild condemnation to lionisation.7 There was a general feeling, however, that even if Scott had gone about things the wrong way, he had comported himself in a manner befitting an English gentleman. **Even in failure, Scott’s efforts to master nature struck a resonant chord with an imperial ethos raised on ideals of muscular Christianity and self-sacrifice: ‘from these frozen regions of the South, there seems to come, like a trumpet call, a message: the greatness of England still’**.8 At the heart of Scott’s story was the mentality of settler colonialism – a desire to conquer nature and to appropriate space – narrated on an epic scale. **Scott’s expedition helped to set a standard for future Antarctic exploration.** The **enterprise was exclusively white and exclusively male.** Herbert Ponting, the photographer on the expedition, titled his **book of photographs The Great White South.** The racial connotations of the expedition can also be seen by the dismissive British attitude towards a Japanese expedition of the same year. Officials in Britain privately dismissed the Japanese as interlopers in a white man’s continent and the Australian public in particular was suspicious of their presence in Australia en route to Antarctica.9 The Norwegians, in contrast, as a staunch Nordic race, were worthy competitors for the British. The myth of Captain Scott, in fact, would probably have been inconceivable had he been beaten by anyone but Amundsen. The racial aspects of heroic era exploration fit almost perfectly with the mentality of settler colonialism. In contrast to settler colonial situations elsewhere, women were excluded from participation in the heroic era of Antarctic exploration.10 This fits uneasily with the broader settler colonial project, where female reproductive labour was a requirement for producing self-sustaining settler populations. Many members of Scott’s expedition enjoyed the exclusively masculine company and revelled in the absence of women.**11 Men were reliable and physically capable of the arduous conditions of polar exploration; women, they implied, were not.** Male explorers believed that the presence of females would weaken their resolve, to the detriment of their attempts to prove their racial fitness. Women would domesticate an enterprise that was deliberate in seeking to escape from the mundane everyday world of Edwardian Britain. Scott and his fellow explorers explicitly gendered the landscape: they viewed the Antarctic environment both as female and as a place to be conquered. In some instances at least, such rhetoric was undoubtedly a cover for homosexual feelings. Apsley Cherry Garrard – a man who found relationships with women difficult – was by no means alone when he implied that his time in Antarctica was the best of his life.12 Rather than offering an allegory for the impending end of empire, as several authors have claimed**, Antarctica and the story of Captain Scott offered an idealised vision of the imperial future.**13 In contrast to the simplicity of Scott’s tryst with nature, the British imperial world of 1913 was full of complex uncertainty. New geopolitical rivals, such as Germany, the United States and others, were emerging to challenge Britain’s assumed hegemony. In the colonies, rumblings of colonial nationalism were inexorably intensifying. These rumblings accompanied a sharpened critique of colonial practices among some metropolitan voices.14 Empire was becoming more difficult to justify both at home and abroad. In Britain itself, all was not well: women were demanding the vote, labour unions were demanding improved pay and conditions and Ulster Unionists were threatening to scupper any solution to the ‘Irish Problem’.15 In these circumstances, stories from Antarctica offered more than just welcome relief: they offered the hope of a better future, shorn of the dangerous complexities of the present.16 By the time of Scott’s death, a large part of Antarctica directly to the south of South America had already been claimed by the British Empire. The so-called Falkland Islands Dependencies had been established in 1908 and included the Antarctic Peninsula, the Weddell Sea and the surrounding sub-Antarctic islands. The British sovereignty claim to Antarctica was based on the settler colony of the Falkland Islands themselves. The Islands had been taken by force from a handful of settlers under the jurisdiction of the government of Buenos Aires in 1833.17 The government at Buenos Aires claimed to have inherited the islands, known in Spanish as the Islas Malvinas, following independence from Spain in 1816. Great Britain wanted the islands to serve as a naval station in the South Atlantic and simply deported all the Argentine settlers who refused to submit to British authority. Geopolitical motivations clearly lay behind this move: the British wanted a naval supply station close to the strategically important Cape Horn. In order to be effective, the British needed at least a handful of settlers to occupy the islands. Given the rainy climate and almost total isolation, there could be few less glamorous destinations for British settler colonialists. But a combination of sheep farming and fishing, alongside the government interest, made the archipelago sufficiently economically attractive to draw around 2,000 settlers, many of them from Scotland. In a similar fashion to Antarctica, the Falkland Islands had no Indigenous population. The competing claims of Argentina, however, helped to create a siege mentality typical of many settler colonial situations around the world.18 The principal motivation for Britain’s claim to the Falkland Islands Dependencies was economic. The British wanted to tax and regulate the booming whaling industry that was developing in the seas and oceans around the Antarctic Peninsula in the first decade of the twentieth century.19 Following the rapid decline of whale populations in the northern hemisphere due to chronic overfishing, Norwegian whalers in particular had begun to head south in search of a new supply of whales. They established whaling stations on South Georgia and other sub-Antarctic islands around the Antarctic Peninsula. Due to this expansion in the Antarctic, the world’s whale oil production increased from 149,100 barrels in 1904 to 812,000 in 1914.20 There was also a belief – based on an almost complete lack of knowledge about the Antarctic interior – that the continent could contain vast mineral wealth. The **potential for economic gain was a central part of the settler colonial mentality, in which the land itself was seen as a productive resource.** Closely connected to the economic motivations for making a claim to Antarctica were geopolitical considerations. As well as being an economic resource, whale oil was also of strategic value: during the First World War it was used in the manufacture of explosives. Similarly, officials believed that strategically important resources such as iron, coal, petroleum (and later uranium) might be found under the Antarctic ice. Perhaps most importantly, British strategic planners extended their geopolitical rationale for claiming the Falkland Islands to their claims to the Falkland Islands Dependencies. Occupation of the Antarctic Peninsula, officials reasoned, would help to guarantee control of the strategically important Drake Passage. This southern sea route around America would become particularly vital if ever the Panama Canal were put out of action in a future war. Such considerations reflected a global vision of empire, which were often expressed in the need to deny strategic benefits to potential adversaries. Sea-lanes were crucial to the British imperial system. As in settler colonial spaces throughout the world, the British justified their claim to the Falkland Islands Dependencies through assertions of scientific authority and the idea of ‘improvement’.21 Without imperial rule, British officials argued, the marine wealth of the Antarctic would be squandered. It would either be underexploited (a classic example of natives not improving the land, or in this case the nearby states of Argentina and Chile) or overexploited as in the case of the South Atlantic sealing industry which had effectively destroyed itself in the early nineteenth century through its own rapacity. British rule, British officials argued, offered the possibility of a well-managed, sustainable whaling industry. Sir Miles Clifford, the Governor of the Falkland Islands from the mid-1940s, made the case explicitly: The only true wealth that this area contains, so far as we know today, is still as in the past its marine wealth – its whales and seals; these, as we have noted earlier, could readily be exterminated by indiscriminate killing and it was the recognition of this danger which decided His Majesty’s Government to bring these industries under control and lead to the establishment of British sovereignty over the area now known as the Falkland Islands Dependencies. The motive was a purely unselfish one, to conserve the harvest of these seas for the benefit of mankind as a whole. 22 In the years after the First World War, the British established an oceanographic research project, with a particular focus on the marine life of the Southern Ocean, which became known as the Discovery Expeditions.23 The Discovery Expeditions initially used the ship from Captain Scott’s first expedition, adding a layer of romantic association to the scientific case for British sovereignty. Alongside the economic and geopolitical motivations for Antarctic empire, the region continued to inspire a strong emotional attachment among British politicians, officials and the general public. In 1914, just as the First World War was beginning, the Anglo-Irish explorer Ernest Shackleton set out on an expedition in which he intended to walk across the entire Antarctic continent.24 Concerned about the outbreak of hostilities, Shackleton telegraphed the Admiralty asking whether he should cancel the expedition. The Admiralty replied that the expedition should proceed as planned, since it was good for the morale of the British people.25 The idea of walking across Antarctica had obvious geopolitical implications. By conquering nature – in this case by the simple act of walking across it – Shackleton believed that he was demonstrating that the continent would rightfully belong to the British Empire. Again, such an attitude resonates with the mentality of settler colonialism, where ‘taming the wilderness’ provided one of the surest demonstrations of imperial rule. It is interesting to note that the British had different standards for ‘conquering nature’ for different parts of their empire. In Australia, for example, the act of walking across land was not considered to be sufficient to demonstrate ownership by the Aboriginal peoples.

#### 4. Colonialism and colonization is violent and suppresses histories and attempts to erase the idea of the “other” – this causes psychological violence. Furthermore, the construction of a space not yet colonized that we can colonize (such as in the case of outer space) – as decidedly empty, construes the colonized land as the land of the colonizer and nothing else. Simatei ‘05

[Colonial Violence, Postcolonial Violations: Violence, Landscape, and Memory in Kenyan Fiction Author(s): Tirop Simatei Source: Research in African Literatures, Vol. 36, No. 2 (Summer, 2005), pp. 85-94 Published by: Indiana University Press Stable URL: http://www.jstor.org/stable/30131143 Accessed: 03-01-2016 21:18 UTC]

As represented in Kenyan literature, this hegemonic construction that justifies colonial occupation is pitted against the muted resistance of the indigenous population, which soon develops into a violent reaction to marginalization and occupation. A superb illustration of this is to be found in Ngugi wa Thiong'o's novel Weep Not, Child, especially in the relationship between the white settler Mr. Howlands and his servant Ngotho. It is a relationship that demonstrates competing representations of the land and inscribes a dialectic of attitude into the landscape between master and servant that foreshadows the violence ahead. In fact, Mr. Howlands and Ngotho already share, and are products of, a violent past, both having participated in the First World War, an experience the narrator calls "four years of blood and terrible destruction" (30). The tension underlying the relationship of the two is captured early in the novel: They went from place to place, a white man and a black man. Now and then they would stop here and there, examine a luxuriant green tea plant, or pull out a weed. Both men admired this shamba. For Ngotho felt responsible for whatever happened to this land. He owed it to the dead, the living and the unborn of his line, to keep guard over this shamba. Mr. Howlands always felt a certain amount of victory whenever he worked through it all. He alone was responsible for taming this unoccupied wildness. (31) The representation of land as "unoccupied wildness" or, in the imagination of Mr. Howlands, "a big trace of wild country" (30) is a hegemonic impulse that underlies the process of imperial annexation of territory**. Territory targeted for colonization is first reproduced in the imperial imagination as an empty space that must be regimented so as, in the words of John Noyes, "to order the chaos of the savage land or the empty space of 'virgin nature'"** (136). Noyes has discussed how the idea of empty space is crucial in the process of colonial expansion. **The concept of the empty space, he has argued, serves as a useful ideology of expansionism:** [I]t enhances the romantic longing which seeks to transpose primary narcissim onto a landscape in which, for the sake of phantasy, it cannot afford to encounter a human being who is radically other, and it expresses a real inability of the European eye to look at the world and see anything other than European space-a space which is by definition empty where it is not inhabited by Europeans. (196) Such (re)ordering of land and its inhabitants becomes a form of epistemic violence to the extent that it involves immeasurable disruption and erasure of local systems of meaning that guide the ownership and use of land. Because it actually suppresses the difference of the Other, colonial representation in this sense is a mode of violence. An actual example of this is the colonial government's rejection of the Gikuyu demands for land tenure rights in the 1920s. Referring to this episode, Simon Gikandi notes that the action by the government "was not simply questioning their (Gikuyu) narratives of ownership and possession, but their notions of the past and the future" (19). Jomo Kenyatta pioneered the fictional contestation of this (il)logic of colonial dispossession in his allegorical fable "The Gentlemen of the Jungle." The tale features a benevolent man who gives shelter to an elephant during a storm only for the latter to displace him from his hut. Following the man's protestations, a one-sided Imperial Commission of Enquiry is set up by the Lion, the King of the Jungle, and comes up with a verdict favorable to the elephant. The man is told: "As it is clearly for your good that the space should be put to its most economic use, and as you yourself have not reached the stage of expansion which would enable you to fill it... Mr. Elephant shall continue the occupation of your hut" ("The Gentlemen" 38). Using the same trickery, the other animals follow suit as they keep displacing the man each time he builds a new hut. Kenyatta's allegory illustrates the aforementioned point, that and pain" (203, is what awakens the colonized into a violent revolt. **The concept of the empty space is also challenged in Weep Not, Child. Ngotho's relationship to the alienated land shows that precolonial territory was never an empty space in the way the colonial expropriators visualized it, but rather a landscape already defined and mapped by local histories, myths, and memories of bequethal and ownership. What a colonizing topography therefore maps out as untamed, depopulated, wildness is acknowledged by the indigenous perspective as a scenic landscape of valleys, ridges, and hills that constitute "the heart and soul of the (Gikuyu) land**" (The River Between 3), while the "labyrinth of bush thorns and creeping plants" is revered not only for their medicinal resource but also because they form part of the "blessed and sacred place [s]" (14). It is such spatial and cultural knowledge of the territory-the kind demonstrated by Chege in The River Between when he conducts Waiyaki in the tour of the hills as part of the latter's initiation into the secrets of the community-that represents a particular form of land tenure that the settler lacks. As demonstrated in the action of Mr. Howlands, the colonial settlers sought to legitimize the possession of land through its utilization. But this utilization, which in effect involves clearance, demarcation, and enclosure, leads also to the production of a bounded space to which the settler can easily relate while at the same time controlling the extent of the indigenous people's relationship with it. The "native," on the other hand, correctly reads this as an act of dispossession and resists it through the activation of collective memory in which the land is, as in the case of the Gikuyu, mythologically imaged as a divine bequest to Gikuyu and Mumbi, the forebears of the Gikuyu, "to rule and till in serenity" (Weep Not, Child 23). The **spatial stratification of physical space in conquered territory is the means by which colonialism annexes and marks exclusive ownership of the land, and yet, ironically, the privileged enclosures, the no-go zones that this demarcation creates, invite the violation it intends to forestall.** In other words, the violent transgression of the bounded space with all the hegemonic subjectivities it encodes is adopted by the "native" as a form of resistance to colonial presence. The hit-and-run guerrilla tactics adopted by the Mau Mau fighters would later constitute the main form of transgressing the space of the colonizer who, in turn, reacts by creating more barriers aimed at isolating Mau Mau in the forests but which in reality are markers of the increasing instability of the colonial world. The curfew that followed the State of Emergency declared in October 1952 may be seen in this respect as the ultimate attempt to control violation of the privileged colonial space.

## Contention 2: Climate Change

#### Non-terrestial appropriation further corroborates appropriation of the atmosphere and justifies this appropriation, leading to increased pollution and even a system of pollution trading. This is uniquely imperial and anti-ethical, and impedes upon the freedom of the community Folkers ‘20

[Folkers, A. (2020). Air-appropriation: The imperial origins and legacies of the Anthropocene. European Journal of Social Theory, 136843102090316. doi:10.1177/1368431020903169]

The appropriation of land is not the only mechanism for creating a nomos. The nomos is not the natural ground that offers the foundation for law. Rather, the act of appropriating, measuring and dividing space makes up and orders these spaces in the first place. Therefore, non-terrestrial appropriation is possible and in fact happens frequently. Schmitt (2011b, pp. 86–89) argues that the British dominance of world trade was made possible by an act of ‘sea-appropriation’. He considers the global-networked space disclosed by modern technologies such as railway, electricity and radio (Schmitt, 2011b, p. 103f.) and ponders the impact of aviation on the modern experience of space and its significance for warfare (Schmitt, 2011b, p. 104f.). Yet the notion of air-appropriation that I want to foreground in this article is not about the role of aviation for ‘vertical geopolitics’ (Elden, 2013). It instead refers to the occupation of the atmosphere by CO2 emissions as an effect of the combustion of fossil fuels. Indeed, in contrast to the debate on vertical geopolitics, this understanding of air-appropriation is not just about vertical space or volume, but about the molecular spatiality that concerns the chemical composition of the atmosphere expressed in parts per million (ppm) of CO2. **The large-scale combustion of fossil fuels has colonized the atmosphere with the molecules of a geological formation: carbon minerals. That is why an atmospheric chemist, Paul Crutzen (2002), could declare a new geological epoch – the Anthropocene – that began with the invention of the steam engine.** In contrast to colonial land-appropriation, air-appropriation does not involve the use of immediate physical violence, but it is responsible for the ‘slow violence’ (Nixon, 2011) of climate change. The **‘weapons’ of such an ‘air-grabbing’ are not guns and canons but steam engines, furnaces, cars and aeroplanes. The temporal lag between the cause (emissions) and its effect (global warming) renders this violence less visible, but by no means less real. Apart from the innumerable lives endangered by extreme weather, droughts and spreading disease, climate change will lead to new forms of land-expropriation through rising sea levels and desertification.** It is important to note that the history of air-appropriation is deeply entangled with colonial land-appropriation. The impact of colonial practices on the atmosphere started even before the industrial-scale combustion of fossil fuels. Lewis and Maslin (2015, p. 175) associate the temperature drop during the little ice age in the seventeenth century with the colonization of the Americas from 1610. This colonial genocide brought the fire clearing practices of the American natives to a halt. As a consequence, forests could fix more carbon and thus reduce the concentration of CO2 in the atmosphere. Yet with the invention of the steam engine and the subsequent industrialization of Europe, colonial land- and air-appropriation started to reinforce each other. The exploitation of resources and labour in the colonies and the opening up of new export markets increased the combustion of fossil fuels. In Land und Meer, Schmitt cites a famous paragraph from Hegel’s Philosophy of Right, where the latter emphasizes the deterritorializing tendencies of capitalist industries by pointing out the affinity between industry and the sea: ‘Just as the earth, the firm and solid ground, is a precondition […] of family life, so is the sea the natural element for industry, whose relations with the external world it enlivens’ (Hegel, 1991, p. 268, italics in the original). It turns out that the element that ‘enlivens’ capitalist industry is not just the sea (and the colonization it engendered), but also the fire of fossil fuels and the air in which it dumps its emissions. Writing nature: Pollution as material-semiotic appropriation But why does the pollution of the atmosphere constitute an act of appropriation? Part of the answer lies in the way climate science and politics conceptualize, measure and divide the atmosphere. In climate politics the atmosphere figures as a dumb space with limited capacity (Whitington, 2016). **The limited capacity of the atmosphere indicates the relative amount of carbon allowed to enter it without causing global warming to exceed 1,5°C or 2°C.** According to official estimates, this corresponds to 450 ppm CO2 molecules. Though this implies a relational-molecular spatiality of the atmosphere’s chemical composition, the atmosphere is mostly cast in the geometrical terms of a limited dumb space. This makes it possible to treat atmospheric space as bounded and amenable to measurement and division. Climate policy becomes the management and distribution of atmospheric space or ‘atmospheric capital’ (WBGU, 2009, p. 2). It seems counter-intuitive that the atmosphere figures both as a dumb space and as capital, and so as a valuable property. Liberal theories of property, at least since John Locke (1982, pp. 17–31), assume that something becomes property by virtue of the work invested in it, not the waste dumped on it. According to liberal theories, a plot of land becomes property through the labour of cultivation – an argument that frequently served as a justification for the seizure of supposedly unpropertied land (terra nullius) by the European colonialists (Verran, 1998). In contrast, the atmosphere became a property through its pollution. But how can pollution (waste), rather than labour (work), become an act of appropriation, of making property? Michel Serres’ (2010) theory of property provides an answer that allows us to understand the logic of air-appropriation and implicitly criticizes liberal theories of property. Serres seeks to show that the secret origin of property lies in acts of contamination. Animals mark their territory with excrement and kids lick food to claim it as their own. Serres (2010, pp. 5–7) even argues that the fertilization of soil with dung is originally a territorializing technique. In turn, every act of signification that marks a territory or, respectively, an exclusive property – from initials in briefs, to advertisements in the urban landscape – is a form of pollution. Against this backdrop**, Serres (2010, pp. 65–66, 79) interprets modern environmental pollution, especially air pollution – as representing both the culmination point and the crisis of the contaminating logic of property:** At least since the industrial revolution, heat effluents no longer encounter any limits and are diffused in the atmosphere […] all over the world. […] The owner of a blast furnace was able to dirty the air all the way to the ocean and the stratosphere and thereby increased his property on earth, water, and air, without limits. Whether he intended it or not, his property swelled and became global and exploded. […] Pushed to the limit […] acts of appropriation will inevitably lead to the end of property. Contemporary climate politics addresses this crisis of property with more of the same and salvages the logic of property in the moment of its inevitable decline. Emissions trading turns distinct parts of the atmosphere into a tradable commodity (Lohmann, 2005), and thus not only internalizes economic externalities but also reterritorializes deterritorialized space (Lövbrand & Stripple, 2006) and property. Serres’ theory not only challenges traditional theories of property but also theories of pollution. Waste is not ‘matter out of place’ (Douglas, 1966, p. 36), and so something that becomes a pollutant by falling out of an already established symbolic spatial order. Instead, **pollution acts as a medium to carve out territories and thus to establish such an order in the first place. Polluting matter is not in or out of place, but a spatial operator that creates places.** Understood as a theory of territorialization, Serres’ considerations represent a counterpoint to Deleuze and Guattari’s (1987, pp. 310–350) theory of territory in their famous chapter on the refrain in Thousand Plateaus. To them, animals carving out their territory are proto-artists and not conquerors (Folkers, 2017). However, both Serres and Deleuze/Guattari have a similar systematic idea about the appropriation – whether artful, economic, polluting or violent – of territory. Both argue that appropriation hinges on material operators that carve out a territory by becoming expressive. Deleuze and Guttarri (1987, p. 315) argue that everything – excrement, leaves, a bird’s song – can become a ‘matter of expression’. As a matter of expression things or pieces of matter undergo an ‘incorporeal transformation’ (Deleuze & Guattari, 1987, p. 81) and acquire a semiotic quality. For example, a leaf turned upside down by a bird is no longer just a piece of biomass but a signpost in its habitat (Deleuze & Guattari, 1987, p. 315). Against this backdrop, it becomes possible to see CO2 emissions not only as a pollutant but also as expressive or ‘informationally enriched matter’ (Barry, 2013, p. 141). As such they serve as the condition of possibility for the legibility of the atmosphere as a valuable dumb space. Air-appropriation is not only an act of occupation but also of signification. Industrial carbon footprints are an inscription, an act of ‘earth writing’ (Yusoff, 2009, p. 1010), or rather air writing, that enables the subsequent description of the atmosphere. Science and technology studies scholars like Paul Edwards (2010) have rightly emphasized that all knowledge about atmospheric pollution and climate change depends on a ‘vast machine’ of sensors, data infrastructures and computer models. However, one should not forget the agentive role carbon molecules play in climate science by acting both as pollutant and ‘tracer – a way to see relations’ (Tsing et al., 2017, p. M-8). A series of scholars have convincingly argued (Bond, 2013; Jonas, 1984; Masco, 2010) that our knowledge of the environment hinges on environmental disruption and the materiality of pollutants that render visible the relations of ecosystems. In this sense, carbon is not just a passive material but a medium that together with scientific apparatuses takes part in the disclosure of the natural world. The ‘vast machine’ of climate science only reads what acts of air-appropriation have already ‘written’ in the sky. That is why environmental knowledge in the Anthropocene is no longer about observing nature ‘out there’, but increasingly about the interpretation of human traces. The epistemology of the sciences in the Anthropocene is more akin to what is traditionally understood as a particular feature of the humanities: making explicit the implicit structures of the lifeworld, spelling out what has been inscribed in it. Vico’s verum factum principle according to which one can only know the truth of what one has made seems to apply here (Chakrabarty, 2009, pp. 202–203). The difference is, however, that in this case the ‘making’ is always already a destroying and disrupting, not a factum but a destructum, not a performative but a deformative act. The deformation and displacement of carbon – from geological to atmospheric strata – has increased its informational value turning it into a ‘signal of the Anthropocene’ (Zalasiewicz et al., 2014, p. 37). The **processes and materials that cause the climate crises also underpin the science that made the crisis visible and the atmosphere legible. James C. Scott (1998, pp. 11–52) has famously shown how ‘nature and space’ became legible by the state through processes of standardization and simplification.** The sovereign vision rests on material practices that rendered the world visible and governable. The legibility that ‘carbon’ induces follows a similar logic. Carbon metrics are simplifying by not only measuring all greenhouse gas (GHG) emissions against the benchmark of CO2 (MacKenzie, 2009) but also by utterly reducing nature to the stocks and flows of carbon (Bonneuil & Fressoz, 2016, p. 56). After all, the measurement of the world in terms of ‘carbon’ does not just take into account CO2 emissions from the combustion of fossil fuels or the carbon footprint associated with consumer goods along their ‘life cycle’ (Freidberg, 2013). With the emergence of emissions trading (Lohmann, 2005) ecosystems that sequester CO2, such as tropical rainforests, entered the climate balance sheet as potential offsets for industrial GHG emissions. ‘Carbon’ not only makes atmospheric space measurable, but also a wide variety of ecospaces that partake in the planetary carbon cycle: from forests to oceans. Carbon is no longer just the basic chemical building block of life (sustaining)-processes on earth, but increasingly its principle of legibility and accountability. As in high-modernist state projects, the visibility that carbon brought about produces measurable, dividable and fungible spaces of nature through an epistemology that eclipses alternative ways of knowing (Moreno et al., 2015).2 From the (re)distribution of ecospace to the re-appropriation of the earth **The ecological nomos of the earth hinges on the prior process of air-appropriation because this material-semiotic appropriation constituted the epistemological conditions of possibility to measure and divide the ecospace of the earth.** This measurement, in turn, constitutes another political and economic reason why the air-appropriation provoked a new nomos. The colonization of the atmosphere poses questions over the right distribution of ecospace and the remaining atmospheric capital just as the old land-appropriation posed the question of how to distribute the supposedly ‘New World’ among the European colonizers. This is a socio-economic distributional conflict concerning the question of how to distribute the atmospheric dumb space, among whom and for what purpose. But it is also about the ‘redistribution of agency’ (Latour, 2017, p. 235) because it raises the question of who can be held accountable for the colonizing consumption of atmospheric space, or, put differently, who is the author of air writing. The question of authorship is a particularly tough one in the hermeneutics of the atmosphere. The carbon traces in the atmosphere do not come with a signature. The atmosphere remembers air writings. It has a good, in fact all too good, memory for retaining carbon traces for centuries (on the memory of the earth, see: Szerszynski, 2019), but it is a pretty messy archiver. It only retains and accumulates the writings itself and does not care about who wrote it. For the atmosphere, the author is always already dead. However, if climate knowledge is about the interaction between carbon air writing and its scientific decipherment, then there is more than one possible reading of the atmosphere and way of construing authorship. For the hegemonic Anthropocene narrative, the author of air writing is humanity per se, which systematically sidesteps considerations of distributing atmospheric space according to differentiated responsibilities for global heating. The hegemonic climate regime does not do much better. It allocates atmospheric capital through a budgeting approach. According to the Paris Agreement (UN, 2015) there should be net zero emissions, and so a balanced budget, by 2050. Until then there is only a limited amount of available carbon space left to divide. The remaining budget is then distributed among nation states (Lövbrand & Stripple, 2006). This amounts to an economistic and future-oriented reading of the carbon traces. It does not focus on who has left traces in the past, but rather on how much available carbon space this leaves for the future.

#### As further evidence – rocket launches have the potential to devastate the environment especially as private companies enact more and more

[Tereza Pultarova, 7-26-2021, "The rise of space tourism could affect Earth's climate in unforeseen ways, scientists worry," Space, https://www.space.com/environmental-impact-space-tourism-flights]

"Demand for suborbital tourism is extremely high," Kasaboski said. "These companies virtually have customers waiting in a line, and therefore they want to scale up. **Ultimately, they would want to fly multiple times a day, just like short-haul aircraft do." The rate of rocket launches delivering satellites into orbit is expected to grow as well. But Kasaboski sees bigger potential for growth in space tourism.** "It's like the difference between a cargo flight and a passenger flight," Kasaboski said. "There's a lot more passengers that are looking to fly." The problem is, according to Ross, that the scientific community has no idea and not enough data to tell at what point rocket launches will start having a measurable effect on the planet's climate. At the same time**, the stratosphere is already changing** as the number of rocket launches sneakily grows. "The impacts of these [rocket-generated] particles are not well understood even to an order of magnitude, the factor of 10," Ross said. "**The uncertainty is large, and we need to narrow that down and predict how space might be impacting the atmosphere."** So far, the only direct measurements of the effects of rocket launches on chemical processes in the atmosphere come from the space shuttle era. In the 1990s, as the world was coming together to salvage the damaged ozone layer, NASA, NOAA and the U.S. Air Force put together a campaign that looked at the effects of the emissions from the space shuttle's solid fuel boosters on ozone in the stratosphere. "In the 1990s, there were significant concerns about chlorine from solid rocket motors," Ross said. "Chlorine is the bad guy to ozone in the stratosphere, and there were some models which suggested that ozone depletion from solid rocket motors would be very significant." The scientists used NASA's WB 57 high-altitude aircraft to fly through the plumes generated by the space shuttle rockets in Florida. Reaching altitudes of up to 60,000 feet (19 km), they were able to measure the chemical reactions in the lower stratosphere just after the rockets' passage. "One of the fundamental questions was how much chlorine is being made in these solid rocket motors and in what form," David Fahey, the director of the Chemical Sciences Laboratory at NOAA, who led the study, told Space.com. "We measured it several times and then analyzed the results. At that time, there were not enough space shuttle launches to make a difference globally, but locally one could deplete the ozone layer due to this diffuse plume [left behind by the rocket]." The space shuttle retired 10 years ago, but rockets generating ozone-damaging substances continue launching humans and satellites to space today. In fact, in 2018, in its latest Scientific Assessment of Ozone Depletion, which comes out every four years, the World Meteorological Organization included rockets as a potential future concern. The organization called for more research to be done as the number of launches is expected to increase.

#### Climate Change is its own form of violence and can devastate communities. Solnit ‘14

[Rebecca Solnit,4-1-2014, "Call climate change what it is: violence," Guardian, https://www.theguardian.com/commentisfree/2014/apr/07/climate-change-violence-occupy-earth]

But if you're tremendously wealthy, you can practice industrial-scale violence without any manual labor on your own part. You can, say, build a sweatshop factory that will collapse in Bangladesh and kill more people than any hands-on mass murderer ever did, or you can calculate risk and benefit about putting poisons or unsafe machines into the world, as manufacturers do every day. If you're the leader of a country, you can declare war and kill by the hundreds of thousands or millions. And the nuclear superpowers – the US and Russia – still hold the option of destroying quite a lot of life on Earth. So do the carbon barons. But when we talk about violence, we almost always talk about violence from below, not above. Or so I thought when I received a press release last week from a climate group announcing that "scientists say there is a direct link between changing climate and an increase in violence". What the scientists actually said, in a not-so-newsworthy article in Nature two and a half years ago, is that there is higher conflict in the tropics in El Nino years, and that perhaps this will scale up to make our age of climate change also an era of civil and international conflict. **The message is that ordinary people will behave badly in an era of intensified climate change.** All this makes sense**, unless you go back to the premise and note that climate change is itself violence. Extreme, horrific, longterm, widespread violence.** Climate change is anthropogenic – caused by human beings, some much more than others. We know the consequences of that change: the acidification of oceans and decline of many species in them, the slow disappearance of island nations such as the Maldives, increased flooding, drought, crop failure leading to food-price increases and famine, increasingly turbulent weather. (Think Hurricane Sandy and the recent typhoon in the Philippines, and heat waves that kill elderly people by the tens of thousands.) Climate change is violence. So if we want to talk about violence and climate change – and we are talking about it, after last week's horrifying report from the world's top climate scientists – then let's talk about climate change as violence. Rather than worrying about whether ordinary human beings will react turbulently to the destruction of the very means of their survival, let's worry about that destruction – and their survival. Of course water failure, crop failure, flooding and more will lead to mass migration and climate refugees – they already have – and this will lead to conflict. Those conflicts are being set in motion now. You can regard the Arab Spring, in part, as a climate conflict: the increase in wheat prices was one of the triggers for that series of revolts that changed the face of northernmost Africa and the Middle East. On the one hand, you can say, how nice if those people had not been hungry in the first place. On the other, how can you not say, how great is it that those people stood up against being deprived of sustenance and hope? And then you have to look at the systems that created that hunger - the enormous economic inequalities in places such as Egypt and the brutality used to keep down the people at the lower levels of the social system, as well as the weather. People revolt when their lives are unbearable. Sometimes material reality creates that unbearableness: droughts, plagues, storms, floods. But food and medical care, health and well-being, access to housing and education – these things are also governed by economic means and government policy. That's what the revolt called Occupy Wall Street was against. **Climate change will increase hunger as food prices rise and food production falters**, but we already have widespread hunger on Earth, and much of it is due not to the failures of nature and farmers, but to systems of distribution. Almost 16m children in the United States now live with hunger, according to the US Department of Agriculture, and that is not because the vast, agriculturally rich United States cannot produce enough to feed all of us. We are a country whose distribution system is itself a kind of violence. Climate change is not suddenly bringing about an era of equitable distribution. I suspect people will be revolting in the coming future against what they revolted against in the past: the injustices of the system. They should revolt, and we should be glad they do, if not so glad that they need to. (Though one can hope they'll recognize that violence is not necessarily where their power lies.) One of the events prompting the French Revolution was the failure of the 1788 wheat crop, which made bread prices skyrocket and the poor go hungry. The insurance against such events is often thought to be more authoritarianism and more threats against the poor, but that's only an attempt to keep a lid on what's boiling over; the other way to go is to turn down the heat. The same week during which I received that ill-thought-out press release about climate and violence, Exxon Mobil Corporation issued a policy report. It makes for boring reading, unless you can make the dry language of business into pictures of the consequences of those acts undertaken for profit. Exxon says: We are confident that none of our hydrocarbon reserves are now or will become 'stranded'. We believe producing these assets is essential to meeting growing energy demand worldwide. Stranded assets that mean carbon assets – coal, oil, gas still underground – would become worthless if we decided they could not be extracted and burned in the near future. Because scientists say that we need to leave most of the world's known carbon reserves in the ground if we are to go for the milder rather than the more extreme versions of climate change. Under the milder version, countless more people – species, places – will survive. In the best-case scenario, we damage the Earth less. We are currently wrangling about **how much to devastate the Earth**. In every arena, we need to look at industrial-scale and systemic violence, not just the hands-on violence of the less powerful. When it comes to climate change, this is particularly true. Exxon has decided to bet that we can't make the corporation keep its reserves in the ground, and the company is reassuring its investors that it will continue to profit off the rapid, violent and intentional destruction of the Earth. That's a tired phrase, the destruction of the Earth, but translate it into the face of a starving child and a barren field – and then multiply that a few million times. Or just picture the tiny bivalves: scallops, oysters, Arctic sea snails that can't form shells in acidifying oceans right now. Or another superstorm tearing apart another city. Climate change is global-scale violence, against places and species as well as against human beings. Once we call it by name, we can start having a real conversation about our priorities and values. Because the revolt against brutality begins with a revolt against the language that hides that brutality.