

Contents lists available at ScienceDirect

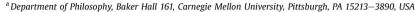
Studies in History and Philosophy of Biological and Biomedical Sciences

journal homepage: www.elsevier.com/locate/shpsc



Logical empiricists on race[☆]

Liam Kofi Bright a,b,*



^b Department of Philosophy, Logic, and Scientific Method, London School of Economics, Houghton Street, London WC2A 2AE, Lakatos Building, United Kingdom



ARTICLE INFO

Article history: Received 16 June 2016 Received in revised form 3 July 2017

Keywords: Logical empiricists Philosophy of race Human racial taxonomy Biology Anti-fascism

ABSTRACT

The logical empiricists expressed a consistent attitude to racial categorisation in both the ethical and scientific spheres. Their attitude may be captured in the following slogan: human racial taxonomy is an empirically meaningful mode of classifying persons that we should refrain from deploying. I offer an interpretation of their position that would render coherent their remarks on race with positions they adopted on the scientific status of taxonomy in general, together with their potential moral or political motivations for adopting that position.

© 2017 Published by Elsevier Ltd.

1. Introduction

The logical empiricists developed a view of race that may be stated as such: human racial taxonomy is an empirically meaningful mode of classifying persons that we should refrain from deploying. To defend this claim I shall consider the works of a central European subset of the logical empiricist movement: Carnap, Neurath, Schlick, Reichenbach, Waismann, Hahn, Frank, and Lewin. One consequence of this is that, despite the warnings of Uebel (2013), I treat members of both the Vienna Circle and the Berlin Society together under the name 'logical empiricists'. What is more, the Berlin versus Vienna distinction is far from the only distinction between the various thinkers I cover that I am going to be glossing over - they were an ideologically and philosophically diverse set. Further, finally, I am going to consider these thinkers' views expressed throughout their careers without drawing particular attention to the time of writing of the various extracts I consider. I hence do not claim that the view I developed here was held by any actual logical positivist nor less that this was a

E-mail address: liamkbright@gmail.com.

consensus or collectively held opinion; only that, based on what the logical empiricists whose work I review did say about race, somebody similar to the people listed on the epistemological and moral commitments regarding the issues actually surveyed could well have adopted the particular view I put forward for the particular reasons I suggest. This essay should not be taken as establishing, or attempting to establish, that there was a unified position on human racial taxonomy across the whole logical empiricist movement.

The logical empiricists surveyed very rarely wrote directly on human racial categorisation, and never did so at length. There is no logical empiricist treatise on human racial taxonomy. However, they often referred to what I shall call racial explanations. A racial explanation purports to explain phenomena in a way that involves either referring directly to the racial categorisation of those involved, or by claiming that certain features of those involved track racial categorisation. For instance, if one answered the question "Why does Rudson like the music of Bruce Springsteen?" with the response "Rudson is black, and all black people like the music of Bruce Springsteen" then one has offered a (spurious) racial explanation. This example also makes clear that I am using 'explanation' in a non-factive sense; some philosophers may prefer to think of these as 'attempted racial explanations', while I stick with the shorter phrase for ease of reading. In this paper I will see how much information about the logical empiricists' views of human racial taxonomy can be garnered from what they say about racial explanations. To do this I bring together and display many of the logical empiricists' remarks on race as they appear in those texts of theirs that have been translated into English. In addition, I offer a unifying

[†] Thanks to Dan Malinsky, Haixin Dang, Hannes Leitgeb, Eric Schliesser, Chike Jeffers, Quayshawn Spencer, Teddy Groves, Gregory Frost-Arnold, Aaron Novick, and Anonymous Reviewers at Studies for the History and Philosophy of Science, Kevin Zollman, and Zina B. Ward. Special thanks to Dan Kaplan for translation of the Neurath's foreword to Galton. This work was supported by NSF grant SES 1254291.

^{*} Department of Philosophy, Baker Hall 161, Carnegie Mellon University, Pittsburgh, PA 15213—3890, USA.

account of what the logical empiricists might have thought about racial categorisation which would unify these remarks by the logical empiricists and which I hope would be attractive to people with similar commitments as them.

2. The scientific status of racial categories

In the spirit of the logical empiricists' own split between factual and normative judgements, I separate out work on racial explanation which occurs in descriptive contexts from their ethical or political commentary on race. I begin with the descriptive uses of race. I have found six passing references to racial explanation and two sustained engagements with racial explanation. I will consider one of those sustained engagements, from Moritz Schlick, in the next section, since it occurs in the context of a work on ethics. The six passing references and the remaining sustained engagement with racial explanation will be dealt with in this section.

The first of the passing references to race is from Friedrich Waismann:

... the expression "causes of a war" may mean three different things: either the events, conditions, processes, inherited racial dispositions and other factors which, in actual fact, influenced the impulses of the masses ... In the first sense, what the causes have been, *may* be found by observation ... though it must be admitted that we are still very far from a real understanding of historical processes. (Waismann, 2011, 125)

Waismann does not return to this notion of explaining a rush to war by means of appealing to the 'inherited racial dispositions' of the masses, so it is difficult to know whether he thought that there were any true historical explanations which involved appeal to such entities. None the less, the passage is informative about Waismann's view of race. Firstly, Waismann thought that racial dispositions could be inherited. Second, racial dispositions are the sort of things that can at least potentially cause outcomes of interest. Relatedly, earlier on in the text (p.64) Waismann had said that the idea of a 'causal law' had 'absorbed into its meaning ideas and modes of thinking inherited from many different ages, races, and civilisations'. While this does not tell us much about what Waismann thought of racial categorisation as a causal explanatory tool it does tell us that he thought that one could identify people of different races as having made contributions to the philosophy of science, and hence that there are meaningful ways of racially categorising people. Thirdly, immediately after raising the possibility of explaining historical events by means of inherited racial dispositions, Waismann stresses that we do not actually have good theories of historical processes. As we shall see, Waismann is fairly typical of the logical empiricists on race. He raises the possibility of explaining human behaviour by appeal to a racial explanation, and suggests that such an explanation would be an empirically meaningful example of (quasi-biological) reasoning. But he does not actually endorse any such explanation, and if anything seems to go out of his way to undermine this explanation.

The second passing reference comes from Reichenbach. When discussing the (then present) state of the logical empiricist movement in 1930s Germany, he remarks: "Science, surely, is not limited to national or racial boundaries; we prefer to stand for this historical truth, in spite of all the pretensions of a certain modern nationalism" (Reichenbach, 1936, p. 160). Historical context makes it clear that the 'certain modern nationalism' Reichenbach is referring to is Nazism. It is hard to infer what Reichenbach believed about race in general from this, only that he believed that Nazi attempts to explain dispositions to produce different scientific

theories by referring to different racial dispositions were not resulting in truths.

The third passing reference comes from Otto Neurath. He imagines designing a school curriculum, and in particular somebody suggesting that we teach Nazi racial theory. He responds as such: "If we were to discuss the Nazi literature on race, as far as it is based on a purely empiricist language. I think we would agree about its undesirability, because we did not think the approach sufficiently serious, but rather frivolous" (Neurath, 1983, p. 241). He then says that lessons on telepathy would be treated in the same way, implicitly equating the epistemic worth of Nazi racial science to claims about telepathic powers. Again, note that Neurath does suggest that at least some fragment of the Nazi literature on race can be reconstructed within a purely empiricist literature. Neurath thus does not suggest that racial categorisation is metaphysical, or meaningless. He goes on to say: "The spreading of muddle does not seem to be as simple as the spreading of a successful technique. The frivolity of the race theory developed by the Nazis in many books on character, physiognomics and heredity, did not even infect the mathematics, astronomy, chemistry, and physics of the Nazis very much. If it had, the firing capacity of their machine-guns might have been reduced" (Neurath, 1983, p. 242). Thus, Neurath's reference to a racial theory is (in particular) a reference to a biological racial theory. Further, this reference is again made in the context of mocking the racial theory's intellectual merits.

The fourth passing reference is from Hempel's *The Function of* General Laws in History. Hempel is trying to illustrate the idea of historical 'pseudo-explanation'. This is a story which seems to explain a certain event having occurred, but which appeals to empirically meaningless concepts in the process of doing so. These explanations must be rejected as unintelligible, Hempel claims. To illustrate this idea he turns to the following example: "In the case of non-empirical explanations or explanation sketches, on the other hand-say, by reference to the historical destination of a certain race ... the use of empirically meaningless terms makes it impossible even roughly to indicate the type of investigation that would have a bearing upon those formulations, and that might lead to evidence either confirming or infirming the suggested explanation" (Hempel, 1942, p. 43). This is hence another case of a logical empiricist discussing a racial explanation only to reject it. Of great interest is what exactly the empirically meaningless term is here. The sentence structure indicates that it is the 'historical destiny' of the race. It is meaningless to declare groups have destinies, Hempel is not claiming that it is meaningless to appeal to racial groupings. Further, the context of utterance and the specific language of the 'historical destination' of a race used make it highly likely that what Hempel is attacking here is Nazi racial ideology. So, as with Neurath and Reichenbach, this is a positivist reacting negatively to Nazi racial explanations in particular.

The fifth passing references comes from Frank (1949). In his book Modern Science and its Philosophy Frank mentions racial theories on a couple of occasions. First, in discussing why different scientists prefer more intuitive or abstract theories respectively, Frank notes that people sometimes treat it as a function of the scientist's personality, and that '[t]hese psychologic factors are sometimes taken to be facts of individual psychology, sometimes of race or nationality'. However, Frank immediately after says that 'the importance of such pyschologic considerations has been exaggerated' and that they 'play little role in the world of the great masters of science to whom we are chiefly indebted for the present state of the sciences' (Frank, 1949, p. 150). Second, Frank says that adopting the tenets of 'logical positivism' will help ensure that foundational problems in physics do not spread to the scientific world view as a whole, and in particular guard against 'those that advocate a return to pre-Galilean science, whether it be under the name of "idealism,"

"holism," or "organicism," or even under the name of "race or nation"" (Frank, 1949, p. 195). Tellingly, he immediately afterwards cites as an example of such enemies of positivism the editorial stance of a scientific journal that he points out was published under the auspices of the Nazi government.

The sixth passing reference comes from Carnap's Aufbau. Carnap is discussing different types of terms. A term-type is a collection of words/phrases such that all can be substituted for each other in meaningful sentences and have the sentence remain meaningful. For instance, 'and' and 'or' are of the same term type. Anywhere you find one you could substitute it for the other and obtain a meaningful sentence, although the truth-value of the sentence may be altered. In contrast, 'and' and 'Alexis' are not of the same term-type. One will often find that one cannot substitute a proper name like 'Alexis' for a logical connective like 'and' while ensuring the resultant sentence as meaningful. For instance, with all due respect to Terminator X, "Chuck D and Flava Flav constitute the greatest rap duo the world has ever seen" is a meaningful and true sentence. "Chuck D or Flava Flav constitute the greatest rap duo the world has ever seen" is a meaningful but false sentence, since it entails that either 'Chuck D' or 'Flava Flav' names a rap duo, whereas both are actually names for individuals. Whereas "Chuck D Alexis Flava Flav constitute the greatest rap duo the world has ever seen" is simply not a syntactically well-formed sentence. Carnap is illustrating the idea that words and phrases can be of different types by giving some examples of terms that are in different types. He lists 'the Mongolian Race' as in the 'biological' type (Carnap, 1961, p. 54). Once more, and this time explicitly, we find a positivist treating racial taxonomic term as picking out biological features of persons. While explaining his view, Carnap asserts that the Mongolian race cannot be located in Switzerland in the same sense that an individual rock might be. This entails that, whatever the Mongolian race is, Carnap does not think it is the sort of thing about which it makes sense to say that it has a straightforward physical location. However, Carnap does not discuss whether or not there are any true sentences about people that can be formed which use the term 'the Mongolian race'. So, once again, we do not get any endorsement of a racial explanation, thus making it difficult to know what Carnap thought about the term, beyond that it picks out a biological category.

Before moving on to Carnap's more substantial engagement with racial explanations, I review what theses six passing references have in common. First, racial categorisations are empirically tractable differences among persons, not metaphysical or meaningless. Reichenbach, Neurath, Frank, and Waismann suggest that racial explanations (if correct) would explain behavioural differences between persons: different dispositions to go to war, different dispositions to produce scientific theories, and different characters. The logical empiricists' general view was that meaningful explanations must only involve either claims that are analytically true or claims that have been phrased in terms that are reducible to observation terms; in later liberal later views, this was weakened to claims which stand in some sort of confirmatory or epistemic relationship to empirical evidence (for the development of the later more liberal view, the classic text is Carnap, 1936). This entails that terms picking out racial categories must be picking out an observable difference between persons, or at least must be picking out a kind of difference between persons about which epistemically pertinent empirical evidence could be gathered. Second, Waismann, Carnap, and Neurath all suggest that racial theory as they discuss it is biological. Third, all either refrain from endorsing or openly oppose the racial explanations they consider. Finally, with Hempel, Reichenbach, Frank, and Neurath, it is not just any racial explanations they discuss, but the racial explanations which the Nazis offered in particular.

The most sustained engagement between a logical empiricist figure and a racial explanation comes in Rudolf Carnap's The Philosophical Foundations of Physics. Understanding this episode will require some information about the wider context of the work it is embedded within. A quantitive concept is one which allows us to assign a numerical magnitude to an entity according to specified measurement procedures. For instance, 'degrees celsius' is a very familiar quantitative concept, related to qualitative concepts of warmth, heat, coldness, etc. Carnap argues at length that there are significant practical advantages for scientists in adopting quantitative over qualitative concepts for their explanatory purposes. He then discusses why some philosophers have objected to the manner in which scientists use quantitative concepts to explain phenomena. He respectfully discusses Goethe and Schopenhauer's defences of excluding quantitative concepts from scientific explanations and using qualitative alternatives instead. He grants that there are pedagogical advantages to the more intuitive methods they propose, but none the less asserts the superiority of the quantitative method. Goethe and Schopenhauer's mistake, he believes, is driven by the fact that when one uses concepts one is familiar with it is easy to see the link between the explanation offered and the phenomenon of interest. However, the unfamiliar quantitative concepts of science require extra translation into natural language for those of us unfamiliar with them to be able to see how they address the matter we are concerned with. These philosophers have been led by this fact into making the mistake of thinking that the quantitative concepts are not actually addressing the phenomena which concern us, or at least are only doing so indirectly. Carnap understands why one might think this, but he views it as simply an especially tempting error brought about by the fact that we are first taught to use qualitative terms in natural

However, after the respectful discussions of Goethe and Schopenhauer, Carnap turns to a work by Kurt Riezler. This discussion of Riezler has an entire chapter devoted to it. Riezler constructed a dialogue in which Aristotle came back to life, observed the state of modern science, and gently chided scientists for their neglect of the study of Being. To do this, Riezler's Aristotle describes a case of scientists responding to the fact that different evaluations of a day's temperature are given by two individuals. Riezler's Aristotle says that 'The day is cold to a Negro and hot to an Eskimo' (Carnap, 1966, p. 117), and asks the scientist what they would say about this case. Riezler imagines the scientist as first saying that agreement can be reached by using some measurement procedure which both can see assigns the day 50°. However, Riezler's Aristotle objects to this on the grounds that it involves 'eliminating both the Negro and the Eskimo' (Carnap, 1966, p. 117). The scientist who responds by emphasising the possibility of reaching agreement via the introduction of the quantitative temperature concept is accused by Riezler's Aristotle of mistaking agreement for reality; they have made the mistake of thinking 'since it is true for both the Negro and the Eskimo [that it is 50°] you call it objective reality' (Carnap, 1966, p. 118). However, this must be rejected because 'This reality does not depend on the Negro or the Eskimo. It is related to neither but to the anonymous observer' (Carnap, 1966, p. 118). Truth, or Being (which is what Riezler's Aristotle contents they ought to be investigating) is something that must be related to the Negro and the Eskimo.

Riezler's Aristotle then considers a racial explanation for the different reactions. Riezler imagines the scientist responding to Aristotle by saying that "... the system under observation needs to be enlarged to include the physical happenings within the Negro or Eskimo" (Carnap, 1966, p. 118). However, this sort of racial explanation is still not good enough for Riezler's Aristotle, for it still does not get at the real difference between what the Negro and the

Eskimo feel. Instead it describes them both as a collection of 'physical and chemical happenings ... what they are relative to the anonymous observer, a compound of happenings described by relations between measurable quantities' (Carnap, 1966, 118). This, Riezler charges, fails to describe 'cold as cold and warm as warm'. A more proper explanatory procedure, Riezler's Aristotle maintains, would have to involve appealing to the fact that all humans know what it is like to feel hot, and cold, respectively.

Note that Riezler's preferred explanation is indeed a racial explanation. Although Riezler's preferred explanatory strategy seems to emphasise the shared humanity of the Eskimo, the Negro and whoever is observing their behaviour, in fact the whole point of this episode is to explain the difference between them. Riezler's Aristotle wants us to use our common understanding of what it means to feel hot (or cold) in order to understand why the Eskimo feels hot and the Negro cold. Although we all know what it feels to be hot (or cold), some difference in dispositions to have those feelings tracks the distinction between the Eskimo and the Negro. What is more, Riezler actually has a doubly strong commitment to racial explanation in terms of familiar qualitative racial categories. For Riezler insists on applying two qualitative classificatory schema. Firstly, Riezler's Aristotle demands that scientists make use of concepts like 'cold' and 'warm' in their explanations if they are to get at Being. Secondly, Riezler's Arisotle implicitly uses the classification of humans into different racial categories (Eskimo and Negro) as part of what explains the difference in their reaction to the same day. When Riezler's straw-scientist responds by trying to give a quantitative racial explanation in terms of physiology, Riezler rejects this precisely for moving away from familiar qualitative terms, which here seems to be a move from division of the human race in qualitative racial terms into quantitative terms of the sort an 'anonymous observer' might use. Riezler is thus doubly committed to qualitative explanations, and part of this is a commitment to qualitative racial explanation.

Carnap's assessment of this discussion is scathing. He accuses Riezler of peddling superstition. The chapter is called *The Magical* View of Language, where the magical view is defined as the belief that "there is a mysterious natural connection of some sort between certain words (only, of course, the words with which [we] are familiar) and their meanings" (Carnap, 1966, p. 118). The discussion immediately after giving this definition makes it clear that Carnap thinks this is a childish mistake. Riezler is then accused of only believing what he does because he harbors latent belief in 'the magic of words' (Carnap, 1966, p. 119), and Carnap sympathetically discusses a review of Riezler's book by Nagel which makes Riezler out to be even more misguided (Carnap, 1966, p. 120). Carnap does not actually argue against Riezler's view; he simply moves straight to this insulting psychological explanation of why Riezler has adopted the view he has. What, if anything, can be inferred about Carnap's view of race from his reaction to this piece?

As with all the logical empiricists we have seen so far, Carnap is hostile to this purported racial explanation. However, the hostility is particularly marked in this case. For Carnap's explanation of Riezler's mistake does not actually differ from his explanation of Goethe and Schopenhauer's mistakes. The first idea Riezler's Aristotle rejects is Carnap's preferred strategy of scientific explanation by introducing quantitative temperature concepts to replace qualitative ones. This is rejected because its only advantage is a pragmatic one (it helps all parties reach agreement), whereas the scientist has forgotten that their task is to uncover Being or Truth. Such pragmatic advantages are precisely the sort of grounds that Carnap thinks should motivate one to adopt a quantitative classificatory schema, and he explicitly rejects the idea that our

classificatory schema must track real distinctions in nature: "Favouring quantitative over qualitative classificatory schema is no more than a matter of preference in the choice of an efficient language. There is not just one way to construct a language of science. There are hundreds of different ways. I can only say that, in my view, this approach to quantitative magnitudes has many advantages" (Carnap, 1966, p. 104). Riezler's mistake is thus a philosophical error about how concepts ought be used in scientific explanations, and it is essentially the same error made by Goethe and Schopenhaur. They have all made the mistake of thinking that just because they find it easier to associate qualitative terms like 'hot' and 'cold' with phenomena of interest than they do with technical quantitative terms, an explanation which goes via quantitative rather than qualitative terms must be changing the topic, not discussing whatever the proper topic matter of inquiry ought to be. There is, however, a huge rhetorical difference in how Carnap treats Riezler versus how he treats Goethe and Schopenhauer. Riezler gets a chapter devoted to labelling him as superstitious, Goethe and Schopenhauer are treated as misguided peers who none the less make interesting points.

Second, Carnap never suggests that where Riezler has gone wrong is in appealing to meaningless or metaphysical racial categories. At one point, while giving a gloss of Riezler's remarks, Carnap adds the detail that the Eskimo is from Greenland and the Negro from Africa (Carnap, 1966, p. 117). This implies that Carnap thought that the racial categorisations can be used as part of empirically meaningful assertions, since one can apparently observe the location of an individual and thus truly say "An individual of such and such a racial category is located in such and such a place". Hence, whatever explains the difference in rhetorical tone between Goethe and Riezler's treatment, it is not because Carnap is returning to his earlier hostile attitude to metaphysics as was displayed in (Carnap, 1959); if anything, as discussed in the next section and given the connection to Heidegger, it is more likely that the common thread between the more famous piece and this is hostility in response to perceived racialism.

To review, Carnap is notably, and distinctively, hostile to an explanation which involves appeal to human racial categorisation. However, although he is particularly hostile to this explanation as compared to similar explanations in other fields, nothing that he says implies that he is hostile to the explanation because it makes use of a meaning-less racial categorisation. Indeed, one of his remarks suggests that he does think one can make use of racial categories in true statements, implying that he believed that human racial categorisation is an empirically meaningful way of taxonomising persons. His work in the Aufbau suggests that, in particular, Carnap thought that racial terms pick out biological categories. Thus while we cannot conclude that Carnap actually endorsed making use of racial categories, it also seems that he thought that it is empirically meaningful to do so.

There is thus a confusing yet discernible pattern in the logical empiricist responses to human racial categorisation. These disparate thinkers writing at different times show much consistency; not just in their views, but also in the way these views are expressed. The logical empiricists thought that there are empirically meaningful methods of dividing humans up into racial taxonomic categories. Much of what they say indicates that if one were to do this, it would be a division of humans along biological lines. However, despite thinking that one could do so in principle, the logical empiricists never actually endorsed a racial explanation. Further, they were often overtly hostile to the racial explanations they consider. I will offer an explanation of this remarkable unity of style and content in the penultimate section.

3. The moral status of racial categories

I now turn to the logical empiricists views on the moral significance of racial categorisation. The logical empiricists frequently expressed hostility to ethnic or racial prejudice, and support for political acts which promoted more equitable racial relations. For instance. Reichenbach evinces contempt for those who would discriminate against people based on skin colour or the fact that they are Jewish (Reichenbach, 1951, p. 287). Kurt Lewin, who participated in the Berlin circle, went on to lay the foundations for sensitivity-training to combat racial and religious prejudice (Creath, 2013). Schlick says that thinking about the persona of Abraham Lincoln brings him a sort of moral-pleasure (Schlick, 1939, p. 106). He is not explicit, but I presume this is because of Lincoln's role as The Great Emancipator. The manifesto of the Vienna Circle declared them in favour of 'the unification of mankind' (Hahn, Neurath, & Carnap, 1973, 304-305). When illustrating the pedagogical use of his preferred 'pictorial statistical method' for education the public, Neurath chooses the example of how it can debunk false claims about "yellow peoples" out breeding and swamping "white peoples" that Neurath says have been used in " imprecise emotional expressions" that amount to calls to arms amongst Europeans (Neurath, 2017, p. 111). Likewise, as part of his generally condemnatory attack on Spengler's pessimistic view of cultural history, Neurath specifically critiques Spengler's claims that there are vast gulfs of misunderstanding between cultures and points out that we may appreciate art from a variety of different ethnic groups (Neurath, 1973b, p. 204).

This anti-racist tendency is noted not just in the positivists' published moral writings, but also in various secondary sources and unpublished works. In his autobiography when he attempted to sum up the shared political convictions of the Vienna Circle, Carnap described them as such: "... we had the conviction that mankind is able to change the conditions of life in such a way that many of the sufferings of today may be avoided and that the external and the internal situation of life for the individual, the community, and finally for humanity will be essentially improved" (Carnap, 1963, p. 83). In the latter years of his life Carnap told his daughter that "the poor white Americans and the blacks should get together then they would have more political power" (Gimbel, 2013), and was involved in black civil rights groups in LA. Scholars discussing Carnap have acknowledged the point, e.g. "Carnap had just such a lefttechnocratic inclination, for he was identified with the neue Sachlichkeit cultural movement, which was committed to internationalism" (Potochnik & Yap, 2006, p. 472). And when he died Schlick was working on a piece, the drafts of which contain lines such as:

Will I not prefer a thousand times more to cooperate with a reliable Chinese of good character than with an egoistic, insincere European?... People of good character, the kind and peaceful, belong together "by nature"; they form the invisible state of god, civitas dei ... Living together on the same territory, taken to the principle of belonging together, gives rise to all such evils which dog our divided world the most (Schleichert, 2003).

The logical empiricists thus have views clearly at odds with any simple form of racial nationalism. Indeed Schlick is surely deliberately introducing a racial contrast between 'a reliable Chinese' and an 'insincere European', only to make the point that the racial difference between him and the Chinese individual is not morally relevant for deciding who to form a community with, whereas the individual psychological characteristics of this Chinese and this European person are. Generally and consistently, the logical empiricists used their writings and statements (and in some cases

deeds) to indicate opposition to race hatred, nationalistic chauvinism, or ethnic prejudice.

Before moving on to the most sustained ethical or political engagement with race relations produced by a logical empiricist, it is worth acknowledging a text that might be thought to furnish a counter-example to the overall thrust of my remarks, but turns out to be curiously uninformative. This is the Neuraths' translation of Galton's work on eugenics. Genius and Inheritance. Otto and Anna Schapire-Neurath translated the text together, and wrote a foreword and introduction. Given Galton's personal views and the connection between his work on eugenic and defences of white supremacy (Blacker, 1951), one might expect there to be some commentary on this element of the text from the Neuraths. In their introduction they indicate sympathy for "the movement for the systematic improvement of race" (Neurath & Schapire-Neurath, 2016), but they do not comment on or give any indication of an opinion on the idea that systematic improvement would involve ensuring the dominance, superiority, or purity of the white (or any other) race in particular. The act of producing any translation at all of a eugenics text might be felt to be informative of some degree of sympathy for white supremacist positions, even if the matter is not explicitly commented upon. But this would be anachronism, for in the early 20th century there were defences of eugenicist positions which separated out a belief that selective breeding could improve human capacities from the belief that selecting for purer caucasian types was the way to achieve this – for an example see (Du Bois, 1909, pp. 153–155), and for some discussion of this point and the broader context relating specifically to the Neuraths' translation see (Uebel, 2010, p. 218). It cannot be ruled out that the Neuraths would have endorsed some such race-neutral vision of what systematic eugenics policy should involve. The Neuraths do not comment either way, and as such their translation of this text and introduction to it turns out not to be informative.

There is one example of a logical empiricist thinker giving sustained attention to a purportedly morally important difference between members of different races. This is Schlick's discussion of different moral judgements made by an African and a European in Problems of Ethics. Contrary to the picture of the logical empiricists steadfastly opposing the 'racial hatreds of their day', one finds Schlick deploying racialist tropes typical of early 20th century Europe. To illustrate the idea that what is judged to be moral changes from society to society Schlick tells the story (which, he notes, is taken from Darwin's writings) of 'an African savage' who felt pained at his own failure to revenge himself against a member of a different tribe who had wronged him. Eventually this individual slipped away and murdered somebody from the other tribe, and after having done so felt greatly relieved. Immediately after telling the story, Schlick asks: "Would anyone wish to deny that the feelings of the savage are "real" pangs of conscience, as these are felt by a moral civilised man?" (Schlick, 1939, p. 92) Schlick's use of the story tells us interesting things about Schlick's beliefs about race. For, assuming the 'savage African' and the 'civilised man' are of different races, then this is not a difference which shows itself in the ability to feel the pangs of conscience. Racial difference is not the sort of thing which leads to some people being more or less morally sensitive than others. In fact, Schlick claims that to deny this would be (objectionably) prejudiced. For, the full section reads "Would anyone wish to deny that the feelings of the savage are "real" pangs of conscience, as these are felt by a moral civilised man? If so, we can only attribute this to prejudice, for one will search in vain for the difference (Schlick, 1939, p. 92)." This is in line with Schlick's aforementioned use of the contrast between the Chinese and the European individuals. Schlick does not believe that racial differences introduce morally relevant differences.

Schlick goes further in rejecting morally relevant differences between the savage and the civilised person. He begins by playing down the difference between the European and the African; he points out that Europeans seem happy to believe that the destruction of their enemies is a moral obligation in times of war. He then says the following to explain the difference between the African and the European in the case of murdering the member of the other tribe: "The difference between the moral views of the African and a modern European in this respect is explained by the fact that the group which furnishes the standard for the formation of those views is for the savage the tribe or clan, but for the civilised man is extended to include a whole nation or state" (Schlick, 1939, p. 93). To the question: why does the African take their moral cue from a smaller group than the European? Schlick answers "What appears here in a single example holds universally. The content of the moral precepts that hold in a community, and that are taken over completely into the moral consciousness of its members, depends entirely upon its living conditions, upon its size and strength, its relation to the surrounding world, its civilisation, customs and religious ideas" (Schlick, 1939, p. 92). Hence according to Schlick, individuals from different races are just as morally sensitive as each other, and only prejudiced people would deny as much. Further, in so far as differences in moral precepts arise, it is because of sociological facts about the community an individual is reared in, and these sociological facts are not themselves explained by biological facts but rather a host of non-biological facts. Biological race is not used to explain morally relevant differences between communities.

On the other hand, the story Schlick uses involves racist tropes. The African is savage, the European civilised; the African's moral system disposes them to more violence than the European's; the African is contrasted with the modern European; the African's viewpoint is provincial, the European's much more universal. In short, at least taken at face value, Schlick's telling of Darwin's story depicts the African as backwards, violent and parochial.

The example of Schlick's faltering anti-racism is instructive. The logical empiricists do seem to have earnestly believed that their work would serve to foster international cooperation and the improvement of all people's conditions, and there is no evidence that any of them believed that racial differences tracked morally relevant differences. In the case of Schlick and Reichenbach they made it clear in writing that they did not think that racial differences tracked moral differences. In the case of Carnap his personal actions regarding abused racial and ethnic minorities made it clear that he opposed to the racist structures he lived within. Finally, Lewin's work included a direct attempt to weed racist sensibilities out of the population. However, for all this, nothing they said was inconsistent with holding views about differences between racialised groups which we should now reject, even if they were not founded on a biological theory of race. Such views are contained in Schlick's story, and while there is no reason to believe that others agreed with these views, there is equally no reason to believe they would not have endorsed such common prejudices as they were likely to have been raised with in late 19th and early 20th century Europe. In particular, they did not tend to offer explicit arguments which came to conclusions that would be inconsistent with holding such prejudices. It is not just that they may have failed to fully live up to their anti-racist convictions, but rather that nothing they said implies that their convictions could not have included such cultural chauvinism as Schlick's story actually displayed.

4. Voluntarist eliminativism

Thus far the following has been established. (i) the logical empiricists referred to human racial categories on multiple occasions, and imply that they thought human racial categorisation is part of a

biological theory meant to help explain human behaviour. (ii) they never endorse an explanation which involves appeals to the racial categories a person falls within. (iii) they are often very hostile to explanations which involve appeal to human racial categorisation, but never explicitly because it involves human racial categories. (iv) the logical empiricists shared personal anti-racist and internationalist political convictions. (v) they offered no reason to suppose that the claims of (i) - (iii) gave epistemological support to the antiracism of (iv). I will offer an interpretation of what the logical empiricists thought about race which unifies all of (i) - (iv) and respects the constraint laid out in (v). I cannot claim anything more than that it is a consistent interpretation of what they said in various places, since there is no explicit endorsement of this view.

I shall offer an interpretation of the logical empiricists' views which depends on a notion of the relativised a-priori, something like that which Friedman has stressed was a common element to the work of Carnap, Reichenbach and Schlick (Friedman, 1999; ch.3). I will give an outline of this view as it applies in general, and then to taxonomic schemes in particular. The starting point for the logical empiricists is that while all cognition must proceed within a conceptual scheme, there is no one conceptual scheme which all cognition must proceed within. To explain: science is in the business of providing organisations of our experience, and all these organisations presuppose some conceptual framework as a precondition for their applicability. The canonical examples of such conceptual schemes would be the different ways of viewing space given by Euclidean and various forms of non-Euclidean geometry. The lesson the logical empiricists drew from Einstein's successful deployment of non-Euclidean geometry in his theory of special relativity was that there are multiple conceptual schemes which may adequately describe the facts of experience, and that one can only decide between them based on conventional decision. It is not that there is a real structure of space waiting out there to be discovered, and which the best scientific theory should reflect in its choice of geometry. Rather, we voluntaristically adopt a conceptual framework which includes (say) Euclidean geometry to frame our scientific theories. Once we have made such a decision, it becomes an a priori truth for all those who use adopt this convention that the axioms of Euclidean geometry (and their logical consequences) are true. But it is only an a priori truth relative to this choice of conceptual framework; others are available, and may be preferable for certain purposes.

Deciding between conceptual frameworks can only be made on grounds which the logical empiricists did not consider fully epistemic. Adopting a conceptual scheme in which to describe one's experience is viewed as something like choosing a tool for a particular constructive project. One is not wrong in any purely cognitive goal-independent sense if one tries to lodge a nail in a wall using a slide-rule, one is simply wasting one's time given the availability of hammers. Much the same if one decides to use an inappropriate geometry to describe our experience of space. Conceptual frameworks are meant to make life easier for us by facilitating our organisation of experience. It is not a matter about which you can be correct or incorrect. It is a matter about which you can make more or less efficiency conducive decisions given one's goals C.f. (Carnap, 1988); (Friedman, 1999, p. 68); (Richardson, 2007).

What went for conceptual schemes in general went for taxonomic divisions in particular. First, for an empirical taxonomy one must be able to specify what observations one can make which allow one to determine that an object is of a sort that it can appropriately be taxonomised by the scheme in question. E.g. if you have a taxonomy of bird species, one must be able to pick out which entities are birds. Secondly, one must be able to specify what observations would allow one to place an appropriate entity into one taxonomic category rather than another. E.g. if you divide birds into

flighted and terrestrially-bound, you must be able to specify what counts as being able to fly and what counts as being terrestrially-bound. These conditions ensure that there must be some connection to the world external to the scientist by insisting that there are intersubjectively defined measurement procedures to determine when a classificatory concept applies. However, once these conditions are met then according to the logical empiricists there can be no in principle objection to using that taxonomy in explanatory theories unless and until one specifies some goal for which it would be inappropriate to deploy them.

The Carnappian version of the relativised a-priori has a distinctive feature that it will be worth paying explicit attention to in what follows. Carnap distinguishes between 'L-rules' and 'Prules'. The L-rules state the constitutive rules for the terms of the language and thereby ground a-priori truths concerning those terms, whereas the P-rules are admissible transformations based on synthetic, empirical, or extra-logical generalisations the language allows one to state. In the above example, one might think that the rules for picking out certain critters as birds were the Lterms of the language, and this grounds an a priori truth to the effect that any critter who meets the application conditions of the rule is a bird. Whereas an inference rule that allowed me to move from establishing that a bird is terrestrially bound to it being Australian is a candidate P-rule. For my purpose, the relevant distinction between these is found in what it means to change Lversus P-rules. As Friedman puts it, '[c]hanging the L-rules involves changing the language and therefore the meanings of the terms of the language, whereas changing only the P-rules involves no such change of language but only a revision of synthetic or empirical sentences formulated within a given ... language' (Friedman, 1999, p. 69). I shall be claiming that, conceived in these terms, the logical empiricists sought for a revision of our L-rules concerning racial terms rather than our P-rules.

Before turning directly to race, it will be illustrative to take some toy examples of human taxonomy. Consider three possible taxonomies of human persons, and assume all have a common method of picking out who is a human. The first groups people by Nation of Citizenship at 11.59 GMT on 18/06/2003. There are n many nations in the world, and as such this taxonomy groups people into n many sorts. We can readily imagine why such a taxonomy might be useful; it may be useful for tracking population movements, for instance. Compare this to what I shall call the Manu-Sphere taxonomy. This is a binary partition of human persons into "Humans who occupy space within a sphere of such and such a size around Manu Owusu at 11.59am on 07/08/1997" and "Humans who are outside of that sphere at that time". Under the vast majority of circumstances it will be pointless or superfluous to divide the world into those in the Manu-sphere and those without. But so long as we can (in principle) identify who Manu Owusu is and where they were at that time, and can measure what would count as a human currently occupying space within such and such a size sphere, the logical empiricists cannot say it is wrong or incorrect to use this taxonomy of human persons. The third taxonomy is another binary partition, drawn from an example Carnap gives in The Elimination of Metaphysics. There he discusses the idea of dividing the world into those things which are, and are not, 'teavy'. However, Carnap adds the proviso that there is no means of telling what is and is not teavy. The logical empiricists would reject the third taxonomy out of hand. The term 'teavy' has no empirical application, it is metaphysical nonsense to describe anything as 'teavy'. Hence there can be no taxonomy of individuals into those who are and are not teavy. To give a more serious case of the latter sort, this is precisely the objection the logical empiricists gave to dividing the world up into those objects which did and did not have entelechy, and then using this taxonomy in explanations of what separates life from non-life.

They claimed that entelechy had no empirical application, and hence could not feature in any explanatory story.

Let us apply the above directly to human racial categorisation. Racial taxonomies can be incorporated into a conceptual scheme by introducing terms for human races and then specifying empirical procedures which allow us to identify what entities fall under the remit of this taxonomy, and then how they should be taxonomised given the terms available. We will take as a toy example a racial taxonomy which divides all people up into the Celtic or Negroid categories. Assuming the taxonomic terms are well defined, then once such a taxonomy is part of our conceptual scheme it becomes a priori true to say of any individual that if they are in the specified class of entities then they are of some race or another. For instance, 'Everyone is either a Celt or a Negro' might be grounded in an L-rule that allows one to infer from the claim that somebody is a human to the claim that they are of some race, and this would therefore be an a priori truth, in our example racial taxonomy assuming that 'Celt' and 'Negro' have been given empirical meaning. There may be further P-rules – for instance, rules licensing inferences from x is a Negro to x has curly hair — stated concerning the taxonomic terms so defined. With these rules in place, sentences telling us that given individuals are of a particular races can also become true. For instance, our toy taxonomy may generate the truth that 'Liam is a Celt and Kofi is a Negro'. Finally, if we decided to abandon this framework, to no longer recognise any L-rules giving meaning to the terms 'Celtic' or 'Negroid' within our language and to no longer use this taxonomic system in our new conceptual framework, then the above sentences would no longer be meaningful. It is not that Kofi would have changed from being a Negro to no longer being one, but it shall simply no longer be a meaningful utterance for us to declare 'Kofi is a Negro', or 'Everyone is either a Celt or a Negro'.

Whether or not such a taxonomic scheme should be adopted (and thus such sentences given truth values) depends on how useful it would be to speak about people in this manner, given antecedently specified goals. Since the logical empiricists operated first in early 20th century Europe, and then many of them were later in mid 20th century America, they found themselves in situations where most people made frequent use of a somewhat more sophisticated racial taxonomic system in their conceptual schemes. Given what we have learned in sections 2 and 3, can we work out what they should have thought about the practice of human racial taxonomisation? Does it serve the logical empiricists' purposes to make use of human racial categorisation?

Consider the question: are there good sociological explanatory theories which rely on tracking who is within, and who is without, the Manu-Sphere? Such Manu-sphere style explanations cannot be ruled out as pointless in principle. Suppose Manu were at that time teaching people scuba diving. We may wish to explain why some students learned better than others by saying that students who were able to stay within the Manu-sphere are likely those who were better at following instructions. We could then draw out predictions for people's test scores at the end of the instruction period by seeing who managed to remain within the Manu-sphere. However, barring that sort of oddity, every time somebody tried to launch an explanation of some significant phenomena which revolved around somebody being within or without the Manusphere, sober-minded persons would rightly be highly suspicious of it, and would likely try to explain it away by other means. It is surely very inefficient to introduce into our conceptual scheme so ridiculous a pair of properties as Within- and Without-the-Manusphere. Anything we could explain via the Manu-sphere, we could most likely also explain via properties we already use in sociological theory. For instance, it is likely that the above use of the Manu-sphere could be replaced by picking out which students are dextrous and attentive, and we could thus predict exam scores by means of properties already recognised in psychology and sociology. As such, we could reject Manu-sphere explanations on grounds of inefficiency, and thus also reject the Manu-sphere taxonomy as a tool without a purpose.

The first part of my thesis concerning the logical empiricists is: their reactions to racial explanations can best be systematised if we interpret them as wanting people to reject human racial taxonomising. However, this is not because they thought it was without empirical application. Hence they did not want to reject it for the reasons one might reject explanations in terms of what is and is not teavy. To say of a given individual (e.g.) "Aisling Moloney is black" is more akin to saying "Aisling Moloney is within-the-Manu-sphere" than that "Aisling Moloney is teavy". It is not that racial taxonomic terms simply lack application; as (iii) notes, the logical empiricists never said anything to imply that one cannot determine where individuals stand with regard to racial taxonomic terms. Presumably they would have thought that if one were so inclined one could systematise human racial taxonomic terms in a roughly faithful-to-biological-usage way that would have generated coherent L- and P-rules for their usage. This goes even if they never endorsed any actual explanations of phenomena of interest which made use of human racial categorisation. What they did was just what we should expect somebody would do when faced with a Manu-sphere explanation. They indicated disapproval with the proposed explanation without saying that people actually are not within the relevant categories, and where they went into depth suggested that there were alternate explanatory strategies available which would be more adequate. I hence claim the logical empiricists believed that the racial taxonomy was a categorisation system which biologists ought to reject.

However, it is worth attending to the manner in which the logical empiricists advocated rejecting this taxonomy. For the logical empiricists do not directly argue against the utility of human racial taxonomising, nor do they just offer alternative explanations in place of explanations which appeal to somebody's position within a racial categorisation. The logical empiricists instead seem to have been actively hostile to racial categorisation and those who explain things in terms of racial taxonomies. The logical empiricists often describe those who offer racial explanations, and/or their work, in loaded terms which suggest that anybody who would use such a taxonomy is unintelligent or immoral. Carnap is scathing about the author who wants a racial explanation of differences between 'the Eskimo and the Negro'. Schlick describes the person who would ascribe behavioural differences between an African and a European to deep psychological differences as being motivated by mere 'prejudice'. Neurath describes Nazi racial science as 'frivolous' and equates somebody defending it to somebody defending telepathy. Reichenbach describes those who would explain differences in scientists' scientific theorising by appeal to ethnic differences as having taken on 'pretensions'. At the least, there is more rhetorical strength to this than would be necessary to express incredulity at the idea that human racial categorisation could be a useful taxonomic system.

My explanation for this hostility is that the logical empiricists can be interpreted as wanting to reject the racial taxonomy for moral and political reasons, rather than for reasons of conceptual parsimony or scientific efficiency. The logical empiricists' primary experience of racial categorisation being used in the social and scientific realm would have been by fascists in early-mid 20th century Europe. This, we saw, was even explicitly the context of Hempel, Frank, Reichenbach and Neurath's consideration of racial explanations. (The case of Carnap and Reizler comes well after the period of fascist dominance of central Europe. But by that point Carnap was involved in the civil rights movement in the US, and would thus have once more been involved in a political project

which pitted him against those who claimed that morally significant differences between persons tracked their racial categorisation.) The logical empiricists, on the other hand, were internationalists who were invested in the idea that people should see themselves engaged in a common project of universal (socialist) betterment. What is more, some of those discussed here – for instance, Neurath (Neurath, 1973a, p. 68) — would themselves have been directly subject to racial oppression, since they would have been classified as Jewish per the Nazi racial laws. Human racial categorisation would thus in their minds have been deeply connected to a divisive and oppressive political programme to which they were fundamentally opposed. Once one agrees to analytically divide people into racial categories, it becomes true of them that they are distinct by virtue of belonging to different categories. These truths can be used to ground social hierarchies and divisions which mirror those analytic divisions; and given the logical empiricists' experience of the rise of fascism they would have been only too familiar with the role that scientific racism can play in bolstering social racism.

The logical empiricists, on the other hand, self-conceived their philosophical mission as being involved in the struggle against fascism. They hence took it as part of their mission to undermine the intellectual support for fascism, and in particular to undermine support for theories which explained significant features of social life by appealing to differences which track human racial categories. But logical empiricist moral philosophy lacks the resources for sophisticated ethico-political argumentation. Means-end reasoning they can handle; but, with the disputed exception of the later Carnap (Carus, 2014; §4), they have no recognised means of rationally persuading people of final goals. It may simply come down to "Either you're an internationalist or you're not". All that is left in such cases is brute force persuasion, which is exactly what appears to be going on with the logical empiricists discussing racial taxonomy (c.f. Richardson, 2007, p. 310) (for discussion of Neurath's voluntarism in particular and how it made it difficult for him to condemn bad-ends rather than bad-means see Okruhlic, 2004, especially page 60). Hence, consistent with (v), it is not the logical empiricists' scientific philosophy (or commitment to empiricism) which is entailing their moral stance on race. Rather, their moral stance on race (or, at least, on socialist internationalism) is bolstering an aspect of their scientific philosophy: it is pushing them towards a position within philosophy of race. The second part of my thesis then is just this: the logical empiricists were eliminativists about racial categorisation because they thought using human racial taxonomic categorisation undermined political programmes they supported.

The position I am attributing to the logical empiricists can be clarified by appeal to the Carnappian distinction between L- and Prules. The logical empiricists can be interpreted as saying that we should refuse to bind ourselves to any L-rules that generate meanings for human racial taxonomic terms. We should not recognise such rules as legitimately governing our own linguistic behaviour, essentially denying human racial taxonomic terms meaning via denying them application conditions. This is to distinguish the view I attribute to them from two nearby positions. First, they might have thought that our present practice is teavy-esque, in that there are simply no L-rules grounding the terms' meaning in a manner acceptable to their empiricist scruples. However, as noted above, their reaction to actual racial explanations they encountered never suggests anything of this sort, and often their responses presuppose or explicitly grant the meaningfulness of the terms in question. Second, going in the other direction so to speak, one might have thought that while human racial taxonomic terms are indeed meaningful, we are en masse systematically wrong in how we apply them – perhaps in a manner related to the bigotry they often saw or diagnosed underlying racial explanatory practices. On this analysis, we could, for instance, have adopted either a number of prejudicial and false particular claims about racial groups, or we could have adopted misleading P-rules leading us to infer insulting falsehoods about racialised individuals. However, it is equally notable that when the logical empiricists did state their preferred alternatives to racial explanations they did not tend to proffer rival claims couched in the racial terminology or rules for the use of racial terms, they rather tended to prefer explanations of the phenomena that simply dropped the application of racial terminology. This is most notable in the case of Carnap responding to Riezler, but something akin to this can also be seen in Schlick's playing down of the distinction between European and Chinese individuals in favour of emphasising the importance of sincerity, or Frank's championing of positivistic philosophy of science as opposed to some philosophy grounded in racial theory.

The position I am attributing to the logical empiricists may be fruitfully compared with Richardson's critique of the 'Left Vienna Circle Thesis'. Richardson stresses that Carnap and Neurath each in their own way maintained that theoretical reasoning was politically neutral. Regarding Carnap, Richardson notes that in debate with Neurath he was, at the least, somewhat surprised to have his conventionalism 'turned against' him and render it possible for Neurath to argue that a physicalist language is to be preferred on broadly social grounds (Richardson, 2009, p. 18). Such passages may seem in tension with what I am arguing here, but this impression is misleading. First, I reiterate that I am only outlining a position consistent with what the logical empiricists argued at various points, not attributing this view to any actual logical empiricist. But, second and more significantly, the position I outline here would be consistent with Richardson's interpretation of the members of the Vienna circle even if they did actually hold the view I've outlined. For, exactly what constraint (v) was meant to capture was the fact that the logical empiricists I surveyed tended to fall short of actually providing arguments for their preferred (non-)use of human racial taxonomic terminology. Their shared political convictions on this matter did not manifest themselves in the forms of arguments or theses which might provide an epistemically-grounded defence of the racial eliminativism I attribute to them. This is in line with Richardson's critique of the Left Vienna Circle Thesis, since it may be that what caused them to hold their tongue on this point, to stop short of providing explicit theoretical argumentation in defence of the position I outline, is exactly their conviction that it was inappropriate to use political considerations to decide theoretical matters. I do not mean here to endorse Richardson's historical claims – for critique, see (Uebel, 2010). Rather, I just mean to note that far from being in tension with my interpretation, Richardson's historical work could, if true, explain some of the silences which I have noted in this work.

To summarise, the logical empiricists can be interpreted as engaged in a project of voluntarist racial eliminativism. They did not take themselves to have an in principle argument against racial categorisation of human beings. Their frequent references to biological racial categorisation make it clear that they thought this was something you could coherently do, and it would be inconsistent with their version of conventionalism to argue that one is cognitively mistaken to use an empirically meaningful categorisation scheme. Hence, while the position I am attributing to them is similar to the position that racial taxonomic terms are simply meaningless, it is not quite that — it is not that they thought there was no empirically meaningful way that one could make sense of human racial taxonomy. Rather, it was that they thought one ought not use these terms. They had political projects which made it inconvenient to encourage human racial categorisation. Their

internationalism involved frequent expressions of desire to bring together all people for the common good, and their formative experience of the scientific use of racial categorisation was in fascist central Europe, where racial science buttressed the movement they were in deadly opposition to. As such they adopted a policy of refusing to endorse any instances of racial categories being used as part of empirical explanations, and discouraging racial explanation by rhetorical means. Whether or not this was the logical empiricists' actual view and motivation, this is a view and motivation for adopting the positions on race which they seem to have and is consistent with what we know about the logical empiricists' political and epistemological preferences.

5. Conclusion

I am now in a position to review the logical empiricists' position on race. The logical empiricists often discussed racial explanations, and never painted them in a positive light. They also shared a commitment to undermining racial divisions in so far as they were a basis for divisive political policy. There is a consistent view of the nature of human racial categorisation which could unify and explain the logical empiricists reactions to racial explanations with their general epistemological principles, and which could be motivated by their shared political commitments. To summarise this view: racial categorisation is a challenge to be overcome. A genuine challenge because racial divisions do represent in principle legitimate ways of dividing up the world; they cannot be simply be dismissed as pseudo-concepts. But one to be overcome because humanity's unfortunate habit of making use of racial terms interfered with the internationalist political projects which members they endorsed. The use of racial categorisation in scientific work is thus to be avoided where possible.

I have found so many references to racial explanations by the logical empiricists that I am convinced that it was a subject of persistent interest to them, and thus likely to turn up elsewhere in their writings besides the places I have looked. What is more, among the figures aligned with the logical empiricist movement that I have not surveyed in this essay are Charles Morris and Ernst Nagel, both of whom are plausible sources of writings on race, and are coming from what may prove to be an interestingly different American context. This essay will hopefully be only the starts of a broader conversation on the role of thinking about race in the development of logical empiricist philosophy.

References

Blacker, C. P. (1951). Galton's views on race. *The Eugenics Review*, 43(1), 19–22. Carnap, R. (1936). Testability and meaning. *Philosophy of Science*, 3(4), 419–471. Carnap, R. (1959). The elimination of metaphysics through the logical analysis of

language. In A. Julius Ayer (Ed.), Logical positivism, pages 60–81. The Free Press. Carnap, R. (1961). Der logische Aufbau der Welt (2nd ed.). Hamburg: Meiner.

Carnap, R. (1963). Intellectual autobiography. In P. Arthur Schilpp (Ed.), *The philosophy of Rudolf Carnap*. Cambridge University Press.

Carnap, R. (1966). *Philosophical foundations of physics*. Basic Books Incorporated. Carnap, R. (1988). Empiricism, semantics, and ontology. In *Meaning and necessity*. University of Chicago Press.

Carus, A. (2014). Carnapian rationality. Synthese. http://dx.doi.org/10.1007/s11229-014-0574-3.

Creath, R. (2013). Logical empiricism. The Stanford Encyclopedia of Philosophy.

Du Bois, W. E. B. (1909). Evolution of the race problem. In Proceedings of the national Negro conference. New York, pages 142–158. National Negro Conference.

Frank, P. (1949). Modern science and its philosophy. Harvard University Press.

Friedman, M. (1999). Reconsidering logical positivism. Cambridge University Press. Gimbel, S. (2013). Hanna thost transcript. Unpublished MS.

Hahn, H., Neurath, O., & Carnap, R. (1973). The scientific conception of the world. InM. Neurath, & R. S. Cohen (Eds.), *Empiricism and sociology* (pp. 299–318). D. Reidel Publishing Company.

Hempel, C. G. (1942). The function of general laws in history. *The Journal of Philosophy*, 39(2), 35–48.

- Neurath, M. (1973a). 1940–1945. In M. Neurath, & R. S. Cohen (Eds.), Empiricism and sociology pages 68–75. D. Reidel Publishing Company.
 Neurath, O. (1973b). Anti-spengler. In M. Neurath, & R. S. Cohen (Eds.), Empiricism
- and sociology, pages 158-213. D. Reidel Publishing Company.
- Neurath, O. (1983). The orchestration of the sciences. In R. S. Cohen, & M. Neurath (Eds.), *Philosophical papers:* 1913–1946. Dordrecht.
- Neurath, O. (2017). Pictorial statistics following the Vienna method. ARTMargins, 6(1), 108–118.
- Neurath, O., & Schapire-Neurath, A. (2016). Foreword and introduction to Galton's Genius and inheritance. Unpublished Translation by Dan Kaplan.
- Okruhlic, K. (2004). Logical empiricism, feminism, and Neuath's auxilliary motive. Hypatia, 19(1), 48-72.
- Potochnik, A., & Yap, A. (2006). Revisiting Galison's 'Aufbau/Bauhaus' in light of Neurath's philosophical projects. Studies In History and Philosophy of Science a, 37(3), 469–488.
- Reichenbach, H. (1936). Logistic empiricism in Germany and the present state of its problems. The Journal of Philosophy, 33(6), 141–160.

- Reichenbach, H. (1951). The rise of scientific philosophy. Los Angeles, CA: University of California Press.
- Richardson, A. (2007). Carnapian pragmatism. In The cambridge companion to Carnap. Cambridge University Press.
- Richardson, S. S. (2009). The left Vienna circle, part 1. Carnap, Neurath, and the left Vienna circle thesis. Studies In History and Philosophy of Science Part a, 40(1), 14—
- Schleichert, H. (2003). Moritz Schlick's idea of non-territorial states. In The Vienna circle and logical empiricism, pages 49-61. Netherlands: Springer.
- Schlick, M. (1939). *Problems of ethics*. New York, NY: Prentice-Hall Inc.
- Uebel, T. (2010). What's right about Carnap, Neurath, and the left Vienna circle thesis: A refutation. Studies In History and Philosophy of Science Part a, 41(2), 214-221.
- Uebel, T. (2013). "Logical positivism" "logical Empiricism": What's in a name? Perspectives on Science, 21(1), 58-99.
- Waismann, F. (2011). *Causality and logical positivism*. London, UK: Springer.