Logic and Liberalism

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Abstract:

What does it take for a society to become enlightened? Kant suggests that the members of it must be free to use their 'public reason'. Arendt develops this thought, adding that we must be able to recognize the others in our society as worthy of intellectual engagement. But, what happens when we disagree in extreme ways, for example about the laws of logic? On some traditional conceptions of the connection between logic and rationality, disagreements of this kind force us to regard others in our society as irrational. In this paper, I argue that, if we want to maintain a Kantian model of enlightenment, then these kinds of disagreements push us towards a logical pluralism. I examine two forms of pluralism, Beall and Restall's, and Carnap's, and show that Beall and Restall's version conceals a lurking monism, and so cannot be the kind of pluralism needed for enlightenment. But, I argue that Carnap's pluralism is. I conclude by examining the history of Carnap's pluralism, and show that using it for political ends – namely, for facilitating discussion in pursuit of enlightenment – is consistent with Carnap's initial motivations for his work, and clears the way back towards Kantian enlightenment.

Keywords: Rudolf Carnap, Immanuel Kant, Hannah Arendt, history of analytic philosophy, logical pluralism, philosophy of logic

Analytic philosophy in the hands of the Vienna Circle had an idealistic and activist mission: the goal was to use the tools of modern logic to expose irrational thinking, and thereby to reform of society according to rational principles. At some stage, analytic philosophy lost these ambitions, though it is hard to pinpoint the precise moment in its history; perhaps it was on the steps of the University of Vienna where Moritz Schlick was murdered, in the death camps and mushroom clouds of World War 2, or in the stifling atmosphere of Cold War academia where suspicion of 'scientific attempts to reform society' could get advocates investigated by the FBI and hauled before the House Committee on Unamerican Activities, and blacklisted from academia. And, though many members of the Circle had long careers after these traumatic events, the philosophical movement they spawned never again regained the vision of unity between philosophical pursuits and social and political orientation activity.

In this paper, my aim is to help to reverse this trend and to show a route back towards these

politically engaged founding impulses. In so doing, I bring two at least apparently different traditions together: the liberal tradition found in Kant, and logical pluralism as found in the work of by Rudolf Carnap. I articulate the role that systematic, formal thinking can play in some political ideas central to a liberal way of life.[1] Moreover, it is my business here to try to set out the ways in which logic, understood in the way that I argue Carnap understood it, supports the kind of pluralistic thinking that is central to a liberal democratic society of the kind that Kant envisions.

I start in section 1 by examining Kant's brief essay "An Answer to the Question: What is Enlightenment?" with a primary focus on his distinction between public and private reason. I conclude the section by raising a problem for Kant's view that is, at least in part, based in the commentary on it given by Hannah Arendt in her *Lectures on Kant's Political Philosophy*. But, I give a new version of it – one that is grounded in a traditional understanding of the relationship between logic and rationality. In short, the problem is this: in order for a society to achieve 'enlightenment' in Kant's sense, the members of that society must be (1) free to engage each other in discussion, and (2) able to recognize each other as worthy of such engagement. But, as I will argue, if one were to cling to a traditional conception of logic, whereby a single logic uniquely encodes the laws of thought, then they will be unable to recognize those who disagree with the laws of logic as worthy of the requisite engagement because they will not be able to see their interlocutors as rational. This, I will conclude, would be a disaster for the project of societal enlightenment because such disagreements are not matters of mere philosophical speculation, but, as I show, actually occur.

Next, in section 2, I turn my attention to certain contemporary understandings of logic, and try to make clear how I think they can help us overcome the difficulty that I, along with Arendt, have raised. Ultimately, I conclude that a Carnapian understanding of logic can help. This is no anodyne incitement to "be more logical". Rather, it involves a radical departure from logical orthodoxy, and a turn towards pluralism about logic. I will explore two forms of pluralism about logic: the recent form developed by Beall and Restall in their book *Logical Pluralism*, and an older one due to Rudolf Carnap from his book, *The Logical Syntax of Language*. With this exploration I will show that the kind of pluralism required for the project of preserving a liberal notion of public engagement must be a more open one than is found in Beall and Restall's work. In section 2.1, I argue that the deeper pluralism that is required can be found in Carnap's work, in particular in his (Carnap 1937). There, I find a pluralism that forecloses on as few possibilities as possible, and, I argue, one that is motivated by an explicitly political project. Taken together, these two features make Carnap's pluralism particularly suited to the goal at hand: regrounding an analytic approach to philosophy in the political life of the day, and using it to pursue a project of societal enlightenment.[2]

1. Enlightenment and Rationality

In his essay "An Answer to the Question: What is Enlightenment?", Kant says that for a person to be enlightened is for them to think for themselves in all matters. That is, they cannot simply take the word of experts as truth. He further claims that there is more chance of the whole society becoming

enlightened if each member of society is allowed to think freely. In particular, the kind of freedom that is required is the freedom to use one's reason publicly.

In order to see what Kant means, we must understand what it is to use one's reason publicly. It is also helpful to try and think through what the contrast case might be. I begin with the contrast: Private reason, Kant tells us, is any act of reasoning or publicly accessible use of your reasoning that is done in any kind of official capacity. So, for example, when the general tells her officers what to do, she should communicate her orders to her soldiers clearly, directly, and without commentary or disagreement. This is because, in their capacity as officers, their use of reason is not their own, but subject to the rules of their profession – which is to say, it is private in Kant's sense. As he puts the matter:

> Now, for many affairs conducted in the interest of a commonwealth a certain mechanism is necessary, by means of which some members of the commonwealth must behave purely passively, so as to be directed by the government, through an artful unanimity, to public ends [...]. Thus it would be ruinous if an officer, receiving an order from his superiors, wanted while on duty to engage openly in subtle reasoning about its appropriateness or utility; he must obey. (Kant 1784, 18-19)

It must be noted, however, that the private use of one's reason does not mean that the act of reasoning is not accessible to others, or even that it happens in a private space, as for example in the home. Instead, and to reiterate what was said above, it is the use of one's reason when it is constrained by the demands of one's public persona – as in the case of speaking in one's official capacity as an officer in the military, or, in a more mundane example, in one's capacity as the spokesperson for a corporation.

So, if some acts of reasoning which take place in public are nonetheless called 'private' by Kant, what could 'public' reason be? Public reasoning, for Kant, is the use of reason to communicate a person's views, independently of any official positions they might hold. So, to return to the military case, the officer is free to use her reason to represent her own views, even to criticize military strategy or leadership in, for example, letters to the editor of newspapers. Continuing the quotation above, Kant says: "But [the military officer] cannot fairly be prevented, as a scholar, from making remarks about errors in the military service and from putting these before his public for appraisal" (Kant 1784, 19). In this case, she is speaking simply as one citizen among many, albeit a particularly informed one on military matters. What she cannot do, is to claim that the view she is presenting in the letter is that of the military itself, or is endorsed by them. She must take individual ownership of the ideas she presents if they are to count as public reasoning in the way Kant intends us to understand.

Moreover, what is being explicitly allowed in the public use of reason is disagreement. What must be permitted, Kant thinks, is for people as their private, non-professional selves, to publicly disagree with established experts, and other orthodoxies. The example Kant uses is that of religious matters; he says we must allow individual people – even those employed as religious officials such as Priests or Ministers – to disagree with the official positions of their religion.

There are two features of this disagreement which are critical for my present purposes. Firstly, the disagreements are public – that is, what Kant exhorts us all to do is not just to think bold thoughts

that might challenge authorities and orthodoxies in the privacy of our minds, but share and debate them with others, or at least participate in discussions about them. In short, there must be dialogue with others who are similarly making use of their public reason. Second – or perhaps this is really just reiterating a part of the first point that may have slipped past without notice – it is this process of debating ideas via the use of our public reason that Kant believes will lead us, individually and collectively, to enlightenment ("[...] the *public* use of one's reason must always be free, and it alone can bring about enlightenment among human beings [...] (Kant 1784, 18).

So, to sum up Kant's view, in order for an individual to have the possibility to be enlightened, they must be free to make public use of their reason, even if it means they will disagree with important people or with important ideas. And, he claims, a society which allows this kind of freedom is more likely to become enlightened as a society than one which does not. So far, I imagine, all this sounds pretty reasonable. And, indeed, these ideas have a long history in political philosophy. The name that has been traditionally given to this kind of view in political philosophy is Liberalism. To see what my problem is we must interrogate the notion of disagreement.

1.1. Arendt

What does it take to disagree with someone? This is a difficult question, and one which philosophers have spilled a lot of ink trying to answer. I will not attempt to summarize all the discussion on this matter here. What I will do, though, is explore what Kant must mean, and to articulate a problem that I find there.

In her lectures on Kant, Hannah Arendt says that what is required of a society if it is to be enlightened in the way Kant says it should be, is that the members of it must expand the circle of people whose views it can consider. As she puts it, "... critical thinking implies communicability ... [which] ... obviously implies a community of [people] who can be addressed and who are listening and can be listened to" (Arendt 1992, 40). What happens, then, in the exercise of public reason – which Arendt calls "critical thinking" – is the following: (1) we engage with the views of others in our community, (2) we examine their views and attempt to make clear any hidden or latent implications of them, and (3) we hold our interlocutors accountable to be able to explain not just what they think, but why they think it. In other words, we examine their reasoning. This demands from us a kind of pluralism – we must be able to both entertain and engage with the views of others who are exercising their public reason, no matter who they are, or what dogma they might be challenging. This, then, is what the process of becoming enlightened in Kant's sense is like: we exercise our public reason together, and we hold each other accountable for our reasoning supporting our views. If they do not, we should not accept the views; conversely, if they do, we ought to accept them. And, what is more, we ought to accept them without consideration for the professional standing of the person who articulates the view.

Now I have arrived at the heart of the problem: by what mechanism are we to evaluate the arguments of those in our community who are exercising their public reason? What is needed is a

neutral tool which all can use to assess matters. What kind of tool could this be? Of course, I imagine some will naturally think: it must be logic! If the view is not logical, then I should not believe it; and if it is, then I should believe it no matter whose view it is. Now the difficulty: this view, no matter how good it might sound, assumes that there is this single, univocal thing, logic, which is a neutral tool which all can accept. But what are is to be done when it is the standards of logic itself about which we disagree? That is, what if my logic is different from your logic? How are we to decide these kinds of disagreements? Obviously, we cannot simply appeal to logic again – to do so would beg the question against our interlocutor. This kind of disagreement might strike some as too farfetched to be seriously entertained. After all, if someone disagrees with logic itself, then they must simply be confused or irrational, and that is reason enough to dismiss their view.

There are two problems here, one historical and the other – for lack of a better term – logical. They run as follows: imagine for the sake of argument that there really is one uniquely right way of reasoning. Then, either someone has discovered it in the past, and we should all reason as that person recommends, or no one has yet discovered it. If someone has already discovered it, then when we look at the history of logic, and assuming that we ourselves are rational, we should see one way of reasoning that is obviously correct. But, unfortunately, this is not what we see when we examine logic's history. We do see a kind of convergence towards a certain style of reasoning that we would now call 'classical logic', but the story is more complicated than that. We also see a process of discovery followed by a forgetting and subsequent re-discovery. To wit, there are three independent discoveries of classical logic in the history: Aristotle, the medieval logicians of the 13th and 14th Centuries, and the 19th Century mathematical logicians. But, running in parallel to this convergence towards classical logic is another logical tradition with a similar history of discovery and re-discovery, namely that of connexive logic.[3] Importantly for our purposes, we do not see convergence on a *single* style of reasoning. What this suggests is that even if there is one uniquely correct way of reasoning, no one has found it yet.

So, perhaps our task is to do more research and to find the right logic. But, what would happen if we did find it? We would have to communicate our findings to others, that is, we would have to tell everyone that they have been reasoning incorrectly, and show them how to reform their thinking. But, by what standards should these others assess our claims? They cannot use our (purportedly) correct logic without the evaluation being circular. And they should not use their (purportedly) incorrect logic. It would seem, then, that they are in a bind.

But, the problems get worse. It has been a commonplace in the history of philosophy that there is a tight link between logic and rationality. As Frege put it: "Logic marks the boundary stones of thought" (Frege 1893, xvi), and earlier in the same passage, though somewhat less poetically, "... [the laws of logic] are the most general laws, which prescribe universally how one should think if one is to think at all" (Frege 1893, xv). I take Frege to mean that the laws of logic are, in his view, constitutive of rational thought. He goes on in the same passage as above to say: "But what if beings were found whose laws of thought directly contradicted our own and therefore frequently led to contrary results in practice as well? [...] I would say: here we have a hitherto unknown kind of madness" (Frege 1893, xv).

What this adds up to is the following thought: if someone disagrees with you about logic, then by a standard view, that person is irrational or does not count as thinking at all.[4]

The implications of this tight connection between a particular conception of logic as the laws of thought and rationality for our investigation into Kant's view is devastating. Remember, that in order to be properly enlightened, we must be able to reason with others, even when they disagree with deeply held dogmas – as, for example, the laws of logic. But, if we cannot recognize such a person as thinking at all, then how could we ever engage them in a project of public reason? And, further recall Arendt's analysis of what Kant's view requires: there must be a community of people who are listening and who can be listened to. How could we listen to those who we cannot recognize as thinking? Moreover, since such disagreement actually happens, not only historically but in contemporary philosophy as well, it would seem that we can never achieve the kind of enlightened society that Kant imagined.

2. Logical Pluralism

Up to now, I have been writing as if there is one thing, Logic with a capital L, which rules univocally on which inferences are valid – or, in Frege's poetic formulation, marks the boundary stones of thought. But this way of looking at logic forces me to the following conclusion: if an interlocutor reasons differently from me, and if I were to accept the orthodox view of the relationship between logic and rationality, then my interlocutor is not only not reasoning – they are not thinking (at least not properly so called)! This view is hardly compatible with the pluralism that Arendt's articulation of Kant demands of us. So, if we are to live up to the requirements of Kantian enlightenment, we must either abandon the connection between logic and (public) reasoning altogether, or find a way to reflect the required pluralism in our logic; I prefer the latter course, and it is to this that I now turn.

What are we to make of those who reason differently from us? What are we to say to the person who, for example, denies the Law of the Excluded Middle? In recent work, JC Beall and Greg Restall have proposed a view that I will call 'closed' logical pluralism. They say that the pre-theoretic notion of validity is vague, and as such, is best captured by what they call the Generalized Tarski Thesis (GTT):

> An argument is valid$_x$ if, and only if in every case$_x$ where all the premises are true, so is the conclusion.

This gives us a recipe for creating accounts of logical consequence by stipulating an account of cases. Each such stipulation constitutes a precisification of the pre-theoretic notion of validity. So, for example, if one were to be concerned with building a logic to capture necessary truth-preservation, then one might stipulate that possible worlds are to be the range of cases; this would result in the following instance of GTT:

> An argument is valid if, and only if, in every possible world where all the premises are true, so is the conclusion.

But, one might instead be concerned to track a tighter notion than mere necessary truth-preservation, and so one might stipulate Tarskian models as the range of cases under consideration, and so get an instance of GTT where the phrase 'Tarskian model' replaces 'possible world' in the example above. Either of these stipulations constitutes a potential instance of the GTT as Beall and Restall intend it.[5]

An account of consequence is admissible when it meets three criteria: (1) necessity, (2) normativity, and (3) formality. That is, for a given relation to be a relation of logical consequence, it must be the case that the relationship between the premises and the conclusion is not a contingent matter, that if an argument is valid and you accept the premises, then you go wrong in some way if you fail to accept the conclusion, and finally that the notion must be a formal one, even though the precise way in which it is to be formal is an issue they do not settle.[6] Finally, Beall and Restall claim that there is more than one stipulation of cases which produces an admissible relation of logical consequence. So far, this approach might seem promising, though the sense in which it is 'closed' will soon become apparent.

They go on to say that how one should reason – that is, what kind of case we should include in our account of consequence – is determined by the 'situation' one is in. A situation, they explain, is a part of the world. But, as I see the matter, there is a difficulty here. For, if we are to try and adopt their view, some questions impose themselves on us rather immediately. How do I know which reasoning style goes with which situation? And, how do I know which kind of situation I am in? To me at least, these questions present significant challenges for the closed pluralist.[7] Without an answer to them, the prospects for using closed pluralism for our current purposes seems dim. The cause, I argue, is a lurking absolutism.

The urgency of the questions posed against closed logical pluralism stems from this thought: for each situation (or perhaps for each kind of situation), there is a uniquely correct way to reason. This is, to be sure, a more lax view than the old monism of orthodox approaches to logic. But, we still must think that there is a single correct way to reason, albeit that it's correctness is now relative to a situation. For my part, I am not sure which situation I am in. Perhaps worse, I am not sure how I would go about determining that the situation I am in now – whatever that might be – is relevantly similar to other situations such that I could know which logic, that is, which style of reasoning, I should use. And these questions press in on us because, even according to closed pluralism, there is only one style of reasoning which is appropriate for this (type of) situation. Finally, this entails that, in a given situation, if two people reason differently from each other, then at least one of them is making a mistake. For, if we reason otherwise than the single logic appropriate to the (kind of) situation we are in, we reason incorrectly. In other words, this kind of logical pluralism is *closed* to the participation of those who reason differently. I am forced to conclude that closed pluralism leaves us no better off than we were before.

So, given that we must find a way to reason together in order to be properly enlightened in Kant's sense, and that no one way of reasoning can do the job, I turned to a kind of logical pluralism, which I termed closed pluralism, in hopes that it would show a path towards a more inclusive way or reasoning together. And, it is more inclusive! But, as I have argued, not inclusive enough because it conceals a lingering commitment to a monism about logic. Given this, what are those of us who

want to be pluralistic participants in an enlightened society to do? The answer, I think, is not to turn our back on pluralism about logic, but to abolish all traces of the lurking monistic absolutism. We must find a logical pluralism which is 'open'.

2.1. Open Logical Pluralism

The starting point for an open logical pluralism can be found in the work of Rudolf Carnap, in particular in his 1934 book *The Logical Syntax of Language* (*LSL*). The title is abstruse, and one could be forgiven for not immediately seeing it as a work of import for political ends. So, let me first say a bit about why I think this is the place to look before getting into some of the details of what we can learn from Carnap's view.

As mentioned briefly at the outset of this paper, Carnap and the Vienna Circle saw their mission, as they make clear in a manifesto published in 1929 – and which was principally authored by Carnap – as articulating a vision of philosophy which uses the tools of modern logics and modern philosophy of language to engage in a project of societal reform.[8] As they put in the manifesto:

> [T]he work of 'philosophic' or 'foundational' investigations remains important in accord with the scientific world-conception. For the logical clarification of scientific concepts, statements and methods liberates one from inhibiting prejudices. [...] We witness the spirit of the scientific world-conception penetrating in growing measure the forms of personal and public life, in education, upbringing, architecture, and the shaping of economic and social life according to rational principles. (Carnap, 1929, 316-318)

For the Circle, the investigation of logics, and the use of them to analyze arguments, was bound up with "the shaping of economic and social life according to rational principles". It important to note that the specific parts of life that they saw the 'spirit of the scientific world-conception' are parts of common life – art, architecture, and family life (i.e. upbringing); the Circle does not see its mission as limited to academic philosophy (though that is included as well, I take it, under 'education'). In short, the aims of their project were ultimately political. The end goal was reforming discourse in society to be more rational, and to avoid the errors that they believed had led to the tragedy of the First World War, and the turn towards irrationalism that followed in its wake.[9] In other words, they wanted the society they lived in to use logic to become enlightened.

But, as we have seen, there is no orthodox view of logic that will do the work we need for an enlightened society. So, how does Carnap help us with this problem? In one of the most famous, and indeed most controversial passages in *LSL*, he presents what he calls the principle of tolerance:

> Our attitude [...] is given a general formulation in the Principle of Tolerance: *It is not our business to set up prohibitions, but to arrive at conventions*. [...] *In logic there are no morals*. Everyone is at liberty to build up his own logic, i.e. his own form of language, as he wishes. If he wishes to discuss it, then he must state his methods clearly, and give syntactical rules instead of philosophical arguments. (Carnap 1937, 51-52, original emphasis)

This principle is a rich one, and it bears careful consideration. I begin with the first clause: "It is not our business to set up prohibitions, but to arrive at conventions". We must ask two questions of Carnap here: (1) what are conventions, and (2) how could we arrive at them without a straightforwardly circular process whereby we must reason our way to the principles which will govern our reasoning? We will tackle each in turn.

By 'conventions', Carnap means the rules which will govern our reasoning. But, if this is what is meant, then why not just call them that? After all, we already know what rules are (or, at least that is a subject for another day). The reason has to do with considering the nature of justifications for rules. If the claim is really a rule for reasoning in the usual sense of 'rule', then as I argued in section 1.1 above, no non-circular justification could be given for it. But, at least according to the view Carnap presents us with here, we must be able to choose amongst possible rules. These rules are not carved in stone, but are merely agreed to by the participants in the discussion – that is, they are conventions of that discussion. And, that they are chosen by those participants is all the justification that the rules could have.[10]

This last observation – that the rules are merely agreed to by the participants in the discussion – gives a guide to answering the second question, namely: (2) how could we arrive at our conventions without a straightforwardly circular process? The answer, I've just suggested, is that the participants in a discussion will voluntarily agree with each other to be bound by those conventions for the conversation at hand. But, what kind of agreement could this be that is not circular? This is the heart of the second question, and the answer to it is a delicate one. First, I note that we enter into a conversation to discuss some particular topic. And, at the risk of saying something painfully obvious, not every conversation has the same topic – topics vary from conversation to conversation. So, what is needed are rules to guide the conversation which are appropriate to the subject matter of that very conversation. There is no reason to expect, as the earlier monism about logic does, that one and the same collection of rules will be appropriate for every subject matter. So, for example, there is just no obvious reason that we should think that the rules we should adopt for a discussion of physics will be the same as the rules we should adopt for a discussion of literary criticism – though, of course, they could be. Similarly, there is no reason to think that the rules we should adopt for a discussion of physics will be the same as the rules we should adopt for a discussion about what rules we should adopt for a discussion of physics. To put that more plainly: the rules for a conversation about some subject are (or at least could be) different from the rules for a conversation about picking rules. It is this which gets us out of the circularity. In a slogan, I might say: different topic, (at least the possibility of) different rules. In this way, the Carnapian pluralist avoids appealing to the very rules that are the subject of discussion.

Let me conclude this section by summing up Carnap's view plainly. There are many logics, and none of them are the uniquely correct logic. For each conversation, we must first fix the rules. The process we use to establish these rules does not rely on those very rules and so is not circular. So, we avoid the absolutism of the orthodox view of logic because we are able to entertain many logics,

and so it is not a problem if someone does not reason the way we might antecedently believe they ought to. And, we avoid the concealed absolutism of closed pluralism because we allow for the choice of logic to be determined by the participants in the conversation, not by any external factors like 'situations'. What remains to be done is to tie this, admittedly rather abstract idea, back to the project of enlightenment.

3. Back to Enlightenment

The problem I had at the outset of this paper was that I wanted to find a way for society to become enlightened. This required, or so Kant claimed, that the people who make up the society had to be free to exercise their public reason together, so that they might individually become enlightened, and drag society along with them, so to speak. But, following Arendt, I noted that a prerequisite for reasoning with others is the ability to recognize them as rational, thinking beings. Adding on to Arendt's problem, I noted that if our interlocutors challenged certain ideas, in particular the laws of logic itself, and if I stuck to the classical notion of logic as the laws of thought, then the required recognition became impossible. That is to say, I saw that no one logic could do the job of accommodating the level of collective reasoning that Kant (and Arendt) requires of an enlightened society, and neither could closed pluralism. To try and solve the difficulty, I have introduced a more open pluralism based in the work of Carnap. In this final section, I will address one final objection, namely whether and to what extent it is legitimate to co-opt Carnap's work in logic for political ends.

Many scholars are now acknowledging the political aspects of Carnap's work, especially during his period with the Circle. But this understanding comes with an explanatory burden. In his *Intellectual Autobiography*, there are some passages which seem to suggest that my interpretation of Carnap's work, which integrates his philosophical work with political aims, is inappropriate. So, I owe a story about why I think I can safely integrate these two aspects of the view without misunderstanding or misrepresenting Carnap. I will argue that there are substantial historical and contextual reasons to doubt what Carnap says in the *Intellectual Autobiography* as accurately describing his views on the relationship between his work in philosophy – and in logic – and his political aims. Before these arguments, however, there is some nuance that has be added to my claim.

What do I mean when I say that Carnap saw his work as political? For my purposes here, I mean that he saw his work as part of an active attempt to reform the way people live their life, both within the practice of academic philosophy, but very importantly also outside of it. However, care must be taken to not confuse this with promoting the cause of any particular political group; that is, while I understand Carnap's work to be political, I *do not* take it to be party-political.[11]

With this distinction in hand, I turn my attention to addressing a passage from Carnap's *Intellectual Autobiography* which seems to say that my interpretation of him as presenting a view whereby his work in logic and in philosophy are to be understood as part of, and done in service to, a political agenda is mistaken. Carnap writes:

> All of us in the Circle were strongly interested in social and political progress. Most of us, myself included, were socialists. But we liked to keep our philosophical work separated from our political aims. (Carnap 1963, 21-22)

Taken at face value, this seems to be a direct refutation of the idea that we ought to understand Carnap's work in logic and philosophy as continuous with his political ideals. And, some scholars have been inclined to accept this face-value reading.[12] But, I argue that this is mistaken, and that what Carnap says in his *Intellectual Autobiography* must be understood in the context in which it was written. So, in the remainder of this section, I will give an overview of the relevant parts of that context, and show its connection to my interpretation of Carnap's work.

Carnap fled the rise of fascism in Europe in 1936, moving from his position at the German University of Prague to the United States, eventually settling at the University of Chicago. At the time Carnap arrived in the US, left wing politics were in vogue with certain academic and intellectual circles with which the members of the Circle (including Carnap) associated.[13] But, after the conclusion of World War 2, feelings quickly changed, and the ensuing Cold War environment was much more hostile to the political ideas of the members of the Circle and their associates. As Reisch reports, in 1951 *New York Times* reported the overall climate of fear regarding the ways ideas were presented, even inside the confines of academia:

> College campuses around the nation, the *New York Times* reported, were attacked by "a subtle, creeping paralysis of freedom of thought and speech." Faculty avoided speaking about controversial issues and students worried that using "the wrong word at the wrong time might jeopardize their futures." (Reisch 2019, 173)

This climate of fear impacted several former members of the Vienna Circle directly. Two of them, Philipp Frank and Carnap, were investigated by the FBI for possibly being Soviet spies. Though the investigation, which ended in 1954, concluded that Carnap did not pose a threat and that no further action needed to be taken in his case, the danger of being investigated by one's own government was surely not lost on those who had fled the Nazis. In addition to these formal threats, there were informal ones. For example, in 1949 Carnap was included in the philosophers targeted by Sidney Hook, a philosopher well-known for anti-communist crusades in the immediate post-war years, for his appearing on a list of sponsors for the 'Cultural and Scientific Conference for World Peace'. Ultimately, Carnap refused to withdraw from the list, but being publicly tarred as a communist sympathizer would, no doubt, have been dangerous.[14]

During this same time, there was a growing consensus amongst the group of Vienna Circle emigrés and their philosophical allies, that logical empiricism had to distance itself from any appearance of political motivation or entanglements. As Reisch puts it, albeit with a slightly different focus:

> Though the view that logical empiricism properly had nothing to do with noncongnitive, normative claims of ethics or politics had circulated sine the 1920s, there are several reasons to identify Reichenbach's popular book *The Rise of Scientific Philosophy* (1951) as the final vector in this debate. It appeared at the beginning of the decade, when logical empiricism, if it were to grow and thrive in the age of the Red menace, would have to appear – as Reichenbach urged it was – free of ideological contamination. (Reisch 2005, 355)

What this goes to show is that presenting logical empiricism as 'free of ideological contamination' was both a change from logical empiricists' – and in particular Carnap's – previous presentations of their views, and it was an intentional change brought on by the hostility of the intellectual climate in the United States.

It is in this increasingly hostile environment that Carnap wrote his *Intellectual Autobiography* as part of the volume dedicated to his work, and subsequently published in the *Library of Living Philosophers* series. And, importantly, the bulk of the writing was done in the period from 1956 – 1958, precisely in the time during which the transformation in the way logical empiricists presented the relationship between their work in logic and philosophy took place.[15] I contend that the comments Carnap makes about the separation of his work in philosophy, and in logic, from his political orientation must be interpreted in this light. Put plainly, I believe that Carnap was actively trying to distance himself, the Vienna Circle, and logical empiricism more generally from their politically oriented aspirations. And, most importantly for my purposes here, he was not trying to do so because of a change in heart, but instead to avoid further dangerous scrutiny from a hostile government, and anti-communist crusaders in academia. Finally, it is for this reason that I believe it is legitimate to make use of Carnap's open logical pluralism in reconnecting work in logic, and in philosophy, with political questions.

Given this, I believe that redrawing the connection between this kind of theoretical work – both in logic, but in analytic philosophy in general – and political action is a return to the founding impulses of contemporary analytic philosophy. That is, what Carnap's open pluralism allows us to do is to always find a way to recognize each other as thinking beings, even when our preferred logic is different. It renders accessible even the most deeply held dogmas, like the laws of logic, to rational argument and assessment. That is, it makes good on Kant's ideal, and shows a way for society to become enlightened.

Endnotes:

1. By 'liberal way of life' I mean a way of life which values each person, and sees them as worthy of both inclusion and engagement
2. I am not alone in wanting to link Carnap's work to enlightenment projects. See (Carus 2007) for a masterful example.
3. Connexive logic validates Aristotle's Thesis: ~ (P → ~ P). See (McCall 2012) for an overview of the history of connexive logic.
4. While the very tight connection between logic and rationality is prevalent in the history of logic, there are, of course, other less extreme accounts of it. (MacFarlane 2004) is a classic example. See also (Milne 2009).
5. See (Beall and Restall 2006), chapter 4 for details.
6. (Beall and Restall 2006), pp. 14 – 23 provides a discussion of the properties of logical consequence as they understand it.

7. Questions about the nature of situations are distinct from questions about the nature of cases. For a discussion of how we ought to understand the notion of a case, see (Beall and Restall 2006), pp. 89-90.
8. The political nature of the Vienna Circle has been noted by many scholars; for a nice example, see (Friedman 2000), in particular chapter 2. For discussions of Carnap's activism in particular, see (Uebel 2004) and (Uebel 2005). Moreover, see (Uebel 2008) for a discussion of Carnap's role in the writing of the manifesto. But, see also (Richardson 2009) and (Richardson 2009a) for a critique of some aspects of Uebel's interpretation of Carnap.
9. The classic study of post-war irrationalism in Germany and Austria is (Forman 1971).
10. In fact, in the introduction to *LSL*, Carnap says something a bit stronger, namely that his view dissolves any question of justification for logical rules: "For language, in its mathematical form, can be constructed according to the preferences of any one of the viewpoints represented; so that no question of justification arises at all, but only the question of syntactical consequences to which one or other of the choices leads, including the question of non-contradiction" (Carnap 1937), p. xv).
11. (Romizi 2012) also draws this distinction.
12. See (Reisch 2005) and (Mormann 2012) for examples.
13. (Reisch 2005) provides a fuller account of this popularity.
14. (Reisch 2019), pp. 81-84. See also chapters 5 and 9 of that same book for further helpful context of the impact of the anti-communist crusades in academia.
15. (Carnap 2019) contains a useful timeline which includes the production process of the *Library of Living Philosophers* volume.

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