The Vienna Circle's "Scientific World Conception": Philosophy of Science in the Political Arena

Abstract. This paper is intended as a contribution to the current debates about the relationship between politics and the philosophy of science in the Vienna Circle.

I re-consider this issue by shifting the focus from philosophy of science as theory to philosophy of science as practice. From this perspective I take as a starting point the Vienna Circle's scientific world conception and emphasize its *practical* nature: I re-interpret its tenets as a set of recommendations which express the particular *epistemological* attitude in which *both* the Vienna Circle's (doing) philosophy of science and its political engagement were rooted

Regarding politics, I reconstruct, referring to new primary sources, how the scientific world-conception placed the Vienna Circle within a *neoliberal-socialist* political network which pursued concrete political aims.

In light of my reconstruction I shall argue that neither the Vienna Circle's alleged ethical non-cognitivism nor its alleged adhesion to the Weberian ideal of a value-free science rule out the possibility of ascribing to the Vienna Circle a politically engaged philosophy of science: the case of the Vienna Circle shows how philosophy of science, as a public activity, can itself become a form of political engagement, even without necessarily entailing a theory of objective values.

Introduction

In recent years, while philosophers of science have increasingly been asking questions about the interplay between science and politics, historians of philosophy of science, and among them some historians of Logical Empiricism, have been engaged in impassioned discussion of the relationship between politics and philosophy of science within the Vienna Circle¹. It is probably due to the Vienna Circle's non-homogeneity, both philosophical and political, that most scholars have decided to focus only on a few of its members, and in particular on those whose political engagement would hardly be disputed: on the so-called Left Vienna Circle, or on Otto Neurath. Furthermore, attempts have been made to discuss the issue of the (Left) Vienna Circle's political engagement in light of the more topical issue of philosophy of science's present-day potential for social and political engagement².

These debates have the merit of bringing into focus two major questions that deserve further discussion:

(1) Whether we can ascribe to the Vienna Circle a "politically engaged philosophy of science"³, and

(2) Whether this issue can still be said to have any significance or any implications regarding the relationship between philosophy of science and politics *in the present day*.

In this paper I deal especially with the first question and argue in favor of an affirmative answer. Of course, any potential answer to the question depends on what we demand from a philosophy of science in order to declare it "politically engaged". If we require it to be politically engaged in the same sense in which *contemporary* philosophy of science is, then we will not find much politically engaged philosophy of science in philosophical works written some eighty years ago. *Nowadays* philosophy of science's political engagement is mostly related to the development of *theories about science* which aim to show how science is value-laden, or politically driven, or gender-biased: Philosophy of science ascends – so to speak – to a meta-perspective and assesses or reveals the political biases or implications *of science*. Such a value-laden assessment of science mostly implies taking certain values as a "yardstick" and formulating normative judgments about what science ought or ought not to be. While this is a perfectly legitimate and valuable way for philosophy of science to be politically engaged, it is not what we should expect from the Vienna Circle.

Even if we grant that some Vienna Circle members formulated philosophical theories which recognized that values can influence one's choice of scientific theory (Uebel 2005, 758), or which would have in principle allowed "the practice of critical social science" (Uebel 2010, 219), their philosophical-scientific theories mostly would not tell us the ethical values or political positions we should adhere to while critically evaluating science, nor the concrete decisions that would constitute a 'policy' for doing science, nor how to practise science with respect to explicitly stated values. The fact that the Vienna Circle did not develop this kind of politically engaged philosophy of science can perhaps be seen as a consequence of certain ethical stances present in the Vienna Circle, such as ethical non-cognitivism or the ideal of the value-neutrality of science⁴. Nevertheless, while Carnap's brand of non-cognitivism and Neurath's brand of commitment to the Weberian doctrine of the value-neutrality of science have taken center stage in the recent dispute between Thomas Uebel and Sarah Richardson (see esp. Uebel 2005 and Uebel 2010; Richardson 2009a and Richardson 2009b), I do not think that they are essential in ascribing to the "Left Vienna Circle" a politically engaged philosophy of science. After all, while strongly disagreeing on both those issues, Richardson and Uebel seem more or less to agree on the fact that the Left Vienna Circle did not develop

any politically engaged philosophy of science according to our contemporary meaning of the concept, i.e. as a value-laden, normative, critical analysis of science⁵.

The real question is rather this: does this also mean that we should not ascribe to the (Left) Vienna Circle a politically engaged philosophy of science *at all*? I do not think this is the case. We should, instead, not look to find evidence of the Vienna Circle's political engagement in any particular *theory* about science, or in a political stance elaborated by any particular Vienna Circle member, but rather in the *attitude* that the Vienna Circle publicly adopted and diffused as a social actor (the "scientific world conception"), as well as in the *praxes* arising from this attitude.

The key importance of the "scientific world-conception" (henceforth SWC) in understanding the political engagement of the Vienna Circle, as well as the attitudinal and procedural (rather than theoretical and substantial) nature of the SWC, has not been completely neglected by Uebel and Richardson. However, their dispute about the possible political engagement of the Left Vienna Circle has focused on philosophy of science as theory – and, as a consequence, on issues like ethical non-cognitivism and the doctrine of the value-neutrality of science – perhaps because of a concern that shifting the focus away from the theoretical realm would imply abandoning the realm of philosophy of science proper. But this is not the case, if we are ready to conceive of philosophy of science as being also a form of practice, as the expression of an attitude, as a way of acting in the world. In fact if we focus our analysis on the theoretical level, we end up neglecting most aspects of the Vienna Circle's political engagement, which consisted not in some theory about science and political values, but in a way of participating in public life.

In this paper, I shall therefore try to answer affirmatively question (1), but I will not look to find evidence about the relationship between the Vienna Circle's philosophy of science and its political engagement in any specific theory about science or politics that was elaborated by a particular "wing" or member of the Vienna Circle. After all, it is not theories but people (or other living beings) that properly "engage" in something. Furthermore, it is typically the case that acts of social and political engagement become especially effective when their agents join together and act as a publicly recognizable social actor. Thus, my argument will concern not a "politically engaged philosophy of science" as theory, but rather politically engaged philosophers of science who chose to become institutionally visible and active as "the Vienna Circle of the scientific world-conception", and who acted as such not only within their scientific community, but also within the broader social and political context of their time.

The Vienna Circle's engagement with its social and political context can now be considered, especially after Friedrich Stadler's works on the Vienna Circle within "Late Enlightenment", a well-attested phenomenon⁸. In sections 3 and 4 of this paper I will further strengthen the evidence for it using new historical sources, and I will highlight some aspects of the Vienna Circle's political engagement which are in need of special consideration in order to understand its nature as a whole. The crucial question to be asked, of course, is whether the Vienna Circle's engagement in politics was especially related to its philosophy of science, such that we can speak of a politically engaged philosophy of science and not merely of politically engaged private citizens who happened also to be philosophers of science. I will argue that this is indeed the case.

My argument develops as follows:

(Section 1) Notwithstanding the fact that the Vienna Circle was heterogeneous regarding most of the important issues, we can take the SWC to be the common core or the shared part of the philosophies developed by the Vienna Circle philosophers. In section 1, I try to spell out the SWC as a set of four beliefs. With respect to the issue of the Vienna Circle's political engagement, the existence of this common core is of particular importance: This core defined the "corporate identity" under which the Vienna Circle acted as a unitary social actor, not only within the scientific and philosophical communities, but also within the socio-political context of that time.

(Section 2) The SWC was not so much a theory, but rather an epistemological *attitude*: a set of recommendations, which served (and to a great extent still serve) as guidelines for *doing* philosophy of science, and which entailed a particular set of values. The Vienna Circle's philosophers did not support any theory of objective values, but, of course, possessing values and acting according to them requires no such theory: the Vienna Circle's philosophers had shared values, even if they did not provide a justification for them. They valued science, they valued conceptual clarity, they valued the reliance on empirical evidence, and so on.

(Section 3) In the specific historical context in which the Vienna Circle was embedded, public adherence to those values and their public enactment mostly constituted the holding of a specific political position. This was the case because, as some historians have pointed out, in that context politics and world-views were very much entangled. The political position held by the Vienna Circle as a unitary social actor, which we may call "progressive", is not, however, to be identified with adhesion to a specific party. The distinction between "political" and "party-political" is a crucial element in understanding the Vienna Circle's political engagement.

(Section 4) The Vienna Circle did not only hold and try to propagate a philosophical stance with a clear political meaning: it was also actively and concretely engaged within a politically "progressive pole" which aimed to realize specific political aims related to that stance.

(Discussion) The Vienna Circle's philosophy of science and the Vienna Circle's political engagement were strongly related, because they were two manifestations of the same attitude and were both inspired by the same values. The Vienna Circle's (*doing*) philosophy of science was indeed politically engaged - it was, in a sense, itself a form of political engagement, at least in its public manifestations (especially those which involved a broader public than the academic or scientific communities of scientists and philosophers): it was the expression of a politically laden and politically effective attitude.

In the last section of the paper I will also discuss some implications that my reconstruction has, on the one hand, for the recent debate about question (1), that is, whether we can ascribe to the Vienna Circle a "politically engaged philosophy of science"; and on the other hand, for further reflection on question (2), that is, whether this issue can still be said to have any significance or any implications regarding the relationship between philosophy of science and politics *in the present day*.

1. The "Vienna Circle of the Scientific World Conception"

The years between 1928 and 1931 must be considered a turning point in the history of what would become known as the "Vienna Circle": they brought about its institutionalization and they shaped its "public phase" (Stadler 2001, §6.2 and Ch.7). During this phase, the coinage and the repeated use of the expression "scientific world conception" by the core Vienna Circle members endowed the Vienna Circle with a sort of "corporate identity".

In 1928 the Ernst Mach Society was founded by a number of Vienna Circle philosophers together with the Austrian Freethinkers with the explicit and official aim of popularizing and publicizing the SWC⁹. After a crowded inaugural speech given by Neurath, the Society went on to organize regular popular lectures on scientific and philosophical topics and issued a series of popular-scientific publications¹⁰. In the same year an entire book series was started, edited by the Vienna Circle philosophers Philipp Frank and Moritz Schlick and entitled "Collected works for the SWC"¹¹. Schlick, in what was supposed to be the introduction to the opening volume of the series (neither of which would be published until much later), illustrated what the SWC was meant to be¹².

In 1929 the Ernst Mach Society published the so-called "Manifesto" of the Vienna Circle, which was entitled *The Scientific Conception of the World: the Vienna Circle* and was intended to announce publicly "that there is such a thing as the 'Vienna Circle' of the scientific conception of the world" The expression "SWC" seems here almost to be an additional part of the Vienna Circle's name and the entire second chapter of the "Manifesto" is devoted to illustrating this very expression. The Ernst Mach Society sponsored not only the publication of the "Manifesto", but also a conference held the same year in Prague, in conjunction with a meeting of physicists and mathematicians organized by the German Physical Society (Uebel 2008, 72-74). Although the official title of the conference had been the "First Conference for the Epistemology of the Exact Sciences", the popular journal of the Freethinkers would publicize it later as a "Congress about the SWC" (*Der Freidenker*, No. 4, Apr. 1930, 74).

Furthermore, the SWC played a major role in the first issue of *Erkenntnis* (Vol. I, 1930/31), which was both the journal of Logical Empiricists, and also a widely-distributed journal circulated to all members of the Ernst Mach Society (*Erkenntnis*, I, 1930/31, 74), which had sponsored its editorship (Uebel 2008, 72). The first issue of *Erkenntnis* contained two articles, by Neurath and by Hahn, devoted to the SWC (Neurath [1930/31] 1983 and Hahn [1930/31] 1980). It also included the announcement of a public talk by Frank on "The Scientific World Conception in Russia", a public report by Schlick on "The Scientific World Conception in the United States of America" and an illustration of the concept of *Einheitswissenschaft* by Neurath, relating it to the SWC (*Erkenntnis*, I, 1930/31, 74-75).

Friedrich Stadler has defined the SWC as "the least common denominator of the scientific-philosophical positions within the Vienna Circle" (Stadler 1982, 138; my translation): the SWC was shared by all Vienna Circle members beyond their different philosophical positions and their different party-political sympathies. Clear evidence for Stadler's statement is to be found in the "Manifesto", where, after the acknowledgment of "differences in lines of interests and points of view" among the Vienna Circle's members, a convergence is emphasized as follows: "Step by step the common fund of conceptions is increased, forming the nucleus of a scientific world-conception" (Carnap, Hahn and Neurath [1929] 1973, 316). By means of the concept of the "SWC", then, the Vienna Circle members joined together as a publicly recognizable unitary subject endowed with a kind of corporate identity: the Vienna Circle's political engagement — as shall emerge clearly below, in sections 3 and 4 - was tightly centred around the SWC, which gave the Circle a distinctive identity within its socio-political context. In order to understand the Vienna Circle's political engagement it is,

therefore, not only possible but also appropriate to consider it as a *unitary* subject - as the "Vienna Circle of the SWC", active between 1928 and 1936: it was in this guise that it would constitute what was, to my mind, the most important and unambiguous example of a politically engaged logical empiricism.

Before inquiring further into the political stance and the political engagement of the "Vienna Circle of the Scientific World-Conception", however, it is of course fundamental to understand what the SWC amounted to. As I mentioned, there are several descriptions of it by different Vienna Circle members¹⁴: out of all these descriptions a set of four major characteristics of the SWC can be identified¹⁵.

Firstly, the SWC ascribes a particular value to science and a special epistemological status to scientific knowledge: science is the search for knowledge par excellence, scientific knowledge is the only "real" knowledge and this is confirmed by the fact that only scientific knowledge can be seen to make progress. This is clearly stated by Schlick ([1928] 1979, 132) when he writes - referring to the SWC - that "the issue is that of a progress in knowledge, and all interconnected knowledge is science; there is therefore no other way of understanding the world but a scientific one"; furthermore, "in the evolution of science there are no such ups and downs of doctrine as there are among the philosophic systems; instead, there is a continuous ascent". In holding this special appreciation of science, the Vienna Circle was not an isolated voice, either temporally or geographically. In historical terms, this appreciation can be seen as one element of continuity with 19th century positivism, although it must also be kept in mind that there were important differences between positivism and the so-called neopositivism¹⁶. In terms of geography, the Vienna Circle shared its faith in science with other - in some respects very different, but, significantly, also politically engaged - European and Soviet currents ¹⁷. From a biographical point of view it must also be noted that most of the Vienna Circle members had been educated as natural scientists, and even if most of them did not pursue this career further¹⁸, they probably retained much of the natural scientists' thought-style – which of course entails a high opinion of the scientific enterprise.

However the Vienna Circle's faith in science was not as blind as the frequent charges of "scientism" it has faced (se e.g. Sorell 1991, Ch.1) would suggest. The Vienna Circle's members thought science neither to be infallible, nor to achieve objectivity as it is traditionally conceived: they did not think that science provides us with "the" picture of reality or with a "view from nowhere". The epistemological virtue of the scientific enterprise that the Vienna Circle members particularly prized was its reliance on an *inter-subjective*

control of statements and theories¹⁹. Accordingly, the three other main tenets of the SWC that I identify express *preconditions for the inter-subjective testability* of statements and theories.

As a second feature of the SWC we can consider the requirement of intelligibility. The SWC requires conceptual and linguistic clarity²⁰ in the formulation of any argument or statement and dismisses as cognitively empty all those expressions which turn out to be obscure or which contain grammatical or logical errors or indefinable terms. In the "Manifesto", the "clarification of problems and assertions" via logical analysis is set as the very "task of philosophical work" (Carnap, Hahn and Neurath [1929] 1973, 306).

A third tenet of the SWC should also guarantee inter-subjective testability: it can be synthesized as the reliance exclusively on empirical evidence and on logically sound arguments in formulating or verifying meaningful statements or theories. According to the "Manifesto" (Carnap, Hahn and Neurath [1929] 1973, 308), "the scientific world-conception knows only empirical statements about things of all kinds and analytic statements of logic and mathematics". The name "SWC" - writes Hahn - means "a confession of faith": on the one hand "in careful logical inference", on the other hand "in the patient observation of phenomena" (Hahn [1930/31] 1980, 20). Hahn defines accordingly "the basic theses of the scientific world view: there are only two means of acquiring knowledge: experience and logical thought" (Hahn ([1930/31] 1980, 28).²¹

Last but not least, the well-known rejection of "metaphysical and theologising thought" (Carnap, Hahn and Neurath [1929] 1973, 301) should certainly be mentioned as an essential characteristic of the SWC: in the Circle around Schlick "a position not only free from metaphysics, but opposed to metaphysics was the common goal of all"²². Arguments, statements, theories or concepts referring to metaphysical entities, to "unknowable or transcendental things" (Neurath [1930/31] 1983, 34), or to anything that in principle eludes inter-subjective testability, deserve – according to the SWC – to be judged "meaningless". In fact, all "bold flights of ideas, mystical intuition, emotive comprehension", "poetic and imaginative attempts to grasp wholes and complexes", and "philosophy in the usual sense: as a theory about the world"²³ are to be conceived of as "meaningless". Regarding the rejection of "theories about the world" Neurath ([1930/31] 1983, 33) specifies: "[The SWC] recognises no 'world' as a whole, it does not aim at comprehending a mighty world-picture in its totality, at a world-view. If one speaks of a scientific world-'conception' in contradistinction to a philosophical world-'view', 'world' is not to indicate a definitive whole, but the daily growing sphere of science". As Frank (1949, 38) would later confirm, the very expression

"SWC" [wissenschaftliche Weltauffassung] was chosen with the intention of avoiding the "metaphysical connotations" of the expression "world-view" [Weltanschauung].

In summary, the SWC is characterized by:

- (i) the deep appreciation of science and the attribution of a "distinguished" epistemological status to scientific knowledge;
- (ii) the requirement of conceptual and linguistic clarity;
- (iii) the exclusive reliance on empirical evidence and on logically sound arguments as means for acquiring or recognizing genuine knowledge;
- (iv) anti-metaphysics, as the wish to avoid vague concepts and "uncontrolled" statements.

Of course, the SWC-tenets leave many questions open: for instance, what should count as scientific knowledge when scientists disagree with each other? How far should we push the pursuit of linguistic clarity? How should we conceive of natural language? What counts as empirical evidence? Which kind of logic are we referring to in requiring logically sound arguments? What do we really mean by "metaphysics", and can scientists dispense with it at all? These, and many other questions, cannot be answered by the SWC (though each member of the Vienna Circle dealt with some of them and provided his own answers): its theoretical content is too weak for this purpose.

2. The primacy of practical reason in the "scientific world conception"

The SWC, in fact, is *not* a theory. And although relationships of logical implication or of logical reduction could be established among some of the tenets (i)-(iv)²⁴, the Vienna Circle members do not provide us with a rational justification for the SWC. The SWC-tenets do not appear in their writings as something one can argue for²⁵. Rather, they are the starting point, the framework within which one can start to argue.

In the "Manifesto", the fact that the SWC does not consist in theoretical propositions but rather has a practical nature is actually stated quite clearly:

The scientific world conception is characterised *not so much by theses* of its own, but rather by its basic *attitude*, its *points of view* and *direction of research* (Carnap, Hahn and Neurath [1929] 1973, 305-306; my emphases).

Furthermore, the descriptions of the SWC given by the Vienna Circle members are filled with references to value judgments, aims, actions, behavior patterns, and even to emotions. This is particularly evident in the "Manifesto", of course, because of its programmatic character and its pamphletary style. But aside from that, even in the more sober texts written by "moderate" Vienna Circle members, it is easy to find value judgments or references to behavior and actions – as well as signs of emotional involvement. Consider, for instance, the value judgments implicit in the passage by Schlick quoted above:

[...] the issue [with reference to the SWC] is that of a progress in knowledge, and all interconnected knowledge is science; there is therefore no other way of understanding the world but a scientific one [...]. [...] in the evolution of science there are no such ups and downs of doctrine as there are among the philosophic systems; instead, there is a continuous ascent" (Schlick [1928] 1979, 132).

As for Hahn, I have already quoted his words about the SWC being "a confession of faith" (Hahn [1930/31] 1980, 20). This "faith" also has, apparently, an emotional component, which emerges in statements such as the following:

The true expression of our time [...] is the scientific world view with its *loving*, *careful*, detailed observation of the given, its *prudent* step-by-step logical constructions [...] (Hahn [1930/31] 1980, 30; my emphases).

Of course, one can question the appropriateness of the English translation of Hahn's *Bekenntnis* with "confession of faith". Nevertheless, it may be worth considering the nature of the SWC against the background of the final paragraphs of Carnap's *Aufbau* – one of them having the very title "Faith and Knowledge" (Carnap [1928] 1969, 292-295). In this paragraph Carnap assumes that "faith" is "the inner attitude of a person", something which is "not [...] within the realm of theory". In this respect faith is *not* knowledge, even if it can – as Carnap underlines – lead to knowledge²⁶. Emphasis on the emotional component attached by Hahn, by the "Manifesto" and by Carnap himself²⁷ to the SWC could ultimately bring us to declare the SWC to have been indeed a "faith", or a "metaphysical" world-view – despite the Vienna Circle members' efforts to deny this: In fact, according to Carnap ([1932] 1959, 79), "metaphysics also arises from the need to give expression to a man's attitude in life, his

emotional and volitional reactions to the environment, to society, to the tasks to which he devotes himself".

Furthermore, if we raise the question of whether the SWC is true or false, we feel immediately that such a question is not properly formulated: it is not a "genuine" question, it does not belong to the realm of those scientific questions which can be properly answered²⁸. It would make sense instead to ask whether adopting the SWC would be right or wrong, and this (pseudo-) question would very much resemble what Carnap – following Wittgenstein – calls a "riddle of life", or a "practical situation"²⁹.

However, at this stage it seems fruitful to distinguish – better than Carnap did³⁰ – "emotional" from "volitional", "riddles of life" from "feelings of life", ethics from poetry. Leaving aside, then, any question about possible existential and emotional aspects of the SWC, it is worth considering again the SWC-tenets (i)-(iv) in a way which brings to light their *practical* nature. They can easily be re-interpreted as recommendations in the following way:

- (i*) Do attach value to scientific knowledge, rely on it!
- (ii*) Whatever you want to state, state it as clearly as possible! Make yourself intelligible to others!
- (iii*) Do believe in a statement or in a theory only on the basis of empirical evidence or logically sound arguments! Do not make/accept ontological commitments that cannot directly or indirectly rely on empirical evidence!
- (iv*) Do not believe statements or theories that escape inter-subjective control! Do not believe in any alleged extra-scientific knowledge!

Again, it could be conjectured that the formulation of the SWC was a (more or less conscious) attempt by the Vienna Circle to extend the attitude of scientists to philosophers. As mentioned above, most of its members had been trained as scientists, and we can imagine (i*)-(iv*) as implicit rough guidelines that one follows (or tries to follow, or imagines one follows) in pursuing science. Certainly, and more importantly, they were conceived of by the Vienna Circle as guidelines valid (also) in pursuing philosophy. In this context it should also be recalled that Wittgenstein's idea of *philosophy as an activity* (Wittgenstein 1990, 32) was popular in the Vienna Circle (Schlick [1928] 1979, 137 and Schlick [1930/31] 1979, 157). Even an anti-Wittgensteinian like Neurath shared a version of this idea, or even anticipated it: in his essay on "The Lost Wanderers of Descartes and the Auxiliary Motive" (Neurath [1913]

1983), for instance, he criticizes Descartes for not having included thinking in the class of "acts"³¹.

Assuming that doing philosophy is an activity, prescriptions like (i*)-(iv*) would broadly direct this activity along a particular path, and at the time of the Vienna Circle they actually shaped to a great extent that particular *way of doing* philosophy that would establish itself as "philosophy of science".

Indeed, philosophy of science – whose origins have to be traced back largely to "scientific philosophy" – emerged historically from the attempt at *doing* philosophy "scientifically". This new way of doing philosophy was an essential contribution towards shaping the attitude of philosophers of science. For the most part this attitude is still alive, and contemporary philosophers of science should be able to recognize that the SWC constitutes to a great extent the origins of their approach to philosophy. Certainly, we could dismiss an overly extreme version of (i), and agree with Sarah Richardson that "ethically and empirically, it is no longer possible to think of science as only a liberatory force or ideal way of knowing" (Richardson 2009b, 172). But even "postmodern" critics of science, and the most severe critics of Logical Empiricism, if they are philosophers of science, would try to express their criticisms of science or of Logical Empiricism as clearly as possible, they would provide structured arguments, they would appeal to some empirical evidence, they would try to perform conceptual analyses, and probably they would often have to rely on (other) pieces of science. Furthermore they would not appeal to transcendental truths, to religious dogmas, to obscure concepts, to subjective feelings; nor would they rely on poetic expressions, on suggestive metaphors, on associative thinking or on unstructured streams of consciousness. The recommendations expressed by the SWC, it seems, possess a certain normative efficacy even if they are theoretically weak, that is, even if they are theoretically general (and even vague) enough to allow for many different specifications and interpretations of their theoretical content. It seems that two philosophers can both conform to (i*)-(iv*) and thus "do" philosophy in an approximately similar way even if they have different conceptions about what should count as scientific knowledge, or about what empirical evidence is, or about what counts as inter-subjective control etc. At least with respect to (ii*)-(iv*), it could be argued that the Vienna Circle "extracted" from science an epistemological attitude that any philosopher of science would still (have to) use even if she disputed scientific "truths" and practices or the philosophical statements of a particular Vienna Circle member.

As already mentioned, the Vienna Circle does not provide us with a justification of (i*)-(iv*): we are left with no rational justification for preferring this way of doing philosophy (i.e.

philosophy of science) to others - rather than, for example, the way German idealists, or existentialists, or neo-Thomists, or phenomenologists, did or do philosophy. While many of these would have been "denounced" by the Vienna Circle as "merely" doing metaphysics, such a "denunciation" does not amount to an argument: Neurath himself admitted explicitly that "metaphysics ultimately cannot be defeated by arguments" (Neurath 1932, cit. in Uebel 2004b, 41).

Since at least Carnap seems to have admitted the truth-aptness of *conditional* value-judgement³², we could be tempted to ascribe to the Vienna Circle a pragmatic justification of (i*)-(iv*), which makes them true conditionally on specific aims: thus, our recommendations would become a kind of hypothetical imperative of the form

(i**) "If you want X, then you should attach value to scientific knowledge and rely on it".

For instance, since the Vienna Circle did not reject metaphysics *tout court*, but any metaphysics pretending to be knowledge, we could re-interpret SWC-recommendation (iv*) as:

(iv**) If you want to gain knowledge, you should not believe statements or theories that escape inter-subjective control and you should not believe in any alleged extra-scientific knowledge.

While this *a posteriori* interpretation of the Vienna Circle's position may be plausible, it must be recognized that it is hard to find in the works of the Vienna Circle members such a justification of the SWC. A convincing explanation of this absence can be found in a thesis recently advanced by Paul Forman, according to which

Modernity is distinctively, uniquely, that historical-cultural era in which means had primacy over ends. Modernity placed its *faith* in rule-following, in proceeding methodically according to proper method, as surely leading to the optimal end in every cultural endeavour and, more generally, in the individual's conduct of life. (Forman 2010, 161; my emphasis)

The SWC is to be considered, in this respect, a perfect expression of modernity³³: its normativity is attitudinal and procedural rather than doctrinal or substantial. This should not lead us to deny the normative force of the SWC entirely, nor to forget that such an attitude has perhaps an even stronger and more direct relationship with values than any *theory* about values, since it is an *immediate* expression of them³⁴. The Vienna Circle members valued science, valued linguistic clarity, valued logical consistency and empirical evidence, and rejected any "metaphysics" pretending to be knowledge. They certainly stuck to these values,

even if they considered them not a matter of truth and theories, but rather a matter of commitment and action.

The SWC consisted in rough guidelines about *how* to do philosophy (the following of which would probably result in a piece of philosophy of science). The guidelines were very general, and the Vienna Circle members were, already among their contemporaries, certainly not the only ones who adopted them (the other Logical Empiricists in Berlin, or even a Neokantian like Cassier would have endorsed them). A genuinely original characteristic of the Vienna Circle, however, was its pursuit of the same guidelines while also engaging in politics. The Vienna Circle's political engagement is the subject of the next two sections.

3. The Vienna Circle's SWC in its historical context

In order to understand the Vienna Circle's political engagement it is necessary to take into account the historical context in which it was embedded. Although it would be inappropriate here to go too deeply into the details of Austrian history, I shall try – in this section – to give a brief reconstruction of the historical context inasmuch as it is relevant to our purposes. By means of this reconstruction I intend to emphasize two issues which have been neglected in the recent debates on the Vienna Circle and politics:

I) The (partial) convergence between liberalism and social democracy, as a peculiarity of Austrian history in the decades around the turn of the 20th century which set the stage for the Vienna Circle's political engagement. Recent research on the issue of the Vienna Circle and politics has concentrated more and more on the connection between the "Left Vienna Circle" and the Austrian Social Democrat Party, or the so-called Red Vienna. However this focus obscures another important factor, to which the "Manifesto" refers quite clearly:

That Vienna was specially suitable ground for this development [i.e. the development of the SWC] is historically understandable. In the second half of the nineteenth century, *liberalism* was long the dominant political current. Its world of ideas stems from the enlightenment, from empiricism, utilitarianism and the free trade movement of England. In Vienna's liberal movement, scholars of world renown occupied leading positions. (Carnap, Hahn and Neurath [1929] 1973, 301; my emphasis).

The development of the SWC was originally related to the culture of liberalism. Thereafter, for historical reasons which I shall try to illustrate briefly in this section, the SWC was able to

become a common standpoint shared by *both* liberal-oriented *and* social-democratic oriented people inside and outside the Vienna Circle³⁵.

II) The inseparability of politics and world-views, or "questions of life" 36, as a highly important feature of the political context in which the Vienna Circle originated and acted. The almost shocked indignation with which Sarah Richardson talks about a "technosocialist Red Vienna" (Richardson 2009b, 170) and about the Social Democrat Party's prescribing "even highly detailed lifestyle recommendations" (Richardson 2009a, 15) reveals the extent of her unfamiliarity with Austrian history and politics 37. The inseparability of politics and "questions of life", particularly at the time of the Vienna Circle, characterized the *entire* political debate and the positions of *all* political parties: it was not the sinister feature of a party obsessed by planning and with a concealed leaning towards totalitarianism.

Acknowledgment of this conflation of politics and world-views is fundamental in understanding the nature of the Vienna Circle's political engagement for two main reasons: firstly, because against this background it becomes understandable how a "world-conception" like the SWC could have been intrinsically political. Secondly, because thinking in terms of word-views – and not (only) of specific party-political affiliations – allows us to understand the above-mentioned convergence between liberalism and social democracy and to consider the *whole* Vienna Circle as a unitary social and political actor despite the different party-political affiliations or sympathies of its members. I shall try now to deal with these historical issues in greater detail. The interesting question which arises, of whether politics is inevitably sinister whenever it concerns itself with world-views or "questions of life", I will leave open to debate.

The "golden age" of Austrian liberalism was in the 1860s and 1870s – in Vienna it lasted until the mid-1890s. It was a time of extremely rapid industrialization, modernization, urbanization, and population growth. Along with its growing economic prosperity, the mostly liberal-oriented Austrian bourgeoisie was able to gain some political power and – more importantly – was able to assert ideals and values which would later be inherited by the Social-democrats: the reliance on science and technology and the belief in their decisive contribution to social progress; a strong belief in the emancipating power of education, which would foster the diffusion of scientific knowledge and a critical attitude among the citizens; a will to emancipate the State and the citizen from the influence of the Catholic Church and of religion in general; a faith in the power of reason in conjunction with a pragmatic-empiricist attitude; and a leaning towards cosmopolitanism and pacifism³⁸.

In the Vienna of the late 19th century, a great economic depression, which increased social inequalities and unemployment and led to the growing proletarianization of the urban masses, marked the failure of liberalism and paved the way for the political rise of the Christian-social Karl Lueger, mayor of Vienna from 1897 until 1910. He succeeded especially in mobilizing the middle class (the petty bourgeoisie of tradesmen, craftsmen, small businessmen etc.), but also parts of the aristocracy and the lower classes, against the "capitalists" and "financial speculators" who were taken to be responsible for the crisis and often identified with the Jews. Lueger mobilized the masses by means of his renowned rhetorical ability, contrasting the aforesaid liberal ideals with appeals to tradition, to religion, to national pride, and to anti-Semitism. It is worth considering the following description, by the Austrian writer Felix Salten, of Lueger's rhetorical performances:

And how he talks to them! [...] When he flies into one of his towering rages, the kind of which his temperament is capable of, he vilifies rational lines of argument and given facts, tramples points of significance to the ground, then aggrandizes inanities with just one word, so that they appear to be of the very highest consequence. [...] During his furious oratory, when he has reached a stage where proprieties no longer matter to him, he provokes the wrath of the streets, draws foolish exclamations of superstition from the mouths of the lowly and the dim. He even manages to outdo the clergy, long flagging at the pulpit anyway – but with all this he triumphs.³⁹

This was exactly the kind of rhetoric the Vienna Circle would later publicly oppose: its insistence on the value of rational arguments and empirical evidence would not only be addressed to fellow philosophers and scientists, but would be publicly propagated as part of the SWC (see in particular tenets (ii*)-(iv*)).

Going back to Karl Lueger: notwithstanding his achievements in modernizing the city, he promoted a pre-modern culture based on traditional values, indisputable social hierarchies, irrationalism, nationalism and anti-Semitism, and religious and social submission. It was against this world-view that the Social-democrats, in turn, reaffirmed the views and values of the 19th-century liberals, even if they differed from the latter in other respects (especially concerning economic policy)⁴⁰.

In 1907, at the time when the so-called "first Vienna Circle" started its meetings, universal male suffrage was introduced in Austria: this meant the beginning of the domination of the political scene by the mass parties. As has been highlighted by historians specializing in Austrian history, these mass parties (not only the Social-democrats, but also the conservative Christian-socials and the German-nationalists) constituted *Weltanschauungsparteien* (Hanisch

1994, 117. Wandruszka 1977, Ch. 1): that is, they were political parties fighting not only in order to increase their power and to foster the interests of their electoral supporters, but also in order to establish a specific world-view. Each party supported an "overall-concept of society" [Totalentwürf der Gesellschaft] (Hanisch 1994, 117) which embraced every aspect of the economic system, of culture, of education, and of everyday life:

On this ideological basis the parties sought to influence and to guide their members in all areas of life [...]. They [sc. the members] would find within the party a (new) homeland, "from birth to death", "from the cradle to the grave" – this was the motto. (Kuprian 1997, 22; my translation)

It was in this political context that members of the progressive liberal bourgeoisie, deprived of a party affiliation, joined the Social-democrats, or at least shared much of their world-view, in particular their efforts to improve and secularize the educational system and to popularize science.

Crucial is the extent to which the celebration, or defamation, of science was politically loaded: for this reason, the weight and the political value of the first recommendation of the SWC ("Do attach value to scientific knowledge, rely on it!") should not be underestimated. As Felt (1996, 46) has pointed out, between 1900 and 1938 the popularization of science increased enormously in Vienna. The propagation especially of the natural sciences, which in the 19th century had already been part of the educational ideal of the liberals, was further pursued in the first half of the 20th century by the Social-democrats, in particular in the context of the Volksbildung (adult education) in the so-called "Red Vienna" Felt (1996, 48-49 and 59-60; 2002, 57) has also shown how the popularization of the natural sciences and their empirical and rational methods was a common interest both of the liberal bourgeoisie and of the working class. The increasing influence of science in the educational system and on the world-view of citizens was publicly opposed by the Austrian Christian-socials, who could also appeal to the encyclical Pascendi dominici gregis published by pope Pius X in 1907: in this document the pope publicly denounced the diffusion of natural sciences as a threat to "more serious and elevated disciplines" 42, thus opening a Kulturkampf of immediate political significance, since it involved spheres of public life such as legislation and the educational system. Immediately after the publication of the pope's encyclical there followed in Austria dramatic political conflicts concerning the secularization of the Austrian law and political control over schools and universities (Coen 2007, S. 238-243). The extent of the conflation between world-views and politics, as well as the major role of science within this context, is attested by a debate which started in early December 1907 in the Austrian parliament⁴³. The debate brought into open conflict a world-view based on theology and a world-view based on science: the Social-democrat member of parliament Dr. Masaryk characterized this contrast as follows:

"All science recognizes the lawlike character of the universe, of nature, of society and of history [...] Theology [...] is based on the faith in authority and conceives of nature, society and history as undetermined" (Quoted in: *Der Freidenker*, N. 2, January 1908, 10; my translation)

This parliamentary debate continued well into the following year, developing further into a debate about materialism *versus* metaphysics, and the great extent to which philosophical questions had entered politics was noticed by the protagonists of the debate themselves. According to the proceedings, a certain Herr Krek remarked at one point:

"It is interesting that in our materialistic times, in which the poverty of the working class – including the farmers – is really dreadful, the grouping of the parties takes place here on the base of schools of thought [Geistesrichtungen], of beliefs concerning the most elevated questions, and not on the base of material principles" (Quoted in: *Der Freidenker*, N. 10, May 1908, 76; my translation)

The struggle between *Weltanschauungsparteien* to win institutional power and establish a specific world-view was to become increasingly fierce after World War I, when the end of the Habsburg Empire and the establishment of the parliamentary system of the First Republic made the mass parties unrivaled protagonists on the political scene. In Vienna, the Social-democrats prevailed against Christian-socials and German-nationalists, and were to govern the city from 1918/1919 to 1934, even though from 1920 Austria as a whole was ruled by the Christian-socials. Furthermore, the economic and social conditions of the country after the war were somewhat desperate. The political scenario was thus characterized by a strong polarization (see Kuprian 1997, 23), which in the late 1920s and early 1930s would pave the way for the rise of Austrofascism: on the one side, Christian-socials, German-nationalists and (at a later stage) National-socialists can be said to have represented a "conservative pole" (notwithstanding the important differences among the three political parties); on the other side, liberals and Social-democrats constituted a "progressive pole".

This polarization is also attested in various passages of Vienna Circle members' writings on the SWC. At the beginning of the "Manifesto", for instance, it is said that a "new opposition" has arisen between "metaphysical and theologising thought" and "the opposite spirit of enlightenment and anti-metaphysical factual research"⁴⁴. The "Manifesto" makes clear that this "opposition" did not concern only philosophy:

The increase of metaphysical and theologizing leanings which shows today in many associations and sects, in books and journals, in talks and university lectures, seems to be based on the fierce social and economical struggles of the present: one group of combatants, holding fast to traditional social forms, cultivates traditional attitudes of metaphysics and theology whose content has long since been superseded; while the other group [...] faces modern times, rejects these views and takes its stand on the ground of empirical science (Carnap, Hahn and Neurath [1929] 1973, 317).

Within the conservative pole Christian-socials, German-nationalists, as well as National-socialists (who gradually emerged after World War I) combined their (different) conservative or reactionary political stances with a world-view based on the irrationalistic adhesion to traditional values and social hierarchies, on slippery, undefined concepts (such as *Ganzheit*, *Volksgeist* etc.), on unjustified claims about essences (the nature of women, the nature of Jews etc.), and – in the case of Christian-socials – on religious beliefs. The following quotation from an essay by Jakob Wassermann provides us with an illuminating example of that combination of anti-Semitism, anti-intellectualism (as well as anti-scientific spirit), anti-capitalism, anti-modernism and "metaphysical leaning", which can be taken as characterizing the conservative pole:

[...] A lack of honorableness, a lack of commitment, a lack of aptitude for metaphysics - the latter in particular appalled me the most about the educated classes. A predisposition towards rationalism characterized these Jews and marred even the most intimate relationships. As to the inferior classes, this leaning was also evident and at work in their correspondingly low milieu, shown in the adoration of success and wealth, in the thirst for dominance and pecuniary gain, the lust for power and social amelioration. In the higher classes it evinced itself in the incapacity to form ideas and an absence of intuition. Science was an idol, intellect held to be the absolute master. What could not be calculated was regarded inferior – even fate was calculable; the most secret, darkest reaches of the soul laid bare. They possessed such a will and determination to expose the mysteries of the world, and they often went so far in this respect [...] that in many cases it was not possible to distinguish shamelessness from the drive to learn⁴⁵.

In opposition to the conservative pole and its world-view, both liberals and Social-democrats supported a rationalistic world-view which challenged traditional values and religious beliefs, proclaimed the emancipating power of education, appealed to science and reason, and

demanded empirical findings and rational arguments. It is not difficult to recognize the correspondence between this political position and the SWC-recommendations (i*)-(iv*): they supported science against metaphysics (see especially (i*) and (iv*)) in a context in which this opposition very much informed political identities and political debates; they demanded conceptual clarity, rational arguments and empirical evidence (see especially (ii*) and (iii*)) at a time when reactionary political parties were appealing to tradition and authority and relying on irrationalistic rhetoric.

Thus, it is clear that the Vienna Circle, in that it publicly supported and promulgated the SWC, was also publicly supporting a political (even if not yet party-political) position. The next question to be raised is whether the Vienna Circle can also be said to have been "politically engaged" in an even narrower sense of the expression, that is, whether it made concrete efforts to convert this epistemological *and* (at least in that historical context) political attitude into the pursuit of concrete political aims. The next section will demonstrate that this question should definitely be answered in the affirmative.

4. The SWC "in action":

The Vienna Circle within "Late-Enlightenment"

As Stadler's studies on the Austrian "Late Enlightenment" and the Vienna Circle have documented (Stadler 1981; 1982, Part II; 2001, § 5.1), a number of associations and societies – which belonged to what I have called the "progressive pole", but which cannot be identified with a specific party – were politically engaged in Vienna at the time of the Vienna Circle: among them, the Austrian Monist Society, the League of Austrian Freethinkers, the Ethical Society and the Association for a Universal Nutrition Service. In this section I shall focus on the Austrian Freethinkers as an ideal starting point for demonstrating (a) how the Vienna Circle was institutionally entangled in a politically active network and (b) how this network was concretely working for the realization of objectives whose political nature is more or less beyond doubt.

The Austrian Freethinkers were a political movement which originated from the Austrian section of a broader "International Freethinkers League" in the late 19th century⁴⁶. In the beginning, the movement was little more than the expression of a liberal anticlerical tradition: its program focused on the emancipation of the State and the citizenry from the influence of the Catholic Church and from religion in general. Later, its development was characterized by

the growing preponderance of the social-democratic members⁴⁷ and by the emergence of new aims and activities in favor of the workers: the Freethinkers, for instance, promoted adult education (Sertl 1994, 63), offered legal aid and health care for people with low income (Sertl 1994, 120), and provided psychological support for the suicidal⁴⁸. Nonetheless the movement remained without a specific party affiliation. In fact, from the very beginning the Freethinkers were organized as an ensemble of many different smaller societies, some left-oriented, and others with a more liberal leaning (Sertl 1994, 43). The Freethinkers can thus be considered as exemplifying the convergence between progressive-liberal bourgeoisie and the Social-democrats.

After the end of the Habsburg monarchy and the beginning of the First Republic (1918/1919), the Austrian Freethinkers became a "mass movement": The "Freethinkers Society" alone (the most relevant among the Freethinkers' societies) could in 1921 count on some 100,000 members (Sertl 1994, 42). From as early as 1896 the Freethinkers had had their own journal, which was re-named *Der Freidenker* in 1902 (Sertl 1994, 36). During the 1920s two more "special" journals were set up: one by the left wing of the Freethinkers (*Der Atheist*) and one specifically for Vienna (*Der Pionier*). The Freethinkers also possessed their own publishing house (Freidenker Verlag) and their own school (Stadler 2001, 188-189).

As already mentioned, the movement of the Austrian Freethinkers was organized as an ensemble of different societies: the many attempts up to 1912 to unify these societies were hindered by the public authorities, the reason for their refusal being the suspicion that the Freethinkers would concern themselves with political matters⁴⁹. While the programs and statutes of their different societies often referred to the "apolitical" character of Freethinker activities⁵⁰, the public authorities recognized immediately the "strategic" nature of these declarations and did not believe them, just as around twenty years later the Austrofascist administration would not believe Schlick's reassurances about the neutrality and political disinterestedness of the Ernst Mach Society⁵¹. As I shall show below, while both the Freethinkers and Schlick could rightly declare their societies to be *non-party-political*, it is difficult to deny the political nature of their purposes.

The Ernst Mach Society – which I mentioned in section 1 as the main institutional "sponsor" of the Vienna Circle's SWC – was in fact one of the societies founded on the initiative of the Freethinkers (Stadler 2001, 328; Uebel 2008, 71-72). The latter's idea of founding a Society dedicated to the spreading of the ideas and findings of the natural sciences could at that time enjoy the cooperation of most Vienna Circle members: As already mentioned, in 1928 the Ernst Mach Society was officially founded in order to "further and disseminate the scientific

world-conception"⁵². Schlick and Hahn were nominated respectively director and vice-director, Neurath and Carnap secretaries, and Zilsel was among the committee members.

In addition the majority of the Vienna Circle members were engaged in other societies or activities belonging to the network of the Freethinkers. Schlick, Carnap and Kraft participated in the activities of the Ethical Society (*Ethische Gemeinde*), founded in 1894 by the Freethinkers as *Ethische Gesellschaft* in order to divulge a secularized ethical education that was to replace religious education⁵³. Schlick, Neurath, Feigl and Carnap supported the German and Austrian Monists, whose main aim was the propagation of a rationalistic and scientific standpoint against metaphysics and religion⁵⁴. Neurath, Feigl, Waismann and Zilsel taught courses in the adult education centres mentioned above⁵⁵. The Vienna Circle's doing philosophy of science (teaching, lecturing, and publishing) in these public contexts was a form of political engagement, since it was the public manifestation of a politically-laden attitude.

Furthermore, by participating in the activities of the Freethinkers the Vienna Circle chose to be part of a network which was concretely working to realize objectives of an almost undeniably political nature. The Freethinkers' official program from 1919 until 1933 (when the Freethinkers were banned by the Austrofascist government), which was also the program of the broader "Free Union of Cultural Associations" is reported in Sertl (1994, 95-96; my translation):

- separation of the Church from the state and the school system;
- equal treatment of all religious faiths and other associations, submission of the religious faiths to the statutes governing associations;
- substitution of confessional religious education with a non-denominational moral and ethical education;
- separation of the Faculties of Theology from the University, maintenance of them by the confessional associations;
- radical reform of the Marriage Act in terms of obligatory civil marriage [viz. in terms of giving civil marriage laws priority over Catholic rules]
- abrogation of the prohibition of divorce for separated Catholics;
- institution of a single, completely free comprehensive school system to be attended until the age of 14 (teaching material and meals should also be provided for free); all schools, including colleges, should be free and school doctors should be appointed;
- elimination of every direct or indirect obligation to attend religious education classes, abolition of compulsory religious practices at school;
- global reform of the criminal law;

- equal treatment of legitimate and illegitimate children;
- full women's equality, and in particular: admission of women to every school, office and profession and equal pay for equal work; abrogation of § 144 [i.e. the punishment of abortion with one to five years of harsh imprisonment];
- legalization of cremation.

This program was shared and actively furthered by those "neoliberal-socialist currents" (Sertl 1994, 115; my emphasis) to which the Vienna Circle belonged: it was a program informed by a specific world-view and by specific ideas about how citizens should be educated and how public life should be shaped. It was not the program of a specific party, but again its political nature is hard to deny.

Of course, if we compare the SWC-recommendations with the political program of the Freethinkers we will not find between the two any relation of implication in a strictly logical sense. But it is at least apparent that there was a great degree of convergence. If someone is against metaphysics, he will probably be unhappy with the influence of religious beliefs or of conservative social hierarchies on education and laws. If someone attaches positive value to scientific knowledge, he will probably wish to live in a society in which science is propagated and appreciated. If someone is persuaded only by empirical evidence or rational arguments, he will probably dislike legislation based on traditional values or religious beliefs. And so on. The epistemic attitude and the political engagement of the Vienna Circle were not two separate dimensions running in parallel, but were essentially interwoven: the Vienna Circle members were willing further to apply their epistemological tenets and requirements to intervention in public life and to decisions on how society should be shaped. The SWCrecommendations ((i*)-(iv*)) determined the conditions from which not only the Vienna Circle's practice of philosophy of science, but also its political engagement originated - not so much as logical consequences originate from given premises, but rather as activities originate from and are governed by general prescriptions, or by general methodological guidelines⁵⁷.

5. Discussion

It is time to recall our initial questions and to consider what answers can be provided to them in light of the overall content of this paper. As anticipated in the Introduction, this paper deals especially with the question of

(1) Whether we can ascribe to the Vienna Circle a politically engaged philosophy of science.

If we seek the Vienna Circle's political engagement in some piece of theory produced by a Vienna Circle member, as has been done in the recent literature, we end up neglecting its clearest manifestation, as it consisted in deeds much more than in theories.

It will be helpful to recapitulate these deeds, emphasizing their close relationship with the Vienna Circle's (doing) philosophy of science. First, Vienna Circle members chose to step out into the public sphere as a unitary social actor that publicly supported and tried to diffuse an attitude (the SWC) endowed with a clear political meaning (clearly political, at least, in that historical context). This politically-laden deed was at the same time part of the Vienna Circle's philosophical work; firstly, because the SWC had been worked out as a common aspect of the different Vienna Circle members' philosophies, and, second, because the SWC also guided the Vienna Circle's way of doing philosophy, i.e. its doing philosophy of science. Furthermore, the members of the Vienna Circle chose to participate in the activities of a politically engaged progressive network, in particular in the activities of the societies of the Freethinkers, a liberal-socialist movement pursuing concrete political aims. This engagement with the progressive pole also partly overlapped with the Vienna Circle's philosophical work: Circle members engaged in that network not just as private citizens, but as philosophers of science, since their engagement consisted – beside the organizational work for the Ernst Mach Society - in giving philosophic-scientific public talks or in publishing for a broader audience than the philosophic-scientific community. Finally, Vienna Circle members joined a liberalsocialist educational program which sought to propagate scientific knowledge and the appreciation of scientific methods: many of them taught courses in the adult education centres. Again, this politically-laden act was at the same time part of their work as philosophers, since their teaching was based on their scientific and philosophical knowledge and competence.

As I hope to have shown in this paper, if we look on the Vienna Circle's philosophy of science as a practice (i.e. as the *doing* of philosophy of science in a concrete historical context) which results from a particular attitude (the SWC), its relationship with the Vienna Circle's "other" practice – its political engagement – becomes manifest. And indeed it can be said that the Vienna Circle members' (doing) philosophy of science was politically engaged: First, their *doing* philosophy of science was the expression of an *attitude* which, in the historical context of that time, had a quite immediate political meaning. Second, as a consequence, every public manifestation of this attitude - including teaching, speaking and

publishing as philosophers of science in a social context broader than just the academic and scientific community, as the Vienna Circle members did - was an act endowed with political meaning. Finally, the same attitude that guided the Vienna Circle in doing philosophy of science (i.e. the SWC) also inspired its engagement within a political network which actively pursued concrete political aims.

My reconstruction of the Vienna Circle's politically engaged (doing) philosophy of science has the advantage, I hope, of overcoming one major obstacle to the recognition of the political nature of its philosophy: this is the idea that the Vienna Circle could not have produced a politically engaged philosophy because its members were allegedly non-cognitivist in ethics⁵⁸. If we look on doing philosophy of science as a way of acting in the world, we can see that – in certain historical contexts – this way of acting can be itself a form of political engagement, independently of the fact that the piece of philosophy of science which results does not entail a theory of values. With respect to the Vienna Circle the expectation that its philosophy of science entail an objective determination of values is redundant, since, *inversely*, the Vienna Circle's doing philosophy of science was already the expression of the values the Vienna Circle adhered to. Philosophy of science does not need to entail a theory of values in order to be politically engaged.

A second hindrance to any attribution of political engagement to the Vienna Circle's philosophy has typically been identified in well-known declarations to the contrary by certain Vienna Circle members themselves⁵⁹. Yet most of these declarations may be seen as referring to the political neutrality of the philosophies of science as theories produced by the Vienna Circle members – which does not exclude that the Vienna Circle's doing philosophy of science was a form of political engagement in the specific historical context in which the Circle was embedded, as I have argued in this paper. Furthermore, I hope that my reconstruction of this context (sections 3 and 4) leads us towards the correct historical assessment of such declarations of political neutrality. First, it was a context in which, especially after the rise of Austrofascism, such declarations were expedient in order to protect certain societies and associations - such as the Ernst Mach Society and the other groups forming part of the Freethinkers - from a hostile political environment (as I mentioned, this expedient did not work: the political character of these associations was too evident). But, second, there is indeed a sense in which we should believe both the Freethinkers' and the Vienna Circle members' declarations of political neutrality: they referred to their independence from any specific political party. The distinction between political and partypolitical, as I hope to have shown, is crucial to an understanding of the Vienna Circle's

political engagement and of that of the movements belonging to the Viennese "Late-Enlightenment" in general. These movements worked towards the realization of a program whose political nature can hardly be disputed, concerned as it was with reform of Austrian legislation and of the education system, with women's rights and the secularization of the State, and so on. Still, this engagement could rightly be declared to be *not* party-political, since the movements belonging to the Viennese "Late-Enlightenment" and to the "progressive pole" cannot be identified with a single party.

As to the second question mentioned at the beginning of this paper – whether the relationship within the Vienna Circle between philosophy of science and political engagement can be said to have some significance for today's philosophy of science - my impression is that, conversely, in the recent literature the historical question (1) has been interrogated and discussed through the prism of *contemporary* political engagement of philosophy of science. As already mentioned in the Introduction, contemporary philosophy of science's political engagement is mostly related to the possibility of providing theories about science which assess the political implications or the political biases of science. As a consequence, the question about the political engagement of philosophy of science tends to shift into the question of the political engagement of science. The recent literature focusing on the Vienna Circle shows the same tendency: the question about the political engagement of *philosophy* of science always tends to pass into the question of the political engagement of science 60 . However, the Vienna Circle's politically engaged philosophy of science – as I have reconstructed it – was not politically engaged in the sense in which contemporary philosophy of science usually is, i.e. as a theory about the possible political engagement or bias of science. It was philosophy of science itself, by means of its epistemological normative core, to be *directly* politically engaged.

By projecting back on the Vienna Circle our contemporary idea of a politically engaged philosophy of science we not only entangle ourselves in anachronism: we also miss a good opportunity to find other possible ways for today's philosophy of science to be politically engaged. In particular, we miss an opportunity to look for a political and social engagement of *philosophy* of science *qua* philosophy of science, one that can go beyond its role as a "denouncer" of the value-ladenness of science. A politically engaged philosophy of science does not necessarily have to be a philosophy of *science*'s political engagement.

Thus, even if the extent to which the Vienna Circle's philosophy of science was political strongly depended on the historical context in which it was embedded, I think that the issue of the Vienna Circle's politically engaged philosophy of science can nevertheless suggest new

ways in which the present-day political significance of philosophy of science can be conceived. Here I can only give some hints based on my results concerning question (1).

- (A) The recommendations and the values expressed by the SWC concern mostly epistemological standards. From a historical point of view it can be argued that philosophy of science developed out of epistemological inquiries, which are not concerned only with science, but have a much broader scope. Considering the issue from this perspective could help us to prevent the question about the political engagement of philosophy of science from always becoming a question about the political engagement of science. Although philosophers of science can "denounce" science as being value-laden or gender-biased or politically driven, this is only a *derivative* way for philosophy of science to become politically relevant. The more fundamental and intrinsically philosophical way for philosophy of science to assume a political relevance lies in its intrinsic connection with epistemological issues. Issues like what counts as (scientific) knowledge, what counts as justification for some piece of knowledge, what our best sources of knowledge are, what kind of ontological commitments should be allowed, and so on, have been dealt with by philosophers of science in connection with science - and this is important, since science has a great social impact; but, in addition, these issues also have a broader significance: alongside their application to critiques of science is their application to other spheres of public life.
- (B) Contemporary philosophers of science share a general epistemological attitude, which they may choose not to abandon while acting as citizens in their respective historical and political context. This attitude – it seems to me – retains much of the Vienna Circle's SWC, which is vague enough to admit different specifications, but which is not so weak as to allow any kind of philosophy and any kind of political position. Of course, the criticism could be made that a general appreciation of science and a few general requirements about clarity, rationality and empirical evidence are too naïve or too imprecise to be significant. As to the first criticism (naivety): of course we should ask further questions like: which piece of science should we believe in? What if scientific knowledge or rationality standards were in fact only the "opinions of the strongest" (e.g. of the most powerful scientists who could impose their "truths", of men at the expense of women, of Western thinkers at the expense of other cultures etc.)? What if the alleged empirical evidence has been manipulated or is the result of incorrect procedures? Such issues can and should be discussed by philosophers of science, in general as well as in specific cases, but the point is that any philosopher of science – as a philosopher and probably also as a citizen – will normally discuss them maintaining an "epistemological attitude" which, I presume, will very much be in line with the requirements expressed by the

SWC. Certainly, these requirements are rather imprecise (the second criticism) as long as we do not specify what should count as scientific knowledge, what we require from arguments in order to consider them rational, what empirical evidence consists in, etc. But should we really drop any requirement of rationality until we have an undisputable definition of rationality? Should we renounce clarity or ignore empirical evidence until we know exactly what they consist in? What I called "the primacy of practical reason" is best illustrated by the fact that the requirements expressed by the SWC, despite their being theoretically imprecise and incomplete, have been (and still are) significant enough for philosophers of science to use them to delimit the spectrum of the philosophical and political positions they would "allow".

(C) Philosophers of science engaged in education and in popularization activities will hand on their attitude and related skills to other citizens. The Vienna Circle's special concern with

their attitude and related skills to other citizens. The Vienna Circle's special concern with education and with the diffusion of philosophic and scientific knowledge is an aspect which deserves more attention among those who are interested in the political relevance of philosophy of science.

(D) With respect to politics and public life, it seems to me that the attitude that guided the Vienna Circle's efforts is not entirely outdated: there are many tasks, far from superfluous, that are yet to be accomplished: for example, the tasks of propagating scientific education and freeing it from religious dogmas (see e.g. the question of creationism in school programs), of secularizing legislation and freeing it from unjustified prejudices (see e.g. the juridical condition of homosexuals in most countries of the world), of requiring arguments and evidence before supporting political decisions (see e.g. the case of the Iraq war), of requiring in public debates rational discussion instead of rhetoric or the persuasion strategies of the marketing man (see e.g. the Italian political scenario in the long age of Berlusconi).

These hints, of course, amount only to a general sketch of an affirmative answer to question (2), and whether *doing* philosophy of science can become a form of political engagement certainly depends strongly on the specific context in which philosophers of science are acting. However I hope to have suggested some (new) ways in which the Vienna Circle's philosophy and history can still be of some help in reflecting on the issue.

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¹ E.g. Howard 2003, 28-46; Ibarra and Mormann 2003; O'Neill 2003; Heidelberger and Stadler 2003; Uebel 2004a; Uebel 2005; Uebel 2007b; Richardson 2009a and Richardson 2009b; Uebel 2010. In this paper I consider the core of the "Inner" Vienna Circle (Stadler 2001, Ch. 2.1) in its "European phase". Indeed, if one follows Stöltzner and Uebel (2009, LXXXIX), the latter specification becomes superfluous, since they consider Schlick's assassination as the end of the "historical Vienna Circle". Even though it deals mainly with the "depoliticization" of Logical Empiricism after the end of the "European phase", Reisch 2005 has proved an important work in stimulating recent discussion of the issue about Logical Empiricism and politics.

- ² See for instance the recent dispute between Uebel and Richardson: Uebel 2005; Richardson 2009a and Richardson 2009b; Uebel 2010. On the concept of a "Left Vienna Circle", which can be traced back especially to Carnap, see Uebel 2004a, 248-249.
- ³ Richardson (2009a, 15) pointed critically to Uebel's usage of this expression (Uebel 2005, 765) with respect to the Left Vienna Circle.
- ⁴ Carnap's ethical non-cognitivism and Neurath's reception of the Weberian ideal of value-free science are taken by Richardson (2009a) as implying the impossibility of ascribing to the Left Vienna Circle a political engaged philosophy of science. As to the ideal of the value-neutrality of science it should be noted, by the way, that it cannot be taken as implying the value-neutrality of *philosophy* of science, at least as long as philosophy is not assumed to be a science which I do not think was Neurath's position. In my paper I will argue that neither ethical non-cognitivism nor the ideal of the value-neutrality of science rule out the possibility of developing a political engaged philosophy of science.
- ⁵ Richardson (2009a, 15) rejects straightforwardly the thesis (which she ascribes to Uebel 2005) that "the LVC [i.e. the Left Vienna Circle]'s logical empiricism invited, encouraged, or provided tools for the consideration of the social and political dimensions of science". However, as Uebel (2010, 217) reasserts, he had explicitly admitted that "Unlike some contemporary versions of political philosophy of science, the left Vienna Circle's did not itself adopt the strong normative stance of exhorting philosophers of science to be oriented towards ethical-political goals". Uebel argues in fact for the much more prudent thesis according to which the Left Vienna Circle's recognition of the possibility for values to enter theory choice within science opens up to philosophy of science the possibility of analyzing those values and, in principle, of critically discussing them in light of other values. This only means that the Left Vienna Circle's philosophy of science would in principle allow the value-laden and critical approach to science which distinguishes contemporary politically engaged philosophy of science, and not that the Left Vienna Circle developed this same approach.

⁶ This is also the general point of disagreement between Richardson and Uebel: from the fact that the Left Vienna Circle's philosophy of science was not engaged in the same sense in which contemporary philosophy of science is engaged Richardson comes to the conclusion that the Left Vienna Circle's philosophy of science cannot be said to have been politically engaged *at all*. Uebel, instead, holds to the thesis that the Left Vienna Circle's philosophy of science can be said to have been politically engaged in more than one way (see Uebel 2005), but he seems to conceive of this political engagement in a rather weak sense, since he leaves the question open as to "whether the LVC's political philosophy of science is 'political enough' for contemporary purposes" (Uebel 2010, 219).

⁷ Uebel (2005, 760) points out that "lurking as yet unaddressed between the lines written by the members of the left wing [of the Vienna Circle] is a conception of what it is to adopt an attitude, take a stance and engage for or against a particular evaluation or goal, a conception in short of *praxis* that is fully integrated with their theoretical philosophy." Richardson (2009a, 16) recognizes that "For the authors of the Manifesto, the link between logical empiricism and progressive secular politics was attitudinal rather than doctrinal".

⁸ See Stadler 1981; 1982, Part II; 2001, § 5.1. and Ch. 11 and 12. Uebel (2004b; 2008; 2009) is also a precious source of information and reflection concerning the Vienna Circle's engagement in the spirit of Viennese "Late Enlightenment": Still, he seems to have thought at some point that one would do better to focus on the "Left Vienna Circle" and on its acknowledgement of the underdetermination of scientific theories (which allows for ethical and political values to be involved in the process of theory choice) in order to speak properly of a "political philosophy of science". The "turning point" can be perhaps identified at p. 758 of his "Political philosophy of science in logical empiricism: the left Vienna Circle" (Uebel 2005), where he mentions for the last time that the scientific world conception "specified a political role for philosophy of science", and then - having said that "Yet that was not all" - turns to Neurath's and Frank's belief "that political considerations might play a role in science itself: given the well known phenomenon of the underdetermination of theory by observational data - indeed, given the non-foundational nature of the data themselves - political desiderata may enter into theory and data choice [...]". It should be noticed that this "turn" by Uebel (exemplified again in Uebel 2009, 163) shifts the focus from the political engagement of philosophy of science to the political engagement of science (as accounted for by philosophers). Without in any way wanting to reject Uebel's findings about the "Left Vienna Circle", my paper simply does not join him in performing this "turn", and sticks (1) to the Vienna Circle as a whole, (2) to its scientific world conception and (3) to philosophy of science's political engagement

qua philosophy (and not qua perspective on the political engagement of science). My reasons for resisting Uebel's "turn" should become clear in the development of the paper.

- ⁹ "[The Ernst Mach Society] as stated in its program, wished to 'further and disseminate the scientific world-conception. It will organize lectures and publications about the present position of the scientific world-conception [...]" (Carnap, Hahn and Neurath [1929] 1973, 305). Compare also the announcement of the founding of the Ernst Mach Society reproduced in Stadler 2001, 332-333. I shall deal in greater detail with the Ernst Mach Society and the Freethinkers in section 4.
- ¹⁰ Stadler (2001, 342-44) reports the list of topics.
- ¹¹ A survey of this series, Schriften zur wissenschaftlichen Weltauffassung, is included in Stadler 2001, 605-606.
- ¹² Schlick [1928] 1979. The plan was that Waismann's *Logik, Sprache, Philosophie* (1976) would be the first volume of the series *Schriften zur wissenschaftlichen Weltauffassung*, with Schlick having already written a Foreword to it in 1928 that was also intended to open the entire series. For several reasons (explained by the editors at the end of Waismann's volume) Waismann's work, together with Schlick's Foreword, was published only in 1976.
- ¹³ Carnap, Hahn and Neurath [1929] 1973, 299. The "pragmatic" aim of its publication was to thank Schlick for having decided to stay in Vienna in spite of an attractive call to a chair in Bonn. But the publication of the *Manifesto* served also another kind of purposes: "it is a philosophical manifesto that serves as much the purpose of self-definition for the group it represents as it serves the purpose of announcing a distinctive program to philosophers outside" (Uebel 2008, 71. Uebel 2008 is probably the most complete reconstruction of the historical and philosophical context of the production of the *Manifesto* published so far).
- ¹⁴ The sources I refer to in this section and the next are mainly those articles which address directly the SWC: Schlick [1928] 1979; Carnap, Hahn and Neurath [1929] 1973; Neurath [1930/31] 1983 and Hahn [1930/31] 1980. However, there are also other works that can be taken as representative in this respect, e.g. Hahn [1930] 1980, Schlick [1930/31] 1979 and Carnap [1931] 1959, as well as Carnap's *Aufbau* (Carnap [1928] 1969).
- ¹⁵ Even if Uebel (2008, 96-99) seems to suggest that the SWC was conceived of slightly differently by the different Vienna Circle members, the four points with which I will characterize it can be said, I believe, to have been supported by the whole Circle.
- ¹⁶ According to the "Manifesto", "It is *the method of logical analysis* that essentially distinguishes recent empiricism and positivism from the earlier version that was more biological-psychological in its orientation" (Carnap, Hahn and Neurath [1929] 1973, 306). According to Schlick ([1928] 1979, 135), positivism is an

- "offshoot" of that "empiricist philosophy" which was supported also by the SWC. On positivism and neopositivism in connection with the issue of the development of the SWC, see Stadler 1982, 17ff. and 168ff.
- ¹⁷ See, e.g. Weart 1979 concerning France and Green 1977 and Werskey 2007 on both Britain and Russia. In the "Manifesto" (Carnap, Hahn and Neurath [1929] 1973, 301-304) a number of philosophical kinships with past as well as with contemporary authors is listed by the Vienna Circle members themselves; these kinships are conceived with respect to the whole SWC, and not just to the special value assigned to science.
- ¹⁸ Compare the short biographies of the Vienna Circle's members in Stadler 2001, 610ff. In the "Manifesto", with respect to "the Circle around Schlick", it is emphasized that "not one of the members is a so-called 'pure' philosopher; all of them have done work in a special field of science" (Carnap, Hahn and Neurath [1929] 1973, 304).
- ¹⁹ The "Manifesto" puts a clear "emphasis on what can be grasped intersubjectively" (Carnap, Hahn and Neurath [1929] 1973, 306). For interesting considerations about the issue of inter-subjectivity in relation to the SWC, see Uebel 2004b, 52-54. On the problem of inter-subjectivity within the context of Carnap's Neurath's and Schlick's philosophies of science see Uebel 2007a, 128-137.
- ²⁰ In the "Manifesto" Wittgenstein's sentence "What can be said at all, can be said clearly" is taken to be a "specifically scientific attitude" (Carnap, Hahn and Neurath [1929] 1973, 304). In the paragraph devoted to the SWC, it is stated: "Neatness and clarity are striven for, and dark distances and unfathomable depths rejected" (Carnap, Hahn and Neurath [1929] 1973, 306). Compare also Schlick's reference to Wittgenstein in Schlick [1928] 1979, 136.
- ²¹ In the "Manifesto" too the belief that "there is knowledge only from experience" and from the "application of [...] logical analysis" is conceived of as comprising the two essential features of the SWC (Carnap, Hahn and Neurath [1929] 1973, 309; emphasis omitted). Compare also Schlick's reference to Hume (Schlick [1928] 1979, 19) and Neurath's synthetic illustration of "what characterises the modern scientific conception of the world" (Neurath [1930/31] 1983, 42).
- ²² Carnap, Hahn and Neurath [1929] 1973, 304. Hahn ([1930/31] 1980, 28-30) concludes his article on the SWC with a lengthy attack on metaphysical and "poetic" philosophy. Compare also, of course, Carnap [1931] 1959.
- ²³ Hahn [1930/31] 1980, 20. A more accommodating view on intuition is expressed in Carnap, Hahn and Neurath [1929] 1973, 308-309. Regarding "traditional philosophy", Schlick ([1928] 1979, 130-136) gives a critical overview of the history of philosophy.

²⁴ For instance, we could take the tenets (ii)-(iv) as following from (i): having assumed that scientific knowledge is the only genuine knowledge, we "extract" or borrow our epistemological requirements from science. The reverse – (i) as consequence of (ii)-(iv) – is also possible: we like science because it satisfies what we hold to be fundamental epistemological requirements. Furthermore, (iv) can probably be reduced to (ii) and (iii): the rejection of metaphysics only specifies the negative counterpart of the epistemological requirements expressed by (ii) and (iii).

²⁵ To the lack of justification for the SWC corresponds the lack of discussion about "questions of life": "The attitudes toward questions of life also showed a noteworthy agreement, although these questions were not in the foreground of themes discussed within the Circle. For these attitudes are more closely related to the scientific world-conception than it might at first glance appear from a purely theoretical point of view. For instance, endeavours toward a new organization of economic and social relations, toward the unification of mankind, toward a reform of school and education, all show an inner link with the scientific world conception" (Carnap – Hahn - Neurath [1929] 1973, 304-305; my emphasis). This "silence" is not a sign of disinterest, but rather a sign that these issues belong to the *practical* realm.

²⁶ Carnap [1928] 1969, 293. It is certainly the case that Carnap also conceives of "faith" as something "which cannot be conceptually formulated", and apparently this does not apply to the SWC. However, before jumping to this conclusion, one should carefully consider the following *caveat*: "even though we may call conceptual only that which can be expressed through words or other signs, *it does not follow that everything that employs words is conceptual.* There are spheres of life other than conceptual knowledge in which words are used, for example, in the imposition of will from person to person, in art, in the area of myth [...] and in other areas. Words can be considered signs of concepts *only if* they are either defined or at least if they can be defined; more precisely, if they are placed within an experiential constructional system or at least if they can be so placed" (Carnap [1928] 1969, 296; my emphases). The fact that the SWC does not define concepts like "empirical evidence", "argument", "metaphysics" etc., and its lack of clarity as to whether these concepts can be "placed within an experiential constructional system", suggest that the SWC does not belong to the realm of "conceptual knowledge".

²⁷ "After all, the basic orientation and the direction of interests are not the result of deliberation, but are determined by emotions, drives, dispositions, and general living conditions. [...] The practical handling of philosophical problems and the discovery of their solutions does not have to be purely intellectual, but will always contain emotional elements and intuitive methods. [...] We too, have 'emotional needs' in philosophy,

but they are filled by clarity of concepts, precision of methods, responsible theses, achievement through cooperation in which each individual plays his part" (Carnap [1928] 1969, xvii).

- ²⁸ On "genuine questions" and on "scientific questions" see Carnap [1928] 1969, 291 and 297-298 respectively.
- ²⁹ Carnap [1928] 1969, 297. See also Carnap 1934.
- ³⁰ Consider for example Carnap [1932] 1959, 76-77, where he puts speculative metaphysics, ethics and aesthetics on the same plane.
- ³¹ Neurath [1913] 1983, 2-3. Compare also the *incipit* of Neurath's *Anti-Spengler* (Neurath [1921] 1973, 158-159).
- ³² Uebel 2005, 762-764 offers an analysis of Carnap's position in this respect.
- ³³ Uebel (2005, 757) has remarked: "Nothing substantive was prescribed by the scientific world-conception in and of itself but only [a] procedural demand".
- ³⁴ Richardson (2009a, 16) seems to infer from the attitudinal character of the SWC the thesis that "the Manifesto takes no step toward a political philosophy of science". Her argument seems to be that the Vienna Circle could be said to have held values (e.g. to have shared values with socialism) only if it had formulated them as a doctrine which it did not do. But my point is that the SWC, precisely because it was an attitude rather than a doctrine, falls *immediately* in the practical domain, which is value-laden. Richardson argues that the authors of the Manifesto "were careful to articulate" the view according to which they would not have shared any particular set of values with socialism, but only "a commitment to a scientific model of intersubjective, collective work proceeding on rational principles" (Richardson 2009a, 16). But how would you commit to something without holding any value? And how would you share a commitment without sharing any value? Of course the values expressed by the SWC (which the Vienna Circle shared both with social-democrats and liberals, as I show in the next sections of this paper) do not have an immediate political character, but are rather of the epistemological kind. Still, as I show in the next sections, some epistemological values can acquire a political meaning in certain historical contexts.
- ³⁵ It is by virtue of this convergence that Friedrich Stadler has talked of a "Late Enlightenment" and not (only) of "Red Vienna" in his valuable historical contextualization of the Vienna Circle (see Stadler 1981; 1982, Part II; 2001, § 5.1).

³⁶ See footnote 25.

³⁷ See also the criticisms made against Richardson in Uebel 2010, 215-216.

- ³⁸ A valuable source of information about the epistemological and educational ideals of Austrian liberals is Coen 2007.
- ³⁹ F. Salten, *Das österreichische Antlitz* (1910), quoted in Csendes and Opll (eds.) 2006, 235; my translation.
- ⁴⁰ See Csendes and Opll 2006, Ch. 2. Hacohen (2009, 391) describes the convergence between social-democrats and liberals as follows: "The socialists claimed the liberal legacy. Already around the turn of the century, socialists and liberals began collaborating on cultural questions such as school reform and popular education (*Volksbildung*), and constituted a united anticlerical front. The Viennese progressives provided a bridge between the liberals and socialists. Most were [...] heavily but not exclusively Jewish, open to democracy, supportive of economic planning and social legislation. They shared with the socialists a belief in the blessings of scientific culture, and the building of municipal socialism in interwar Red Vienna proved a solid terrain for their collaboration". On the convergence between liberals and social-democrats see also Stadler 1981, 444, Stadler 2001, 182 and Coen 2007, 338. Pointing out this convergence between liberals and social-democrats does not mean, of course, denying that there were important differences between these two political positions neither Hacohen, nor Stadler nor Coen do it. Also, it is important not to forget that there were plenty of liberals who decided to join the conservative political camp (see Hacohen 2009, esp. 385-389). The history of Austrian liberalism between 19th and 20th century is really a "riddle", as Hacohen 2009 calls it in his title: Hacohen (2009, 371-375) also entails a valuable review of the many different and even contradictory interpretations of this historical phenomenon put forward in the last 50 years.
- ⁴¹ See Coen (2007), 338: "The socialists' approach to education echoed that of the old liberals in content as well as intent. Like their predecessors, the socialists tried to wrest control of education from clerical conservatives and made the teaching of empirical science a weapon in that battle".
- ⁴² See in particular §10.2, "De ordine inter fidem et scientiam" and § 31 ff. ("quanto rerum naturalium studia vehementis fervent, tanto magis severiores altioresque disciplinae defluorerint") in the annotated Austrian edition of the encyclical, which gives a good picture of its reception by the Austrian conservatives (Pius X 1908).
- ⁴³ An account of the debate based on the official protocol can be found in the issues of the journal of the Freethinkers (I shall deal with the Freethinkers in greater detail in the next Section), *Der Freidenker*, from January 1908, N. 2, until August 1908, N. 15. According to the description found in this journal, the debate dealt especially with the question of "whether there was a contrast between modern culture and the theological, Christian-Catholic world-view" (*Der Freidenker*, N. 14, July 1908, 107; my translation).

- ⁴⁵ Wassermann 1984, 112; my translation. This is how Jakob Wassermann, despite being a German-Jewish writer, referred to his time in Vienna. Hilde Spiel, in the introduction to the volume, comments on the self-hate with which Wassermann, more proud of his being German than of his being Jewish, describes other Jewish people.
- ⁴⁶ Besides the works by Stadler already mentioned, an important source on the Austrian Freethinkers is a PhD thesis submitted in 1994 by Franz Sertl to the Faculty of Humanities of the University of Vienna (Sertl 1994).
- ⁴⁷ Sertl 1994, 30. On the Austrian Freethinkers' relationships to Marxism and to the Austrian social-democrats, see Sertl 1994, 24-38, 42, 67-78, 106.
- ⁴⁸ The Centre for the Suicidal (*Lebensmüdenstelle*) was organized by the Ethical Society (see Stadler 1981, 452 and Stadler 2001, 193); I will return to this society later in this section. Suicide rates in Vienna were particularly high in the late 1920s and in the 1930s, due to the economic crisis and, especially, unemployment.
- ⁴⁹ The most they were allowed to achieve was the "Central Office of the Austrian Freethinkers", founded in Vienna in 1912 in order to coordinate the activities of the different societies (Sertl 1994, 65). After the First World War, in 1919, the most important Freethinkers' societies were included in the umbrella organization called the "Free Union of Cultural Associations" (Stadler 2001, 180). Referring to this Union Sertl talks of an institutionalization of all "neoliberal-socialist currents" (Sertl 1994, 115; my emphasis).
- ⁵⁰ See the programs and the statutes reported in Sertl 1994, 44 and 50-51.
- ⁵¹ Schlick's aim was to avoid the dissolution of the Society by the public authorities in 1934. The Society had been accused of actively favoring the social-democratic party, which had already been outlawed by the Austrofascist government (See Stadler 1982, Part 2, § 3.6). Consideration of every declaration of "apoliticalness" made in Interwar Vienna must be critical and must take into account the political situation of the time.
- ⁵² See the announcement of the founding reproduced in Stadler 2001, 332-333 and the announcement of the foundation in *Der Freidenker*, Nr. 4, 1930. In 1932 the first page of *Der Atheist* was devoted to the SWC and provided the reader with a related bibliography (which included works by Carnap, Einstein, Feigl, Frank, Kraft, Reichenbach, Russell, Schlick and Zilsel) (*Der Atheist*, Nr. 12, 1932).
- ⁵³ On the *Ethische Gesellschaft* and on its "continuation", the *Ethische Gemeinschaft*, see Stadler 1981, 447-453 and Sertl 1994, 44-47 and 116-125, as well as in English Stadler 2001, 190-193. The Ethical Society was part

⁴⁴ Carnap, Hahn and Neurath [1929] 1973, 301. See also Hahn [1930] 1980, 30 and Neurath [1930/31] 1983, 32.

of an international movement and was financially supported also by the American "Union of Ethical Societies" (Sertl 1994, 121).

- ⁵⁴ The Austrian Monists' Association was founded by the Freethinkers together with the German Monists (Stadler 2001, 183). Carnap refers to his sympathy for the German Freethinkers and Monists in his "Intellectual Autobiography" (in Schilpp 1963, 7).
- The movement for adult education (*Volksbildungsbewegung*) and its related institutions (adult education centres, libraries, societies) which after 1919 were developed and governed by the administration of "Red Vienna" were in fact liberal in origin (see Sertl 1994, 63-64). Thus, they too can be considered as an expression of the (partial) convergence between liberals and social-democrats.
- ⁵⁶ See footnote 49.
- ⁵⁷ It is appropriate here to quote again from Paul Forman's article on modernity and postmodernity: "Modern methodism, or procedurism, insisted not merely that right means produce right ends, not merely that only right means can be relied upon to produce right ends, but, most importantly, that there is no other criterion for the rightness of the ends than the rightness of the means" (Forman 2010, 161).
- 58 Actually the spectrum of the different positions present in the Vienna Circle with respect to ethics, as well as their nuances, would deserve much more, and more careful, consideration. This quite neglected aspect of the Vienna Circle's philosophies has been investigated in the last few years by Anne Siegetsleitner, who has recently edited a volume on values and moral in Logical Empiricism (Siegetsleitner 2010) and is about to publish a volume in which the ethical convictions of each of the Vienna Circle core members are carefully analyzed. These convictions are also related by Siegetsleitner to the Vienna Circle's political engagement in its historical context (the volume is planned to be published in early 2013 by Böhler with the title *Ethik und Moral im Wiener Kreis. Zur Geschichte eines verdrängten engagierten Humanismus*. I am grateful to the author for having let me read a draft of this work).
- ⁵⁹ Uebel (2008, 88-89) reports Schlick's perplexed reception of the Manifesto and of the "politicizing tendencies in the Vienna Circle and in the Ernst Mach Society". Nevertheless, the fact that the Ernst Mach Society was part of a politically engaged network was, as I have shown, very clear, and nobody as far as we know compelled Schlick to be the chairman of the Society from its foundation until its end. Schlick's declarations to the authorities of the political neutrality of the Ernst Mach Society, as I have already mentioned, were expedient to avoid its forced dissolution, and above all responded to the specific charge that "the Ernst Mach Society is known to the authorities as having acted in the interest of *this* party" (reported in Stadler 2001, 347; my

emphasis): "this" party was the Social Democrat Party, and in this respect Schlick was right to say that the Society was not party-political. Schlick was certainly no social-democrat, and he was less interested in politics than, say, Neurath or Carnap, but it is a fact that he nonetheless chose to engage within the progressive network active in the Viennese socio-political context. Uebel (2008, 88-89) also refers to Kraft's declaration of the unpolitical nature of the Vienna Circle (see Kraft 1950, 3, fn. 1), which sounds to me like: (1) a dissociation from the party-political sympathies of Neurath; (2) the expression of a need to dissociate the Vienna Circle's scientific-philosophical theories from political contents (but I have shown that the political engagement of the Vienna Circle members is not to be found in their theories); (3) a sign of Kraft's prudence while working in an environment as conservative as Viennese post-World-War-II academia. Neurath's declaration of the unpolitical character of his economic theories has been already explained by Uebel as a declaration of party-political neutrality (Uebel 2010, 118). Finally, Carnap's declaration of the neutrality of the Circle's philosophical work with respect to political issues - included in his autobiography and reported by Richardson (2009a, 17) as evidence against the political character of the Left Vienna Circle's philosophy of science - was written by a philosopher persecuted by McCarthism at a time in which philosophy of science had already become neutral (see Reisch 2005). Furthermore, it again refers to the absence of political and ethical normative judgments within philosophic-scientific theories.

for example, Ibarra and Mormann (2003, 236; my emphasis) have shown how "Science was considered "[by the Vienna Circle] a tool in the social engineer's toolkit, designed to contribute to the great project of enhancing collective human happiness". Uebel (2005, 760; my emphases) has argued that "[The Left Vienna Circle's] political philosophy of science was political [...] in a descriptive sense: it recognized the influence of extratheoretical values within science and allowed for their pursuit by engaged scientists". On the contrary, Richardson (2009a, 15; my emphasis) rejects the thesis that "[The Left Vienna Circle's] logical empiricism invited, encouraged, or provided tools for the consideration of the social and political dimensions of science" (and seemingly takes for granted that disproving this thesis is tantamount to disproving any possible form of political engagement of the Left Vienna Circle's philosophy).