Abstract:

Is there something like a philosophical method? It seems that there are as many methods as there are philosophies. A method is any procedure employed to attain a certain end. So, before going to a method, we have to ask: what is the aim of philosophy?

At the origin of philosophy, there is a questioning about the world. Leo Apostel and Jan Van der Veken made more precise and explicit those fundamental questions (Apostel, Van der Veken 1991). The primarily aim of philosophy can be seen as answering this philosophical agenda; with the answers, one come up with a worldview. We'll argue that the philosophical worldviews constitute a particular class of the possible worldviews. With the help of three analogies, we'll give some guidelines to construct such worldviews. But, what are the best philosophical worldviews? We'll see how we can compare and confront them; and also some problems for their diffusion. The last section will propose some basic hypotheses to build such integrative worldviews.

Keywords: metaphilosophy, worldview, weltanschauung, philosophical method, philosophical agenda, task of philosophy.

Working paper, feel free to send me any of your comments! :)

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1 Introduction

1.1 Take over of science over philosophy

We have to recognize that a genuine increasing takeover of science over philosophy has happened since the development of modern science. For example, classical philosophical problems about the mind, time, space, or the cosmos are now primarily attempted to be answered by scientific means. How should philosophers react to this? They should be delighted, because it means that we are getting more precise arguments and insights in our search for understanding the world.

However, that doesn't mean that philosophy has lost its place; but rather that it has to redefine its scope, and also its relationship to science. Philosophy could take the opportunity to embrace all this new knowledge with their new philosophical consequences. Partly because of this take over, today's philosophy collapsed in two main tradition, with different drawbacks that we'll sharply and crudely examine.

1.2 Philosophical trends

Paul Ricoeur directed a survey of the "main trends of philosophy" (Ricoeur 1979). Although this dates back to more than twenty-five years, it is interesting to look at the three main trends he did distinguishes.

(1) Philosophy is a weltanschauung (worldview)
   (a) Marxism
   (b) derivatives from hegelianism
   (c) philosophies of scientists calling for synthesis of cosmology and anthropology
   (d) Aristotelian-thomist synthesis.

(2) English and American analytic philosophy

(3) Subjectivity and beyond. Philosophy's responsibility is considered to be the taking into account of other forms of experience than objective knowledge. (young Hegel, Kierkegaard, young Marx, and certain developments of phenomenology.) This third trend could correspond to what is often called "continental philosophy".

Philosophy today seems to show that analytic (2) and continental philosophies (3) are the two main trends. However, even if analytical philosophy did bring powerful methods of analysis and critic into philosophy, it still lacks a general guideline, and a unifying idea. And the use of logical methods can't be such an idea. On the other hand, continental philosophy seems to be a gripping intellectual approach. But it faces even greater problems that analytic philosophy; the first reason being probably its lack of methodology; see e.g. (Shackel 2005).

It is noteworthy to remark that the two first trends also roughly corresponds to the distinction between speculative philosophy and critical philosophy elaborated by (Broad 1924). Thus, we'll postulate that speculative philosophy corresponds to philosophy as a worldview, and critical philosophy to analytic philosophy.

Analytic philosophy crudely needs something more than pure analysis; certainly a synoptic and synthetic point of view. Worldview construction, or speculative philosophy can precisely fulfil this need. This kind of philosophy, could also be called, as the faithful companion to analytic philosophy, synthetic philosophy (although being different from Spencer's philosophy).
Another trend that we should add is the specialization of philosophical problems, together with an explosion of the agenda. This is exemplified with the proliferation of second-order problems, or the "philosophies of x"; where x is often a scientific discipline, but can also be any other discipline. This specialised philosophies are certainly very useful, enlightening their specific domain; but their relation with fundamental questions about the whole is becoming more and more difficult to answer.

This paper intends to put again the fruitful philosophy as a worldview forward in very general terms. We will focus on this approach, providing some methods to build a philosophical worldview.

1.3 Problems

We face two main problems. The first problem is related to the method of philosophy. Since a method is any procedure employed to attain a certain aim, even before going to a method, we must face the highly debated question: What is the aim of philosophy?

A fuzzy answer to that question is to say that it is the quest to understand Man and the world he's living in. However, for the biggest questions, this enterprise overlaps with science and religion. We don't aim to focus on this problem here. Let's just say that philosophy, science, and religion have this common quest for understanding (see e.g. (Russell 1988)), and they can build more or less strong relationships to pursue it. In part 3, we define the worldview agenda (Apostel, Van der Veken 1991); answering it can be seen as the aim of philosophy.

As soon as we quit the scientific method(s), the problem of the philosophical method can be stated in the following way: "If philosophical theories are all irrefutable, how can we ever distinguish between true and false philosophical theories?" (Popper 1958, 266). So, how can we make rational, informed and useful speculations?

In our framework, this second problem can be formulated as: how can we build the best philosophical worldview? This paper aims to answer this question, by providing a method, or at least some guidelines for such a construction. The following questions also naturally arise. What criteria could we use for saying that such or such worldview is better than another? How to compare the strengths and weaknesses of different worldviews? How can we best diffuse them?

We'll first present an enduring philosophical agenda [3]. Then with the help of three analogies, we'll give some guidelines to construct philosophical worldviews [4]. But, what are the best philosophical worldviews? We'll see how we can compare and confront them [5]; and also some problems for their diffusion [5.3]. The last section [6] will go further and propose some basic hypotheses to build such an integrative worldview. But before this, we'll start by some remarks about the philosophical method [2].

2 The philosophical method

How did previous philosophers analysed the problem of the philosophical method?

There seems to be as many philosophical methods as there are different philosophies (Passmore 1967). The philosophical method, for Plato or Hegel, is the dialectic; for Bergson it is the intuition; for Wittgenstein it is uncovering nonsense; for Schlick it is clarification; for Husserl, the phenomenological description; for Hume it is following the methods of experimental inquiry, and for Spinoza the methods of the geometrician, etc... The diversity of methods thus tends to obscures the task of philosophy.
Why is it so? As (Körner 1969, 20) suggests, probably because when philosophers find a fruitful method, they tend to extend it, and say that their method is the only proper method of philosophy. They even define philosophy by the use of that method. Since a philosophy from a philosopher equals a certain philosophical method, it is very difficult to try to make an overview of the philosophical method.

However, specific problems such as "What is philosophy? What is its method, function, and scope?" have been revived and explicitly studied under the label "metaphilosophy". Although the distinction between metaphilosophy and philosophy is possible in terms of problem domain, it is not generally in the sense that there is no such thing as a metatheory that one could apply to any philosophy, without having itself philosophical prejudices.

This paper is based on the work of five important (meta)philosophers; Nicholas Rescher, Karl Popper, Charlie Dunbar Broad, and Leo Apostel with Jan Van der Veken. We'll now say a few words about their contributions that we'll use for our purpose.

2.1 Rescher

*What is the aim of philosophy?*

Nicholas Rescher (Rescher 2001, chap3.) clarified why this question is so important. The set of questions that a philosopher aims to tackle is called the "philosophical agenda". Defining this agenda is strongly related to the kind of philosophy that is going to be undertaken. So, the agenda is a highly controversial topic in philosophy. This is an exceptional case in the landscape of intellectual disciplines. Most disciplines know clearly what are their aims, what they would like to see achieved.

We can illustrate this situation with three examples in the recent history of philosophy. There has been three kinds of reduction of the agenda. The logical positivism tried to reduce the agenda of philosophy to nil; analytical philosophy reduced the agenda to the study of language; and deconstructionism reduced the agenda to the study of literature. However, we have today an explosion of the agenda of philosophy, with topics as exotic as the philosophy of sport or of humour.

Although Rescher speaks about it, and makes important general remarks, he doesn't propose any explicit agenda in his book (Rescher 2001).

2.2 Popper

Karl Popper is famous for his criterion of "falsifiability" to distinguish between scientific and non-scientific theories. But what did he say about the status of philosophy, which is, as he claims, irrefutable and non-empirical? Since he's himself a philosopher, he did think about that issue, and the problem for philosophy can be stated as:

*How can a discourse still be rational and persuading, being irrefutable and non-empirical?*

In the last few pages of a paper entitled "On the Status of Science and of Metaphysics", Popper (1958) exposes his solution. He claims that a rational theory answers questions. And so, we have to analyse the link between a *problem situation* and the proposed solution.

Now if we look upon a theory as a proposed solution to a set of problems, then the theory immediately lends itself to critical discussion -even if it is non-empirical and irrefutable. For can we now ask questions such as, Does it solve the problem?
[...] Questions of this kind show that a critical discussion even of irrefutable theories may well be possible.

(Popper 1958, 269).

2.3 Broad

Broad did distinguish three kinds of philosophical activities; analysis, synopsis, and synthesis. The analysis is the well known analysis of concepts and their interrelations; synopsis is "the deliberate attempt to view together aspects of human experience which are generally viewed apart, and the endeavour to see how they are inter-connected." (Broad 1958, 116); and the "the purpose of synthesis is to supply a set of concepts and principles which shall cover satisfactorily all the various regions which are being viewed synoptically." (Broad 1958, 126). He adds that analysis and synopsis almost always go together:

Analysis and synopsis themselves may be present in very different degrees and proportions. Hume's work, e.g., is so predominantly analytic that it might be denied to be synoptic, and Hegel's is so predominantly synoptic that it might be denied to be analytic. But I believe that both are always present, and that each involves some degree of the other. Lastly, there is a very high positive correlation between synopsis and synthesis. Synthesis presupposes synopsis, and extensive synopsis is generally made by persons whose main interest is in synthesis.

(Broad 1947).

Broad also gives edifying examples of synopsis in different important philosophical problems such as sense-perception, mind-body and free-will. The clarity and rigour of his writings makes them very worth reading (Broad 1924, 1947, 1958).

2.4 Apostel

Great philosophers are so because of their ambition to try to build systems of thought, answering all philosophical questions. One of the last great attempt was made by Rudolf Carnap. Nowadays, Carnap is quoted almost always to be bitterly criticised -and on very strong grounds. However, one student of him, Leo Apostel (1925- 1995) kept the same ambition, the same grandeur, without the naive and reductionistic prejudices of the Vienna Circle. This led him to create an interdisciplinary research group, The World View group, and to write a short book together with Jan Van der Veken (Apostel, Van der Veken 1991), to be compared with the manifesto of the Wiener Kreis (Carnap et. al. 1929). The difference between the two is that one had a recognition it didn't deserves, and the other deserves a recognition that it didn't had.

This work has the great merit to clarify the big questions of a worldview or a philosophy (we will precise the difference between worldview and philosophy in a few moment [3.1; 4.2]). What is this worldview agenda?

3 The worldview agenda

3.1 What is a worldview?

In it's broadest sense, when we talk about "a philosophy" can mean in fact a worldview. For example, when we speak about the philosophy of the eski or the mayas. The term worldview
(weltanschauung in German) has a long and fascinating history going back to Kant (see Naugle 2002 for an history of the concept). The term has been and is used not only in philosophy, but among others also in theology, anthropology, or in education. Wolter (1989) summarized the relationships between worldview and philosophy. With the definition that will follow, our position tends towards what he calls "worldview crowns philosophy"; that is that constructing a worldview is the highest manifestation of philosophy.

The term can thus have a negative connotation for the philosopher, mainly because philosophy generally claims universal validity, as it has a clear association with rational thought. On the other hand a worldview seems at first hand to emphasis a personal and historical point of view. We'll see [4.2] that it is possible to define the class of "philosophical worldviews", as rooted in rationality and thus also aiming at universal validity.

The next section will constitute our precise definition of what a worldview is. It proposes at the same time a very general and appealing philosophical agenda. With Rescher (2001, 33), we can distinguish between the procedural agenda, which are in this paper the worldview questions; and the substantive agenda, which are the proposed answers to the questions, and that we call worldview components. The components articulated together form a worldview, that is "a collection of concepts that must allow us to construct a global image of the world, and in this way to understand as many elements of our experience as possible." (adapted from Apostel, Van der Veken 1991, 17).

3.2 The seven questions.

Here follows the seven worldview questions. These questions are corresponding to "the big questions", "eternal questions", "age-old philosophical questions"... The choice is motivated in more details in (Apostel, Van der Veken 1991); also reformulated in (Heylighen 2000); we build on those two references for what follows.

The answers -the worldview components- corresponds to most of the traditional philosophical domains.

<table>
<thead>
<tr>
<th>Question</th>
<th>Philosophical Domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What is?</td>
<td>Ontology (model of the present)</td>
</tr>
<tr>
<td>2. Where does it all comes from?</td>
<td>Explanation (model of the past)</td>
</tr>
<tr>
<td>3. Where are we going?</td>
<td>Prediction (model of the future)</td>
</tr>
<tr>
<td>4. What is good and what is evil?</td>
<td>Axiology (theory of values)</td>
</tr>
<tr>
<td>5. What actions?</td>
<td>Praxiology (theory of actions)</td>
</tr>
<tr>
<td>6. What is true and what is false?</td>
<td>Epistemology (theory of knowledge)</td>
</tr>
<tr>
<td>7. Where do we start to answer those questions?</td>
<td>History of ideas</td>
</tr>
</tbody>
</table>

Table: Summary of the worldview questions, with their corresponding traditional philosophical domain.

The first question is the question of ontology; or a model of the present reality. It can be typified with the question "What is?". It gathers questions like, What is the nature of our
world? How is it structured and how does it function? Why is there something rather than nothing? etc...

The second question explains the first component. Why is the world the way it is, and not different? What kind of global explanatory principles can we put forward? *Where do we come from?* Where does it all come from? Answers to these questions should be able to explain how and why such or such phenomena arose.

The third question is the complementary to the second. Instead of focusing on the past, it focuses on the future. *Where are we going to?* What is the purpose of it all? It is about futurology, because the component should give us a list of possible future, with more or less probable developments. But the sheer possibilities leaves us with choices. Which alternative should we promote, and which one should we avoid? For this, we need values.

The fourth question is thus the question of values. How do we assess global reality, and the role of our species in it? *What is good and what is evil?* What is the meaning of life? Axiology traditionally deals with those questions, including morality, ethics, and aesthetics. The component should give us a sense of purpose, a direction, a set of goals to guide our actions.

The fifth question is about the theory of action (praxiology). *How should we act?* What are the general principles by which we should organise our actions? It would help us to implement plans of action, according to our values, in order to solve practical problems. It is often said that a philosophy is of no use because it is too far from reality, that it doesn't give any precise answer to concrete question. And this is often true; a praxiology correctly developed should fill this gap.

The sixth question is the question of the theory of knowledge (epistemology). How are we to construct our image of this world in such a way that we can come up with answers to (1), (2) and (3)? In it's most general term, it is the question "*What is true and what is false?*", which is one of the main issues of logic. We thus could also relate to this component the question of language; what language should we use for our purposes of knowledge acquisition, and what are its limitations?

The seventh question is a meta-question, asking "*Where do we start to answer those questions?*" thus inviting us to seek for the partial answers that we can propose to these questions. A natural way to start is to look at worldview fragments in the history of ideas; preferably being aware of the tradition of thought, and its more or less hidden assumptions.
3.3 A cybernetic model of a worldview

To have a more dynamical view, and a first suggestion of how components inter-relate, we reproduced the "Worldview of an individual in a cybernetic system" diagram of (Heylighen 2000).

![Diagram of Worldview of an individual in a cybernetic system]

“The apparently disconnected components of a worldview can in fact be understood as part of an encompassing scheme describing the interaction between a system or self and the world or environment. In cybernetics an autonomous system or agent is conceptualized as a control system, which tries to achieve its goals or values by initiating the right actions that compensate for the disturbances produced by the environment. For that, it needs to perceive or get information about the effects of its actions and the effects of the events happening in the world. More specifically, it needs to understand how particular events (past) cause other events (future), that is to say it needs to have a model that allows it to explain and anticipate events. The first six components of a worldview cover all the fundamental aspects of this control scheme, as illustrated in the following figure. Worldview components (in [large font]) are written above the corresponding control scheme components.” Reproduced with the kind permission of Francis Heylighen (2000).

What is striking when one look carefully at this diagram, is the centrality of the value component. The informations we seek and the actions we do ultimately depends on our values.

We should precise that the World, or the environment is -in system theory- by definition everything that isn't in control; and thus the Self is what is in control. Let us also note that the seventh component doesn't appear here, since it is a meta level component. Also the components 1, 2, 3 could also be seen in the individual, since a worldview is from an individual.
3.4 Examples of different worldviews

We'll now take four examples of four very different worldviews, by considering a scientific and a religious worldview but also the worldview of a bacteria, and of a society. The scientific and religious worldviews we describe are caricatured; the purpose isn't to be accurate in the worldview description, but rather to show how it functions.

<table>
<thead>
<tr>
<th></th>
<th>(a) scientific</th>
<th>(b) religious</th>
<th>(c) bacteria</th>
<th>(d) society</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Model</td>
<td>Materialism, no God.</td>
<td>Dualism matter-mind; God.</td>
<td>What it sense at present.</td>
<td>&quot;Collective consciousness&quot;</td>
</tr>
<tr>
<td>6. Knowledge acquisition</td>
<td>Interaction between theory and experience to build components 1, 2, 3.</td>
<td>Knowledge comes primarily from the writings.</td>
<td>Some basic perceptions.</td>
<td>Relevant informations for decision making at the society scale.</td>
</tr>
</tbody>
</table>

It might surprise that it's indeed possible to analyse the actions and interactions of a bacteria with the worldview model. Speaking about the worldview of a society may also seems rather far-fetched, if we don't use the metaphor of the society as an organism. Those two extreme examples have however the benefits to show us the limits of the worldview concept. For we can ask, what is the difference between a worldview and a model? A possible answer is that a worldview is for an individual, whereas a model can be about any phenomena.

The "worldview of a society" example suggests that, even if a worldview is ultimately carried by an individual, we should also don't forget to analyse higher levels of systems or organizations with the relevant concepts at that level. Of course, this higher analysis has to be in fine reintegrated in a worldview of an individual.

This approach in terms of worldviews thus intricately link the philosophical questions, with the view of a man. We don't simply seek the most perfect model of the world; we also want it integrated in individuals, thus providing rules to act meaningfully.

3.5 Evolution of questions and components.

An objection to this approach is to discuss the evolution of the questions and components.
Is there an evolution of the worldview questions?

By their extreme generality, those questions are robust and enduring through time. For they correspond to the traditional domains of philosophy. Obviously, we can (nay, we must) discuss how those questions can be answered - or failing that, dissolved-; but it is difficult to dismiss those questions as irrelevant. This philosophical agenda is arguably enduring, first because the questions have been tackled again and again through the ages; and second because such answers are needed for an individual to interact in his world (even for the simplest individual, see the example of the bacteria; see also [4.1] for the necessity of a worldview).

As we saw, age-old philosophical questions are or can all be easily related to the worldview questions. For example "the" question of philosophy according to Kant, "What is Man?", and the two related "what is nature?", "what is the relation of man in nature?" are just vaguer and shorter ways to ask for a worldview.

Is there an evolution of the worldview components?

Of course there is. It is part of philosophy's task to constantly re-adapt a worldview to new knowledge and discoveries, to new things happening in the world. This is an epistemological problem, in its most advanced form, asking the general question how can we get knowledge? from an evolutionary point of view (Campbell 1974). In this very large time scale, we can say with Peter Russell that there has been clearly an evolution of worldviews, or internal models: "An important characteristic attributed to conscious beings is the ability to form internal models of the world they experience; the greater the consciousness, the more complex the models". (Russell 1996, 83).

Those seven questions can be seen as a compass for any philosopher. Answering (at least) to those questions isn't just an option. It is the fundamental role of the philosopher.

But how can we proceed to answer the questions, in the best possible way? What are the best philosophical worldviews? And how can we construct them?

4 The best philosophical worldviews

We'll first sketch some reasons for the necessity of a worldview [4.1]. Then we'll argue that philosophical worldviews can be seen as a certain class of worldviews, incorporating rationality in its core [4.2]. We then develop three analogies to explore how one can answer the worldview questions, and thus construct a worldview [4.3].

4.1 Necessity to have a worldview

Our species is Homo quaerens. We have questions and want (nay, need) answers. (Rescher 2001, 7)

There are also psychological and sociological needs for a good worldview. Sociological research seems to indicate that the feelings of insecurity and distrust are strongest among the people who least profess belief in a religious or philosophical worldview (Elchardus, 1998). Psychologists researching life satisfaction, on the other hand, have found that having such beliefs increases well-being, by providing a sense of life's meaning, feelings of hope and trust, a long-term perspective on life's woes, and a sense of belonging to a larger whole (Myers, 1993).

We all need a certain worldview, even if it is unconscious, to interact in our world. There is a practical need to have at least an implicit and very naïve answer for each questions. If
philosophy don't answer those questions, others realms of our culture will take advantage of
the situation, and provide answers. These are principally religion, or, much more annoying,
sects. I interpret the proliferation of sects as philosophy doing a poor job.

4.2 The class of philosophical worldviews.
The worldview questions as we have defined them are nothing else than the most classical and
arguably among the most important philosophical problems. How we will answer to the
worldview questions will determine if we are doing philosophy, and what kind of philosophy
we are doing. A common denominator to all the various definitions of philosophy, is that it is
a rational inquiry. We thus propose to define the philosophical worldviews as the class of
rational worldviews.

A corollary of this approach is that philosophy can be defined as either worldview
construction (speculative philosophy) or worldview criticism (critical philosophy).
Philosophy, like science, is neither pure speculation, nor pure criticism; it is speculation
controlled not by experiments, but by criticism. There is a tension between the need for a
systematic, integrative philosophy, and the rational, critical and sceptical attitude.

The criteria of rationality alone for qualifying the philosophical reasoning is very minimal.
We urge to add the values of open discussion, and scientific attitude (Bahi 1979, 62-63).
Also, one fundamental criteria emphasised by Broad is synopsis. But the synopsis has to be
the widest possible one, e.g. in time and space scales. This requirement of large synopsis
recalls the last principle of Descartes' (1637) Discourse of the Method "de faire partout des
dénombrements si entiers et des revues si générales, que je fusse assuré de ne rien omettre."

For example to the question, "where does it all comes from?" We don't expect an answer of
the kind: "from my mother's belly". We mean, "where does our universe comes from?". In the
same way, the philosopher should seek values that would be valid for everyone (even if the
theory of values is a relative one, in the sense that there is still then the meta-principle of the
relativity of values). And so on for the other questions.

Building a sect or a religion is also building a worldview. Without those criteria of rationality,
open discussion and widest synopsis, we go from a philosophical to a non-philosophical
worldview.

4.3 Three analogies
But, how can we construct the best philosophical worldviews? Of course, there is no easy way
or an all-purpose-ready-made recipe do to it. Besides the three fundamental criteria of a
philosophical worldview we outlined we can go further. Intuitively, the bests worldviews
would answer all our questions, in a coherent manner. How can we precise this intuition?
That's what we'll examine now, with the help of three analogies. To prevent many
misunderstandings, I wish to emphasis that the following analogies, like any explicit
analogies, are cognitive tools. For example, with the first analogy I do not intend to imply all
mathematical logic to the worldview approach. Some perspectives may be worth exploring,
some others no.

4.3.1 Axioms

Finding models (worldviews) for the axioms (questions).
We propose to see the analogue of a worldview question as an axiom. A first consequence of
this mathematical analogy is that every (hidden) assumptions has to be made clear and
explicit. Thus a worldview is the analogue of a model of axioms. We use the term model in the model theoretic sense (that is not the model as in mathematical physics). Thus, a model is a structure satisfying a set of axioms. And as it is often possible for a set of axioms to have different models, so different possible worldviews are equally possible for the worldview questions.

But remember that our problem is; how can we reduce the possible worldviews? The intuitive answer is to keep only the worldviews answering all our questions, in a coherent manner. In our analogy, this corresponds to two fundamental properties of theories: completeness and coherence.

**Completeness**

Let's remind us that a theory is complete if and only if it contains either P or not-P for every sentence P in the language. A philosophical worldview should be complete in the sense that it should answer to any question.

This is somehow near to the synthesis idea of Broad; or the comprehensiveness criteria of (Rescher 2001); or with the idea that "[philosophical systems] should be evaluated, however, on their capacity for maximal integration of the [worldview] fragments."(Aerts et al. 1994, 41)

We mean that a "complete" worldview is suitable, in the sense of a worldview not excluding questions, even if some answers are still problematic or ad hoc.

A powerful method to do this is to generalize Pascal’s bet (Pascal 1670), to answer all questions. Coincidently (or not!) Kant (1788) follows the same principle in his *Critic of the Practical Reason*, with his concept of the "regulative principle of the pure reason". In the first *Critic of the pure reason* (Kant 1781) he recognized that we can't answer metaphysical question definitely. He didn't stopped here, however. He still sought to answer all fundamental questions, and that's why he's a great philosopher. He choose thus a more hypothetical approach, saying that freedom, immortality of soul and God's existence are postulates. This is fully developed in his *Critic of the Practical Reason* (Kant 1788).

**Coherence**

A system is coherent if a proof never exists for both P and not-P.

We mean by coherence, that no contradiction is attainable. One answer to one question should never be contradicted by another worldview component. Of course, in worldviews such contradictions are more or less ubiquitous.

But such incoherences should constitute the focus point of the worldview building, to dissipate them. (Rescher 2001, chap 7,9) convincingly argue that it is the role of conceptual distinctions; and that we can see the whole history of philosophy as this apory-solving activity.

We should however already be aware that the danger of emphasising too much coherence, is to build an abstract system of concepts, very coherent, but that would be too far from reality. So, we should certainly add that coherence mustn't only be internal to the system, but also external, with "facts" or "reality". This suitable dynamic is similar to the well known mutual feedback between theory and experience in scientific enquiry.

**Completeness - Coherence. Which one first?**
An important question naturally arise. What should we prefer: an incomplete but coherent worldview, or a complete but incoherent worldview?

Of course, the right answer is a coherent and complete one... But let's analyse the two possibilities.

(1) incomplete and coherent worldview

We can typify this situation with the scientific worldview. It is extremely coherent for giving answers to a model of the world (1); an explanation (2) and predictions (3); and with some philosophical additions, it can handle the questions of the theory of knowledge (6). But it is incomplete, in the sense that it do not answer to problems of values (4) or praxiology (5).

If we start with a very coherent worldview we can then try to expand it to make it more complete, to answer new questions yet never tackled. However, because of the lost of the synoptic view, this might well be very difficult do to.

(2) complete and incoherent worldview

The religious worldviews are of this kind. They are most often criticized for their inconsistencies. Indeed, if they keep being traditional, they are very poor at components 1, 2, 3, 6. However, they are much better for giving values (4) and helping us to take actions (5).

We have to acknowledge that many theologians do great efforts to become coherent, by including the results of modern science. And if the result is convincing, it is near of what we would call a complete and coherent worldview. In this sense, this approach can be more appealing than a purely scientific worldview, leaving simply unanswered very important questions.

To conclude, we think that starting the focus on completeness, on a synoptic view, makes much more sense than starting with coherence. From a wide synopsis, we can start solving the contradictions and thus going towards a complete and coherent worldview. Whereas the concepts used by some coherent worldview components can be so different of the one used by the others, that it makes the way to a complete worldview (to a synthesis) very difficult.

**Limits of the analogy**

I insist again that this analogy is just an analogy, and thus let's point out some of its limitations. I shall first emphasis that the worldview, contrary to a mathematical model, hasn't to be fixed for ever, it must be kept open to modifications and improvements. There is no time in classical logic. And it must be emphasised that the analogue of axioms here are questions, not propositions. The analogy thus doesn't imply particular prejudices of fundamentalism. Thus, it is foundational in the sense that the questions are fundamental, but not any presupposition for how to answer them.

Some might already have teared to pieces this paper, accurately objecting that the analogy breaks down, because of the well known limitation theorems, stating that no formal system containing at least Peano's elementary arithmetic can be coherent and complete. But here, we are seeking for heuristics, and this analogy gives some clues about what an ideal worldview should tend to.

**4.3.2 System of equations**

Another interesting mathematical analogy is to compare the worldview questions with a system of equations. The questions are related, as are the equations in a system of equations. Hao Wang explicated this analogy (Wang 1986, 210). Solving philosophical problems is
"comparable to solving an intricate set of simultaneous equations which may have no solution at all or only relative solutions in the sense that we have often to choose between giving more weight to satisfying (more adequately) one equation or another."

This suggests that we might have to give more weight to one component or another when answering the questions. Ideally, the philosopher should limit this bias, or at least be aware of it.

This analogy also implicitly assumes that there exists a common language to the different equations. Thus, for the worldview questions, this would imply to find a coherent set of concepts relating consistently each others in all the different components.

4.3.3 Problem-solving

We would like to emphasize the utility of this third analogy, because it is the most interesting and powerful way to look at the worldview questions. Nicholas Rescher analysed the erotetic nature of philosophy, and suggested that probably the most understandable history of philosophy to write would be one explicating the dialectic of problems (or questions) and answers (Rescher 2001, chap2). Now, if we assume for the sake of the analogy, that philosophy is problem-solving... why not use the rich literature about this field to solve and understand philosophical problems? (e.g. the classical (Newell, Simon 1972; Polya 1957)).

A very clear way to approach the problem of building a philosophy is to view it precisely as a (big!) problem to solve. Newell, Simon and Polya have worked on general problem solving methods. The main steps are to:

1. Understand the problem
2. Conceive a plan
3. Execute the plan
4. Examine the solution

In the case of building a philosophy, the problem is a very difficult one, because it is in fact the set of problems given by the worldview questions. This approach fits perfectly with Popper's claim that "every rational theory, no matter whether scientific or philosophical, is rational in so far as it tries to solve certain problems. A theory is comprehensible and reasonable only in its relation to a given problem-situation, and it can be rationally discussed only by discussing this relation." (Popper 1958, 268-269).

The context of the problem, the problem-situation, is thus also of paramount importance. For example, a philosophical problem is always embedded in a contemporary debate of the most prominent philosophical positions.

It is worth noting that this paper is organized according to this method. So, more explicitly the problem is "how to construct the best philosophical worldview?" and the steps are:

1. In part three we understood the problem of the aim of philosophy as answering the worldview questions. To complete this understanding, we would also need the problem-situation, to identify and include the problems and obstacles of your time.

2. To conceive a plan is the difficult theoretical part of the philosopher. It is the building of a philosophical worldview. This construction of the worldview can't go without the discussion with other peers.
3. To execute the plan is an even greater endeavour to make. This implies first to understand the world we live in, its crises, its problems, etc...; and then to diffuse and educate people with the worldview planned in 2. A critical problem is to find the best way to go from the existing worldviews of our time, to the ideal "best" worldview proposed in step 2.

4. Once the "solution" is found, examine if the worldview leads to the expected effects. This requirement must of course be held also during the steps 2 and 3, to check if it has undesired effects.

5 Worldview confrontation and diffusion.
We will now investigate more precisely how we can confront different worldviews. First, we argue that philosophers should aim at a unique worldview [5.1]. We then propose some key questions to see how to confront different worldviews [5.2]; and also some considerations to take into account for worldview diffusion [5.3].

5.1 Uniqueness?
A very important question is, should we struggle for a single worldview or for several worldviews?

At first sight, one might be afraid of a single worldview. Why?

We all know the dangers of powerful worldviews, related to totalitarianism or fanaticism; we think for e.g. to the communist or the Nazi one. Of course, it is very important to analyse the complex reasons of the temporal successes of such worldviews, but it isn't the place to do it here. Still, we can remark that the criteria of open discussion were obviously not present. And an interesting point is that Marx claimed that his ideas were “scientific” (we'll go back to this question of "scientific philosophy", [6.2]). Popper's effort toward epistemology were initially motivated to show that Marx's philosophy (and other cultural curiosity such as psychoanalysis) were not sciences, as they claimed to be. So we should be very careful about applying worldviews uncritically; and a key to do so is to be sure that the worldview stays open minded, that it is revisable. In short, that it accepts values of criticism, open discussion; which are, let us remember, the properties of philosophical worldviews.

Another fear is that if we all had the same worldview, it would imply that we would all think the same. This is of course a misunderstanding, since a worldview is more a guide, that gives very general recommendations, and there can be very different roads to the same destination, thus leaving a lot of freedom of actions. See also (Heylighen 2007, section 7) for these common misunderstandings.

But still, at the present time, the danger is much more in worldview fragmentation than in uniqueness. Archie Bahm already expressed it well: "the problems facing us today are more those of achieving greater unity, through a new complex organic synthesis, than of achieving more diversity." (Bahm 1979, 101). So, we can say that we can aim to an unique worldview, but be careful not to claim that it is absolute. This dilemma is well expressed in (Apostel, Van der Veken 1991, 24) "we have learned to appreciate variety and multiformity as values, and hence we do not want to strive for one unique worldview. But neither do we want to resign ourselves to the present situation of fragmentation."

On the opposite side, what reasons can we find to argue for a unique worldview?
First of all we could say that if reality is one, for objectivity reasons, there must be only one sound worldview. We can immediately object that a worldview contains also components
such as values, which are chosen, and thus not objective. But still, scientific progress let us few choices for components 1,2,3.

A better argument is that an homogeneous society have fewer conflicts (Durkheim 1893). Thus sharing common values and common aims will reduce conflicts, and enable us to conduct more elaborated projects. A classical example of such a collective intelligence are social insects, able to construct great things -although only by stigmergic processes. Their collaboration is possible, among others, because of their very near genetic inheritance. In a human society, it's culture that plays this role, with the existence of common values or goals.

And indeed, there are some common values to all civilizations. As empirical research about quality of life shows (Heylighen, Bernheim 2000a) murder, theft, rape, lying, etc... are negative values in all societies; whereas health, wealth, friendship, honesty, safety, freedom, equality, etc... positive ones.

5.1.1 Distinction

Generally, an homogeneous system is easier to control (the word “control” has no negative connotation here, since it is a very general and central concept of system theory), have fewer conflicts, because the elements have the same goals. So, less diversity is easier to control; but more diversity has the great advantage to allow more adaptability (Gershenson 2007). Thus, it seems that a trade-off between the two has to be found. Surely, an ideal worldview would be one with a great adaptability, so that it can face new unknown problems.

We have to develop and maintain different worldviews only if they are as powerful; i.e. if they answer as well all the worldview questions in a coherent and comprehensive manner.

To sum up, we can distinguish two levels.

The first level is the one of the philosopher, seeking for a single "best" worldview. What is important is to be open to criticisms to adapt the worldview from criticisms, and from new knowledge. If we take too seriously the fact that we should maintain a diversity, we'll never be able to build an integrated worldview. The diversity will naturally stay with the diverse attempts of philosophers to build different worldviews; and also with the constant criticisms. If we arrive and stay a long time with a unique worldview it will be a great achievement. But at that time only we'll have to be particularly critical, and seek for more diversity.

The second level is the metalevel of comparisons of worldviews. This metalevel is taken when one is doing history of philosophy, so that we can do broader analysis of the different worldview evolutions. From this level we could say that having different worldviews is good, because if not, there would be nothing to compare!

But how precisely are we to compare the strength of worldviews? That's what we'll investigate now.

5.2 Worldview confrontation

Why would we confront different worldviews? Isn't it often said that there is no contradiction, between for example, the religious and the scientific worldview? This is wrong, since they give different answers to the same questions. Although we saw that they preferentially answer to different sets of the worldview questions. We can confront different worldviews either to discredit another worldview, or to invite to a new worldview (or both!).

How can we consider that a worldview is better than another? If we take one single worldview question, and try to answer it, any answer will be open to
criticism; and most often on strong grounds. This would lead to the relativistic sceptical attitude, saying that there is no definite answer to such philosophical questions.

But let's challenge the sceptic, and ask him to criticize answers given to all the seven worldview questions. He would then have to destroy not only a philosophical proposition, but a philosophical system of thought. So he should also suggest alternatives when making criticisms. If not, he's taking an easy position, and doesn't see his responsibility about the philosophical knowledge; and besides he also has prejudices and an existing worldview he defends implicitly when he's doing his criticisms.

A philosophical worldview has to carry around with any other worldview (sectarian, religious, scientific reductionistic, etc...) hopefully to be shown to be better.

5.2.1 Agree to disagree

When we face a disagreement, the first minimal step to take is to agree to disagree. This can be achieved by laying bare one's tradition in which we are taking part. This exposure of a philosophical position can be done simply by answering the worldview questions. If two opposed philosophers do this, they will very likely uncover rapidly the source of the disagreement(s). I do not mean that we have to keep on this situation, because this is simply admitting a contradiction; between two thinkers, but still a contradiction. So, both should ask themselves how to solve it, either by changing their position, or by refuting the opponent.

5.2.2 Evaluation standards

What are the evaluation standards to compare philosophical theories? Rescher (2001, 31) proposed some excellent standards that are worth reproducing here:

Example of evaluation standards for philosophical theories/theses.

One philosophical theory/thesis is better than another when, other things being equal:

(1) It addresses and adequately resolves a broader range of important questions
(2) It exhibits greater internal and systemic coherence.
(3) It involves fewer anomalies - fewer difficulties that need to be met, a fewer seeming contradiction that need to be explained away.
(4) Its deliberations are less complex and its exposition is less complicated: it involves fewer distinctions and requires less elaborate explanations.
(5) Its principles are better substantiated and seem less artificial and contrived.
(6) It has a better fit to our prephilosophical knowledge in everyday life and in natural science.
(7) Its lessons and implication for the conduct of life accord better with those of "common sense" experience.
(8) It encourages a life-outlook that is personally more rewarding and socially more beneficial.

note: principles 1-4 envision presentational merits / 5-6 evidential merits / 7-8 consequential merits.

I don't agree with half of the standard (6), because we shouldn't care much about "prephilosophical knowledge in everyday life". Einstein's theory of relativity goes clearly
against all our intuitions. But it has very important consequences for the knowledge of our universe. So, a philosophical theory should foremost focus on fitting with natural sciences (see the next section). The question of our prephilosophical knowledge, is secondary, and is relevant only with the perspective of diffusion. The categorisation proposed of presentational/evidential/consequential merits could also be replaced by a better one.

I've thus reorganised those evaluation standards using a short paper called *Objective, Subjective and Intersubjective Selectors of Knowledge*. Pursuing the thoughts of Donald T. Campbell, Heylighen's (1997) paper distinguishes three main classes of functional selectors of knowledge:

1. Objective criteria – selection for fit to the outside object.
2. Subjective criteria – selection for acceptance by the individual subject.
3. Intersubjective criteria – selection for sharing between subjects.

With these distinctions, Rescher's criteria can be rewritten the following way:

One philosophical system/worldview is better than another, when other things being equal:

1. **It emphasis objective criteria**
   1.1. It has a better fit with all the natural sciences.
   1.2. It addresses and adequately resolves a broader range of philosophical questions (especially the worldview questions).
   1.3. It exhibits greater internal and systemic coherence. It thus has fewer anomalies.
2. **It fulfils better intersubjective criteria.**
   2.1. Its deliberations are less complex and its exposition is less complicated.
   2.2. It encourages a life-outlook that is socially more beneficial.
3. **It is easily adaptable to subjective criteria.**
   3.1. It is simpler. It involves fewer distinctions and requires less elaborate explanations. Its principles are less artificial and contrived.
   3.2. Its lessons and implications for the conduct of life accord better with those of “common sense” experience.
   3.3. It encourages a life-outlook that is personally rewarding.

This list is ordered; in the sense that the objective criteria are certainly more important than the intersubjective which are more important than the subjective ones.

In our worldview framework, and with our analogy [4.3.1] we can find at least the following parallels. (1.2) is completeness; (1.3) coherence; (1.1) is essential for the worldview components 1, 2, 3; (2.2), (3.2) (3.3) are expected for a good praxiology. And (2.1), (3.1) are generally useful for diffusion (see the next section). Keeping in mind those criteria will definitely help to to decide between two speculative philosophical theories.

Popper (1958, 269) also gathered very relevant questions to ask to a philosophical theory (i.e. “non- empirical and irrefutable”). Let's quote him again, without any cut this time:

In other words every rational theory, no matter whether scientific of philosophical, is rational in so far as it tries to solve certain problems. A theory is comprehensible and reasonable only in its relation to a given problem-situation, and it can be rationally discussed only by discussing this relation. Now if we look upon a theory as a proposed solution to a set of problems, then the theory immediately lends itself to critical discussion -even if it is non- empirical and irrefutable. For can we now ask questions such as, Does it solve the problem?
Does it solve it better than other theories? Has it perhaps merely shifted the problem? Is the solution simple? Is it fruitful? Does it perhaps contradict other philosophical theories needed for solving other problems? Questions of this kind show that a critical discussion even of irrefutable theories may well be possible. (Popper 1958, 269).

5.2.3 Application - science against religion
We already spoke about the limitations of both the scientific and the religious worldviews, the one in terms of uncompleteness, the other in terms of incoherence.

So, a fruitful open discussion between the two should ideally lead to either:

1. A religious worldview more compatible with scientific findings.
2. A scientific worldview completed with an axiology and praxiology.

Both, by their attempt to be more comprehensive and more coherent are then becoming philosophical worldviews.

5.3 Worldview diffusion
Since a worldview contains an action component (6) it means that it has the intention and the power to change our world...to the condition that it is diffused, accepted, and used. How are we to diffuse the worldview that we have easily constructed thanks to the previous guidelines?

The 7th component tells us that we can't start from scratch. The philosopher Archie Bahm (1979, 100) distinguished two steps to diffuse a worldview. First, to reveal presuppositions contributing to the present crises; and then to find presuppositions needed to recover from them. We thus have to analyse the present situation, the present existing knowledge, and find ways, from those existing worldviews, to arrive to the new worldview. The two main actions to take are:

1. Refute or show the limitations of the old worldview.
2. Develop social structures to help people with their concrete actions (a supported praxiology).

It is often said that "religions give concrete values". But if we look a little bit closer to the texts, this is not true. A lot of contradictions and different incompatible interpretations are possible in the sacred texts. However, the social structure of people working in spiritual institutions (churches, temples, etc...) is here to welcome people, and to help them to solve their problems. This social structure helps the process of decision making.

Changing the moorings of people must be done smoothly. It often needs time (one generation or more); but in our world of accelerating change, this is not acceptable. Thus, we have to expect people to be able to have a greater adaptability. When a worldview is exposed, with the aim to convince, the statements should be clearly labelled as either strongly supported and consensual, or controversial and in debate. In its relation with the general public, the vulgarisation of philosophy could provide a simplified (but sound) ready-made worldview. Contrary to other belief systems, curious minds would be most welcome to further investigate where the worldview comes from, what are the issues at stake, what are the points the most discussed, etc... But due to the complexity of the issues, to discuss them in details would remain the professional philosopher's job.
In his *Critique of the Pure Reason*, Kant stopped a lot of metaphysical speculations. In a way, it is excellent, because it allowed science to develop clearly, independently of philosophical considerations, always with reference to sensible experience. He wanted peace in the pure reason. But peace is really absurd in the perspective of the quest of knowledge. This quest needs all the contrary: the confrontation and the war of ideas (and ideas only!); for “in philosophy, controversy is the life blood of the enterprise” (Rescher 2001, 208). The worldview framework can be seen as a clear battlefield, where ideas can be confronted to each others. Let the World-View-War (WVW) begin!

6 More worldview filters.

What follows are partial starting points to build an integrative philosophical worldview. The author is clearly more in the spirit of 1c) described in introduction, that is a philosophy that tries to view the cosmos and man together.

What follows are first keys principle giving more ways to filter the possible constructions of a philosophical worldview. Of course building a satisfying worldview is a huge work; see e.g. the big traditional systematic treatise of philosophers, or browse into the hundreds of pages of the *Principia Cybernetica Project* worldview (Joslyn, Heylighen, Turchin, 1993). This section thus makes much more philosophical choices than the previous sections. It will be more related to our present predicament, and to our present scientific worldview.

6.1 Failure of traditional worldviews

We already saw that the understanding of the context (our problem-situation, or present predicament) is vital. What are the main worldviews in our time, and in what respects do they fail? Too quickly, here are some critics. The religious worldview has no rational mechanism to resolve issues or disagreements; it gives no answer to contemporary developments, and thus is non-adaptive. There is a fundamentalism aspect in them. The traditional reductionist scientific worldview maintain determinism, claim that there is no goal-directedness, and thus no meaning. Holistic worldviews (e.g. "New Age") are too fuzzy, irrational and impractical. A humanistic worldview is too anthropocentric; it should consider seriously man in its broader context (evolutionary, ecological, cosmological, etc...). It can't deal with problems such as the so-called singularity. What about a humanistic worldview if man had to disappear to let place to intelligent machines? Individualism is a value so widespread that it could be interpreted as a worldview. It is often viewed as the main problem of our society. On one side, it can mean one different worldview per person, and thus, no shared worldview. This lead to the claim that no worldview is better than another. To its extreme, this implies no common values and thus no common goals (relativism). On a other side, an individualist worldview can mean a worldview with a very narrow scale (how to make the most of "my little daily life", whatever it implies for the others). (Stewart 2000) especially in chapters 11 and 12 did propose ways to make us enlarge our worldviews with evolutionary modelling capacities, thus leading to broader views and values.

6.2 Science first

We introduced our paper by saying that there is an increasing take over of science over philosophy. Considering the development of sciences, it isn't going to slow down, and philosophy has to integrate as best as possible scientific results.

A common vain attempt is to make philosophy a science (e.g. Descartes, Spinoza, Hegel, Marx, etc...). Even if it starts from a good intention to make a very coherent and rigorous
philosophy, we have to be extremely sceptical when we hear "scientific philosophy". Archie Bahm speaks about the different sciences of philosophy (ethics, etc...), but he explicitly means a general scientific and rational attitude. Unfortunately, it is often more a trick of philosophers to impose their philosophy. We saw the example of Marx claiming that his materialism dialectism was a science.

Instead we should simply base philosophy on science, and be inspired by the rigour of the scientific method. There is an important distinction made by Broad between non-scientific and un-scientific. Philosophy is non-scientific, but not un-scientific.

   We must distinguish between being non-scientific and being un-scientific. What I have admitted is that philosophy is a subject which is almost certainly of its very nature non-scientific. We must not jump from this purely negative statement to the conclusion that it has the positive defect of being unscientific. The latter term can be properly used only when a subject, which is capable of scientific treatment, is treated in a way which ignores or conflicts with the principles of scientific method. (Broad 1958, 103)

Thus, being coherent with major scientific results isn't an option. For providing the widest synopsis, scientific results are unavoidable. Thus, the best worldview must take into account the cosmic dimension. We have to firmly and explicitly ground philosophy in science. We should take at the very least the most established scientific beliefs, and find ways to integrate them fully in our worldview. In such a philosophical worldview, it is a more more serious defect to ignore scientific results than to extrapolate them in order to solve other philosophical problems.

Such a worldview must be prepared to be revised as science progress. If a scientific theory is refuted, it would be clear that philosophical consequences would have to be taken into account. This approach would limit purely intellectual philosophical constructions by keeping philosophical theories up to date with respect to scientific theories.

A very common pitfall in philosophy is to delight in a conceptual world, without any connection to reality; i.e. internal coherence alone. But any claim of a worldview should be able to be connected somehow to our concrete world; i.e. also external coherence. A philosophical claim would then be explicitly linked more or less closely to facts, often through scientific theories. Concretely, a criterion for a good systematic philosophy would be a philosophy having links to at least the whole well established scientific knowledge; or even better, to the whole human knowledge.

6.2.1 A universal language for sciences.

Curt Ducasse (Ducasse 1941, chap. 1) criticized the statement that "philosophy is more general than science", because the philosopher doesn't explicit the links between the different sciences. However, this is not true anymore. For the complexity sciences constitute precisely this bridging science. For example, some general concepts like feed-back or self-organization can be applied as well in physics, chemistry, biology, psychology, sociology... General system theory and cybernetics aim to propose a universal language for sciences (e.g. (von Bertalanfy 1968)). We can thus expect fruitful cooperations of philosophy with those sciences of complexity.

We won't further develop the relevancy to strive towards a philosophical system, since Rescher (2001) already massively argued in that direction. Here is a summary of his position:
Our preface for simplicity, uniformity, and systematicity in general, is now not a matter of a substantive theory regarding the nature of the world, but one of search strategy - of cognitive methodology. In sum, we opt for simplicity (and systematicity in general) in inquiry not because it is truth-indicative, but because it is teleologically more effective in conducing to the efficient realization of the goals of inquiry. (Rescher 2001, 202).

6.2.2 No single man

A wide spread adage about today's knowledge, is that "no single man can anymore handle its extent". This seems to imply humility and appeal to restrict ourselves on just a small subject domain. Although the explosion of knowledge is a fact, here are arguments and keys to react against this annoying situation.

First, as we just said, system theory offers us such general concepts that they can apply to all the different sciences. Thus, if we master those concepts, we have keys to access all the scientific knowledge; not in their specific and incompressible details, but at least in their main principles.

Second, to build a worldview, is a huge philosophical enterprise. As with big scientific projects, we would certainly need more collaboration between philosophers. We thus need to have a better organization to handle this information overload, and to develop more collaborations. The use of information technologies, such as emails, search engines, databases, etc... are nowadays indispensable tools for the researcher.

6.3 Ambition and caution

Philosophy faces the following problem; the more interesting the questions are, the less we can be exigent about the answers. For example, we can have a perfectly precise answer to the question "How much is 5+7 in Peano's arithmetic?"; but a much less definite one to "Is there a God?". So, if we try to answer this second kind of questions, we can't expect definitive answers. We have to be more supple, find other ways of arguing, and be particularly open to criticisms.

The further we are from "facts", the more cautious we need to be. So, philosophers should be much more careful than scientists. We claimed that analytical and continental philosophy lack ambition. However, we should be careful with ambition, because it can lead to dogmatism. I would like to put forward the following maxim:

*The more ambition in the questions, the more caution with the answers.*

Philosophers must stay *ambitious* in their goals; but proportionately *cautious* in the weight they give to their solutions. Indeed, this is precisely this ambition that stimulate philosophy. However, they should be modest in the assurance of their system, because their systems are by construction, fragile.

7 Conclusion

Starting a philosophy can be as simple as starting to answer rationally those seven questions. Then we can search for the interrelations between the components. The answers of the different questions will inevitably be in conflict with each others; but again, this is the motive for the philosophical activity! Very naïve at the beginning, but we can affine the answers, by pointing out the contradictions, insufficiencies, and to focus on them to find ways to solve or complete them. The author thus suggest a pragmatic approach. If we wait until we find a
supposed "Truth" or "the Absolute" before answering the questions, we might well wait forever.

Here is a summary of steps to take to build the best philosophical worldview.

1. Make a synoptic review of everything that could be useful to answer the worldview questions.
2. Find the best concepts to make a synthesis out of this synopsis.
3. Propose a synthesis, in the form of a systematic philosophy.
4. Confront the resulting worldview to show why it is a better worldview than the other existing.
5. Show how it can solve the problems of our time.
6. Diffuse your worldview.

Due to its lack of ambition, most of today's philosophy rarely propose -or even aim to propose- a coherent and comprehensive worldview. We hope to have provided the first sketch for a method in which the classical ambition of philosophy is kept, but with an even greater caution up to this ambition.

This worldview approach has the elegance to be in harmony with the origin of philosophy, and with its traditional domains. It provides clear goals for philosophers. Be this paper a rebirth of speculative philosophy, or worldview construction, in a cautious and clear framework. Paraphrasing a well-known philosopher of Königsberg, the spirit of this paper can be epitomized in the maxim:

Speculative philosophies without content are void;
critical philosophies without synoptic conceptions, blind.

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Bibliography


Pascal, B. (1670) Pensées extrait du fragment 233 dans l'édition L. Brunschvicg.


