THE MYTH OF THE FRAMEWORK REVISITED: AN EPISTEMOLOGICAL APPROACH

ÇERÇEVE MİTİNİ YENİDEN GÖZDEN GEÇİRME: EPİSTEMOLOJİK BİR YAKLAŞIM

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Abstract:
Human mind gradually forms a conceptual unity right after birth. Then the mind works within this conceptual unity called "framework" and without a conceptual framework it is unable to interpret reality. My paper is an attempt to evaluate these positions from a new epistemological perspective especially from the standpoint of worldview.
Key words: Popper, theory of framework, the myth of the framework, cultural relativism

Öz:
İnsan zihni, doğumundan sonra kavramsal birlikteliğini doğru bir şekilde merhale merhale oluşturur.Zihin, " esas yapı/çerçeve" diye anılan kavramsal bütünlük içinde çalışır. Kavramsal bir çerçeve olmaksızın zihin gerçekliği yorumlayamaz.Makalem, bu durumu; dünya görüşü açısından yeni bir epistemolojik bakış açısıyla bir değerlendirme çabasıdır.
Anahtar kelimeler: Popper, çerçeve kuramı, çerçeve miti, kültürel görecilik

1. Intraduction

Karl Popper throughout his philosophical career was concerned with rationality and the role of science in our quest for truth; and in this respect he made some of the most important contributions to the twentieth century discussions concerning the nature of science and rationality. In his monograph about "frameworks" he was mainly concerned with the pitfalls of irrationalism and the intellectual disease of relativism, which he perceives as "modern irrationalism". Otherwise, he acknowledged the truth in frameworks and in fact the epistemological function of frameworks in our intellectual endeavor. There is indeed a kind of tension between both sides of this theory of the framework. In my paper I shall try to elaborate this tension and rather than trying to dismantle the tension I shall attempt to preserve it as I believe it should remain in one side of the issue and struggle through it just to show the epistemological function of frameworks in order to clarify what Popper calls "the Myth".

Let me first present a brief summary of Popper's statement of the myth: The framework theory claims that since our intellectual background determines the framework within which we are able to think, truth is relative to our intellectual background. This leads to "…the impossibility of mutual understanding between different cultures, generations, or historical periods – even within science, even within physics". (Popper, 1994, 33)

However, according to Popper, the proponents of this theory do not totally deny the possibility of dialogue between peoples of different background. They set rather "unrealistically high standards" for mutual understanding. Therefore, "a rational and fruitful discussion is

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impossible unless the participants share a common framework of basic assumptions or, at least, unless they have agreed on such a framework for the purpose of the discussion." (Ibid, 35) First of all, according to Popper, besides being false, this statement has some social implications which make it a vicious idea because it leads to violence if not to war. In this regard, however, Popper admits that "a discussion among participants who do not share a common framework may be difficult."

Moreover, he also points out that if the frameworks of the discussants have little in common still they may have problems of communication. (Popper, 1994, 35) In order to examine Popper's critique of the myth we need to explain what is exactly meant with "framework". Popper's definition is very brief: "(a framework) is a set of basic assumptions, or fundamental principles". (Ibid, 35)

However, we need to explain the full epistemological function of frameworks and the way basic assumptions, or fundamental principles are formed in the mind. Also the nature and structure of frameworks must be analyzed in order to make Popper's criticism more meaningful. This requires an epistemological analysis of human knowledge system. I believe that the function of worldviews in acquiring knowledge is totally neglected by most philosophers, and that is why I would like to elaborate on that. Especially a worldview acts as a framework in human epistemology which should not be neglected. If we can show exactly the role of worldview as a framework in the process of acquiring knowledge then we may at the same time shed light on the myth of the framework.

2. FRAMEWORK THEORY VS. WORLDVIEW

A framework begins to be formed in the mind of an individual as soon as s/he is born. Therefore, the rise of a framework takes place as a mental process through the gradual emergence of concepts in the mind. In that case a framework is primarily a set of interrelated concepts. This set of concepts expresses a particular belief, an assumption, what Popper refers to as "fundamental principle", or an idea (view). The concepts in the set are so related to each other that they form a coherent whole. We may give the example which Popper borrows from Herodotus.

Accordingly the Persian King Darius the First, as he was fascinated by the variety of cultures and customs he encountered during his travels, wanted to teach a lesson to the Greeks living in his empire. For, he believed that cultural differences must be appreciated and for peoples of different cultural backgrounds this is a better way of understanding each other. He thought that the Greeks did not have this kind of a sophisticated understanding of the world. At that time the custom of the Greeks was to burn their dead. But Callatians, an Indian tribe, ate the bodies of their dead fathers. Darius asked the Greeks first what they would take to eat the bodies of their dead fathers. They were shocked and replied that no amount of money could persuade them to do such a thing. Then Darius called in some Callatians, and while the Greeks listened asked them what they would take to burn the bodies of their dead fathers. The Callatians were horrified and told Darius not even to mention such a dreadful thing.

In both cases people belonging to a society developed a certain framework in their mind concerning their action towards their dead. Since the Callatians act according to that framework they have hard time to understand the act of the Greeks towards their dead fathers. But what is missing in this argument is the fact that if there is sufficient interaction between these two cultures they will gradually influence the other and they will begin to question their specific act. What we want to assert is that frameworks are usually open ended conceptual networks and therefore, they are always evolving no matter how slow. We may elaborate this further.

Now, in this ancient example each framework has a set of interrelated concepts. In this particular practice the framework of the mind is formed gradually within the society. Suppose that we identify some of the concepts that form this particular belief as death, respect (the dead), life (after death), custom, reward and so on. Frameworks are formed in the mind gradually throughout one's life and this continues as a dynamic process without coming to an end except it slows down in later stages of the individual's life but with an open end, as I have indicated.

We may examine this further with the following diagram (Table 1) which shows that the concepts that make up the mental framework for a particular funeral behavior develop gradually from childhood onward and as they emerge in the mind they are immediately related to previous relevant concepts by the operations of our mind. The total unity of these concepts gives a particular insight to the individual as s/he learns this also from the social environment. The insight emerging from the conceptual unity of these concepts is what we refer to as "framework".

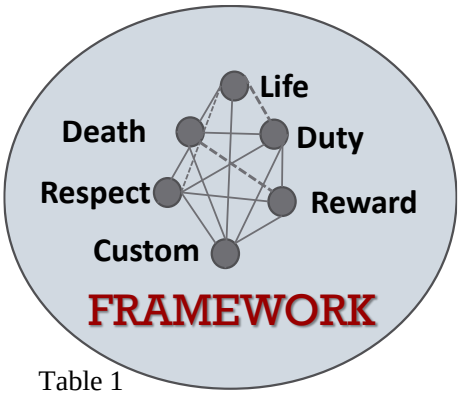
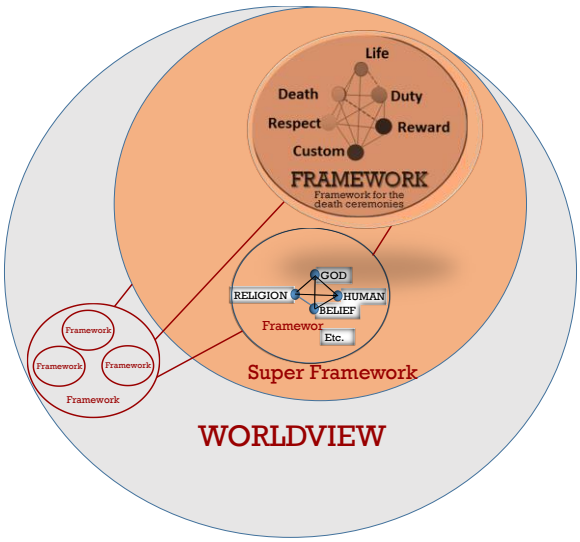


Table 1

I am convinced that our worldview is made of a huge number of such frameworks through which our mind works. We may express this as an epistemological theory that the mind operates through such individual frameworks which are connected logically to form even higher frameworks. We may conclude from this that a worldview is the largest framework which sustains all other innumerable sub-frameworks. As these frameworks develop gradually in the mind they are related to each other by the natural operations of the mind which operates within the knowledge system collectively with other faculties. The smallest conceptual totalities may be termed "atomic frameworks" which form larger globes of concepts called "super framework".

In this way all frameworks embodied within a conceptual unity build up a super framework, called "structure", which does not have any other framework that embodies it except the *conceptual super nova* which we call "worldview". I shall analyze below a worldview in this way into its pieces of frameworks in order to show that the number of atomic frameworks are innumerable. It is also extremely difficult to give an exact number to the super frameworks within a conceptual unity. But definitely their number within the same conceptual unity, namely framework, is much less than that of molecular frameworks. But the number of the largest global frameworks within a worldview is exact and depending on the complexity and sophistication of a worldview it may have no structure, or at least two structures.

Logically speaking a worldview cannot have more than a certain number of structures. As I shall argue below, for example, Islamic worldview (and I think that Western worldview also) as the super nova framework has only five structures. I would like to show this on the following diagram (Table 2) and try to evaluate this epistemological understanding of frameworks through the structure of frameworks.



3. THE STRUCTURE OF FRAMEWORKS

As we have seen the claim that our mind works within certain frameworks and that without a conceptual framework it is unable to interpret reality is what Popper calls the "myth of the framework". This somewhat brief and rough formulation may be called "theory of framework", which has, according to Popper, some implications as well; such as "truth is relative to our intellectual background."

Popper further interprets the theory of framework as a relativistic theory which claims the impossibility of rationalism. In other words, according to this theory, "truth may change from one framework to another." Moreover, he argues that the proponents of this theory claim also the difficulty if not impossibility, of mutual understanding between peoples of different cultures since they will have different frameworks in their minds.

Both the theory of framework and Popper's criticism need a careful evaluation from an epistemological perspective. As Popper also accepts that the theory holds in itself some truth; but it goes beyond its limits and sets too high a standard for objective truth. Since our purpose is to evaluate both of these positions from a new epistemological perspective especially from the standpoint of worldview which may be taken as the most comprehensive mental framework without which human mind is unable to function. I am hoping that my theory of worldview and its epistemological function may shed some light on the problems discussed by both approaches.

As I tried to show above, frameworks are structured within a "worldview", the largest framework which provides the perspective to the individual. In epistemological sense, a worldview is an architectonic mental whole, in which ideas are systematically interconnected

through the natural operations of our knowledge system. But a philosopher may organize his ideas into a system in which case still the natural mental operations are utilized, however, the totality is consciously organized by the philosopher in question through an act of analysis, synthesis and reflection. It is this distinction between a worldview and a system that is actually brought into attention by Whitehead, in the statement that "philosophy is an attitude of mind towards doctrines ignorantly entertained." From the statement "doctrines (the unity of ideas) ignorantly entertained" I understand what I call in this context "worldview". (Whitehead, 1938, 171)

The unity of ideas ignorantly entertained, then, to borrow Whitehead's words, refer to a worldview which is not brought into unity by a conscious scientific effort of philosophy. As he further argues:

> The true method of philosophical construction is to frame a scheme of ideas... All constructive thought [i.e. worldview] is dominated by some such scheme, unacknowledged but no less influential in guiding the imagination. The importance of philosophy lies in its sustained effort to make such schemes explicit, and thereby capable of criticism and improvement. (Whitehead, 1979, xiv)

Our purpose in this context is not discussing philosophical systems. However, the similar epistemological function between the two concepts, i.e., system and worldview, leads to interesting results, including the nature of philosophy as a discipline. For, let us consider the fact that a system is a well-knit organization of ideas and doctrines that manifests a coherent unity that has no gaps, nor any inconsistency; and as such it is "a coherent, logical, necessary [unity] of general ideas in terms of which every element of our experience can be interpreted." (Whitehead, 1979, xiv). Since it is in philosophy that such systems are constructed then *systems* are subject matter of philosophy par excellence. This makes philosophy as the science of systems which can be offered as a definition of philosophy.[1] Let us now concentrate on worldviews as frameworks.

A worldview usually arises in everyday life as we grow up. In this process concepts accumulated in the mind form atomic frameworks which are united to form super frameworks. In this process at early childhood atomic frameworks emerge, then the mind unites these frameworks according to their functions and relations so that higher coherent conceptual unities are formed, called "super framework". Each atomic framework regulates its corresponding behavior and any other behavior that may fall in its jurisdiction. Relationship between behaviors will bring relationships between atomic frameworks and in this manner they will be placed in logical coherence. When thus super frameworks are formed they begin to regulate more complex behaviors. Our mind also operates with its natural constitution by using these frameworks.

Although it is very difficult, if not impossible, to decipher a complete list of such frameworks and draw their map within a worldview, we must yet acknowledge their function in the process of knowing. As noted above, super frameworks also unite to form the highest

[1] In fact in an earlier paper I tried to defend this position in order to reach a plausible definition of philosophy. See my previous paper "Sistem Bilimi Olarak Felsefe" (Philosophy as a System-Science), *Felsefe Dünyası*, 14 (1995), 42-51.

frameworks in a worldview called "structure". It is possible for a worldview in a society to act only as a superstructure in which case the whole worldview will take the place of all other frameworks embodying in itself many atomic frameworks only. This is a simple worldview which has no structures, found predominantly in very primitive societies. If however, the society develops further the worldview dominant in the minds of individuals will reveal a complicated conceptual structure.

It is possible to distinguish five fundamental structures within a sophisticated worldview. The first structure that emerges in the mind as a framework is what we may call "Life Structure" which may include in itself many life related sub-frameworks which are so well connected to each other thanks to the constitution of our mind that they form a coherent unity on the basis of which the individual maintains his/her life. If the society is developed sufficiently then the life structure of an individual can be shaped by the knowledge available and it can become more sophisticated, so to speak leading to the rest of the structures:

1. Life Structure;
2. The Foundation or World Structure;
3. Knowledge Structure;
4. Value Structure;
5. Human Structure

I would like to illustrate this on the following diagram illustrating the worldview framework through an example using the Islamic worldview (Table 3).

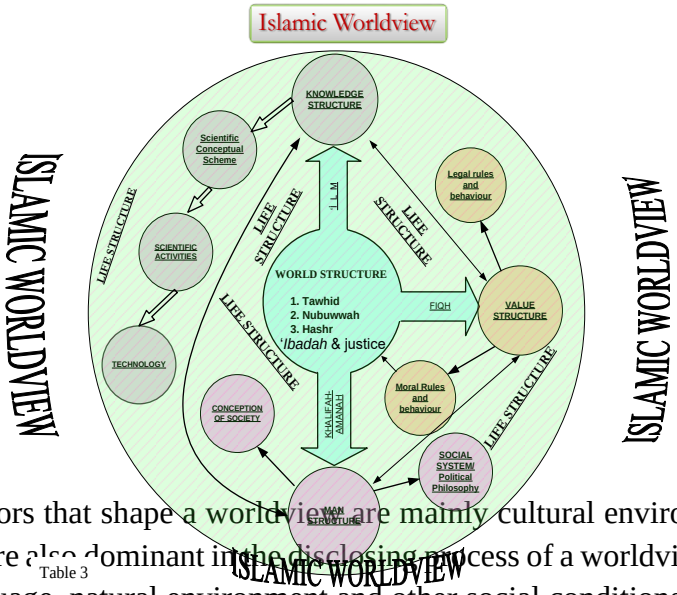


Table 3

The major factors that shape a worldview are mainly cultural environment and education. Other factors that are also dominant in the disclosing process of a worldview are the psychology of the person, language, natural environment and other social conditions. All these factors can be determined more specifically under four heads: (1) culture, which also includes such elements as language and natural environment, (2) abstract thinking (philosophy), (3) science, and (4) technology. Since these are precisely the major factors that form a worldview, the individual does not make a conscious effort to construct a systematically organized worldview.

Therefore, the individual's effort is only to find answers for certain questions that either come to his mind or he simply comes across these questions in an accidental manner in his daily life.

Hence, a worldview is formed by the individual as a matter of habit that is dominant in his daily life, through his culture, technology, scientific, and speculative ideas that he acquires through education. In that case, a worldview is not constructed the way a philosophical system is constructed in philosophy, but rather the individual forms it in a casual manner. It is in this sense that we claim its disclosure to be a natural process, rather than a conscious effort to build an architectonically whole perspective. For a worldview is, in fact, a perspective from which the individual views the universe and the things in it. Therefore, no one can evaluate any question or a problem without first assuming a worldview of a sort. In fact the human mind works only within the context of such an architectonic whole. It is this epistemology of worldview as a fundamental framework that is also raised by Kant:

> Human reason is by nature architectonic. That is to say, it regards all our knowledge as belonging to a possible system... Systematic unity... is indispensable to reason... By an architectonic I understand the art of constructing systems. As systematic unity is what first raises ordinary knowledge to the rank of science [*Wissenschaft*], that is, makes a system out of a mere aggregate of knowledge, architectonic is the doctrine of the scientific in our knowledge... By a system I understand the unity of the manifold modes of knowledge under one idea. This idea is the concept provided by reason... The whole is thus an organized unity, and not an aggregate. It may grow from within, but not by external addition. It is thus like an animal body, the growth of which is not by the addition of a new member, but by rendering of each member, without change of proportion, stronger and more effective for its purposes. (Kant, 1965, A 832-3, B 860-1)

Kant uses the term 'reason' (Vernunft) to refer to only one faculty of knowledge; it is the faculty of speculative knowledge, i.e. metaphysics. Since without this faculty our system of knowledge cannot be completed, then we can conclude that Kant would agree with our claim that the human mind (i.e. faculties of knowledge as a whole) cannot but operate only within the framework of an architectonic whole, which I have termed "system", in the philosophical sense, and "worldview" in the everyday common sense. Both of these function as frameworks in the Popperian sense.

Kant's definition of "architectonic", as "the art of constructing system" also needs an interpretation. I would like to argue that the term "art" (Kunst) is used to mean "science" (*Wissenschaft*). If we take "architectonic" to signify "the structural design of a unity", then we can conclude that our rendering the idea of philosophy as a 'system-science' is acceptable to the critical position. This is seen in the above quotation as interpreted by us according to his statements previously quoted, from the *Metaphysical Foundations of Natural Science* (Kant, 1985, 3-4; 467-8). This is again confirmed by his definition of philosophy as "the science (Wissenschaft) of the relation of all knowledge to the essential ends of human reason."

As it is seen, Kant attributes the process of constructing a system to pure reason, and thus, formal architectonic is assigned to it as a characteristic. But this may lead one to think that constructing a system is not a science, but an art; whereas he claims that "systematic unity is attained only in a science". In that case, he must either establish the architectonic of reason as

an independent science, or refuse this, and, instead, simply claim this task for philosophy. It is understood from his whole project that in either case one comes to the conclusion that the idea of philosophy projects itself as a system-science. I think that we will need this brief discussion of systems and the nature of philosophy when we evaluate Popper's critique of the myth.

We may now try to differentiate between certain worldviews with regard to their composition. In the first case, a worldview which is formed naturally by the individual in a casual manner I shall entitle "natural worldview", because the acquisition of its major components is regulated by the natural operations of the mind and the individual does not make any reflective effort to shape his/her worldview. But when a worldview arises in the mind by a conscious use of the natural operations of the mind then the basic components of the worldview come into existence in the mind through investigation and search for knowledge. That is why many of the basic ideas, beliefs, outlooks and conceptions in it are clarified to the person trying to search for knowledge. Obviously this kind of a worldview is completely different from the natural one; we shall thus refer to it as "transparent worldview".

A transparent worldview may also arise in two different ways: first, in an environment in which the dissemination of knowledge within the society takes place quasi-scientifically; second, in a society where scientific knowledge regulates the dissemination of knowledge. In order to make this point clear, I would like to elucidate how scientific knowledge may regulate the dissemination of knowledge, which will shed light on both cases at the same time.

First of all, in order for scientific knowledge to regulate the dissemination of knowledge, there must be a sophisticated mechanism for the production of scientific knowledge. This mechanism, above all, requires a well-equipped scientific conceptual scheme, and a worldview as a mental framework that is suitable for the development of this scheme, assuming that this mechanism works well in a given society then some sophisticated scientific activities begin to exist. Obviously through time there will be an accumulation of scientific knowledge in that society.

Besides this there will be a group of people, called 'scientists' (i.e., the *'ulamâ'*). But the knowledge put forward by those scientists utilizes a special language, in which many of the everyday words are not used anymore in their daily meaning; a specific scientific meaning is attached to them. Moreover, in certain disciplines, such as philosophy and theology, the concepts used are abstract.

As a result, the general masses are unable to understand this knowledge, to which we have referred as 'scientific knowledge'. But the communities of scholars well understand the scientific knowledge and if an adequate network of communication is established between them, knowledge disseminates at this level directly and rapidly. Thus is formed the first stage in the process of the dissemination of knowledge which we shall call the 'abstract level'. This group of scientists is called *'ulamâ'* in Islamic civilization (Açıkgenç, 2000, 72-73).

Secondly, either there will be or there arises, as a result of the emergence of scientific knowledge, in such a society, a group of people called 'intellectuals', such as men of literature, artists, architects, teachers and educators, who are educated and are able to understand the available scientific knowledge. The intellectuals are not scientists, nor are they scholars, but

rather illuminated personalities who develop a transparent worldview within an environment of scientific activities.

Therefore, they are able to express and clearly define terms and concepts that occupy a prominent place in their worldview; such concepts may be, for example, God, the universe, knowledge, science, the meaning of life, good, evil, freedom, justice, and many other moral, religious, political, educational and social terms. At this level, since the intellectuals are able to understand the scientific knowledge developed by the *'ulamâ'*, they will naturally reflect it in their works, because their worldview is already shaped within that knowledge.

Hence, we may term this level in the dissemination of knowledge the 'concretized level'. Since the works of the intellectuals are usually of a concrete nature, the scientific knowledge is concretized and thus handed down to the general masses who can understand the concrete ideas more easily (Ibid, 73-74).

Finally, at the third stage, the knowledge thus far produced enters into a massive dissemination through the educational institutions, publications and today mass media. This is possible through the work of scientists and intellectuals, because all the educational institutions are formed in accordance with the knowledge put forward by them. When the scientific knowledge thus disseminates from the top level of abstraction to the bottom level of concretization, it reaches to the masses and begins shaping their worldview according to its well-defined and systematically developed concepts, ideas and doctrines, namely, according to a system, developed by the 'ulamâ'.

When a transparent worldview is thus formed in accordance with the system developed by the 'ulamâ', it is called 'scientific worldview'; and this way of worldview-formation we call 'scientific worldview-formation'. Therefore, by the scientific development of a worldview, we mean the "inculcation of its major components, i.e., its concepts, ideas and beliefs, to the individuals of the society through clear and transparent definitions and a systematically organized body of knowledge." (Ibid, 74)

The scientific worldview-formation is not the only way in which transparent worldviews may be formed in the minds of the individuals. For there may be other ways for the rise of such worldviews in the minds of individuals. We shall not discuss all such possible ways here, but only allude to one of those ways in which historically speaking it occurred in our civilization. This is the Islamic worldview as established by the Prophet in Mecca, through the Revelation. Since the Muslim community as such did not exist at that time, we cannot talk of any scientific knowledge within the newly emerging society.

As a result, the formation of the transparent Islamic worldview took place differently. This process of the Islamic worldview-formation was very much similar to the scientific worldview-formation, and as such can be called 'quasi-scientific worldview-formation'. As we know from history each time a new Revelation came, the Prophet explained it to his community and each term and idea thus revealed found a clear definition and a proper place within the Islamic worldview. Hence, since the way the Islamic worldview was established in its original form in the first Muslim community is similar to scientific worldviews, we may call all worldviews that

arise in this way in the minds of individuals "quasi scientific worldviews". (Açıkgenç, 2000, 74-75)

What distinguishes the transparent worldviews from the natural ones is the dynamism they induce to the individuals in whose mind they are formed. This is clear from the historical world phenomenon exhibited by the early Muslims who once possessed the Islamic worldview they became world leaders in culture, science and civilization. But the worldviews these people had before Islam can be defined as natural which lacked the adequate dynamism to give to the individuals of that society. In such a mental framework no scientific activity would have ever been possible. We must also point out that what makes worldviews dynamic, invigorating and stimulating is the continual renewal through scientific or quasi-scientific activities of the same kind which established the original Islamic worldview. If these activities of renewal cease to exist the transparent worldview can gradually turn into a natural worldview in which scientific and civilizational activities also cease. (Ibid, 75)

We may try to apply the concept of worldview in the epistemological sense to different societies and civilizations. The Greek civilization, for example, exhibits a similar development. When we take the early rise of this civilization we can see that it is able to begin to develop a transparent worldview in a quasi-scientific way around 800 B.C. By the time of the Milesian School and the first Ionian philosophers this transparent worldview became quasi scientific, which is clear in the art and literature of that period extant today. It is only that kind of a transparent worldview that leads to a meaningful scientific progress in a creative way. The same process can be observed in the Western civilization beginning around the eighth century. By the Middle Ages, the Western worldview acquired a transparent characteristic and by the nineteenth century it became scientific in the sense described in the process of knowledge-dissemination.[2]

Our exposition shows that some aspects of worldviews are the same in every civilization and society, though some other aspects may be different. It is this identical framework within worldviews that makes communication possible. For example, although the Islamic worldview and the Greek worldview are utterly different, the way they arise in the mind of an individual in their respective societies is identical, and the way they function within their societies is the same. Since we assert this in the epistemological sense, we may illustrate this point by referring to the way the human stomach functions in relation to the human body, as this is the case with the human mind in relation to knowledge. Therefore, the identity of mental frameworks results from the nature of human knowledge system. Some of these points, together with the process of worldview-formation, will become clear as we try to demonstrate the function of frameworks.

4. THE FUNCTION OF FRAMEWORKS

[2] The analysis concerning kinds of worldviews and their formation through knowledge mechanism is based largely on my book *Scientific Thought and its Burdens* (Istanbul: Fatih University Publications, 2000), Chapter 2.

Human behaviour is not like an animal behavior ensuing from only certain biological instincts or propensity without any mental reflection. Some human behavior may result from such biological origins in which case we may act spontaneously without much contemplation. However, meaningful actions especially in relation to frameworks originate mainly from mental frameworks.

We thus claim that frameworks have an epistemological function because our mind cannot operate knowledge processes without them, as I have illustrated above. For instance, if a Greek individual in ancient times had not have the following framework for their dead ancestors they would not have known what to do in such instances. Therefore, frameworks are like mental paradigms within which our mind is able to operate and interpret problems, grasp their solutions. It is this strong epistemological function of frameworks which leads to the myth of frameworks. However, we have argued that frameworks have an open end processes which makes it possible for an individual to modify, enlarge, sustain, remove and change his/her framework.

There are usually several worldviews competing in a society, but among these only one of them is dominant. If there is not only one worldview, which is dominating the overwhelming majority of a society, there cannot be a unity in that society and thus chaos will ensue. Sometimes one worldview is imposed upon a society, as though from without, by a dictatorial power. We shall not concern ourselves with these political aspects of worldviews; nevertheless, we must point out its significance as a social function of systems and worldviews as frameworks.

Worldviews are, as I pointed out, architectonic unities that are expressed in a chaotic categoreal schemes, to use Whitehead's term; whereas systems are expressed in unified and orderly categoreal schemes (Whitehead, 1979). Therefore, since concepts, terms and problems are well defined, they are clearly and distinctly expressed in systems. A worldview can be made systematic by philosophical expression and may be presented as a system. But of course, as this is reflected in individual minds within a society, it is not a philosophical system, but always a worldview.

However, the system of a philosopher is his worldview and of those who accept and assimilate it. When a worldview is thus influenced by a system, its concepts, views, ideas, and outlook acquire a certain degree of clarity and distinctness. Although this degree of clarity and distinctness is possible for a worldview, in the mind of an individual, whom I call an "intellectual", that is not a system-builder, it can never acquire the systematic unity of a system.

On the other hand, this activates individuals towards its concepts, terms, ideas and insights. These concepts, ideas and insights may also be ethical, political, economic, and thus attract individuals with some dynamism towards the implementation of these with a certain degree of effectiveness. It is this dynamism that is vital for the progress of a society; and it is this progressive development in the intellectual life of a society that we call the "social function of systems". I have no doubt in my mind that civilizations rise as a result of this progressive advancement in speculative thought, because, as Rosenthal acknowledges "civilizations tend to revolve around meaningful concepts of an abstract nature which more than anything else give

them their distinctive character. Such concepts are to be found at the very beginning of a rising civilization".

The abstract dynamism of a system comes from its originality, which is invigorating, fascinating and enlivening, it is just like the re-awakening of a land from the demise of winter, and this dynamism is reflected thereby to the society, which is then set into a process of development provided that there are no impediments in the way of mutual companionship between the speculative system and its community. Kant never seems to dwell upon this phenomenon, though Whitehead resolutely points to it:

> In all systematic thought, there is a tinge of pedantry. There is a putting aside of notions, of experiences, and of suggestions, with the prim excuse that of course we are not thinking of such things. System is important. It is necessary for the handling, for the utilization, and for the criticism of the thoughts which throng into our experience. ... Such a habit of mind [i.e. philosophy] is the very essence of civilization. It is civilization. (Whitehead, 1938, 2-3)

Then, he concludes that "if my view of the function of philosophy is correct, it is the most effective of all the intellectual pursuits." I believe that this is clear from the function of systems in a society as outlined above. Although this is so emphatically stated by Whitehead, he does not discuss the process between philosophy-society interactions. Usually it is taken for granted that society, as the cultural environment of philosophy, affects it considerably. But the reverse direction of this interaction is not much taken up as a problem. The way systems function as such is very complex; therefore, because of its importance in this context, I shall allude only in passing to the most common and uncomplicated way in which systems work their way to individual minds, which is what I have called the "social function of systems". We may now utilize this analysis to evaluate Popper's critique of frameworks.

5. POPPER'S CRITIQUE OF THE MYTH

The framework theory holds that a fruitful discussion cannot emerge from the discourse of individuals holding different framework. This is exactly what Popper is against; for he argues on the contrary that no fruitful discussion can emerge if the frameworks are similar or have more things in common, though such a discussion may be more pleasant. But then, since their basic assumptions and fundamental principles, namely clusters of concepts in their framework are common they will have similar views and hence not much different idea will emerge out of their discussions. However, people with different frameworks can have more fruitful discussion because they can learn from each other although their talk may be unpleasant and even at times very difficult to carry out.

On the other hand, I believe that Popper's claim concerning his conclusion that no fruitful discussion can emerge if the frameworks are similar or have more things in common is an extreme claim. We may give counter examples form the history of sciences. For instance, in early thirteenth century almost all scientists operate with the same Aristotelian framework in their scientific activities. But as some of the scientists notice loop holes in that framework they

tried to change some aspects of it, first primarily in physics and as the gap widened it also spread through astronomy and other sciences which eventually led to what is called scientific revolution.

Be that as it may, if we interpret culture clashes as clashes of different frameworks then for Popper the framework clash played a significant role in the rise of rationality and Greek science. This is possible thanks to the fact that the gulf between different frameworks, if not always, but usually can be bridged (Popper, 1994, 38). Our presentation of worldview also demonstrated the emergence of sciences in civilizations. Rationality is no doubt important for scientific inquiry but it is not the only element that leads to the emergence of sciences in civilization. In fact we have argued that a special kind of a mental framework is needed for the rise of scientific inquiry. For example, a worldview which lacks the knowledge structure cannot sustain scientific activities. In a society there is the need for a worldview with knowledge structure so that first knowledge activities begin in that society and then this will gradually lead to the emergence of sciences, if other factors cited above are all present. In this scheme rationality is only one factor which indeed arise in the knowledge structure of a worldview.

According to Popper, Western civilization is "the result of the clash, or confrontation, of different cultures, and therefore of the clash, or confrontation of different frameworks." (Ibid, 38) Popper defends his clash theory on the basis of the critical attitude. For him, the critical tradition was established by "the adoption of the method of criticizing a received story; and then proceeding to a new, improved, imaginative story which in turn submitted to criticism." (Ibid, 42) Popper also thinks that this is the method of science. (Popper, 1994, 42). I also defend this position based on my idea of philosophy as expounded above. Critical attitude and scientific rationality is utterly important for sciences.[3]

At one point Popper offers a brief history of the critical tradition. This method is invented only once in human history, i.e., in the ancient Greek civilization. It died in the West when the schools in Athens were suppressed by a victorious and intolerant Christianity, though it lingered on in the Arab East. It was missed and mourned during the Middle Ages. In the Renaissance, it was not so much reinvented as reimported from the East, together with the rediscovery of Greek philosophy and Greek science. (Popper, 1994, 42-3)

One more criticism Popper levels against the defenders of the framework theory is the idea that frameworks are incommensurable. This theory is developed out of a new perception of the history of science, which we may call the "paradigm theory". (Popper, 1994, 55) This theory is based on the assumption that scientists normally maintain their scientific activities within a common framework. When this framework is broken down it is replaced by a new one. The transition from the old framework to the new one is a process (revolution). The old and new frameworks are incommensurable. (Popper, 1994, 55)

Popper gives some counter examples from the history of science that show the existence of several dominant theories (frameworks) struggling for centuries for supremacy in a science,

[3] However, it is important to explain what kind of "rationality" meant here. I dwell on this issue in the following article "Ibn Rushd, Kant and Transcendent Rationalism: A Critical Synthesis", *Alif* 16 (1996), 164-190. For Poppers concept of rationality see his article "Rationality of Scientific Revolutions" in Popper, 1994, 1-32 and also various sections of Popper, 1968.

and that there may even be fruitful discussions between them. "My counter example under this heading" says Popper, "is the theory of the constitution of matter, in which atomism and continuity theories were, fruitfully, at war from the Pythagoreans and Parmenides, Democritus and Plato, to Heisenberg and Schrödinger." (Ibid, 56) At this point we may have to distinguish some frameworks:

1. Shared frameworks;
2. Borrowed frameworks;
3. Closed frameworks;
4. Utilized frameworks, etc.

In such cases perhaps we need to present different remarks concerning frameworks. Most of Popper's criticism is leveled to common frameworks which termed above as "shared frameworks". Borrowed frameworks would make fruitful discussion possible. Perhaps utilized frameworks may be also in this category. But closed frameworks are not suitable for scientific exchanges and indeed may lead to clashes also. There is still one more possibility that when two individuals have different frameworks but both of their frameworks are closed. Even in this case there may be possibility of fruitful discussion because either one of them may have an attitude of tolerance towards the other or both of them may have this attitude towards each other; and as such they may have discussion in the end reaching a resolution. This may even lead to the fact that either one may change his mental framework.

6. CONCLUDING REMARKS

Our epistemological approach shows that it is possible to break down frameworks and replace them with new ones. As Popper states, just like languages which are at times difficult to translate from one into the other but at the end communication is possible through translation, frameworks are also translatable into each other. Therefore, meaningful discourse is also possible between different frameworks. On the other hand, we tend to accept that some forms of cultural relativism are correct. Critical thinking and rationality plays a key role in this effort.

We see the examples of this in both social histories through cultural clashes and also within the history of science through cooperation of different theories to reach an end. Based on this conclusion Popper also criticizes Hegel's dictum: "what is real is reasonable and what is reasonable is real". This is also another form of cultural relativism which is more dangerous. For it defends the idea that "laws and customs cannot be rationally discussed." (Ibid, 47)

Popper also attracts our attention to the fact that the myth of the framework is also connected with cultural relativism. If this position leads to respect cultural differences then it is a healthy attitude. "But it may lead to relativism" also. Thus on the basis of this position one may claim that "there is no absolute or objective truth, but rather there is one truth for the Greeks, another for the Egyptians, still another for the Syrians, and so on." (Popper, MF, 1994, 45)

On the other hand, Popper does not deny that there is cultural relativism which is correct. But these are arbitrary and conventional practices, such as driving from left hand side of the road, as there are countries where driving is exactly from the other side. Both are correct as they

are accepted, obeyed and applied by the peoples of each country. I am hoping that my epistemological analysis of frameworks shed some light on these issues raised by Popper. It is important, however, not to fall in the opposite extreme position of the myth.

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