

Peace Studies and the Philosophy of Xavier Zubiri

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Abstract

Peace Studies have to grow at a time when the original idea of a modern university is in ruins. Culture has stopped being university's purpose and philosophy is no longer its guardian. Knowledge lacks structure and orientation. The contemporary main purpose of universities is quality and excellence. But what does this mean? More specifically, what are excellent Peace Studies? Ironically, only philosophy can answer this question. Xavier Zubiri's critique of Western thought is a good reference for this. His ideas on reality, reality by postulation, intelligence, objects of knowledge and processes of generation of knowledge can be used to determine, structure Peace Studies and resuscitate the value of intellectual life.

Resumen

Los estudios de la paz tienen que crecer en un momento cuando la idea original de la universidad moderna queda en ruinas. La cultura ha dejado de ser el propósito de la universidad y la filosofía ha dejado de ser su guardián. Al conocimiento le faltan la estructura y orientación. El propósito principal contemporáneo de universidades es calidad y excelencia. ¿Pero qué significa esto? ¿Más específicamente, cual son los estudios de la paz excelentes? Irónicamente, sólo filosofía puede contestar esta pregunta. La crítica de Xavier Zubiri del pensamiento Occidental es una referencia buena para esto. Sus ideas sobre la realidad, la realidad por postulación, la inteligencia, objetos de conocimiento y procesos de generación de conocimiento pueden usarse para determinar y estructurar los estudios de la paz y resucitar el valor de vida intelectual

I. Introduction

According to William Readings the bases of the modern Western university can be traced back to the philosophical work of the German Idealists, from Schiller to Humboldt.¹ For them, reason, as pondered by Kant, was to develop knowledge, and this knowledge was to determine culture. Readings adds that this rational culture guarded by philosophy was to function as the unifier of the activities of a university, whose purpose was to function as the producer of knowledge, conflict solver and organiser of the life of the people of a rational state.

For Readings, from this starting point, American scholars substituted for phi-

losophical tradition certain democratically chosen canons of literature, as the guardians of culture in their universities. Eventually, this led to a process of "de-referentialisation" of culture, the end product of which was that the word "culture" came to mean nothing at all as such. The result was that culture ceased to be the unifier of research, teaching and learning in a university, replaced by the "normalising" notion of excellence.²

Readings suggests that culture used to be the soul of the university, and now it is a program of study: Cultural Studies. Peace Studies could be seen as a development in this direction. In other words, when the main purpose of a university ceases to be

developing culture that can, among other things, guarantee peace, it becomes relevant to have Peace Studies as an independent field of study.

Such tendencies become increasingly widespread in the contemporary phase of globalisation characterised by Americanisation, which has implied to a large extent more focus on excellence than on cultural development in universities throughout the world. But like the term “culture,” or “peace,” the word “excellence” says nothing by itself, as long as it is not accompanied by philosophical considerations that establishing the criteria that ideally make something excellent.³

What then should be the standards of excellence in Peace Studies? A multidisciplinary field becomes impractical unless the different sciences can play a specific role in it, with a purpose and as a part of a greater intellectual project. Ironically enough, the only possible way to answer such a question successfully is by returning to what the German Idealists identified as the unifier of the activities of a university, namely, philosophical reflection on the purposes, the object of knowledge, the process of knowledge and the epistemology of Peace Studies.

A good reference for reflections on such issues is the work of the Spanish philosopher Xavier Zubiri. He developed a radically new open realism,⁴ which culminated in the trilogy *Sentient Intelligence*, the first volume of which was published in 1980. As early as 1942, Zubiri had identified the destruction of philosophical life in universities that was pointed out by Readings in 1996:

- 1) Levelling positivation of knowledge: Sciences lack systemic unity and perspective. They are all set in the same plane. One is as important as the other. When disciplines are regarded as scientific, they acquire the same rank. Lyotard identified a deepening of this problem. For him, “classical dividing lines between the various fields of science are... called into question”.⁵

- 2) Disorientation in the world: The intellectual function lacks a clear role in the current world. Intellectual activity is only measured in relation to how useful it is. The rest is disregarded as mere curiosity. This view parallels the notion of legitimation of knowledge by performability, identified and opposed by Lyotard.⁶

- 3) Lack of intellectual life: Scientific methods are increasingly simple techniques, a sort of meta-technique.⁷

II. Who was Xavier Zubiri?

Xavier Zubiri was born in San Sebastián, Spain, December 5th, 1898. He started studies on philosophy and theology at the Seminar of Madrid. Zubiri’s mentor was the Spanish philosopher José Ortega y Gasset, who Zubiri met in 1919. Ortega was responsible for introducing Zubiri to the main currents of European thought of the time, especially Husserl’s phenomenology. By 1920 Xavier Zubiri obtained a doctorate of philosophy in Rome. A year later, he moved to Belgium to study philosophy in the Institute Superior of Philosophy of the Catholic University of Louvain. In May that same year, Zubiri presented his doctoral thesis in the University of Madrid with the title “A Phenomenological Theory of Judgement”. Before turning thirty, in 1926, Zubiri was tenured as the Chair of the History of Philosophy in the Faculty of Philosophy and Literature of the Central University of Madrid. Three years later, his interests in phenomenology took Zubiri to Freiburg to attend courses with Edmund Husserl and Martin Heidegger. But he did not remain there very long. A year later, in 1930, Zubiri’s interest in physics moved him to Berlin, where he met among others, Einstein, Schrödinger, Zermelo and Jaeger. His thought at this time was concerned with incorporating into philosophy what he called the “new physics”,⁸ referring to the findings of relativity and quantum mechanics. By 1931 he returned to his Chair in the Central University of Madrid.

It can be said that Zubiri moved away from wars in the course of his life. First, a year before the outbreak of the Spanish civil war in 1935, he moved to Rome to study linguistics. After a year there, he travelled to Paris, where he imparted courses in the Institut Catholique. His stay there was interrupted in 1939 when he decided to return to Spain and started working as a lecturer in Barcelona. He had left Paris just a year before it fell to the Germans during the Second World War. Despite the fact that the civil war was over in Spain, his return was not problem-free. The political climate in fascist Spain was repressive, and due to lack of liberties in Franco's regime, Zubiri resigned from work in Spanish universities in 1942. From then on, a circle of close collaborators financed his work. In 1944 he was able to publish one of his best-known works; *Nature, History, God*.

In 1947, Zubiri presided over the Society of Studies and Publications, financed by Banco Urquijo in Madrid. This society became a new intellectual forum where Zubiri was able to expound and discuss his thought with a growing number of students and friends who in 1953, 30 years before his death, published the book "A Tribute to Xavier Zubiri". However, Zubiri's exile from universities implied that his thought was not well known outside very limited circles. For many years, Zubiri did not publish at all in peer-reviewed journals.

The culmination of Zubiri's philosophy would be his theory of Sentient Intelligence, which was not published until 1980. The first step in the process of maturation of his thought was the book *On Essence*, published in 1962, followed by *The Dynamic Structure of Reality* in 1968, which which in many ways completed the thought of *On Essence*. In between these two books, Zubiri wrote the popular book *Five Lectures on Philosophy*. In 1970 a "Second Tribute to Xavier Zubiri" was published. The Seminar Xavier Zubiri was created in 1971 within the Society for Studies and Publications (from Banco Urquijo). Here, Zubiri got the chance to discuss

his thought with close students. In 1974, this seminar started publishing the journal titled *Realitas*, which gathered articles inspired in much of Zubiri's work and other philosophers. In 1979, the Federal Republic of Germany granted Zubiri the Cross of Merit (Das Grosse Verdienst Kreuz), and in 1980 he received a Doctorate *Honoris Causa* from the University of Deusto in Bilbao; the same year the first volume of his landmark trilogy *Sentient Intelligence* was published. In 1983 Zubiri started working on a new book entitled *Man and God*, but never completed it. He died the 21st of September of that year. His students and collaborators in the Xavier Zubiri Seminar (which later became the Xavier Zubiri Foundation) began publishing Zubiri's unedited works. The first of these, *Man and God* (1984), was edited by Ignacio Ellacuría, one of Zubiri's closest collaborators. Then the following books were published: *About Man* (1986), *The Dynamic Structure of Reality* (1989), *On Emotions and Volition* (1992), *The Philosophical Problem of the History of Religions* (1993), *The Fundamental Problems of Western Metaphysics* (1994), *Space, Time and Matter* (1996), *The theological problem of man: Christianity* (1999), *Man and truth* (1999). In the year 2000 his *First Writings* (1921-26) were published. In 2001 the book *On Reality* came out and in 2002 *About the problem of Philosophy and other writings (1932-1944)*.

Zubiri's first contact with the English-speaking world was in 1946, when he attended a conference in Princeton and lectured on the real in mathematics. Nevertheless, his lecture was in French and had the title "Le réel et les mathématique: un problème de philosophie".⁹ Fritz Wilhelmsen, A.R. Caponigri, Thomas Fowler and Nelson Orringer have translated some of Zubiri's work to English.¹⁰

III. An Attempt to Rescue Metaphysics

Zubiri's work can be seen as an attempt to save metaphysics in the twentieth century.¹¹ His intention must have been to provide a solution to the problems he identified in 1942: levelling of the tasks of

sciences, lack of orientation of knowledge in the world and the relative unimportance of intellectual activity.¹²

For this task Zubiri took his starting point in Heidegger's revival of the question of being and metaphysics. Heidegger wrote, "The question of the meaning of Being must be formulated. It is a fundamental question, or the fundamental question..."¹³ Zubiri criticised what he called Heidegger's "substantivation" of Being, which was the result of substantivating space, time and consciousness. In the introduction to the English translation of *Nature, History, God* Zubiri wrote:

Space, time, consciousness, being, are not four receptacles for things, but only characteristics of things which are already real, they are the characteristics of the reality of things, and things, I repeat, are already real in and by themselves. Real things are not in space or time, as Kant thought (following Newton), but rather real things are spatial and temporal, something quite different than being in space and time. Intellection is not an act of consciousness, as Husserl thought. Phenomenology is the great substantivation of consciousness, which has been current in modern philosophy since Descartes. However, there is no conscience; there are only conscious acts. This substantivation has already been introduced into a great portion of the psychology of the end of the XIX century for which "psychic activity" was synonymous to "activity of consciousness", and conceived all things as "contents of consciousness". It even created the concept of "the" subconscious. This is inadmissible, because things are not contents of consciousness, but only terminus of consciousness: conscience is not the receptacle for things. From its own perspective, psychoanalysis has always conceptualised man and his activity with reference to consciousness. It has told us about "the" consciousness, "the" uncon-

scious, etc. Man would be, ultimately, a stratification of qualified zones with respect to consciousness. This substantivation is inadmissible. "The" activity of consciousness does not exist, "the" consciousness does not exist, and neither does "the" unconscious, nor "the" subconscious; there are only conscious, unconscious, and subconscious acts. But they are not acts of consciousness, or the unconscious, or the subconscious. Consciousness does not perform acts. Heidegger took a step further. Although in his own way (which he never managed to conceptualise or define), he accomplished the task of substantivizing being. For him things are in and through being; because of this, things are entities. Reality would only be a type of being. This is the old idea of "real being", *esse reale*. But real being does not exist. The only thing that exists is the real being real, *realitas in essendo*, I would say. Being is only one moment of reality.¹⁴

Zubiri identified two problems in Western thought that were the source of these substantivations:

- 1) *Logification of intelligence*. This is to think that human intelligence is limited to (or begins with) *logos* (Greek for word or thought). Accepting this mistake, which has been present in Western philosophy since Parmenides, leads to postulating that thought refers to things that can be represented ideally and verbally. Parmenides wrote that only *esti* (Greek for 'it is') is, and that it is impossible for it not to be. On the other hand, Parmenides thought that to consider that the negation *ouk esti* (Greek for "it is not") is, implies taking a "wholly incredible course, since you cannot recognise not being (for this is impossible), nor could you speak of it, for thought and Being are the same thing."¹⁵ In other words, for Parmenides that which cannot be stated verbally as some-

thing that “is”, does not exist. According to Jordan Williams, Parmenides’ *esti* played a similar role as *cogito* for Descartes. In the Way of Truth, Parmenides wrote; “It is, and... it is impossible for anything not to be”. Later Descartes paralleled this with his famous premise: “Cogito, ergo sum”. In other words, thinking is Being.¹⁶

This leads to the other error identified by Zubiri:

- 2) *Entification of reality*: Reality is seen as a zone of things. A set of entities with an essence that can be verbally represented.¹⁷

The root of these two problems can be traced to the acceptance of a dualism between intellectual knowing and sensing. This dualism limits human intellection to the efforts that logically organise concepts. It is a dualism that has a long history in Western thought. For example, Aristotle considered reasoning and recalling principles as two intellectual acts, which could be considered as separate from the sensual apprehension of reality.¹⁸

Zubiri argued against this dualism between intellection and sensing, and consequently this confusion between intellection and Being. For him, all intellection is conditioned by reality. Human brains are mere organs of formalisation that re-actualise that reality through a faculty that has three modes:

- A) Sensual apprehension: Senses
- B) Logos: Distinguishing one thing from another.
- C) Reason: Allows us to explain what things are and why they are.

The faculty that is comprised by these inseparable modes is called *Sentient Intelligence*. There is no duality in sensing and thinking. Reason is not more actualisation of reality, just a more exhaustive and re-actualisation of the form and content of reality. When actualised reality is retained in the brain it generates knowledge. When knowledge is the result of reason it is called “understanding.”¹⁹ This shows that all

knowledge has an empirical base.

Logification of intelligence disregards sensual apprehension and reason, and therefore leads to a limited and inappropriate view of reality, which is only very partially understood by logos. Sensual apprehension, intuition and manifestations of reason like imagination are needed to understand other aspects of reality. Examples of this are how in physics, Einstein came up with the theory of relativity through sensing reality and imagining possible situations. If Einstein had been limited to the logos (language) that existed in his time for confronting a zone that is out there called “physical reality” (with for example Newtonian Physics and mathematics of the time) he would never have figured out that the speed of light should be seen as a constant independently of the speed of the observer. Further, he would have never realised that in such a model, Time and space are no longer given facts, but that they can warp and bend depending on the presence of mass, energy and momentum.²⁰ Einstein’s findings showed that time and space are not substantives but characteristics of reality. Therefore, Zubiri tries to incorporate this into philosophy. Reality is not a sort of being in a zone called “Spacetime,” as Phenomenology’s substantiation of *Dasein* or being there (in a zone) would suggest. This opposes Newton’s view of space and time as fixed, and resolves Kant’s confusions on the topic. In 1783 Kant conceived space and time as necessary a-priori concepts or forms of seeing the world, and not as given facts, when he wrote *Prolegomena to Any Future Metaphysics*. Further, human reality is not consciousness/sub-consciousness of being there. Consciousness/sub-consciousness are just characteristics of real human acts.

For Zubiri, reality is open and for this, it can never be fully understood by sentient intellection. For instance, Einstein’s relativity theories are more convenient for explaining reality in outer space and large distances, but they do not apply so well to elementary particles and everyday situations. It has been a struggle for physicists

to bridge the gap between General Relativity and Quantum Mechanics. String Theory is a set of theories that attempt to resolve this, but even if these theories succeed, they will hardly tell us everything about reality.²¹ Saying that reality has the characteristic of time implies acknowledging dynamism. This makes it even more problematical to pretend that intelligence can apprehend everything that reality has not yet given of itself.²²

A Philosophy about Reality

For Fowler, Zubiri thought that philosophy's main concern should not be Husserl's Phenomenological Method, Heidegger's understanding of phenomena, or Ortega y Gasset's notion of life. Philosophy's main concern should be reality that exists in and by itself:²³

For Zubiri, reality in the primary or fundamental sense is a formality, not a zone of things. We sense not just content (that would probably be impossible), but necessarily something more. We sense the content in a determinate form, as something other; and this form of otherness, which completes the content but is not reducible to it, is formality.²⁴

Fowler adds that formality refers to the specific forms in which reality is imposed to human senses. Some animals could call formality stimulus. Human beings call it reality. Content is the structured and dynamic notes that exist in and by themselves. Formality is not added to content. These are two juxtaposed aspects of reality. These notions are not necessarily new. We find already in the writings of Aristotle a distinction between form and matter. Thomas Aquinas took further this concept and Kant used it when analysing space and time.^{25,26,27}

The word "reality" does not refer to a zone of things that is outside the mind. Such a reality could only be discovered by intelligence. Reality refers to a formality with a content that is re-actualised in

human brains through sensing, logos and reason—modes of intelligence, which is in itself a part of reality. These recognitions are the basis of Zubiri's critique of Hume's analysis of causality.²⁸ They imply that reality is not only imposed on human beings. We can also postulate reality. Fowler writes, "Postulations are indeed, real; they have the formality of reality. They differ from rocks, chairs, and tables in that their content has been constructed according to concepts".²⁹ Although the acceptance of postulated realities has many similarities with (weak and strong) constructivism, the two should not be confused. The acknowledgement of postulated realities does not question the existence of a reality in and by itself. However, many constructivists (especially strong constructivists) argue that all facts can be constructions of the mind.³⁰ Zubiri's suggestion was more modest and argued that postulated realities refer to things like literature, mathematics, political entities, and so on.³¹

When a mathematician (or anyone else) speaks about the number π or e , he is speaking about something which really exists, though neither he nor anyone else grasps the content of these transcendental irrational numbers through ordinary sense perception.³²

These postulated realities presuppose the existence of things in and by themselves. There cannot be postulation of reality without the previous existence of non-postulated realities. A person is an example of a combination of reality in and by itself and a postulated reality. For example, elements have interacted through evolution and conception to render the persons. And persons themselves are a combination of body and psyche, which are themselves a combination of reality in and by itself and postulated reality. Further, society is a combination of persons and their postulated realities, and culture, society's collective psyche. This collective psyche can be peaceful or non-peaceful. (See Appendix Figure 1).

Understanding and Science

Intelligence can re-actualise postulated and non-postulated realities and generate knowledge about them. This knowledge can be called understanding if it comes from reason. A scientist follows a particular method to achieve this. Fowler suggests:

In his work, the scientist postulates reality, and then explores that reality to draw out its consequences and to see how well it corresponds to reality beyond apprehension. This is the true meaning of the so-called model building to which many writers on science refer.³³

In other words, scientists postulate explanations on the base of experience. If verifiable by contingency or necessity, these explanations generate understanding accepted as reality. Fowler adds that the Scientific Method in light of Zubiri's thought can be summed up as follows:³⁴

- 1) Start with some knowledge of reality at all three levels: sensing, logos, reason.
- 2) Postulate reality.
- 3) Explore the postulated reality.
- 4) Verify.
- 5) Modify the canon of reality.

These postulations show that all science is normative to a certain degree, because scientists norm or decide in every stage of this process and they influence what human beings call "reality." This proposition parallels pragmatic thought that states that what is true is that which is regarded as relevant for pursuing determinate goals in reality in the short or long term.³⁵ Agreeing with Lyotard, there are no truths, just opinions. "True knowledge... is always indirect knowledge; it is composed of reported statements that are incorporated into the metanarrative of a subject that guarantees their legitimacy".³⁶ However, some opinions are more useful and describe reality better than others.

This open reality is more than what closed meta-narratives can say about it, since logos or even sentient intelligence can never understand reality fully. Therefore, Lyotards' claim that there is a "truth requirement of science being turned back against itself",³⁷ should not be taken as argument in favour of the illegitimacy of scientific knowledge. Such observation only serves to confirm the limits of scientific knowledge; a method that nonetheless possesses fewer limitations than other forms of knowledge that do not combine the three modes of intelligence: primordial apprehension, logos and reason. Philosophy should be regarded as the result of science and a rational attempt to provide an overview that tries to overcome some limitations of science. It cannot overcome all, but this does not mean that an attempt at this should not be made.

Since the scientist postulates models of reality, in this sense, science is always subjective. However, if the objects of scientific inquiry are non-postulated realities, in this sense, science can have non-subjective objects of study. Successful or excellent scientific theories modify what human beings call "reality." Thus the Theory of Relativity gave us relative space, relative time, speed of light as a constant, $E=mc^2$ and eventually nuclear weapons.³⁸

The social sciences' immediate objects of study are postulated realities. Psychology studies postulated psyches; anthropology deals with postulated notions of what it is to be a person. While sociology analyses postulated social realities; economics investigates postulated systems of production, distribution and consumption. History on the other hand studies postulated accounts of the past.

IV. Science and Peace Studies

A Peace Researcher postulates reality on culture, conflicts and society. He or she inquires about that reality in order to establish how to drive the situation to peace and to see how well this corresponds to reality beyond his or her apprehension. Peace Studies is model building about

conflicts with the ultimate purpose of non-violence.

Culture, conflicts, society, non-violence and peace are all real, but they are all a particular sort of reality: postulated realities by human beings. They exist, but it is hard to perceive these realities other than through reflection. Reflection is performed by subjects, and this presents a particular challenge for peace studies, since each postulated reality can take individual forms. There are consequently different forms of the concepts of culture, conflict and society. However, when there is agreement on the forms of these issues, it can be said that there is inter-subjective understanding on them.

V. Conclusion: Excellent Peace Studies

For Readings, the main objective of contemporary universities has become excellence. According to Fowler's interpretation of Zubiri, excellent science would be that one that can be verified, accepted and which modifies the canon of reality. Peace Studies (as any study) include science, but they are something more. They are also meta-science. That is, reflection upon the relationship of science to reality, its methods, the relationships between sciences and the purposes of all this.

Excellent Peace Studies would then be viable models or postulations of experiences of culture, society and conflict; formulated in appropriate academic language and style; in a verifiable way that makes them acceptable; transforming the inter-subjective canons of culture, society and conflict in the direction of peace. But besides this, Peace Studies is also reasoned reflection on the relationships between the different postulations that are made from different standing points in reality. (See Appendix Figure 2).

The figure in the appendix shows that a precondition for Peace Studies is the object of Peace Studies: sensual apprehension of realities. Qualitative, kinetic, spatial and quantitative ways of apprehending reality serve as the basis for language and maths, which help us name and organise

these experiences. These impressions are the base that reason uses to give form to sentient scientific postulations about the world. Reason is a pre-condition for these scientific postulations, which can be organised according to the sort of realities that are their objects study. For example, if they are postulated realities or realities in and by themselves. Sciences in the outer circles are not only dealing with reality in and by itself, but also postulated realities. Thereby what are often referred to in Norwegian, as Real Sciences would be those that deal mostly with reality in and by itself: the inner circles represent them. What Norwegian institutions of higher learning call Theoretical Sciences, would be those represented by the outer circles. However, these are sciences dealing with real things too. It is just that they deal mostly with postulated realities as psyches, society, accounts of the past, stories, systems of production-distribution-consumption, and so on. In the end, philosophy's task is to make sense of all the results from these sciences and to try to determine how their postulations can affect what humans call reality. In Peace Studies, philosophers are to find out if the culture that originates from the scientific knowledge of reality we have is peaceful or not, and how to drive reality to peace.

This way of seeing things might remind some of Comte's "Encyclopaedic Law" or his "Hierarchy of Sciences". What it has in common with Comte's scheme is that it is an attempt to structure knowledge and define functions of the different disciplines. But it differs from Comte's positivism in that it does not limit itself to science. According to Comte's "Law of Human Progress" throughout history, humanity has gone through three stages in the development of knowledge: theological, metaphysical and scientific. This last one is according to him the final one and the access to all truth. This law is based in what Lyotard called the emancipation and the speculative narratives. According to Lyotard these narratives expose the limits of scientific method. Zubiri acknowledges these limitations. Moreover, Zubiri does not ad-

mit Comte's higher praise for science than for metaphysics. Therefore the "Encyclopaedic Scheme" we have produced here for Peace Studies should be instead called the "Hierarchy of Knowledge" (according to Zubiri) instead of the "Hierarchy of Science",³⁹ and it should be read with flexibility.

Zubiri's philosophy helps solve for Peace Studies the problems in the university identified by Zubiri. Let's try to recall these problems:

- 1) Levelling positivation of knowledge: Zubiri's philosophy gives order and structure to the function of knowledge. Sciences can be structured in relation to the reach and character of their main objects of study. For example, those that study different sorts of non-postulated realities and those that study different sorts of postulated realities. Moreover, philosophy is not in the same level as science. Philosophy gives structure and interprets the results of science.

This opens for four general philosophical fields in Peace Studies corresponding to each of the modes of intelligence identified by Zubiri:

- a) Cognitive frames with which we experience reality. How do they affect peace?

- b) Logos: Ways of verbalising, conceptualising or representing reality. Are they conducive to peace or not?
- c) Scientific Models of reality: How can reality be explained in a way that drives it to peace?
- d) Creativity: It structures the studies and tells us how the results of the studies can drive culture to peace.

- 2) Disorientation in the world. According to Fowler's reading of Zubiri, quality science modifies what human beings call reality. Science with a purpose, as Peace Studies, has a direction. Its purpose is to modify realities into peace.

- 3) Lack of intellectual life: In a dynamic world Peace Studies needs constant philosophising about objects of knowledge, process of knowledge and their relationships. Moreover, the results of research in Peace Studies cannot remain isolated. They must be set in perspective by intellectuals (philosophers) in relation to all the disciplines that make out Peace Studies.

Appendix

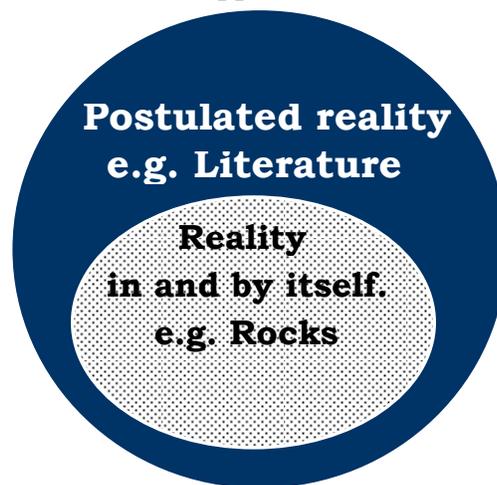


Figure 1. Static Picture of Reality and Postulated Reality

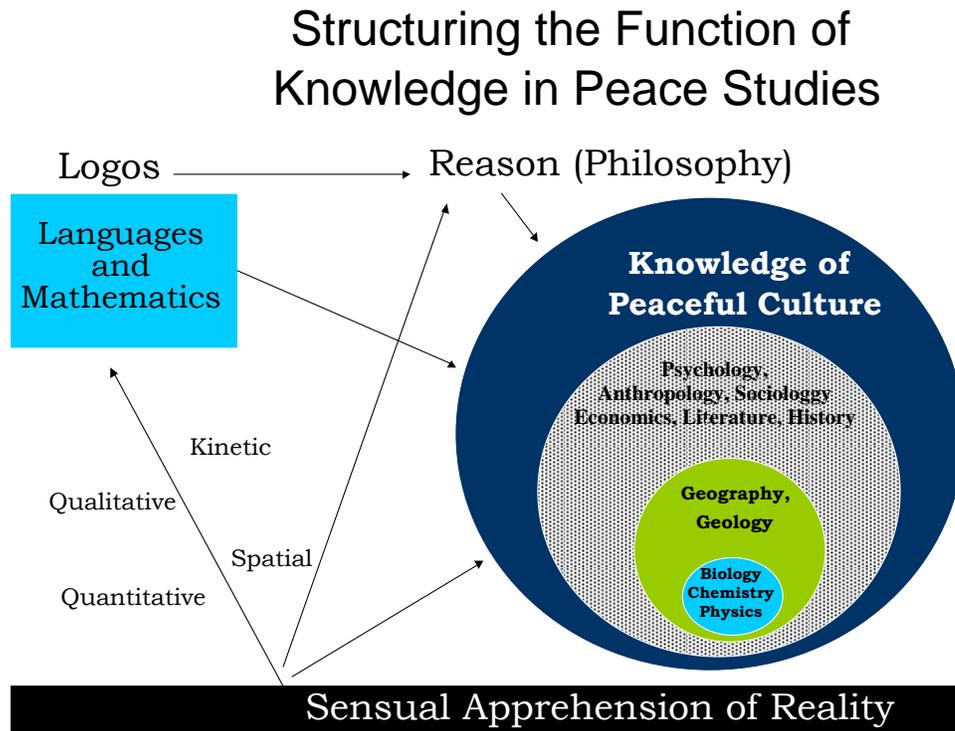


Figure 2. Function of Knowledge in Peace Studies

Notes

- ¹ Readings, William, *The University in Ruins*, Cambridge, Massachusetts: Harvard University Press, 1996.
- ² Foucault, Michel, *Discipline and Punish*, translated by Alan Sheridan, London: Penguin, 1975, p. 183.
- ³ Readings, *op. cit.*
- ⁴ Samour, Héctor, 2003, *Voluntad de Liberación. La filosofía de Ignacio Ellacuría*, Granada: Editorial Comares, 2003, p. 3-5.
- ⁵ Lyotard, Jean Francois, *The Post-Modern Condition. A Report on Knowledge*, translated by Geoff Bennington, and Brian Massumi, Manchester: Manchester University Press, 1979, p. 39.
- ⁶ *Ibid.*
- ⁷ Zubiri, Xavier, *Naturaleza, Historia y Dios*, Madrid: Editorial Nacional, 1944, p. 5-32.
- ⁸ Zubiri, *op. cit.*
- ⁹ [Unfortunately the text of this work has been lost.—ed.]
- ¹⁰ Fowler, Thomas, "History of Zubiri Studies and Activities in North America," *The Xavier Zubiri Review*, Vol. 6, pp. 99-104.
- ¹¹ González de Posada, Francisco, Introduction to *Inteligencia Sentiente, Edición Abreviada*, Madrid: Editorial Tecnos, 2004, p. 60.
- ¹² Zubiri, *op. cit.*
- ¹³ Heidegger, Martin, *Being and Time* [1926] translated by John Macquarrie and edgard Robinson, Oxford: Redwood Books, 1993.
- ¹⁴ Zubiri, Xavier, *Nature, History, God*, translated by Thomas Fowler, Lanham, MD: University Press of America, 1980. Text available at www.zubiri.org.
- ¹⁵ Fairbanks, Arthur, *The First Philosophers of Greece*, London: K. Paul, Trench, Trubner, 1898, p. 91.

- ¹⁶ Williams, Jordan, *Ancient Concepts in Philosophy*, London: Routledge, 1993, p. 30.
- ¹⁷ Fowler, Thomas, "Zubiri's Critique of Classical Philosophy," *The Xavier Zubiri Review*, Volume 1, pp. 68 (1998).
- ¹⁸ Xavier Zubiri, *Inteligencia sentiente*, Madrid: Sociedad de Estudios y Publicaciones, 1980, p. 349-350.
- ¹⁹ Fowler, Thomas, "Introduction to the Philosophy of Xavier Zubiri," *The Xavier Zubiri Review*, Volume 1, pp. 5-16 (1998).
- ²⁰ Greene, Brian, *The Elegant Universe*, New York: Vintage Books, 1999, p. 5-7.
- ²¹ Greene, *op. cit.*
- ²² Orringer, Nelson, "Cognitive Intertexts of Estructura Dinámica de la Realidad or Aristotle Dynamized," *The Xavier Zubiri Review*, Vol 4., pp. 5-18 (2002).
- ²³ Fowler, "Zubiri's Critique of Classical Philosophy," *op. cit.*
- ²⁴ Fowler, Thomas, "Reality in Science and Reality in Philosophy. The Importance of the concept of Reality by Postulation," *The Xavier Zubiri Review*, Vol. 7, pp. 41-56 (2005).
- ²⁵ Watkins, Eric, "Kant's Philosophy of Science", *The Stanford Encyclopedia of Philosophy* (Winter 2003 Edition), Edward N. Zalta (ed.), <http://plato.stanford.edu/archives/win2003/entries/kant-science/>. (accessed 8/27/2005).
- ²⁶ Cohen, S. Marc, "Aristotle's Metaphysics", *The Stanford Encyclopedia of Philosophy* (Winter 2003 Edition), Edward N. Zalta (ed.), <http://plato.stanford.edu/archives/win2003/entries/aristotle-metaphysics>. (accessed 9/1/2005).
- ²⁷ McNerny, Ralph, O'Callaghan, John, "Saint Thomas Aquinas", *The Stanford Encyclopedia of Philosophy* (Spring 2005 Edition), Edward N. Zalta (ed.) <http://plato.stanford.edu/archives/spr2005/entries/aquinas/> (accessed 8/30/2005).
- ²⁸ Fowler, Thomas, "The Formality of Reality: Xavier Zubiri's Critique of Hume's Analysis of Causality," General Sessions from the XX World Congress of Philosophy, *The Xavier Zubiri Review*, Volume 1, pp. 57-66 (1998).
- ²⁹ Fowler, Thomas, "Reality in Science and Reality in Philosophy. The Importance of the concept of Reality by Postulation," *op. cit.*, p. 45.
- ³⁰ Goldman, Alvin, "Social Epistemology", *The Stanford Encyclopedia of Philosophy* (Spring 2001 Edition), Edward N. Zalta (ed.), <http://plato.stanford.edu/archives/spr2001/entries/epistemology-social/> (accessed 9/1/2005).
- ³¹ Fowler, Thomas, "A Framework for Political Theory Based on Zubiri's Concept of Reality," *The Xavier Zubiri Review*, vol. 4, pp. 109-132 (2002).
- ³² Fowler, Thomas, "Reality in Science and Reality in Philosophy. The Importance of the concept of Reality by Postulation," *op. cit.*, p. 47.
- ³³ *Ibid.*, p. 49.
- ³⁴ *Ibid.*, p. 49-50.
- ³⁵ James, William, *Pragmatism: A new name for some old ways of thinking. Popular lectures on philosophy*, New York: Longmans, Green and Co., 1907.
- ³⁶ Lyotard, *op. cit.*, p. 35.
- ³⁷ *Ibid.*, p. 39.
- ³⁸ Fowler, Thomas, "Reality in Science and Reality in Philosophy. The Importance of the concept of Reality by Postulation," *op. cit.*, p. 50.
- ³⁹ Martineau, Harriet, *The Positive Philosophy of Auguste Comte*, Michigan: Bell & Howell Company, 1858.