THE CONTROVERSY BETWEEN THE SCIENTIST GABINO BARREDA AND THE HUMANIST JOSÉ MARIA VIGIL: TWO PHILOSOPHICAL TRADITIONS IN MEXICO IN THE INTERIOR OF "ESCUELA NACIONAL PREPARATORIA" AT THE SECOND HALF OF THE 19TH CENTURY"

In this article, I review the arguments of two philosophical traditions in Mexico, in the second half of the 19th century. These two traditions were disputing the political and philosophical hegemony in Mexico. One of the traditions was scientific and based on the natural and organic approach to society and knowledge about the human being. The other tradition was based on humanistic perspectives, which emphasized the centrality of humanity in understanding the history of himself and that of the world. This debate began when education rose in superiority and took a central role in the formation of the future citizens. The discussion at that time referred to whether the heart of the education system would be scientific or humanistic and which one would be more beneficial for the nation. Both perspectives were different and followed distinct goals. On one hand, the humanists believed education should be general, universal, and include topics such as philosophy, literature, ethics, history and rhetoric. Humanists' main objective was that the citizens behave civilly among each other and that they poses ethical values to arrive at the common good. Every citizen should be involved with politics and the common will because the belief was that everyone knows, through the grace of his own experience, what the common good is. On the other

 $^{^{\}bullet}$ Obed Frausto Gatica is Adjunct Professor at Ivy Tech Community College, Marion, Indiana, US Δ

[&]quot;This paper was presented at the 8th Annual Conference of the International Society for MacIntyrean Enquiry (ISME) which was co-organized by the Department of Philosophy of the University of Ioannina and the Department of Philosophy of the National and Kapodistrian University of Athens and convened on July 9-12, 2014 at the Main Building of the National and Kapodistrian University of Athens, Greece.

^{© 2014-2015.} Επιστημονική Επετηρίδα Δωδώνη/Μέρος Τρίτο, 37 (2014-2015), σσ. 57-70 Scientific Annuary *Dodone*/Part Three, 37 (2014-2015), pp. 57-70

hand, the scientists believed that education should be more specialized, a place of specific professional formation for lawyers, doctors, and engineers. The scientists' main objective was that citizens evaluate their own actions based on the scientific method; in other words, according to a type of rationality which focuses on values such as utility, efficacy and effectiveness. Politics should be reserved only for experts who are able to administer society through the State, as opposed to the citizens who,in general, do not understand politics, requiring thus that politicians tell them what the common good is.

I would like to approach those debates from the perspective of Alasdair MacIntyre. In his article *Epistemological crisis, dramatic narrative and the philosophy of science,* MacIntyre claims that epistemology is grounded in a narrative and a tradition which consistently gets better over time. Here, Macintyre reveals his conception of history: progressive although unpredictable. He states: "I have suggested that epistemological progress consists in the construction and reconstruction of more adequate narrative and form of narrative..." (MacIntyre, 2006, 456).

MacIntyre considers that traditions are very rooted in particular social and historical contexts, including language. Traditions interact with each other, albeit in a restricted manner, full of suspicion and doubt. These interactions are not an expression of rational argument or dialogue but more an expression of moral prejudice. MacIntyre defines tradition in the following terms: "A tradition is an argument extended through time in which certain fundamental agreements are defined and redefined in terms of two kinds of conflict: those with critics and enemies external to the traditions who reject all or at least key parts of those fundamental agreements, and those internal, interpretive debates through which the meaning and rationale of the fundamental agreements come to be expressed and by whose progress a tradition is constituted." (MacIntyre, 1988, 12)

MacIntyre holds that the fundamental disagreements among traditions are especially difficult to resolve because each position has its own narrative of truth. There is not any objective position. Even the scientific community that is expected to be objective is a moral community with a commitment to study the factual and real world. The narratives of truth are entrenched in normative values, attached to social practices. Objectivity is then a moral concept rather than a methodological procedure (MacIntyre, 1978). To MacIntyre, the dialogue among traditions has to be understood historically, the commitment anyone has with his own tradition is a constituent element. The agreement among traditions is a chimera because in a debate, opponents only concede minimally. There is not sufficient recognition among opponents of the other's arguments. When we talk of reasoning, it is like a dialogue of deaf. To reach a recognition of the other side among opponents in a discussion requires a special talent of empathy and intellectual

understanding. Recognition is the beginning for a mutual understanding among traditions. It requires first a moral practical understanding, not a rational approach. Categories such as truth and realityare understood within a significant frame which each traditionpossesses. Those categories have been constructed differently among the traditions and their significance is completely unique from another's tradition.

According to Rorty, in epistemology, the metaphor of the mirror (i.e. each concept has a reflection in reality) has brought more problems than solutions because this perspective forgets the historical backgrounds behind the elaboration of knowledge. Knowledge is not a relationship between the concept and the world but rather it is a normative process. Rortysupposes that it is better to eliminate the idea of representation of the reality (Rorty, 1991). Traditions make prejudices from their own categories and concepts, dismissing other views because they do not make sense. Almost everything that the other tradition says is an error or a mistake by the opposite tradition. The traditions are local and anti-cartesians. In other words, there are not clear and distinct ideas. The traditions are not progressives and anti-hegelians because reason does not aspire to the final stage where all the manners of knowledge bind harmonically together.

It seems that I am drawing a differentiated and fragmented world without any possibility of communication. However, MacIntyre thinks that there is still an opportunity to exchange reciprocal ideas and to reach understanding. Traditions complement each other. Sometimes a tradition's methods and practical knowledge do not respond to the problems of the day. It is in that moment when this tradition considers other ways of approaching those problems. However, even when using practices from different traditions, the receptive tradition appropriates them in a particular and different manner because each social and historical context is singular and local. People who pertain to other traditions do not have all the rational resources to understand other traditions. To MacIntyre, they are like foreigners who do not have the significant coordinates to become intellectual and morally competent enough to interact in that particular tradition. The dialogue between traditions requires a significant effort, similar to a foreigner who has to learn a second language including a new set of linguistic and cognitive rules.

The encounter among traditions begins genuinely when there is an interest in learning from other tradition. They realize that each tradition is unique and singular, each one has virtues and vices and there is not any way that one is better than the other. It is only the proud and the tyrant from one tradition who supposes that they are superior compared with other traditions.

Gabino Barreda: First Mexican positivist in 19th century.

After the French intervention in Mexico, the country needed a complete reorganization of its institutions. Almost five years of bloody wars left an atmosphere of uneasiness in the national territory. Benito Juárez, elected once again as a President of the Republic, saw the need to create a suitable educational institution for the new times. Juarez saw in the ideas of Gabino Barreda's famous writing "Oración Cívica" (Civic Prayer) the answer to the problems encountered in education. The "Oración Cívica" (Civil Prayer) described the bizarre times that had befallen the nation since its own independence when the priest, Miguel Hidalgo, in the middle of the night on September 15th, 1810 raised a banner to promote the armed struggle against the injustices and inequalities of the Spanish Crown against Mexico. Gabino Barreda saw a light of hope after nearly 50 years of darkness. The hope wasfound in a new philosophical perspective: Positivism. "The fire has still consumed two whole generations and it still smokes after fifty seven years." (Barreda, 1979, 3)

Barreda proclaimed a new duty of the nascent society. This new duty was to create a science sufficient to understand the social process that had led the country into such crisis and desolation. This science is "subjected, like the others, by laws which make it possible to forecast the events to come, and to explain those facts that have already passed."(ibidem). To Barreda, establishing science as a foundation was the perfect solution to find order among the hazards and to find ways out of the uproarious history of Mexican society. He believed that it was essential to value the important lessons from the past in order to enhance the future. The only way to understand this process is through the model of progress, as explained by Auguste Comte. Barreda believed in the moral value of science as faith in progress, or the idea that all social progression tends to be better every day. He explained, "According to the council of Comte, there are great social lessons that should be offered in order to solve all those painful collisions that result in anarchy that is currently reigning in spirit and ideas everywhere. This does not cease until a truly universal doctrine joins all intelligence in a common synthesis." (ibid, 4)

The three fundamental values that needed to govern social behavior are as follows: First, there is freedom. Barreda explained in "Educación Moral" (Moral Education) that freedom is related with order. "Far from being incompatible with order, freedom exists in all phenomena, both organic and inorganic, to submit with entire fullness to the laws that determine them." (Barreda, 1978, 9). Freedom is the capacity to understand a certain world, its rules, its laws, and its development. If we are able to predict the future under those rules and laws, we can then infer the future. Being free means understanding that we are determinate and then at last to see what and how we are determined.

Second, there is order. Barreda explained that order is something that never changes. It is permanent, stable, and the basis for development, just as the tracks of a train move into the future. This kind of order was perceived as moral for the Mexican philosopher. The moral art did not consist of changing the natural laws, but "of arranging things in such a way that the result of its inevitable fulfillment is helpful to us. To try to take advantage of science and observation, there is nothing more we need to discover except a strong moral base that will take us to infinite and continuous progress." (ibidem)

Third, there is progress. He believed in a society that tended towards a permanent finality. Regarding this point, Barrera quoted Condorcet in his book, "progrès de l'ésprit humain". Following Condorcet's argument, Barreda argued that society is released gradually from religion until science advances and inspires more development. The sources of morality are found in the human himself and not in religion. The entire moral project proposed by the Mexican philosopher is based on the values of science such as demonstration, method, discovery, truth, order, and progress. In addition, he draws on recent studies of morality of the era, based mainly on disciplines such as biology and physiology. Particularly, he supports Gall's research on the mental and moral faculties based on the external shape of the skull. According to Barreda, this kind of researching would lead us discover the sources of morality in human's natural condition instead of religion or God. He explained, "There are innate tendencies which lead humans toward the good, just as there are others which drive him toward the evil. These inclinations have their organs in the brain mass. There are not only natural inclinations to evil by men, as some theologians and metaphysicians have described. Rather, there are natural inclinations to good and evil at the same time." (ibidem). On having located the source of morality in the human condition and not in religion or gods, to Barreda, it was only the human being who would be able to accomplish his own purpose. By the same process of civilization, the human being discovers his moral condition. In contrast to religion, science gives a secure basis for the discovery of moral principles.

By having two types of natural inclinations to act, it is important to develop the biological organs in the brain which correspond to charitable inclinations rather than those which correspond to malicious inclinations. To develop those inclinations which are benevolentrequires a discipline resting on scientific knowledge to know for certain what types of exercises are prone to develop the best of the human being. Barreda, following Comte, said, "If we now apply these same principles to the whole of the intellectual and effective bodies, it is undeniable; the same result can be obtained using the same means. We should turn our education to friendly and altruistic acts, instead of destructive and selfish inclinations which must be avoidable as far as possible." (ibidem)

The government must have a fundamental role in supporting an educational project promoting a moral order where the citizens are benevolent. It is an obligation of the government to attend to the necessity of society by a moral order conducive to the development and progress of civilization. In the same way as that of a moral sphere, there was also an interest by Barrera to promote political values based on the certainty of scientific knowledge. "In the domain of the intelligence and in the field of the true philosophy, nothing is heterogeneous and everything is solidarity. And it is impossible that politics today marches without the support of science." (Barreda, 1979, 6)

This quote expresses the interest of Barreda in enacting a type of science that could be functional in different fields. It is necessary that the political government support science in order to magnify the human project in civilization. He pointed out the necessity of a secular education, which openly acknowledged that there would be no intervention in education by the Catholic Church. The great aim of education reform was to enshrine the freedom of citizens and to introduce a solid scientific training to epistemologically combat witchcraft and the superstition of the past; in other words, the triumph of a positive spirit against religion and metaphysics. The state plays an important role in establishing the basis for moral and political order by controlling the anarchy and the disorder in society.

Gabino Barreda was elected by Benito Juárez as the new director for the high school founded on February 3th, 1868. Barreda found the perfect place to impel the positivist education. He instituted a form of education following the model of Comte's science. According to Comte, there was a hierarchal classification of all sciences. At the bottom of this classification were mathematics and physics. In the middle of the classification were biology and chemistry. Finally, at the top were the social sciences. It was vitally important to become educated on the basis of general abstractions as well as logic. During the first year of high school the student should take courses in mathematics and physics. Then, in the second year they begin with observations of the phenomena in nature. They were trained in the application of the inductive method. Finally in the last year they studied subjects such as sociology and history. There was an abandonment of philosophy and the humanities in the educational project promoted by Barreda in Mexico. In general terms, Barreda was interested in training the students in a strong program like the natural sciences. Following Comte, Barreda believed that the most developed stage of society is one that is based only on scientific knowledge.

Barreda explained that this new stage is characterized by a synthesis of thought. This is the positivist phase of thinking where in the scientific method the resolution of disputes occurs. Prior to the establishment of science, society had an anarchic spirit. There was no way to a peaceful resolution because passion and religion dominated the souls of the people. The scientific method is the unifying

principle, thus creating an intellectual order. Consequently, there would be a moral regeneration in society, thereby allowing the long-awaited progress of civilization. The belief was that knowledge of natural laws and socially regulated standards would help citizens to better understand the consequences of actions, as well as the best way to carry out appropriate actions. Individuals in society shall discuss rather than use weapons and arms to kill each other. The best way to survive as a species is establishing the synthesis of thought.

The synthesis of thought was considered apolitical concept, as well. There was a great interest to establish a society based on agreement. According to the modern thinkers in politics such as Hobbes and Locke, the origin of the State is due to a social pact where all individuals agree to create a political power in order to guarantee order and peace in society, thus eliminating any type of conflict or divergence. Particularly, the political conception of Barreda was influenced by his own formation as a doctor and the increment of the medical culture in the second part of the nineteenth century (Cházaro, 2002). There was a general belief that medical profession should be the leaders of the nation (González, 1957). The notion of politics was conceived similar to the medical model which supposes the relationship between the doctor and the patient. According to this model the doctor has to heal the patients; in the same way, politicians have to heal the citizens. Politicians become experts and the citizens depend completely on the knowledge of the expert. The political project of the scientist was based on the common truths in society where each individual utilizes the scientific method in order to reach agreement. Divergent opinions are considered by the scientist as an anomaly or even a illness which should be surgically removed. This type of politics justifies an authoritarian power, one who is not able to recognizedissent in society.

José María Vigil: humanist philosopher in Mexico and critic from the positivist project.

José María Vigil was a humanist thinker who debated against the positivist project in most of the second part of nineteenth century. Vigil was the director of the National Library in Mexico for 28 years. In addition, he was a political journalist in journals such as "El Siglo XIX", "El Monitor Republicano", and "El Nuevo Mundo". He was a great defender of the Constitution of 1857 and a writer of literature and poetry. By 1875 he was a professor of subjects such as Spanish, History, and Logic in the same high school which GabinoBarreda directed. Vigil translated from Latin important works written by Bartolomé de las Casas, "Historia de las Indias" (History of the Indies); and by Tezozómoc, "Crónica Mexicana". Similar to Barreda, he was a believer in religious reform in Mexico. He said, "The glorious principles of our reformist revolution have

been finally recorded in the fundamental law of the Republic, making it a part of our constitutive law." (Vigil, 1970, 229)

He recognized the importance of diversity and plurality in philosophical thought. Without a doubt, he believed in scientific thought supported by political and ethical values. Those values are basically freedom, equality, and justice. Following those principles, he thought that a classification of the sciences in which there is supremacy of natural sciences over social sciences is not required. In contrast with Barreda, Vigil believed in the capacity of people to make decisions instead of a powerful state that organizes and imposes limits on individual freedoms.

Vigil explained that within the constitution of 1857 are located the fundamental principles which would allow Mexican society to develop. He said, "The Constitution is the sum of all the rights and the defender of all freedoms. If one day an uncountable misfortune appeared from the horizon in politics and the constitution disappeared, the passions of the individuals would ripple without any limit until it destroyed our nation." (Ibid, 211). This thought was derived from the belief that the constitution respects the individual rights such as free speech, freedom in political decision, and freedom of conscience. Furthermore, the constitution represents the will of the people in general. Vigil explained, "This time the legal sense has not come to be more than the recognition of an existing fact because the reform rests on a much more solid ground than the written law; it rests on the consent of the people, in acquired rights which could not be taken away without producing cataclysms of disastrous consequences." (Ibid, 229).

To understand how to apply the fundamental principles of freedom, equality and justice, a philosophical basis is required in order to logically articulate the different fields that characterize the human being. Philosophy has an important role in knowledge because it allows integration among the political and ethical values in scientific knowledge. This proposal was explained in a journal edited by Vigil. The journal was called, *Revista Filosófica* (*Philosophical Journal*) which was written in 1882. In this journal, Vigil edited some papers written by the disciples of the French philosopher Victor Cousin, in the first part of nineteenth century. Cousin's influence on Vigil was undeniable. Cousin was one of the most emblematic figures in French philosophy in the 19th century. He promoted the philosophical eclecticism which consisted in the articulation of different areas of thought such as philosophy, science, religion, literatures and arts.

In the Revista Filosófica, philosophy is defined as the kind of wisdom that has the feature of being really ancient. Vigil said, "Philosophy is the highest degree of science. It is the perfect knowledge, the entirety of knowledge of the truth, which naturally breeds virtue, or manifests itself through good practice."

(Vigil, 1882, 7) To Vigil, the aristothelical tradition of knowledge is important, in which it recounts philosophy as metaphysical thought. Hence, the main purpose of philosophy is to seek truth in its complete expression. It means that nature and humankind is only understandable by searching the causes and principles as a supreme foundation of what the essential is. The human spirit is looking for answers and cannot be stopped until it finds a foundation of knowledge. During that process, the mind tirelessly moves from idea to idea. The engine which drives the search is the idea of the absolute, the idea of the infinite, and the idea of essence. Finally, Vigil implied that anything can be known through the ideas of the mind. He explained, "But the truth, in general, cannot appear to us but by the thought, because what we do not conceive does not exist for us. Our intellectual faculties enable us to recognize the world." (Ibid, 8)

According to Vigil, the only way to respond to the fundamental questions was through metaphysics and not through psychology as the positivists believed. In the nineteenth century are the first attempts to bring philosophical thought under the tutelage of the scientific disciplines such as psychology. Barreda intended on trying to reduce the role of philosophy and expand the leading role of the scientific disciplines.

To the contrary, Vigil promoted the work of epistemology in the work of knowledge. Vigil proclaimed, "In fact, there is no psychology without metaphysics." (Ibid, 9). Vigil considered that it is necessary to ask fundamental questions about nature and humankind. He asked, "How do you analyze the thought in the being who thinks?" (Ibidem). The most important feature in thinking is thinking itself. This ensures a base to position itself in the world in which we live. To Vigil, there was no knowledge without philosophy. He explained, "There does not exist metaphysics which does not discover the bottom of the things and provide a common basis, a tie, and an unwavering principle to all human knowledge. Metaphysics is to philosophy what philosophy is to other sciences. The object and the center of all investigations of metaphysics is the trunk which supports and makes all its branches live." (Ibidem).

Vigil pointed out how metaphysics has always played a fundamental role in discovery by great philosophers in the modern era. Philosophers such as Descartes, Melebranche, and Spinoza have made important discoveries for the sciences under the guidance of philosophy. To Vigil, the classification of sciences must be through the order of knowledge, as Aristotle proposed. First, at the top of metaphysics, Aristotle places thinking, as well as the logic, as the foundation for understanding. Then, the study of morality is composed of two essential elements: politics and history. Finally, the study of nature requires a cosmogony and a general theory of nature. All these scopes must be connected with a common center which is theology. Vigil explained, "The philosophical science considered in its vastest

extension is divided into three major branches; the philosophy itself or the science of man, formed exclusively over reason and conscience; followed by philosophy of mankind, which is the history of humanity; and finally, the philosophy of nature, forced to add to these same abilities knowledge of the laws and of the main phenomena of the universe." (Ibid, 23).

These three scopes of knowledge are as connected circles all together. It is vitally important to begin with the study of man to reach humanity and finally to understand nature. Unlike the positivist perspective that first announces the need to study nature to later explain the man, the humanism of Vigil believes that it is best to start with the man to conclude in the study of nature.

Vigil pointed out that the ideal methodology for knowledge oscillates between the empirical method and the speculative method. The name of this method is the psychological method which is characterized in a different way than the positivists conceived of it. In general, as John Stuart Mill explained, the spirit is only explained in terms of a secure knowledge base, which is supported by sensitivity and experimentation. To Vigil, there are three levels of the conscience "individual, active, and universal." (Ibid, 28).

First, there is the individual. Vigil explained that this level of the conscience is represented by personality. This means that it is the property of thinking to retreat into itself and perceive its own operations, allowing one to say: "I think".

Second, there is the active. The active element in the conscience is the will which allows the perception of the world as well as the perception of consciousness. Without that, the subject of thinking, self, would not be even more than a personal intelligence, a spirit, a soul.

Third, there is the universal. The universal refers to the ideas of reason which are the a priori principles by helping to understand our being until we find us from the outside to inside, as well as from the phenomenon to the substance, from the effect to the cause, from the contingence to the necessary, from the relative to the absolute.

Vigil recognized that knowledge should not be mutilated; rather it should be full in all its elements. Hence, knowledge would be understood by justice and power. True knowledge does not delete the "should-be" nor the importance of the community. In the philosophical standpoints of Vigil, I find explicit political and moral philosophies which are close to the notion of polis in Aristotle. To Aristotle, the human being who is separated from his social group is also deprived of the capacity to participate politically in the community and for justice. It is said that human beings are only collective beings; they are only beings in the presence of others. A person develops his best qualities through encounters with the community. This achieves the common good. All the perspectives and positions of the people are valuable. The way to make a collective decision depends on

public deliberation.

Vigil pointed out that Aristotle's conception of dialectic was more relevant than those proposed by Plato. Aristotle recognized the importance of phrônesis which is concerned with practical intelligence. To Vigil, debate is essential to resolve the conflicting proposals. The process in which a particular thesis or theories justified itself against its rival is through its superior ability to defeat the opposite argument. Vigil understood the importance of debate and refered to it in a discussion with one of his colleagues, Professor Ruiz. Vigil and Ruiz debated about which type of logic in a book of logic is more useful in the Mexican high school. Ruiz supported the inductive logic of Stuart Mill which was positivist. Vigil supported the logic of Paul Janet which was humanist.

Conclusion

The debate between positivists and humanists began in a significant manner in the second half of the nineteenth century. The protagonists in France were Auguste Comte against the disciples of Victor Cousin: Janet and Ravaisson. In the United States of America, there was John Fiske—the first positivist-against the disciples of Ralph Emerson: Noah Poster and James M'Cosh. In Mexico, the positivist GabinoBarreda was against the humanist José María Vigil.

In general, positivism promoted the study of the sciences instead of philosophy. It incorporated an empirical method in order to understand nature and the human. The positivists believed in the influence of natural science over social sciences. In addition they conceived of a social project based on the anthropological conception of "homo faber" which refers to the capacity of transforming the world according to the desires and necessities of the human being. There is a moral presupposition which refers to self-responsibility. The human being is impelled by self-confidence to create a second nature that is characterized by human rules. In contrast with nature, these human rules allow humankind to embellish the human shelter which supports freedom and satisfies physical needs.

This human project requires faith in progress by understanding there are no limits. Science and technology take a more important role. Increasingly, national states promoted technological policies which need experts. This conception is close to the allegory of the philosopher king in Plato who endorsed a philosophical figure, episteme, or the expert who is a wise and knowledgeable ruler, knowing perfectly the functioning of the laws of the human shelter, as well as nature.

On the other hand, the 19th century humanism was also characterized by the project of the enlightenment. In general, they believed in progress by humanity. They believed that the project was grounded in a different anthropological figure: a wise man that is willing to listen to the arguments of conflicting proposals and exchange points of view. This kind of wise person has to be learned in different

subjects such as philosophy, religion, science, arts, literature, politics, history, and ethics. This wise person recognizes the need to exercise practical judgment which cannot be guided by rules. He recognizes that the nature of a set of rules is that no matter how well formulated they may be, they cannot provide for all such eventualities. This philosophical figure is called, phrônesis inspired by the Aristotelian tradition. The wise person in a humanist metaphor is a thinker who is concerned with normative questions and answers, as well as the technical problems in modern society. To me, the modern science conceived by the positivists only focuses on discovery of new artifacts and machines without the interest in normative problems.

BIBLIOGRAPHY

- Cházaro, L. (comp.) (2002). Medicina, ciencia y sociedad en México, siglo XIX. (Zamora: El Colegio de Michoacán).
- Gabino B. (1978) La educación Positivista en México (México: Editorial Porrúa)
 Gabino B. (1979). "La Oración Cívica", Cuadernos de cultura latinoamericana 72,1-
- González Navarro, M. (1957) "El porfiriato. La vida social.", in D. Cosío Villegas. Historia moderna de México, IV. (México: Hermes).
- MacIntyre, A. (1978) "Objectivity in Morality and Objectivity in Science", in T. Engelhardt and D. Callahan (eds.), *Moral, Science and Society* (New York: Hastings), 21-39.
- MacIntyre, A. (1988). Whose Justice? Which Rationality? (Indiana: University of Notre Dame Press).
- MacIntyre, A. (2006). The Tasks of Philosophy (Cambridge Mass.: Cambridge University Press).
- Rorty, R. (1991) *Objectivity, Relativism, and Truth* (Cambridge Mass.: Cambridge University Press).
- Vigil J.M. (1970) "El Siglo XIX", in C. J. Sierra. *José María Vigil* (México: Club de periodistas en México), 211-230.
- Vigil, J.M. (1882). La Revista Filosófica (México: Litografía de Ireneo Paz).

ABSTRACT

The "Escuela Nacional Preparatoria" national high school of Mexico was established on February 3rd, 1868. The educational system was inspired by the positivism of Auguste Comte and institutionalized by Gabino Barreda. Positivism, which was promoted in the high school, emphasized the studies of the sciences over philosophy. Classes incorporated empirical methods in order to examine nature and human behavior. In sum, the positivists believed in the superiority of natural sciences over social sciences and supported the notion of progress and order in society. According to the positivists, politics served as a type of engineering to more efficiently control human behavior in society. Human freedom was thought of as a geometrical and quantitative unity, which always depends on the totality. On the other hand, the humanism of José María Vigil is characterized by the republican humanism, which symbolizes secularism, political and social rights, and multicultural equality. He supported the idea of training students to be wisemen, ones who are willing to listen to the arguments of conflicting proposals and exchange points of view. This wise person has to be knowledgeable in different subjects such as philosophy, religion, science, arts, literature, politics, history, and ethics. Vigil recognized the need to exercise practical judgment that cannot be guided by rules. This philosophical figure is called phrônesis inspired by the Aristotelian tradition. According to the humanists, politics is the bestway to have more just laws. Freedom is not individual, nor is it a geometrical unity; rather it is collective, creative, and based on the quest for the common good.