## Platonic substratum of Descartes' error: implications for modernity

Nicholas C. GEORGANTZAS \*
Fordham University Business Schools
113 West 60th Street, Suite 617-D
New York, NY 10023-7484, U.S.A.

Tel.: +1.917.667.4022 | fax: +1.212.765.5573 | email: georgantzas@fordham.edu

Georges D. CONTOGEORGIS \*\*
Panteion University of Athens
136 Sygrou Avenue
Athens 17671, Hellas

Tel.: +30.697.730.4175 | fax: +30.210.920.1743 | email: gdc14247@gmail.com

Abstract: Modernity's most regimental stance might see Plato's work as resulting from an excessive 'facticity' bypass, which enabled thought's self-determination, moving beyond the limits that life imposed on it, onto a much higher noosphere, with an outlook toward the future. Yet his facticity bypass might also explain why Plato remains so everlastingly topical. Often tagged as the substratum of the body and mind or soul dualism, Plato—and thereby Socrates, are embodied—so to speak—in Descartes' error, even if their specific dualism slightly differs. Stoicism seems compatible with dualism too, which is probably why this school still holds appeal in a world so heavily influenced by Abrahamic tradition; a tradition that both Plato and Aristotle have heavily swayed. This essay traces the pathways of Descartes' error back and forth through time, and assesses its political implications for modernity, starting from Søren Kierkegaard. Per Dreyfus, Kierkegaard influenced Martin Heidegger, who in turn, along with Edmund Husserl influenced Maurice Merleau-Ponty. Closely associated with Epicurus, Jean-Paul Sartre and Simone de Beauvoir, Merleau-Ponty's philosophy is a sustained argument for the foundational role that human perception plays in understanding the world as well as engaging with the world. Such is the world of the city-state, where Plato's noosphere has thereby been accrete or immanent in its life, his dialogue with it always organic and unabated, and most attentive—one might even say—to its democracy evolution, in all its splendor of temporal dimension bundles, both ontic and ontological ones. The essay shows that, although modernity pertains to a large-scale anthropocentrism or human centrism at once is extremely premature and belongs to the prehistory of the classic temporality of the city-state, at least in comparative space-time proportionality terms.

*Keywords*: Aristotle, dualism, democracy, Heidegger, leverage, modernity, Parmenides, Plato, systems thinking (ST), temporality, totalism

\* Nicholas C. Georgantzas is Professor, Management Systems, and Director, System Dynamics (SD) Consultancy, Fordham University, New York, NY, USA. Both an Associate and a Guest Editor, System Dynamics Review, is also consultant to senior management as well as a forensic economist, specializing in SD simulation modeling for learning in strategy, production and business process (re) design. Author of Scenario-Driven Planning (Greenwood, 1995), has published expansively in refereed scholarly journals, conference proceedings and edited books. Mostly transdisciplinary, his research interests, publications and consulting entail systems thinking, knowledge technology and strategy design, focusing on the necessary theory and tools for learning in and about the dynamically complex systems in which we all live.

\*\* Georges D. Contogeorgis is Professor, Political Science, Panteion University, Athens, Greece. Former Rector, Secretary General of the Hellenic Association of Political Science, member of the High Council and Research Council at the European University Institute of Florence, President-General Director of the Hellenic Broadcasting Corporation, Interim Minister of Media and Communication, Founding Member of European Political Science Network (EPSNET), Director of Research, CNRS, France etc. He is Correspondent Member of the International Academy of Portuguese Culture. Major publications: *The Theory of Revolution in Aristotle*, Paris, 1975; *The Popular Ideology. Socio-political Study of the Greek Folk Song*, Athens, 1979; *Political System and Politics*, Athens, 1985; *Social Process and Political Self Government. The Greek City-State Under Ottoman Rule*, Athens, 1982; *Nuclear Energy and Public Opinion in Europe*, Brussels, 1991; *History of Greece*, Paris, 1992; *Communication System and Political Change: The Television* (in French), 1993; *Greek Society in the 20th Century*, 1995; *Democracy in the Technological Society*, Athens, 1995; *Citizenship and City*, Paris, 2000; "*Samuel Huntington and "The Clash of Civilizations"*. "*Religious Civilization or Cosmosystem?*" Montpellier, 2001; *Modernity and Progress*, Athens, 2001; *The Authoritarian Phenomenon*, Athens, 2003; *Citizenship and State*, Athens, 2003. *The Hellenic Cosmosystem, v.1. The Statocentric Period*, Athens, 2006; *Nation and Modernity*, Athens, 2007; *The Democracy as Freedom. Democracy and Representation*, Athens, 2007; *The Hellenic Democracy of Rigas Velestinlis*, Athens, 2008; 12/2008, *Youth, Freedom and the State*, Athens, 2009.

Geoffrey West, one of *Time* magazine's 100 most influential people, tells how biological research points to mankind's imminent destruction (Slowe 2009). The cause is, West argues, that the way in which our cities and corporations grow is at odds with nature, thereby rendering humanity's way of life ultimately unsustainable. In biology, West discovered the remarkable economies of scale that govern nature. Unlike nature, the larger a city or corporation is, the greater its negative side effects are, in linear proportion. And comparing oxygen and money shows that wealth creation contradicts nature too. Like oxygen, of no use on its own, money too is a vehicle for goods and services useful for society as a whole. But unlike oxygen, us humans do not use the minimum amount of money to survive. "The bigger you are, the less oxygen you use per gram of your weight", West says. "You're very efficient that way. But most people I know that are into money around the world, they want more" (cf Slowe 2009).

Confusion, modernity's *Babel Tower*, results from going against nature. There are seemingly unbridgeable gulfs among and within the natural, social and human sciences, as the debate over the relation between matter and mind goes on, fast developments in neuroscience notwithstanding (Damasio 1994, Freeman 1991). *Scientia*, Kuijper (2008) insists, suffers from schizophrenia.

The very idea of too much wealth may seem odd in 2010. Yet Aristotle teaches caution about such assumptions. He advocates moderation and measure in life, defining  $\alpha\rho\varepsilon\tau\eta$  or virtue as the rational pursuit of a mean between harmful extremes. Excess is bad in itself (Dierksmeier and Pirson 2009, Hatzopoulos 2009, Karayannis 2007). Modern economists often dismiss Aristotle, Plato and Xenophon because the ancients did not observe certain features of our modern market economy, essential to contemporary scholars (e.g., Schumpeter, 1954). The Hellenes, as well as most thinkers of the old Occident and Orient have little to say on marginal utility theory and the non-zero-sum games of modern trade (Solomon, 2004, p. 1023). But it might just be too easy to dismiss them for this reason. By reviewing Aristotle's *Eudemian* and *Nicomachean Ethics*, as well as his *Parts of Animals* and *Politics*, Dierksmeier and Pirson (2009, p. 421) see in Aristotle a political model of 'unity-in-diversity'.

Modernity's regimental stance might see Plato's work as resulting from an excessive 'facticity' bypass, which enabled thought's self-determination, moving beyond the limits that life imposed on it, onto a much higher noosphere, with an outlook toward the future. Often tagged as the substratum of duality between body and mind or soul, Plato—and thereby Socrates, are embodied—so to speak—in Descartes' error. And those enamored of Plato and classical Hellas might tend to be on the wrong side of Descartes' error (e.g., Snell 1953). The stoics varied but, with its logos and spirit notions, stoicism seems most compatible with dualism, which is perhaps why its school still holds appeal in a world so heavily influenced by Abrahamic tradition; a tradition that both Plato and Aristotle swayed heavily, perhaps because of the *Hellenic intellectual resistance* (Siniossoglou 2008).

This essay traces the pathways of Descartes' error (Damasio 1994) and its implications for modernity, starting from Søren Kierkegaard, who influenced Martin Heidegger. It is worth noting up front that Plato's soul-body dualism and Descartes' mind-body dualism are fundamentally different, even if philosophers group them together in comparison with nondualist theories (Broadie 2004). Based on their respective doctrines in *Phaedo* (Plato) and *Meditations* (Descartes), the main difference—from which others flow—lies in Plato's acceptance and Descartes' rejection of the assumption that the soul or intellect is identical with what animates the body.

Heidegger (1992) understands the commencement of Western philosophy as a brief period of authentic openness to being, during the time of the pre-Socratics, especially Anaximander, Heraclitus and Parmenides. From Parmenides, Heidegger takes the idea that *being is* and from Heraclitus that *being becomes*. Then, from Friedrich Nietzsche, Heidegger takes the *eternal return* of the *same* as a philosophical method of turning becoming into being. But after the pre-Socratics followed a long period increasingly dominated by the forgetting of this initial openness. That period commences with Socrates and Plato, leading to a forgetting or abandonment of monism, which now occurs in multitudes.

The acceptance of Plato's facticity bypass shows *three* things (Contogeorgis 2006). *First*, the Hellenic philosophical reflection was born in  $\pi o \lambda \iota \tau \varepsilon i a$ , but had a few aspects in common with the city-state and, thereby, its noosphere dialectic relies on affairs that did not pertain to its temporality. So we must accept that in his *Laws*, Plato does not converse with his own era, even if he—in a sense—refers to

it. Second, we cannot compare our superior modernity with humanity's pre-feudal or traditional era. Third, we must attribute the insubstantiality of comparison, the frailty of our dialogue with the  $\pi o \lambda \iota \tau \epsilon i \alpha$  reality to the superiority of our modern era, not to its temporal distance that has since intervened. Our modernity' vanity tags along an argument of Abrahamic tutelage: time's teleological linearity of our past, present and future. Yet, contrary to Abraham's followers and the modern rationalists, who declare  $\chi \rho \dot{o} v \sigma c$  or time (t) to be a straight line (Fig. 1a), the eternal nature of cosmos rendered the Hellenic perception of t nonlinear. Nor is time circular, as some occult dogmas teach through the  $ov \rho \sigma \dot{b} \dot{\rho} \sigma c \dot{\rho} \sigma c$  or tail-eater snake symbol (Fig. 1b), but spiral, leading to  $\dot{\alpha} \pi \epsilon \iota \rho \sigma v$  or infinity (Fig. 1c). Through the spiral shape of t, annual circles, lunar circles, human and all biological life can be fully interpreted (Bailly Longo and Montévil 2010). History is never repeated. It is just similar, as identical events happen, but always under different circumstances (Fig. 2). The death of us humans—and of all mortal life—happens as  $A\lambda\kappa\mu \alpha i\omega v \sigma K\rho \sigma \tau \omega v i\alpha \tau \eta c$  or Alcmaeon of Croton declared, simply because it is impossible for the end of the circle to touch the beginning, i.e., Fig. 1b, so it is impossible for the old to become infants again.

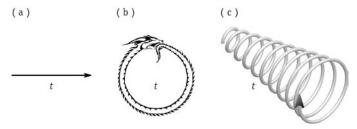


Figure 1. Time as: a) a straight line, b) an ουροβόρος όφις and c) a spiral.

In the realm of mythos, while teaching  $\gamma \epsilon \omega \rho \gamma i \alpha$  or agriculture through the Eleusinian mysteries, goddess  $\Delta \dot{\eta} \mu \eta \tau \rho \alpha$  (Demeter, i.e.,  $\mu \eta \tau \dot{\epsilon} \rho \alpha \tau \eta \varsigma \Gamma \eta \varsigma$  or  $\Delta \alpha - \mu \dot{\alpha} \tau \epsilon \rho$ ) institutes democracy too (Toutountzi 2001). This is the political system needed to govern the city-state organization, its  $\delta \dot{\eta} \mu o \varsigma$ , for the attainment of a harmonious cohabitation among humans and a balanced relationship within each  $\pi \dot{\delta} \lambda \iota \varsigma$ , with its natural environment as well as the populations of other natural species. Nature itself teaches us democracy, through the periodicity, the alternating and the circular motion of everything in the chain of life.

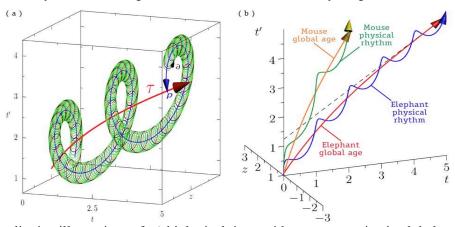
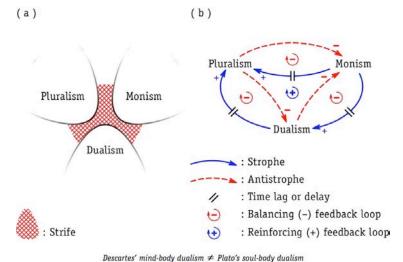


Figure 2. Qualitative illustrations of: a) biological time, with  $\tau =$  an organism's global age and p = its physical rhythm modulation by varying values of  $\partial =$  a 'temporal' dimension, along z = a dimension of interest and b) global age and physical rhythm examples of a mouse and an elephant (*adapted from* Bailly, Longo and Montévil 2010).

In the context of reconciling monism, dualism and pluralism, Kaloy (2002) calls  $\sigma\tau\rho\sigma\phi\dot{\eta}$ , i.e., bend, turn or twist, the internal process of the human intellect from oneness to multiplicity. And the process in opposition to strophe is  $\alpha\nu\tau\iota\sigma\tau\rho\sigma\phi\dot{\eta}$ , i.e., a turning back. It is possible to look at monism, dualism and pluralism as static notions, with a strife field among them (Fig. 3a). Through 'totalism', however, a theory that includes cognitive, aesthetic and moral components, Kaloy sees the potentiality of

an antistrophe to Plato, who refers all multiplicity to the idea of good; and to Descartes, who asserts that we would have no knowledge of the *finite* if we did not have a previous knowledge of the *infinite*. In the Hellenic tradition, the Dodekatheon multiplicity is subdued to the will of Zeus, i.e., the One. Likewise, the notion of Brahma in Indian tradition, with its 'this' with 'that' (*tat twam asi*) identity, stems from the same original belief that might have convinced Plato of the *homogeneity of nature*, Newton of the *analogy of nature* and modern science of the *uniformity of nature*. In the absence of any empirical proof, they all have been convinced *a priori*. As a dynamic theory, *totalism* entails a perennial transformation and recurrence from oneness to multiplicity and from multiplicity to oneness, through a set of four feedback loops through time (Fig. 3b).



Descartes mina-body auditsm ≠ Plato's soul-body auditsm

Figure 3. Reconciling the -isms: a) static view and b) dynamic-complexity view.

But no school of thought, philosophical or otherwise, deviates from the concession of time as a straight line (Fig. 1a), nor from the dogma that modernity is totally superior to its past. This rescinds modernity's superiority dogma and connects the Hellenic *cosmosystem* with Plato's favorite topic in his *Laws*: the equality, justice and liberty triptych. And so does Heidegger, who along with his teacher, Edmund Husserl, influenced Maurice Merleau-Ponty (Fig. 4). Closely associated with Epicurus, Jean-Paul Sartre and Simone de Beauvoir, Merleau-Ponty's is a sustained argument for the foundational role that our human perception plays in understanding the world as well as engaging with the world.

The legacy of René Descartes' notorious dualism of body and mind (Damasio 1994, Russell 1972) has been so penetrative (Fig. 5), that most of us tend to treat the mind and its main organ, the brain, as our body's boss, the pilot of the ship, as if it were (Dennett 1991, 1995, 2009). "Plato's *Theaetetus*, Saint Augustine, and Saint Thomas contain most of what is affirmative in the *Meditations*... Descartes... brought... very nearly to completion, the dualism of mind and matter which begun with Plato and was developed, largely for religious reasons, by Christian philosophy" (Russell 1972, p. 567). Yet, our autonomic nervous system is not a 'mind' at all, but a feedback control system, what Aristotle called the 'vegetative soul'. It preserves a living system's integrity.

Given the social pressures Plato faced, it might not always be clear when he conveys personal belief and when he is merely expressing Hellenic tradition. History might have conditioned Plato's upstart through the wide gulf between the death of Pericles and the Macedonian hegemony. In the absence of any dogma or any organized priesthood in Hellenic tradition, it was the city-state itself, i.e., the citizen body or demos, which undertook to prosecute and to punish those who were 'impiously disposed' (Liritzis and Coucouzeli 2008). But Plato grew up settling all questions through reason, thereby interpreting human comportment in rational terms, and with the belief that  $\alpha\rho\epsilon\tau\dot{\eta}$  or virtue essentially entails rational living. The historical conditioning of his life, i.e., Socrates' trial, might have compelled Plato not to give up rationalism but to extend it metaphysically. Undoubtedly, Socrates' hints must have turn over in Plato's

mind; simple things, such as, for example: "the human ψυχή has something divine about it" and "one's first interest is to look after its health" (cf Dodds' 1951, p. 209).

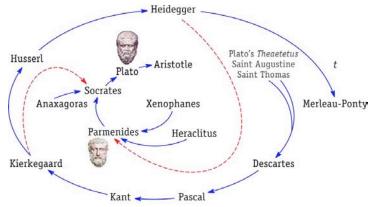


Figure 4. Philosophical *strophe* and *antistrophe* through the time (t) spiral.

Plato crucially identifies a detachable 'occult' self as the carrier of guilt, potentially divine with the rational ψυχή, whose αρετή or virtue is γνώσις, i.e., knowledge. The shamanistic trance, which deliberately detaches the occult self from the body, became a mental withdrawal and concentration to purify the rational soul under the authority of λόγος. The occult γνώσις became a ΘΕΑ (deity or view) of metaphysical αλήθεια or truth, just as the αλήθεια or recollection of past lives became the αλήθεια of bodiless forms, i.e., a new epistemology platform (Dodds 1951, Heidegger 1992). While *Phaedo* shows the soul's dialogue with the body's passions, his Πολιτεία vividly shows an internal dialogue between two parts of the soul, an inner-conflict theory that Plato precisely formulates in the *Sophist*.

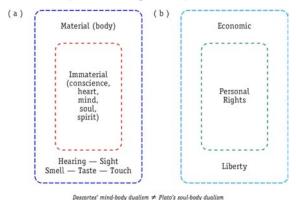


Figure 5. Dualism in a) human nature and b) liberty in modernity.

Plato's fission of the person into  $\delta\alpha i\mu\omega v$  and beast is similar to his human-nature dualism, which corresponds to a wide gulf between human potential: what a person might be, and Plato's estimate of the person as s/he is. So Plato's dualism suggests a religious origin, which one can meet often in later religious thinkers, from Marcus Aurelius to T.S. Eliot, who said in almost the same words: "human nature is able to endure only a very little reality", which agrees with the drift of much else in Plato's *Laws* (*cf* Dodds' 1951, p. 215).

In Heidegger's (1992) provocative dialogue with the pre-Socratics, his central theme is the question of  $\alpha\lambda\eta\theta\epsilon\iota\alpha$  or truth and its primordial understanding in Parmenides' *didactic poem*. Heidegger highlights the contrast between Hellenic and Roman thought and reflects on that contrast in language. Beyond an interpretation of Hellenic philosophy, *Parmenides* offers a strident critique of our modern temporality, delivered during a time that Heidegger sees as 'out of joint'.

Hubert Lederer Dreyfus (1991) sees the way that Blaise Pascal and Søren Aabye Kierkegaard responded to René Descartes as a strain in philosophy (Kreisler 2005). Everybody in the Plato-Aristotle

Hellenic philosophy tradition had tried to figure out what we essentially are. They thought we were essentially minds. Pascal was the first to say that the human condition is fundamentally contradictory. Kierkegaard sees that the self is a contradiction between the finite and the infinite, the temporal and eternal, the possible and the necessary. But he thought the body-mind distinction is not as useful. To get these seemingly contradictory factors together, Kierkegaard advanced the notion of calling: one is called to have an unconditional commitment or an infinite passion for something. Kierkegaard calls it *leveled*. Heidegger takes that up and calls it being 'authentic'.

Dahl's (1956, 1972, *sa* Zinn 1980), fundamental democracy principle entails binding collective decisions to help people end our modernity's polyarchy. Which renders Plato's insight important, not only because of his position in the history of thought, but also because Plato perceived clearly the risk inherent in the decay of an 'inherited conglomerate'. In his final testament to the world, Plato put forward explicit proposals for sustainability through a counter-reformation (Dodds 1951, p. 207). In this context, two questions become pertinent to the situation facing Plato: 1) How much importance did Plato attach to the irrational aspects of the human comportment and how did he perceive them? 2) How much was he willing to give in to popular belief for the sake of sustaining the *inherited conglomerate* of his time?

The harmonious cohabitation among people begins by legally forming a  $\delta\dot{\eta}\mu os$  or demos of citizens. The aim of this body politic is not just another representation government but  $\delta\eta\mu o\kappa\rho\alpha\tau i\alpha$  (dēmokratía), i.e., rule of the people, coined from  $\delta\dot{\eta}\mu os$  (dêmos), i.e., people, and  $\kappa\rho\dot{\alpha}\tau o\varsigma$  (krátos), i.e., power.  $\Delta\eta\mu o\kappa\rho\alpha\tau i\alpha$  or democracy brings along its dimensional triptych of equality, justice and liberty.

Catholic *equality* in the Hellenic, *authentic* democracy includes the dimensions of:

- i)  $i\sigma\eta\gamma\rho\rho i\alpha$  or isēgoria, i.e., equal speech or the equal right of every citizen to debate policy matters,
- ii) ισοκρατία or isokratia, i.e., every citizen has equal power, voting or otherwise, and
- iii) ισονομία or isonomia, i.e., equality before the law (Fig. 6).

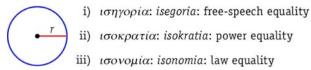


Figure 6. The equality democracy-dimensions bundle or triptych.

Legal eagles can work out the catholic *justice* dimensions within authentic democracy. But it must certainly include a balanced legislative framework. Last but not least, catholic *liberty* within authentic democracy includes 1) personal liberty, 2) social or societal liberty and 3) political liberty or freedom (Fig. 7). Political liberty or freedom begins with the transformation or transmutation of loyal polyarchy subjects to citizens, through the legal establishment and transformation of a society of loyal subjects into a  $\delta \dot{\eta} \mu os$  (dêmos) of true citizens. Right now, we are all loyal subjects of the polyarchy systems within our respective countries or states. To be true citizens again, 'for the sake of which' of our political philosophy must become the transition from modernity's polyarchy to authentic democracy.

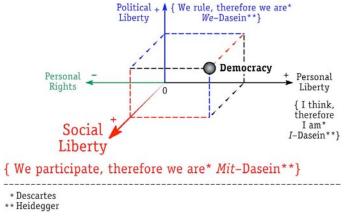


Figure 7. The liberty democracy-dimensions bundle or triptych.

## References

Aristotle. 2007. Politics, (B Jowett - transltr.). Adelaide, South Australia (eBooks@Adelaide).

Bailly F, Longo G and Montévil M. 2010. A 2-dimensional geometry for biological time. *Invited Lecture at the Biologie e selezioni naturali Conference*, Florence, (Dec. 4-8, 2009), available online (5/25/2010): <a href="http://arxiv.org/pdf/1004.4186v1">http://arxiv.org/pdf/1004.4186v1</a>.

Broadie S. 2004. Soul and body in Plato and Descartes. Proceedings of the Aristotelian Society 101(1): 295-308.

Contogeorgis GD. 2006. The Hellenic Cosmosystem, v.1. The Statocentric Period. I. Sideris: Athens, Hellas.

Dahl RA. 1972. Polyarchy: Participation and Opposition. Yale University Press: New Haven, CT.

Dahl RA. 1956. A Preface to Democratic Theory. The University of Chicago Press: Chicago, IL.

Damasio A. 1994. Descartes' Error: Emotion, Reason and the Human Brain. Avon Books: New York, NY.

Dennett DC. 2009. Darwin's "strange inversion of reasoning". Proceedings of the National Academy of Sciences (PNAS) 106 (Supplement 1): 10061-10065.

Dennett DC. 1995. Review of Damasio, Descartes' Error. Times Literary Supplement (Aug. 25): 3-4.

Dennett DC. 1991. Consciousness Explained. Penguin Press: London, UK.

Dierksmeier C and Pirson M. 2009. Oikonomia versus chrematistike: learning from Aristotle about the future orientation of business management. *Journal of Business Ethics* **88**: 417-430.

Dodds ER. 1951. The Greeks and the Irrational. University of California Press: Berkeley, CA.

Dreyfus HL. 1991. Being-in-the-World: A Commentary on Heidegger's Being and Time, Division I. MIT Press: Cambridge, MA.

Egan K. 1997. *The Educated Mind: How Cognitive Tools Shape Our Understanding*. University of Chicago Press: Chicago, IL.

Freeman WJ. 1991. The Physiology of Perception. Scientific American 264(2): 78-85.

Hatzopoulos JN. 2009. The boundaries of right and wrong: learning and the human brain. *ACSM Bulletin* (Feb.): 20-22.

Heidegger M. 1992. *Parmenides*, (A Schuwer and R Rojcewicz – transltr.). Indiana University Press: Bloomington, IN

Johnson-Laird PN. 1983. *Mental Models: Toward a Cognitive Science of Language, Inference and Consciousness*. Harvard University Press: Cambridge, MA.

Kaloy NA. 2002. *Totalism or the Will to Happiness, Prolegomena to a General Theory of Philosophy*. Fondation Kaloy: Geneva, Switzerland, online (5/30/2010): <a href="http://www.nicolaskaloy.com/philo">http://www.nicolaskaloy.com/philo</a> what is totalism.htm.

Karayannis AD. 2007. Αρχαιοελληνική Πρωτοπορία στα Οικονομικά. Papazisis Publishers: Athens, Hellas.

Kreisler H. 2005. Conversations with History: Hubert Dreyfus. Regents of the University of California, available online (5/28/2010): <a href="http://globetrotter.berkeley.edu/people5/Dreyfus/dreyfus-con0.html">http://globetrotter.berkeley.edu/people5/Dreyfus/dreyfus-con0.html</a> and <a href="http://youtube.com/watch?v=-CHgt2Szk-I">http://youtube.com/watch?v=-CHgt2Szk-I</a>

Krishnamurti J and Bohm D. 1985. *The Ending of Time*. Krishnamurti Foundation Trust Ltd.: Brockwood Park, UK. Kuijper H. 2008. Area studies versus disciplines: towards an interdisciplinary, systemic country approach. *International Journal of Interdisciplinary Social Sciences* **3**(7): 205-216.

Liritzis I and Coucouzeli A. 2008. Ancient Greek heliocentric views hidden from prevailing beliefs? *Journal of Astronomical History and Heritage* **11**(1): 39-49.

Merleau-Ponty M. 2005. Phenomenology of Perception, (C Smith – transltr.). Routledge: London, UK.

Michael DN. 2010. In Search of the Missing Elephant: Selected Essays. Triarchy Press: Devon, UK.

Russell B. 1972. A History of Western Philosophy. Simon & Schuster: New York, NY.

Schumpeter J. 1954. History of Economic Analysis. Oxford University Press: Oxford, UK.

Sharpe B. 2010. Economies of Life: Patterns of Health and Wealth. Triarchy Press: Devon, UK.

Siniossoglou N. 2008. *Plato and Theodoret: The Christian Appropriation of Platonic Philosophy and the Hellenic Intellectual Resistance*. Cambridge University Press: Cambridge, UK.

Snell B. 1953. *The Discovery of the Mind: The Greek Origins of European Thought*. (TG Rosenmeyer – transltr.), Harvard University Press: Cambridge, MA. Publication.

Slowe K. 2009. The end of the world is nigh. *Arabian Insight* **2579**(1 Jul.), available online (5/26/2010): <a href="http://www.arabianbusiness.com/542705-the-end-of-the-world-is-nigh">http://www.arabianbusiness.com/542705-the-end-of-the-world-is-nigh</a>.

Solomon RC. 2004. Aristotle, ethics and business organizations. Organization Studies 25(6): 1021–1043.

Toutountzi, O. 2001. The mysteries of the Hellenes and the democratic tradition. *Proceedings of the 1st Conference on the Ancient Thracian Mysteries*, Alexandroupolis, Hellas, available online (5/29/2010): <a href="http://www.xrysalogia.gr/mystiria.html">http://www.xrysalogia.gr/mystiria.html</a>.

Zinn H. 1980. A People's History of the United States: 1492-Present. HarperCollins: New York, NY.