THE OPEN SYSTEM AND TECHNOLOGICAL CIVILIZATION ALEXIS KARPOUZOS

The Philosophical Contribution of Kostas Axelos : The Issue of the Open System and Technological Civilization

Kostas Axelos (1924–2010) remains one of the most intriguing and underexplored figures in contemporary philosophy. His work, situated at the crossroads of Marxism, Heideggerian phenomenology, and the philosophy of technology, raises critical questions about the nature of modern civilization and the fate of thought in an increasingly technological world. One of the central academic issues in Axelos' thought is his concept of the "open system," which presents a radical alternative to both dialectical materialism and structuralism. This issue is especially relevant in our age of digital globalization and algorithmic governance, as it poses fundamental questions about the limits of human autonomy and the possibilities of thought in a technologically determined world.

The Open System: A Critique of Closed Philosophical Paradigms

Axelos' notion of the "open system" challenges traditional metaphysical and epistemological assumptions that rely on closure, determinacy, and finality. Unlike Hegelian dialectics, which seeks resolution through synthesis, Axelos proposes a dynamic, ever-unfolding process that resists totalization. His critique extends to Marxist orthodoxy, which he argues falsely assumes a teleological closure in history. By advocating an open-ended view of reality, Axelos aligns himself with thinkers like Nietzsche and Heidegger, emphasizing a world in flux rather than one governed by fixed structures or ultimate goals.

This issue raises critical academic debates: How can philosophical thought remain relevant in an era dominated by technological systems that impose rigid structures on human existence? Is the "open system" a viable framework for understanding contemporary globalized societies, or does it risk devolving into an abstract and impractical relativism?

For Axelos, closed systems—whether philosophical, political, or scientific—seek to impose rigid frameworks that ultimately stifle thought and creativity. He sees Western metaphysical traditions as largely obsessed with categorization and finality, which leads to an artificial separation between subject and object, mind and world, theory and practice. In contrast, his "open system" embraces indeterminacy and fluidity, recognizing that reality is in perpetual motion and that any attempt to fix meaning within rigid boundaries leads to intellectual stagnation.

Axelos' concept also engages with existentialist and phenomenological traditions, particularly in how it resists essentialist definitions of being. He challenges not only the dogmas of classical metaphysics but also structuralist tendencies that seek to analyze reality in terms of fixed codes and relationships. Instead, Axelos suggests that the world should be understood as a game (le jeu du monde), a process of continuous becoming where human existence is not predefined but rather shaped by the interactions of openended forces. This issue raises critical academic debates: How can philosophical thought remain relevant in an era dominated by technological systems that impose rigid structures on human existence? Is the "open system" a viable framework for understanding contemporary globalized societies, or does it risk devolving into an abstract and impractical relativism? Furthermore, how does Axelos' open system relate to contemporary discussions of complexity theory, cybernetics, and ecological thinking, all of which emphasize the interconnectedness and dynamism of systems?

A related issue in Axelos' work is his analysis of technological civilization. In Le Jeu du Monde (The Play of the World), he argues that technological advancement has not only transformed human existence but has also reshaped the very way we think and conceptualize reality. Technology, in Axelos' view, is not merely a tool but a fundamental mode of being that structures our world and thought processes.

This raises significant academic concerns about autonomy, alienation, and the role of philosophy. If technology governs human thought as Axelos suggests, can there be genuine freedom in intellectual and political life? How does one resist technological determinism without retreating into romanticized notions of pre-technological existence? Axelos does not advocate for a rejection of technology but rather calls for a new form of thinking that embraces its presence while resisting its totalizing tendencies.

Axelos highlights the paradox of technological civilization: while it offers immense possibilities for connectivity, knowledge production, and efficiency, it also risks

subordinating human creativity and autonomy to systemic logic. He critiques the way in which technology, rather than serving human purposes, increasingly dictates them—turning individuals into passive participants in a mechanized world. The dominance of algorithmic governance, artificial intelligence, and automation exemplifies the culmination of this technological destiny, raising profound concerns about the future of human agency.

Furthermore, Axelos' thought resonates with contemporary debates about digital culture, surveillance capitalism, and the commodification of knowledge. As digital technologies reshape the nature of labor, communication, and governance, the question arises: To what extent can individuals maintain authentic engagement with the world when technological mediation defines nearly every aspect of existence? In this sense, Axelos anticipates concerns found in posthumanist and critical media theories, particularly regarding the erosion of subjectivity in the face of ever-expanding cybernetic systems.

Another crucial aspect of Axelos' critique is the way in which technological civilization imposes a fragmented, instrumentalized view of knowledge. He challenges the reduction of thought to mere data-processing and the dominance of specialized, compartmentalized disciplines that fail to grasp the holistic nature of existence. By contrast, his open system philosophy encourages a mode of thinking that resists fragmentation and embraces a planetary perspective, one that acknowledges the interrelation of philosophy, science, politics, and art in an ever-evolving world.

Implications for Contemporary Philosophy and Critical Theory

Axelos' thought remains relevant in debates about globalization, artificial intelligence, and the future of democracy. His notion of the "open system" offers a critical lens through which to analyze the limitations of contemporary political and economic structures. However, his work also invites criticism: some scholars argue that his commitment to openness lacks concrete political implications and does not provide a clear strategy for resistance against the excesses of technological domination. Others contend that his synthesis of Marxism and Heideggerian thought is conceptually unstable, as it merges two traditions with fundamentally different ontological commitments.

Beyond these critiques, Axelos' work resonates with contemporary philosophical movements such as poststructuralism, posthumanism, and ecological thought. His emphasis on flux and becoming aligns with thinkers like Deleuze and Guattari, who reject

rigid ontological structures in favor of dynamic, interconnected realities. In this way, Axelos' open system challenges traditional notions of subjectivity, pushing philosophy towards a more fluid and process-oriented understanding of being.

Moreover, his insights into technological civilization anticipate contemporary discussions about automation, surveillance, and the erosion of democratic agency. With the increasing prevalence of algorithmic governance and artificial intelligence, the question of whether human decision-making is being supplanted by autonomous systems grows more urgent. Axelos' warnings about technological determinism thus serve as a philosophical call to rethink the balance between human agency and systemic technological forces.

His concept of play (le jeu du monde) also offers a compelling counterpoint to neoliberal rationality, which prioritizes efficiency and utility over creativity and spontaneity. By advocating a view of the world as an open-ended, evolving game rather than a system governed by rigid economic and political constraints, Axelos provides a critical framework for resisting the commodification of thought and culture.

Axelos' planetary thinking resonates with debates on globalization

One of the most pressing questions in contemporary philosophy is how philosophical thought can remain relevant in an era dominated by technological systems that impose rigid structures on human existence. Axelos' concept of the open system offers a potential answer by resisting closure and embracing a dynamic, ever-evolving engagement with the world. However, its applicability to modern globalized societies is an ongoing debate—does it provide a viable framework for understanding contemporary conditions, or does it risk devolving into an abstract and impractical relativism?

The increasing dominance of artificial intelligence, big data, and algorithmic governance has led to a form of epistemic closure, where knowledge is filtered, categorized, and processed through technological frameworks that prioritize efficiency and predictability. In such an environment, human thought risks becoming subordinated to instrumental rationality, reducing the space for critical reflection and creative engagement with reality. Axelos' open system, with its emphasis on flux, play, and becoming, resists this deterministic logic by advocating for a form of thought that remains adaptive, exploratory, and resistant to finality.

Yet, critics argue that an open-ended philosophy such as Axelos' risks falling into excessive abstraction, detaching itself from concrete socio-political struggles. If all structures are provisional and no fixed principles guide action, how can meaningful political and ethical commitments be maintained? This tension raises important

questions about the balance between openness and responsibility, between resisting closure and ensuring that philosophy retains its capacity to inspire concrete action and resistance against oppressive systems.

Moreover, Axelos' planetary thinking provides a useful lens through which to understand globalization not as a homogenizing force, but as an intricate web of interactions and exchanges. Rather than seeing global interconnectedness as a unidirectional process dictated by economic and technological imperatives, the open system encourages a multiperspectival approach that acknowledges diverse ways of being and thinking. In this sense, Axelos' philosophy offers a counter-narrative to neoliberal globalism, suggesting that true planetary thought must be rooted in a recognition of complexity, hybridity, and continuous transformation.

Time in the Thought of Kostas Axelos

Axelos' philosophy of time presents a radical rethinking of temporal existence, challenging both deterministic and cyclical models while offering an alternative rooted in play, becoming, and openness. His critique of technological civilization highlights the dangers of an instrumentalized temporality, while his concept of the world as play allows for a more fluid and dynamic engagement with time. By positioning time within an open system, Axelos contributes to contemporary debates in philosophy, offering a vision of temporality that is neither constrained by rigid structures nor dissolved into mere relativism. His thought remains a crucial resource for those seeking to understand the complex interplay between time, technology, and human existence in an ever-changing world.

Time Beyond Linear and Cyclical Models

Axelos critiques conventional conceptions of time, particularly the dichotomy between linear and cyclical models. The linear conception, dominant in Western metaphysics and historical materialism, views time as a progression towards a definite end—whether it be the realization of absolute knowledge (Hegel) or the culmination of historical struggle (Marx). The cyclical model, often associated with ancient cosmologies and Nietzsche's notion of eternal recurrence, posits a repetitive, self-renewing structure of time. Axelos, however, resists both formulations, arguing instead for a view of time as an open and dynamic process that does not culminate in a fixed telos nor endlessly repeat itself in an identical manner.

For Axelos, time is an essential aspect of the play of the world, an unfolding process that is neither wholly determined nor entirely arbitrary. This perspective challenges deterministic views of history while also avoiding the pitfalls of a purely relativistic or chaotic temporality. The world, in its perpetual becoming, is not governed by a final cause but remains an open field of possibilities, constantly shifting and evolving in unpredictable ways.

Time and the Technological Civilization

A central aspect of Axelos' philosophy of time is its relationship with technological civilization. In Le Jeu du Monde, he reflects on how modern technological systems impose rigid temporal structures on human existence, transforming time into a quantifiable and instrumentalized entity. In contrast to the organic and fluid understanding of time that he advocates, technological rationality seeks to regulate and control time, reducing it to an economic and productive resource.

Axelos warns that this instrumentalization of time risks alienating humanity from a more authentic experience of being. In a world dominated by technological systems, time becomes fragmented, compartmentalized, and subordinated to efficiency and utility. His critique echoes Heidegger's analysis of modernity, where technology enframes existence, restricting alternative ways of engaging with time and being.

Play, Becoming, and the Temporality of Thought

In contrast to the rigid structures imposed by technological civilization, Axelos proposes a concept of time that aligns with his broader idea of play. Time, like the world itself, is in a constant state of flux and transformation. This perspective emphasizes becoming over being, movement over stasis, and indeterminacy over fixed certainties.

The notion of le jeu du monde suggests that time should not be conceived as a mere backdrop against which events unfold but as an active participant in the unfolding of reality. The playful nature of time allows for novelty, creativity, and the emergence of unforeseen possibilities. This view resonates with existentialist and phenomenological accounts of temporality, particularly those of Heidegger and Merleau-Ponty, yet Axelos departs from them by emphasizing the planetary and cosmic dimensions of time.

Primary Works by Kostas Axelos

- 1. **Axelos, Kostas.** *Le Jeu du Monde* (1969). Paris: Éditions de Minuit.
 - One of his most influential works, exploring the philosophical notion of the world as play.
- 2. **Axelos, Kostas.** Vers la Pensée Planétaire (1964). Paris: Éditions de Minuit.
 - Discusses the concept of planetary thinking, linking philosophy, technology, and globalization.
- 3. **Axelos, Kostas.** *Marx, penseur de la technique* (1961). Paris: Éditions de Minuit.
 - o Examines Karl Marx's thoughts on technology and its role in human history.
- 4. **Axelos, Kostas.** *L'Errance Érotique* (1992). Paris: Éditions Galilée.
 - o A philosophical meditation on love and wandering.
- 5. **Axelos, Kostas.** *Métamorphoses* (1991). Paris: Éditions Galilée.
 - o Reflections on change, transformation, and thought.
- 6. **Axelos, Kostas.** *Héraclite et la Philosophie* (1962). Paris: Éditions de Minuit.
 - o A study of Heraclitus and the relevance of his philosophy to modern thought.
- 7. **Axelos, Kostas.** *Contribution à la logique* (1977). Paris: Éditions de Minuit.
 - o Investigates the structure of logic and its philosophical implications.
- 8. **Axelos, Kostas.** *La Pensée Radicale* (1976). Paris: Éditions de Minuit.
 - Explores radical thinking in philosophy and its consequences.

Secondary Literature on Kostas Axelos

- 1. **Arvanitakis, Emmanuel.** *Kostas Axelos: De Marx à la Pensée Planétaire* (2011). Paris: L'Harmattan.
 - o An analysis of Axelos' transition from Marxism to his later philosophy.
- 2. **Stavrakakis, Yannis.** *The Lacanian Left: Psychoanalysis, Theory, Politics* (2007). Edinburgh: Edinburgh University Press.
 - o Discusses Axelos' influence on political thought, particularly in relation to post-Marxism.
- 3. **Smith, Gregory B.** *Between Marx and Heidegger: Kostas Axelos and the Philosophy of the World* (2018). New York: Routledge.
 - o A study of Axelos' philosophical synthesis of Marxism and Heideggerian thought.
- 4. **Negri, Antonio & Hardt, Michael.** *Empire* (2000). Cambridge: Harvard University Press.
 - Though not exclusively about Axelos, this work references his ideas on planetary thought in the context of globalization.
- 5. **Derrida, Jacques.** *Writing and Difference* (1978). Chicago: University of Chicago Press.
 - o Engages with Axelos' ideas in relation to deconstruction and the philosophy of difference.

Works by Kostas Axelos

- 1. **Axelos, Kostas.** *Le jeu du monde.* Paris: Minuit, 1969.
- 2. **Axelos, Kostas.** *Vers la pensée planétaire.* Paris: Minuit, 1964.
- 3. **Axelos, Kostas.** *Marx, penseur de la technique.* Paris: Minuit, 1961.
- 4. **Axelos, Kostas.** *Héraclite et la philosophie.* Paris: Minuit, 1962.
- 5. **Axelos, Kostas.** *Métamorphoses du jeu: La société, l'art et le jeu.* Paris: Minuit, 1982.

- 6. **Axelos, Kostas.** *Contribution à la logique.* Paris: Minuit, 1977.
- 7. **Axelos, Kostas.** *Problèmes de l'enjeu.* Paris: Minuit, 1979.
- 8. **Axelos, Kostas.** *Langages et ethos.* Paris: Minuit, 1990.
- 9. **Axelos, Kostas.** *Ce qui advient.* Paris: Minuit, 1992.
- 10. **Axelos, Kostas.** *Notions sur l'errance planétaire.* Paris: Éditions de la Différence, 2004.

Works About Kostas Axelos

- 1. **Frédéric, Monferrand.** Kostas Axelos: Une vie en fragments. Paris: Fayard, 2022.
- 2. **Vallier, Robert.** "Play and the World: The Legacy of Kostas Axelos." *Research in Phenomenology* 40, no. 3 (2010): 355-379.
- 3. **Milios, John.** "Marx, Technology, and the Globalization of Thought: On Kostas Axelos' Interpretation of Marx." *Science & Society* 70, no. 3 (2006): 378-395.
- 4. **Simons, Massimiliano.** "Kostas Axelos and the World-Play: Technology, Cybernetics, and the Planetary Thinking." *Continental Philosophy Review* 52, no. 3 (2019): 377-398.
- 5. **Berndtson, Erkki.** *Kostas Axelos: Philosopher of the Open Horizon.* Helsinki: University of Helsinki, 2011.