

# Chance between passivity and control: The post-humanist ethics of Xenakis, Cage, & Lyotard

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Proceedings of the Xenakis International Symposium  
Southbank Centre, London, 1-3 April 2011 - [www.gold.ac.uk/ccmc/xenakis-international-symposium](http://www.gold.ac.uk/ccmc/xenakis-international-symposium)

Though much has already been written on the relationship between Iannis Xenakis and John Cage, in this paper I contribute to this discussion by arguing that their parallel adoptions of chance—whether Zen-cum-“anarchical” as in Cage, or mediated and controlled through the scientific method as in Xenakis—represent a response to a common intellectual phenomenon. This is the apparent exhaustion of humanistic ethics and all of its attendant notions: subject-object dualism, the primacy of the ego and dialectics, and anthropocentrism. A fundamental dissatisfaction with humanistic subjectivity was also the essential preoccupation of philosopher Jean-François Lyotard, a thinker noted for producing some of the most incisive commentaries on contemporary music in recent years. Particularly pertinent in this context is Lyotard’s longstanding focus on the ethical realm, which he saw as more important than ever given recent anti-humanistic philosophy’s rejection of foundationalism. I demonstrate that Cage and Xenakis were unique among composers of their generation in also refusing to lose sight of this same concern. Yet while both composers go very far in dissolving subjectivity and the self-propriety of reason by following what is akin to a Lyotardian aesthetics/ethics of the sublime, each also makes compromises on the extent to which they ask their listeners to passively submit to an Other of reason. From a humanistic perspective, such a move appears little more than “enslavement” to an amorphous, ungovernable “nature”. Lyotard, however, follows Emmanuel Levinas by arguing that this is actually a fundamentally ethical act insofar as it requires an obligation prior to any *post facto* rationalization. Though Xenakis and Cage both reject traditional political praxis, they remain partially unsatisfied with this extreme “ethical” alternative and its apparent dangers, and in spite of themselves, they ultimately admit of some of the reflective politics which they appear to disdain.

The nature of Iannis Xenakis’ relationship with humanism and its various anthropomorphic perspectives remains an open question. In particular, subject to considerable debate are the precise coordinates of his position *vis-à-vis* humanistic ethics’ radical mid-century reassessment among Western intellectuals in the wake of the Second World War. In large part, this ambiguity can be chalked up to the coexistence of seemingly contradictory tendencies in Xenakis’ creative practice. On the one hand, his far-reaching knowledge of quantum physics and chaos theory, manifested compositionally by means of stochastic procedures and game theory, reflect a mind profoundly doubtful of the continued validity of all “man as the measure of all things” ideologies. This is why Nouritza Matossian posits Xenakis as the first musical Copernican, whose work “removed the anthropocentric vision of the universe” (1986: 244). Yet at the very same time, with his heart in the world of Greek antiquity, Xenakis’ faith in the power of reason and scientific inquiry rarely wavered. As a result, a certain epistemological foundationalism can be seen to undergird all of his mature creative efforts, and it is here where the suggestion that Xenakis’ work was that of “a profound humanist” (Kanach 2003: 154, Sutherland 1994: 88) has its primary origin. In spite of it all, Xenakis refused to cede entirely the jurisdiction traditionally given by the institution of authorship. Hence his oft-quoted maxim, “chance needs to be controlled” (1992: 38), which captures both sides of this outwardly paradoxical coin.

Written in response to the work of John Cage, Xenakis’ statement of polemical intent has served, with particular reference to their divergent working methods, to emphasize the apparent gulf separating the two figures. But what is most significant from a global standpoint about their relationship is rather what they share in common, which is this: the trait, rare among Western artists, of having few qualms in “professing passivity as the way out of the death of the subject” (Williams 2000: 65). As embodiments of such an attitude toward aesthetic experience, these two *oeuvres* represent, first and foremost, closely related responses to the same intellectual phenomenon—the exhaustion of humanism. Xenakis thus admired the extent to which Cage’s entire *raison d’être* was the mapping out of humble alternatives to the more absolutist residues of Enlightenment rationalism. Even if he could not follow him to his more extreme conclusions, Xenakis “respected” what he called Cage’s state of “permanent anxiety” (Silverman 2010: 287), for Cage was eager and willing to tackle the

question of the subject head-on in a manner that even his most progressive colleagues were unwilling to countenance.

Compare Matossian's portrayal of Xenakis with critic N. Katherine Hayles' gloss on the Cagean project as an attempt to "subvert the anthropomorphic perspective that constructs continuity from a human viewpoint of control and isolation" (1994: 228). It is here, with regard to the control presupposed by the scientific method, where the two men most meaningfully part ways. Yet when viewed synoptically, this divergence only suggests that there exist a wide variety of strategies for disarming traditional notions of subjectivity. If Xenakis' means of bypassing authorship as the mere self-sufficient conduit of human communication were otherwise than anarchy, this did not preclude them from proposing an equally novel solution to the question of passivity. This is why Xenakis can criticize Cage's "freedom ... of intuition" as a "partial" solution (Varga 1996: 56), because "freedom ... means total responsibility" (1987: 22). Cage's methods are "an act of resignation" (1992: 38), disappointing in ethical terms above all else. To say, then, that Xenakis was a humanist who could not abide humanism, a creator who insisted on partially controlling passive forces, is not necessarily a contradiction in terms. This is why he could assert that "the finest of the wonders of the world is Man" (Bois 1967: 19) and approvingly cite Milan Kundera's diagnosis of his music as an antihumanist attack on "emotional filth" (1987: 48).<sup>1</sup>

Taking as fundamental the assumption that on at least some level, both Xenakis and Cage exhibit a dissatisfaction with humanism, it is this divergence in the ethical import of their respective *oeuvres*, hitherto ignored, upon which I will focus. Before embarking on this discussion, however, it will be helpful to give a sketch of the way in which Xenakis' work in particular problematizes subjectivity. Cage's passive tendency is well known, manifested in indeterminacy and his openness to "no matter what eventuality" (1961: 35). Defusing the ego and its arbiters "quality" and "interest", a path is thus cleared to a "non-dualistic" state with "a multiplicity of centers" (36) irreducible to subject and object poles. In a telling exchange with Daniel Charles, Cage notes that he is not "dealing with the 'subjectivity' of Western philosophers, which always needs 'objects' ... [but rather] with what each person is in the depths of himself: a Self, not reducible to an ego ... something which comes much before that and ... allows that 'subjectivity' to be produced" (1981: 234). Much the same, it seems, can be said for the effect of Xenakis' annulment of the ego's self-possession. Thus Sander Van Mass observes that in "playing down the role of both musical subjectivity and objectivity," Xenakis "inspires a shift of attention towards processes that 'precede' this bifurcation" (2005: 68).

How does Xenakis achieve this? As we know, his work appeals to natural "forces"—masses, swarms, and formations. His music is precisely calculated to elicit adjectives such as "monumental" (Halbreich 2003: 19), "torrential" (Olivier Messiaen, quoted in Van Maas 2005: 68), and "primordial" (back matter, Varga 1996). Like these forces, Xenakis contends, music cannot be reduced to a matter of communication. This is because, as he puts it, it is rather "like a highly complex rock ... that can be interpreted in a thousand ways without a single one being the best or the most true ... [a] multiple exegesis" (1987: 32). Apprehension of such a composition is thus an infinite, interminable task. It is for precisely this reason that a certain fatalism, seemingly foreign to Cage, prevails in Xenakis' approach. For Xenakis, subjectivity can be assumed, but only with the stipulation that it be taken as absolutely inconsequential. Here, the subject is humbled, held entirely in thrall by entities far exceeding its lowly grasp. In the moments of awe-struck disappropriation which Xenakis so tirelessly pursues, the mind is enslaved at the foot of that which it cannot begin to comprehend. Problematizing the subject through the beyond of reason, Xenakis searches for what he describes as "abysses [which] are unknowable, that is to say, knowledge of them is an eternal and desperate flight" (32).

Xenakis' novelty, as Olivier Revault d'Allonnes once observed, rather lies in his conviction that all of this must be approached without nostalgia (cited in Bidima 2004: 187). His anti-totalizing tendencies come most strongly to the fore here and in works such as *Terrekektorh*, in his rejection of a "tragic" attitude toward the impossibility of a unified, wholly ordinary ground of experience. At least here, Xenakis' is without doubt a poetics of the sublime, understood in the Kantian sense of a discrepant, contradictory feeling occurring in relation to objects which are for reasons of scale, magnitude, or incommunicability, "absolute". Reason, battered by that for which it can have no corresponding presentation, experiences pain on the occasion of this impotence: it cannot think through the object with which it is faced. Xenakis' "rock

formations", with their infinite traversals, no combination of which can synthesize the whole, capture this precisely. But at the very same time, in the sublime encounter, the mere fact that the mind can rationalize this aborted experience at all gives rise, paradoxically, to a sense of hope in regard to reason's boundless potential.

The sublime is implicit in Xenakis' writings under the category of "revelation", which he defines, precisely, as a moment of "pain, or on the contrary ... joy, or the two together" (1985: 32). It is hardly fortuitous, then, that when discussing the topic in his thesis defense, Olivier Messiaen describes Xenakian "revelation" as "like a thunderbolt" (33). This was one of the favorite imagistic metaphors of philosopher Jean-François Lyotard, who among contemporary thinkers did the most to revive and revise Kant's ideas on the sublime. Thus Lyotard speaks of a "sublime violence [which] is like lightning," a "thunderbolt" which "short-circuits thinking with itself," creating a situation in which "the teleological machine explodes" (1991: 54-55). It is a singularity that, at least temporarily, stands outside of cognitive systematization. Insofar as self-propriety hinges on reason, the sublime is not subject to control. It admits solely of a passive attentiveness to the present in which the ego has not yet had the opportunity to assert itself. Xenakis' work, described by Lyotard as aural "hypersensitization" (1973: 105), is thus ground zero for a conception of the sublime in which a passive receptivity towards sensibility, as the other of reason, necessarily leads to the weakening, even dissolution, of the bonds of the subject's propriety. Yet in order for all this to be the case, Lyotard's take on Kant must necessarily downplay the second moment of the sublime, the productive joy which is a byproduct of the mind's creative capacity. Whether this is a move Xenakis would sanction is a question I will address presently.

For the moment, however, what I want to insist upon is that a certain part of Xenakis surrenders the listening subject to the dictates of forces outside itself no less strongly than does Cage. As described by Charles, this entails a "blurring of the classical oppositions between art and nature ... [and] the division between the *esthetic* and the *artistic*" (1965: 164, 165), a trend designated as "anti-" or "an-aesthetic". Irrespective of whether this move has a mystical valence, as in Cage, or techno-rationalist connotations as with Xenakis, on this count their music speaks jointly of a universe in which human criteria—those of beauty, judgment, and even ethics—are, though in nowise eliminated, disenfranchised and humbled. This is not meant to disqualify both artists' revolutionary impulses. Yet these latter do necessarily make for strange bedfellows with their passive aesthetic strategies. If the endpoint of Xenakis and Cage's work is a cutting down to size of humanistic moral notions, neither appear able to maintain the slightest ethical base on which can be grounded a revolutionary praxis as commonly understood.

The way in which each attends to this ethical vacuum is of the utmost importance. This may seem a peculiar assertion, given the routine exclusion of ethical considerations from most discussions of aesthetics. Yet both Cage and Xenakis were unique among composers of their day in being highly alert to such concerns. Paradoxically, however, Cage's strategies for bypassing subjectivity, what art critic Moira Roth designates the "aesthetic of indifference" (1998: 33), led him more often than not to radically apolitical conclusions. This was a stance Charles, in spite of his longstanding admiration for Cage, did not hesitate to question, musing that Cage seems to "maintain a fatalism ... to whatever happens," an "inhuman attitude" (in Cage 1981: 95). Tellingly, this was one of the very few critical glosses of his work for which Cage did not have a satisfactory rejoinder. As a matter of course, though, nearly all of the twentieth century artists and thinkers who forged detours around the credos of humanism faced such difficulties. Hence, for example, the steady stream of denunciations of French poststructuralism by liberal intellectuals as so much reactionary "relativism" hastening a return to the politics of 1930s Europe. Little wonder, then, that one of Pierre Boulez's fiercest attacks on Cage reads in just such terms, with Cage's "an-aesthetic or anti-aesthetic programme" disparaged as a "passive acceptance of what is; it is a concept of [surrender]" with "anti-social implications ... a pretext for becoming a closed society with fascist tendencies" (Nattiez 1993: 23).<sup>2</sup>

For his part, Cage was always quick to argue that his attitudes did not at all entail self-loathing, observing that if he "find[s] nature far more interesting than any of man's controls of nature [t]his does not imply that I dislike humanity" (1961: 194). Yet in spite of Cage's objections, such criticisms doggedly persisted, and they caused him in his later years to tweak

his aesthetic outlook from one of passive non-intervention to a selectively active environmentalism. As critic George J. Leonard puts it, precipitated by a crisis of conscience, this move risks "seem[ing] a complete reversal of the younger Cage's Eastern contemplative, aestheticized quietism" (1994: 180). It is why Cage, in another rare moment of uncertainty, could muse that "it may seem ... that through the use of chance operations I run counter to the spirit of ... revolution" (1979: 5). Cage, it appears, is forced into an uncomfortable compromise, a shift that at least in part accounts for his return to "proper" composition in the last ten to fifteen years of his life.

In contrast, Xenakis only ever experienced such censure on a more oblique level. An example of this, perhaps, can be seen in the reactions to his work of early audiences, which he described as "believing [themselves] assaulted, violated, duped, or dumbfounded by an astonishing persecution complex" (Bois 1967: 9). As a result, and unlike Cage, he never had to make an extreme conceptual about-face on this count. This is precisely because a solution to the problem of ethics was built into his creative project from the start, by way of his definition of chance, his *partial* passivity. Xenakis once asserted that "we can only simulate chance, and to do so, we must either be mad, or children, or make extraordinarily complicated calculations" (Halbriech 2003: 21). If these are three of the most visible thematic tropes of the post-humanist movement—madness, childhood, and contemporary science—Cage, for his part, always tended towards the former two, in spite of his interest in the *I Ching* and computers. Where Xenakis differs is that his exclusive use of intricate computations—he largely, though not entirely, rejects the other two options—does not appear to throw out the baby of just action with the bathwater of subjectivity. One need not be insane or without language to use a calculator. Xenakis always insisted that the sublime moment of "revelation" was only one component of the creative process, one to be used in tandem with control and the exercise of authorial selection.

Xenakis adhered to this stance in even his most optimistic moments. If he once observed, praising Cage, that "to destroy consciousness and let the deeper strata of the psyche emerge in unreasoned acts is a fascinating thing," he could never allow this to go without the caveat that such an experiment must be put to work to "produce the integration of conscious and subconscious reason into a harmonious whole" (quoted in Charles 1965: 144). Cage, on the other hand, would never accept this final synthesizing move. Such an eleventh hour reappearance of dialectics would have been the ultimate betrayal. Insofar as this is the case, Cage and Xenakis thus appear to represent two antipodes of the Lyotardian sublime. Cage represents the most extreme formulation, in which the sublime remains permanently outside systematization and rational calculation. Xenakis' sublime, on the contrary, maintains the possibility of a feedback loop between reason and the sublime, in a more traditional Kantian sense. This is the sense in which I would like to read his rejection of Cage's "romanticism, with [its] worship of action" (Bois 1967: 10). Instead, Xenakis asserts, "there is no reality outside humanity" (15), no Utopia to be forged out of the sublime moment. It is for this reason, finally, that Xenakis asserts that "the intuition of Cage" is a "dangerous ... mystico-romantic[ism] ... which agitates ignorant souls" (Revill 1992: 175). Yet none of this really forestalls an even more fundamental question about Xenakis' tactics: by tempering passivity with control, in harnessing the sublime by the rational ego, does he not irrevocably undercut the former's entire positive force, constraining himself into a position of compromise much the same as Cage's?

Relevant here once again are Lyotard's insights. If Lyotard was far from alone in searching for alternative horizons to humanistic thinking, he was unique among French intellectuals of his generation in refusing, virtually from the start, to lose sight of the problem of justice in view of the overhaul of subjectivity. This is Lyotard's singular value as a philosophical resource, and it is where he converges with Cage and Xenakis, in the seemingly impossible project to discount foundationalism without having to forgo the possibility of just ethical action. It is also why with his friend Charles, Lyotard was another of Cage's very earliest French critical interlocutors, recognizing the patently "ethical aspect" (1988: 20) of the American's work. As one critic helpfully puts it, Lyotard's brand of "anaesthetics" were always conceived of as a species of "negotiations between ethics and aesthetics" (Glowacka 2007: 62).

Lyotard was himself no stranger to accusations of fatalism. Such was the nature of the "postmodern" sublime, perhaps the central stratagem in his post-humanist playbook. Insofar

as the sublime trumps and shows up reason, it is the occasion for what Lyotard calls a "humiliated and disqualified reality" (1988b: 12). As a result, the onlooker becomes "dependent on the sensible, thus violated, humiliated ... enslave[d]" (1993: 243). Because the limits of reason are brutally exposed by the sublime experience, the subject's hubris and humanistic ideas of control are disarmed. This, and not any sort of sadism, is the sense in which Lyotard uses the word "humiliated": "the question of 'passivity' is not the question of slavery, the question of dependency not the plea to be dominated" (1974: 61). Yet this relation to experience is almost entirely foreign to the modern West. Thus Lyotard notes that "if sense belongs to the dialectic of the self, the [passive] event of the other turns it into non-sense" (1983: 110). As Lyotard must take repeated pains to make clear, the aesthetic of passivity can only be deemed an enslavement from a perspective which already presupposes the validity of humanism. Rebutting both Boulez's as well as his own critics' "straw man of fascism,"<sup>3</sup> he maintains that they "always confuse [submission to] power and [openness to] force" (1974: 30), not realizing that "obedience is one thing, the feeling of obligation or respect is something else" (1983: 121).

What is this "feeling of obligation" Lyotard detects in the products of anaesthetics? No less than Xenakis, Lyotard disdains the attempt to reduce art to a matter of communication. Both describe the creative enterprise with the metaphor of a "message in a bottle" (Lyotard 1974: 255, Lyotard & Thébaud 1979: 5, Varga 1996: 211). If, as Lyotard has it, the passive experience requires us not to prejudge whatever happens, we are in the position of an ethical command which "is not a bit of information" (1983: 111). Not prejudging this "obligation [which] is immediate, prior to any intellection" (111), we do not even know if it is an *I* commanding us. As a result, "obligation alienates the ego: it becomes the you of an absolutely unknowable other" (115). In conjunction with the sublime, as Lyotard has it, creative work "is witness to the fracturing of the I, to its aptitude for hearing a call" (113). Unmistakable here is the influence of the ethical thought of Emmanuel Levinas. Tellingly, Xenakis is one of the few composers to appear by name in Levinas' work, where he cites *Nomos Alpha* as resisting "misleading anthropomorphism" (1998: 41). In any case, what is important here is the total incompatibility between passive obligation and the active ethics of anthropomorphism. For humanism, Lyotard writes, the former is "a scandal" insofar as "the one who is obligated [is] deprived of the 'free' use of oneself" (1983: 109). If, as Levinas has it, "passivity is ... opposed to the imperialism of consciousness open upon the world" (1998: 92), it must necessarily forgo all the trappings of the latter's morality.

As we have seen, in their actions if not necessarily in their words, both Xenakis and Cage exhibit a discomfort with the position of being wholly "hostage" to the Other of ethics, or what Jacques Rancière, forcefully denouncing Lyotardian anaesthetics, calls its tendency "to prostrate [art] before the indistinction of ethics" (2009: 87). From a philosophical standpoint, the problem with Xenakis' and Cage's compromises resides in the fact that heeding a Levinasian ethical call is an all-or-nothing enterprise. Once the certainties of anthropomorphism are discarded, one must, it seems, trade in politics for ethics. Both Cage and Xenakis can affirm that they find traditional politics to be bankrupt. Yet insofar as the two men are not mystics by trade—they do not pursue a negative theology—their discomfort with the ultimate implications of their passive tendencies belie this to a significant degree. This should not, however, be read as a "failure" on either composer's part. Even Lyotard, who is like Xenakis at heart an eminently unromantic thinker, would assert that in practice a complete and total obligation to the Other is impossible (1988d: 33-38). Ultimately, their "failure" on this count is their signal achievement, an anti-humanism which "manifests to [the human] community the lack of humanity it is suffering from, and which calls on it to become more human" (1988d: 4). This is the sense, finally, in which we can understand Xenakis' seemingly conflicted anti-humanism: reinstating the "humility" in "humanism".

## References

Bidima, Jean-Godefroy. 2004. "Music and the Socio-Historical Real: Rhythm, Series and Critique in Deleuze and O. Revault d'Allonnes". In *Deleuze and Music*, eds. Ian Buchanan & Marcel Swiboda, 176-195. Edinburgh: University of Edinburgh Press.

Bois, Mario. 1967. *Iannis Xenakis: The Man and His Music*. London: Boosey & Hawkes.

- Boulez, Pierre. 1975. *Par volonté et par hasard: entretiens avec Célestin Deliège*. Paris: Éditions du Seuil. *Conversations with Célestin Deliège*. London: Eulenberg, 1976.
- Cage, John. 1961. *Silence: Lectures and Writings*. Middletown, Conn.: Wesleyan University Press.
- Cage, John. 1979. *Empty Words: Writings, '73-'78*. Middletown, Conn.: Wesleyan University Press.
- Cage, John. 1981. *For the Birds: In Conversation with Daniel Charles*. London: Marion Boyars.
- Charles, Daniel. 1965. "Entr'acte: 'Formal' or 'Informal' Music?". *The Musical Quarterly* 51/1: 144-165.
- Glowacka, Dorota. 2007. "Lending an Ear to the Silence Phrase: Lyotard's Aesthetics of Holocaust Memory". In *Minima Memoria: In the Wake of Jean-François Lyotard*, eds. Claire Nouvet, Zrinka Stahuljak, & Kent Still, 49-66. Stanford, Calif.: Stanford University Press.
- Halbreich, Harry. 2003. "Iannis Xenakis: Chamber Music (1955-1990) for Strings, Piano, Strings and Piano". In *Iannis Xenakis: Chamber Music, 1955-1990*, 18-25 [CD booklet] (MO782137). Paris: Naïve Records.
- Hayles, N. Katherine. 1994. "Chance Operations: Cagean Paradox and Contemporary Science". in *John Cage: Composed in America*, eds. Marjorie Perloff & Charles Junkerman, 226-241. Chicago, Ill.: University of Chicago Press.
- Kanach, Sharon. 2003. "The Writings of Iannis Xenakis (Starting with *Formalized Music*)". *Perspectives of New Music* 41/1: 154-166.
- Kundera, Milan. 2010. *Encounter*. Trans. Linda Asher. London: Faber and Faber.
- Leonard, George J. 1994. *Into the Light of Things: The Art of the Commonplace from Wordsworth to John Cage*. Chicago, Ill.: University of Chicago Press.
- Levinas, Emmanuel. 1998. *Otherwise than Being, or Beyond Essence*. Trans. Alphonso Lingis. Pittsburgh, Penn.: Duquesne University Press.
- Lyotard, Jean-François. 1984. *Driftworks*. Ed. Roger McKeon, trans. Roger McKeon, et al. New York: Semiotext(e), [1973].
- Lyotard, Jean-François. 1993. *Libidinal Economy*. Trans. Iain Hamilton Grant. London: Continuum, [1974].
- Lyotard, Jean-François. 1988. *The Differend: Phrases in Dispute*. Trans. Georges Van Den Abbeele. Minneapolis, Minn.: University of Minnesota Press, [1983].
- Lyotard, Jean-François. 1988a. *The Inhuman: Reflections on Time*. Trans. Geoffrey Bennington & Rachel Bowlby. Cambridge: Polity Press, [1991].
- Lyotard, Jean-François. 1988b. *The Postmodern Explained: Correspondence 1982-1985*. Trans. Don Barry, et al. Minneapolis, Minn.: University of Minnesota Press, [1993].
- Lyotard, Jean-François. 1988c. *Peregrinations: Law, Form, Event*. New York: Columbia University Press.
- Lyotard, Jean-François. 1988d. *Heidegger and 'the jews'*. Trans. Andreas Michel & Mark Roberts. Minneapolis, Minn.: University of Minnesota Press, [1990].
- Lyotard, Jean-François. 1991. *Lessons on the Analytic of the Sublime: Kant's 'Critique of Judgment' §§23-29*. Trans. Elizabeth Rottenberg. Stanford, Calif.: Stanford University Press, [1994].
- Lyotard, Jean-François. 1993. *Postmodern Fables*. Trans. Georges Van Den Abbeele. Minneapolis, Minn.: University of Minnesota Press, [1997].
- Lyotard, Jean-François & Jean-Loup Thébaud. 1979. *Just Gaming*. Trans. Wlad Godzich. Minneapolis, Minn.: University of Minnesota Press, [1985].
- Matossian, Nouritza. 1986. *Xenakis*. London: Kahn & Averill.
- Nattiez, Jean-Jacques. 1993. "Introduction. Cage and Boulez: A Chapter of Music History". In Pierre Boulez & John Cage. *The Boulez-Cage Correspondence*, ed. Jean-Jacques Nattiez & trans. Robert Samuels. Cambridge: Cambridge University Press.
- Rancière, Jacques. 2009. *Aesthetics and its Discontents*. Trans. Steven Corcoran. Cambridge: Polity.
- Revill, David. 1992. *The Roaring Silence. John Cage: A Life*. New York: Arcade Publishing.
- Roth, Moira. 1998. *Difference/Indifference: Musings on Postmodernism, Marcel Duchamp and John Cage*. Amsterdam: GB Arts International.

- Silverman, Kenneth. 2010. *Begin Again: A Biography of John Cage*. New York: Knopf.
- Sutherland, Roger. 1994. *New Perspectives in Music*. London: Sun Tavern Fields.
- Van Maas, Sander. 2005. "The Xenakian Fold". *International Symposium Iannis Xenakis. Conference Proceedings*, eds. Anastasia Georgaki & Makis Solomos, 67-71. Athens: University of Athens Press.
- Van Maas, Sander. 2008. "Intimate Exteriorities: Inventing Religion Through Music". In *Religion: Beyond a Concept*, ed. Hent de Vries, 750-771. New York: Fordham University Press.
- Varga, Bálint András. 1996. *Conversations with Iannis Xenakis*. London: Faber & Faber.
- Williams, James. 2000. *Lyotard and the Political*. New York: Routledge.
- Xenakis, Iannis. 1985. *Arts/Sciences: Alloys. The Thesis Defense of Iannis Xenakis*. Trans. Sharon Kanach. New York: Pendragon Press.
- Xenakis, Iannis. 1987. "Xenakis on Xenakis". Trans. Roberta Brown & John Rahn. *Perspectives of New Music* 25/1-2: 16-63.
- Xenakis, Iannis. 1992. *Formalized Music: Thought and Mathematics in Composition*. Rev. ed. Stuyvesant, N.Y.: Pendragon Press.

## Notes

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<sup>1</sup> See Kundera's original: "The moment could come (in the life of a man or of a civilization) when sentiment (previously considered a force that makes man more human and that relieves the coldness of his reason) is abruptly revealed as the 'superstructure of brutality' .... The world of noises in Xenakis's works became beauty; beauty washed clean of affective filth, stripped of sentimental barbarity" (2010: 77-78).

<sup>2</sup> Boulez's original is *une conception d'abandon* (1975: 111). Nattiez translates this as "abandonment"; I follow the translation in Boulez 1976: 85 and use the more evocative "surrender".

<sup>3</sup> Translator Iain Hamilton Grant uses the more literal "scarecrow"; I substitute "straw man", in accordance with Lyotard's sense.