# Fragments on Xenakian pianism

Πιο θαρραλέοι πλησίαζαν την άκρη του νερού, το ψηλαφάν ευλαβικά με τις παλάμες. Το μελετούν με εκείνα τα αρχαία μάτια των τρελών κι απάγγελναν ορισμούς για το νερό.

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## Introduction

Despite its canonical status in contemporary music, Iannis Xenakis' work retains a primordial quality difficult to put in words. His works are increasingly accessible in concert, recordings, through online interactive platforms, as part of conservatory and university curricula, and yet: they still make us question the ways in which we play, listen, experience and make sense of music in general. They constitute an umbilical cord to the existential abyss of the pre-Socratic philosophy he so much cherished, never compromising their overwhelming sensorial energy with discursive meanders or theoretical constructions. Echoing the opening epigram by the Greek novelist Giorgos Cheimonàs, one could say that they courageously approach a natural limit and attempt to grasp the ungraspable, like "ancient madmen reciting definitions for the water".

One potential reason for the dark youth of this music might lie in the fact that it lives in multiple domains, masterfully decoupled from each other: the notes on paper are more often than not a transcription of elaborate calculations by hand and of graphic sketches drawn on the architect's table. These transcriptions are explicitly or implicitly disembodied, often defying by design the biomechanics of the human body or the mechanics of instruments in performance. They invite performers to take initiatives, make priorities and alchemically transform the symbols into unprecedented sonorous acts. These acts are transmitted to the listener, making palpable the rifts between conception, composition and performance.

Another reason for his music's relevance today might lie in the ways music mediation has changed since Xenakis' times: The democratization of online technologies in cognitive capitalism may allow for easier access to mediations such as recordings and videos, but the ritual dimension of this music and its reliance on the physicality of presence can hardly be fully captured. Thus, recordings and live performances occupy non-fungible territories, rendering the live experience of Xenakis' music desired even in (post-)pandemic times. Musicology has equally adapted its methods to such changes, through an increased focus on embodiment and technologies for the study of the performative act; however, there always are elements that escape computation and analysis.

In what follows, I provide a personal account of my performance experience of Xenakis' four mature solo piano works: *Mists* (1980), *Herma* (1961), *Evryali* (1973) and à r. (*Hommage* à Ravel) (1987). Rather than presenting them in the chronological order of their creation, I do so in the light of my own

<sup>1 &</sup>quot;More courageous ones approached the edge of the water, feeling it devoutly with their palms. They study it with those ancient eyes of madmen reciting definitions for the water". Giorgos Cheimonàs (2005), *The Builders*. Athens: Kastaniotis, p. 348

learning experience over a period of 17 years. In this way, I hope to give some insight into Xenakis' evolutionary arch, as well as into my own growing as a pianist through his work.

## Mists

My entry point to Xenakis' work was through *Mists* (1980), his third and most mature solo piano work. At the time I started working on it, on the occasion of a presentation at the *Darmstädter Ferienkurse* (2006), *Mists* seemed more manageable than both *Herma* (1961), his early masterpiece, whose mathematical abstraction results in an unusually fragmented notational surface, and *Evryali* (1973), that still carried an aura of notorious impossibility and off-putting macho quality. In contrast to these rather monolithic works, *Mists* exhibits a dynamic articulation mixing several types of textural materials: polyphonies of hyper-scales stretching the whole keyboard (called *sieves*), clouds of notes and tree-like structures combined in a dramatic form.

My first impression of the piece, particularly its middle part, the so-called *stochastic* section, was not an easy one: a cloud of stemless, insect-like swarm of note-heads loosely placed on a temporal grid, extending over many pages in formations that have nothing to do with either music or language as I knew them and that are shaped by probabilistic laws applied to gas molecules. The shock was life-changing. I suddenly realized that no reduction other than lived experience could give shape to what initially seemed like an amorphous mass and that I had to sculpt this mass (or mess) with my own hands, before being able to assign to it any sort of meaning.

Equally challenging were the mosaics of non-coinciding polyrhythms in the opening and closing sections of the piece. I spent months trying to conventionally calculate and learn the rhythms in my mind, before the *eureka* moment: that bodily rhythms - including breathing and gestural shaping, grouping events under my hands and a flexibility in thinking around those very precisely notated rhythms - were key in managing to play them.

Eventually, the experience of *Mists* was instrumental in shifting my whole approach to learning towards a less noöcentric, more material process, as indicated in the following practicing diary entry:

"Never start learning smaller chunks serially and never do it away from the instrument. I always try to scan the whole several times, usually mapping it with very detailed fingerings and positions at first and increasing speed of access later, as well as folding it into tighter units. The outcome constitutes a 'ground' of gesture. I may insist on the materiality of that movement, but it always also involves analytical insight, even of a more intuitive type. According to how things evolve, the navigation focuses on different hierarchical levels, freely sculpting detail or becoming aware of larger units. The question of continuity becomes crucial through the question of interrupting it: Where does one stop when learning? When I get tired of detail or feel physically and mentally fixated, I move either forward or onto another hierarchical level, in-between hierarchical levels and structures. When I feel unfocused, or in danger of a generic approach, I smoothen out my navigation by repeating... and so on: a sort of higher rhythm of learning is established to organically interweave things together. Usually it is not too long until I get a certain physical feeling of the whole and start fixing things for the performance and making proper interpretative choices and putting priorities, albeit a certain degree of elasticity as remnant of this process survives in future performances".

#### Herma

Herma (1961) (from Greek ἕρμα, meaning support, bond, foundation, indicating heaviness) is Xenakis' first solo piano piece, which I had the chance to learn and play in 2011, after an invitation at Goldsmiths University, London. Similarly to one of the first pianists who attempted it, Claude Helffer, I was drawn to the global sound of the piece, which evokes Brahms, covering all registers at all times, as well as the palpable rhythmic friction of quintuplets against sextuplets, a form of 'pigment accumulation', as Yuji Takahashi, the dedicatee of the piece, has put it. Through its pointillistic qualities, stringently opposing the linearity of the other pieces, the piano is to be imagined as a set of colorful percussion. The formal idea behind the piece is too abstract, and yet: the dance of two parallel algebraic processes, as exposed in Xenakis' theoretical treatise, Formalized Music, achieves an immense effect of 'algorithm embodiment'.

# Evryali

Evryali is the second solo piano work by Iannis Xenakis, created in 1973 for the French pianist Marie-Françoise Bucquet, to whom it is dedicated. Xenakis wrote: "Evryali: another name for Medusa. Means wide sea. [...] This piece contains the birth of 'arborescences' which will be used more fully thereafter. The tree is a tangle of lines in pitch-time space. This entanglement like a bush, a tree, undergoes rotations, dilations, deformations, etc.". The etymology 'wide' (or 'open') sea and its mythological origins (Evryali was one of the fearsome three Gorgons, next to the rather more infamous Medusa and Stheno) evoke both this main technical characteristic, the *arborescence*, and its notorious performance practice history, which accentuates the near impossibility of realization due to sensorimotor aspects.

The greatest challenge in learning it, though, was to be able to listen to the complex chords that change almost imperceptibly, like the sea. The toccata-like and 'impossible' aspects are pretty uninteresting and non-existent as soon as one can listen and voice the whole thing, almost arpeggiating every single dense texture. I would even dare say that Xenakis' early criticism of serial polyphony had a side-effect in the performance practice of his music: it enabled a neglect of refinement and a generic reproduction of masses, surfaces and the like, whereas his music is all about the utmost polyphonic subtlety. Interestingly enough, at the time I was learning it during the early phase of the pandemic, I was obsessively listening to the vocal group *Graindelavoix* and their latest Gesualdo recordings.

Recent analyses have characterized *Evryali* as a notable example of 'anti-virtuosity', in the sense that it renders the traditional notion of virtuosity as perfect realization redundant. *Evryali* invites instead a multiplicity of creative approaches to its notated impossibilities, each of them prioritizing and shedding light on different aspects of the work that remain always incompatible. My performance set the priority of realizing all notated pitches and textures. This decision functions as a constraint, since it does not allow for maintaining the same tempo throughout the performance, and is incompatible with alternative approaches of note omissions in order to keep a steady tempo. Playing all the notes is achieved through techniques of multidirectional broken chords and rapid arm displacements, which are inspired from the stride technique of ragtime piano. The physical effort to grasp the ungraspable, so essential to the Xenakian spirit of transcendence, is thus projected through conscious variations of tempo according to the texture, not necessarily through a frenetic tempo that occasionally allows for thinner textures than the ones written. In the same vein, the plastic projection of Xenakis' arborescent

polyphony horizontally is not prioritized against the subtlety of complex sonorities vertically, which require space and time in order to be properly performed and perceived.

# à r. (Hommage à Ravel)

Xenakis meets here the subtle pianism of Ravel and Mozart in a hyper - modal environment which reminds me of the Byzantine 'trochos' system for chaining pentachords: I am now practicing the late solo piano piece  $\grave{a}$  r., to be performed in coming recitals of his complete solo piano works for the Xenakis Centenary year 2022. Contrary to what most people would think, this is a very tricky situation, with extremely low tolerance for wrong notes and sloppy pianism, often afforded by his earlier pieces and their more massive effects.

### **Future**

My work on Xenakis as a pianist has evolved in parallel with my work as a researcher. Since 2014, I've had the chance to study multimodal performance data registered through wearable sensors and other systems, aiming at both analyzing the score in relation to the data, but also creating systems that would enhance learning and performance. Some of the results may be seen and heard <a href="here">here</a>. The cyborg image of a performer that adds layers of constraints on top of the original Xenakian challenge might give a glimpse into the new horizons opening up for the fourth generation of young performers of this music.

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