

Composers and  
Musicologists  
on the Present and  
Future of Art Music



# Composers and Musicologists on the Present and Future of Art Music:

*Crossing into Distance*

Edited by

George Holloway

**Cambridge  
Scholars  
Publishing**



Composers and Musicologists on the Present and Future of Art Music:  
Crossing into Distance

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This book first published 2026

Cambridge Scholars Publishing

Lady Stephenson Library, Newcastle upon Tyne, NE6 2PA, UK

British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

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ISBN: 978-1-0364-6641-1

ISBN (Ebook): 978-1-0364-6642-8

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## INTRODUCTION

### “CROSSING INTO DISTANCE”: PROCEEDINGS OF A SYMPOSIUM

GEORGE HOLLOWAY

This collection of essays, each sketching a different perspective on the present and future of contemporary art music, represents the Proceedings of the Third International Symposium of Contemporary Music Research (2023), supported by the Taiwan Ministry of Education, and both the Office of Research and Development and the Department of Ethnomusicology at Nanhua University 南華大學, and includes both the selected conference papers as well as the keynote addresses of Hwang-Long Pan and Yannis Kyriakides. The theme of the 2023 symposium was “Contemporary Music, Present and Future”, and the symposium accepted papers and musical works from composers and musicologists from eight different territories.

The nine essays in their unique ways respond to this theme of “present and future”. The collection includes contributions from mainland Chinese, Hongkongese, Taiwanese, Brazilian, Italian, English and Australian composers and musical thinkers on diverse topics.

The collection begins with the keynote addresses of Hwang-Long Pan 潘皇龍 and Yannis Kyriakides. Hwang-Long Pan is arguably Taiwan's leading living composer, and he offers a depth of perspective on the development of contemporary art music from 1945 to the present, thus painting a powerful picture of the aesthetic inheritance that gave rise to the status quo. Innovative Netherlands-based Cypriot composer Yannis Kyriakides meanwhile suggests some future pathways for the art-form, by sketching out the array of new paradigms of music-making and score-creation open to contemporary composers by way of media technology.

Two composers write about ways of understanding timbre and sound. Chinese composer Liu Dong-Yan 劉冬艷 discusses the exploration of timbral and sonic combinations of accordion and electronic music in her compositional work, while Portuguese-based Italian composer and academic Riccardo D. Wanke discusses research into perception-based approaches to analysis and description (what he calls, the “embodied cognition”) of sound-based music.

Two composers with hybrid identities share very different perspectives on their self-conception as composers. Taiwan-born composer Mu-Xuan Lin 林慕萱, who has American citizenship and has also lived for a period in France, writes as a child of the '80s, describing how her equal familiarity with both the analogue and the digital, her multilingualism, and the socio-politically problematic nature of the Taiwanese identity constitute her postmodern identity as a composer. Meanwhile, Polish-Australian composer Bruce Crossman emphasises the permeability of different cultural worlds and describes his attempts as a composer to achieve “hybrids of being”, particularly with reference to his encounters with Korean aesthetics.

Two composers discuss aspects of non-equally-tempered music. English composer-guitarist Sam Cave discusses the aesthetic and technical inheritance of spectralist music with particular reference to the compositions of English composer Christian Mason (1984-), while Hong Kong composer Chan Chak-Hang 陳澤行 draws comparisons between Easley Blackwood (1933-2023)'s fifteenth-divisions of the octave and the five-note equally-tempered Slendro scale of Gamelan.

Finally, German-based Brazilian musicologist Joevan de Mattos Caitano summarizes research into the history of Taiwanese composers and performers' participation in the International Summer Courses for New Music in Darmstadt.

In summary, the chapters presented here contain various common threads relevant to today's music-makers and listeners. While some chapters detail aspects of the vast expansion of expressive content that music has undergone since the dawn of Modernism, and the concomitant expansion of the technical and aesthetic-conceptual apparatus governing that content

(Pan, Cave and Chan), other papers look prospectively towards different sorts of “literate” music inscribed by different notational means, as well as different *modus operandi* for the act of performance itself (Kyriakides) and different ways of conceptualising *what one is actually hearing* as a cognitive phenomenon (Wanke). The musical scores by Cave, Lam and Lu included in the appendix likewise evince, in markedly different ways, their composers’ fascination with the sonic (and expressive) possibilities of the string quartet medium.

Other papers touch upon the ways in which music is both potentially a deliberate expression and an involuntary reflection of the creator’s hybrid identity (Lin, Crossman, Liu and Caitano). Indeed, while the geopolitical and social changes that have occurred since the Great Financial Crisis of 2008 have (albeit inconclusively) tested the validity of “identity” as a political concept, these chapters yet demonstrate forcibly that, for artists at least, identity serves as a meaningful summation of the manifold influences of cultural and historical memory acting upon them as they both create and reflect upon what they created.

If one were to distil all these threads into a single overarching theme, it might be that of *expansion and multiplicity*: of aesthetic concepts, of modes of expression, notation, performance and—crucially—of listening.

My role in assembling this collection went beyond that of mere collating, typesetting and proof-reading. Standardisation of language usage, spelling, layout, reference style and the numbering of figures, examples and tables was not the full extent of the editorial work required. Different papers required different degrees of adaptation and intervention, including translation from the original Mandarin, correction of an English translation of a Mandarin original, adaptation of spoken scripts for print form, and numerous alterations, additions and distillations in order to elucidate arguments. All this editorial work has led to fascinating discussions with the authors of each paper. If the editorial hand has been slightly heavy at times, it has unwaveringly been in the service of the original research and profound thought contained herein, which deserved the clearest presentation possible (it should be noted that two papers were barely altered, and only a paucity of alterations was made to a third).

The collection aims to provide a much-needed snapshot of the aesthetic concerns of a younger generation of contemporary composers whose creative practices struggle for attention, as well as the research interests of musicologists and thinkers on music. One major insight among many from this collection is that Taiwanese, Hong Kong and mainland Chinese composers and musicologists in particular are pursuing distinctive courses, informed by heterogeneous cultural influences.

### A Note on the Title of the Collection

The title, *Crossing into Distance*, refers to a line from the poem 渡荊門送別 (*Dù jīng mén sòng bié*), *Farewell at the Jingmen Pass*, by Tang dynasty poet Li Bai 李白 (701-762, traditionally called Li Po in the Anglophone world). The full poem reads as follows:

渡遠荊門外，來從楚國遊。  
 山隨平野盡，江入大荒流。  
 月下飛天鏡，雲生結海樓。  
 仍憐故鄉水，萬里送行舟。  
 (彭 1986, 450)

*Crossing far beyond Jingmen pass,  
 I travel from the lands of Chu.  
 The mountains trace the wild plains to the horizon;  
 the river flows into the barren expanse.  
 Beneath the moonlight flies this heavenly mirror,  
 while clouds form a tower out at sea.  
 I still pity the waters of my home,  
 having to carry this boat one thousand leagues.  
 (Translation by the editor)*

The evocative rendering of the first two characters (渡遠) as “crossing into distance” is David Hinton’s (Li 2006). It evokes for me feelings of distance in time as well as in space, of cultural journeying as well as of geographical travel. It seemed an apposite title for this collection of miscellaneous and

geographically and culturally diverse scholars and artists, all of whom have travelled far, yet who are still carried by the “waters of home”.

### **A Note on Romanisation of Mandarin Proper Nouns and the Inclusion of Original Chinese Characters**

Owing to the lack of a standard convention for romanisation in Taiwan, the editor has adopted the policy of respecting individuals’ own transliteration of their names, where this is known. Where it is unknown, the author has adopted the convention of Hanyu Pinyin 漢語拼音 employed in China, as this is the approach most commonly encountered in the West.

In Joevan de Mattos Caitano’s paper, it was not possible to locate the Chinese characters for the names (nor the dates) of all the Taiwanese individuals cited. The editor has added them where available.

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May 17<sup>th</sup> 2025



# CHAPTER ONE

## NEW PERSPECTIVES ON MUSIC COMPOSITION

HWANG-LONG PAN

### **Preface**

During my “reckless youth” I lived in Europe for eight years. I often attended composition-related seminars or summer camps, where the most frequent question posed by participants to the Masters was, “What are the future trends in music composition?” The answer was always the same: “If I knew, it would be reflected in my works!” In fact, the old and the new, tradition and modernity, conservatism and avant-garde are relative and vary from person to person, not absolute. Furthermore, many Masters emphasize, “Composition cannot be taught!”

My realization over the past fifty years is:

**The Master leads you to the door; the rest is up to you.**

And also:

**Teachers can only show students how the Masters composed through analysis of classic works.**

### **I. Expansion of Musical Elements**

In the past, the four elements of music were: melody, rhythm, harmony, and timbre. Today, they may include: pitch, duration, dynamics, texture, density, brightness, concentration, tempo, mode, tonality, polyphony, meter, speed, range, sectionality, expression, breadth, depth, pointillism, strata, series, microtonality, transformation, connection, substitution, rest, tendency, gradient, cadence, atonality, musical sounds and noise, constants and

variables, contrast or unity, *accelerando* or *ritardando*, *crescendo* or *decrescendo*, expansion or contraction, continuity or interruption, mutual generation or opposition, and so on. It may involve pushing some elements to their extremes or limits.

Embellishment of monophonic lines is a distinctive syntactical element in traditional Eastern music, which I conceptualise and apply in my music through “the formation, continuation, and disappearance” of sound. My String Quartet No.2 (1977) and several works related to traditional instruments are examples of this. Regarding this formation, continuation, and disappearance of sound, the following principles for the ornamentation of skeleton tones are of relevance:

1. Traditional Embellishment
2. Imitation (overlapping or canonic writing)
3. Layering of strata or tiers
4. Compounds (grafting, mosaics)
5. Mixing (synthesis)

## II. Advances in Instrumental Performance

Thanks to the imagination of composers and the diligence of performers, musical instruments have undergone improvements, such as expansion of their ranges, improvements in timbre, technical refinements, enhanced resonance and propagation of sound. New sonic resources both musical or noise-related, extended techniques and new playing-styles have also been developed, drawing upon both traditional musical aesthetics as well as modern aesthetics, using defamiliarisation and fixation, and even incorporating rare instruments and electronic sounds, leading to significant advancements in musicology. My trilogy *Wandlungsphasen* 《五行生剋》, [*Phases of Change*] (1979-) has extensively explored and refined these concepts.

With such significant changes in the performance capabilities of instruments, music has undergone a shift from the pursuit of integration to the extreme pursuit of variation. We should examine music’s internal

connections and enhance its cohesion through the inspiration of aestheticist Wang Changling's "Three Realms" 三境.<sup>1</sup>

### III. Expansion of Instrumentation

During the era of tonal music, composers typically preferred composing for fixed instrumental genres. Later, in pursuit of new sounds or possibilities, they gradually abandoned old patterns of reasoning, introduced novel instrumental combinations, and even ventured completely unique performance setups, all with a view to satisfying their personal creative needs and even challenging habitual ways of listening. This has been a great collective effort, and individual composers have demonstrated their own unique talent and vision. On the other hand, whether this should be called innovation or retrogression, remains to be decided. After all, ensemble combinations were very free and uncertain during the Baroque period, becoming standardized and formalized in the [Classical] period of tonal music.

Nowadays, composers replace stability with differentiation, unity with diversity, opus numbers with "year of composition", generic formal labels with unique titles. They have developed electronic sounds and incorporate them into instrumental performance. Consequently, the convergence of Eastern and Western traditions, cross-genre, cross-ethnic, cross-technology ensembles gradually became prevalent, reinvigorating the unrestricted scope of instrumentation. An example from my oeuvre would be

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<sup>1</sup> [The original Chinese here is "王昌齡三境圖". Wang Changling 王昌齡 (698-c.756) was a Tang Dynasty poet, master of the quatrain form known as *juéjù* 絕句 and famous for his "frontier poetry" describing the borderland of the Chinese North-West (Jin 2019, 133-4). The "three realms" of which Pan seems to be writing could be the "external scene" 景, "internal affect" 情 and "evocation" or "impulse" 興. For example, in the "Grand Preface" 大序 of the "Book of Songs" 詩經 (compiled in the 11<sup>th</sup>-6<sup>th</sup> centuries BC), both affect and evocation are listed as two of the six principles of poetry (大序-詩序全文原文 n.d.). At the same time, Pan could be hinting at literary critic Wang Guowei 王國維 (1877-1927)'s related formulation of "artistic conception" (also called "ideorealm") 意境 too: physical objects 物境 and emotional context 情境 together generate the ideorealm of the work (X. Liu 2016, 88). In musical terms, Pan seems to be arguing that the three realms (strata) all need to be present in the composer's mind during composition—especially the last of the three, which serves to conceptually unify the details of a work of art.]

*Majestaetische Spielerei* 《莊嚴的嬉戲》 [*Majestic Playfulness*] (1978-) for 10 percussionists. *Heterophony* 《普天樂》 (2005/06) is a concerto for orchestra, solo guzheng 古箏, piano, organ, and *Beiguan* 北管 ensemble,<sup>2</sup> which is notable for its unique instrumentation.

#### IV. Changes in the Form of Music

Different musical styles display varying degrees of standardisation and radical transformation of their formal structures. The sonata form reigned for two to three hundred years, so in the tonal music era, almost every solo piece, string quartet, symphony and the like all used it. Today, with the intertwining of structure and deconstruction, forms such as *Momente-form*, open and variable forms, and unsynchronised and layered sounds have become prominent. During my study in Germany, I was inspired by Chinese calligraphy and my mentor Helmut Lachenmann's *Klangtypen* (*sound types*), leading to my formulating a taxonomy of five types of sonority [related to the present author's conception of the structure of Chinese characters]: natural-coloured sonorities, artificial-coloured sonorities, fluctuating [or "iterative"] sound, interwoven sound, and structural sound (Table 1).<sup>3</sup> This taxonomy assisted me in my development of a creative syntax. Some say, "modern music has no form," but I say, "there is no fixed form, rather each work is given a uniquely new form."

#### V. Instrumentalisation of Vocal Music

Due to the musical conceptions of composers, and, for example, the combination of singing and recitation, or the influence of instrumental music on vocal music, more possibilities for vocalization have been developed. This has led to the exploration and development of vocal techniques once thought impossible, creating many strange and fantastic vocal works. Many vocalists have very stable absolute or relative pitch

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<sup>2</sup> [Lit. "northern pipe band", a type of rhythmically vibrant traditional Chinese music characteristic of Taiwan (Li 2024).]

<sup>3</sup> [自然的色澤音響，人為的色澤音響，波動音響，交織音響 and 結構音響 respectively. "Structural sound" seems to imply the possession of a multiplex compound internal structure.]

abilities, allowing composers to create numerous classic vocal works without anxiety about the music’s performability. Whether it be solo, ensemble,

*Table 1: Correspondences between categories of Chinese characters and taxonomy of sonorities.*

	Chinese characters: constructive category	Sound Type
1	Basic forms [基本體]	Natural-colored sound
	日(sun)、月(moon)、木(wood)、口(mouth)、女(woman)	○ △ ◇ □ ☆
2	Combined forms [結合體]	Artificial-colored sound
	明、好、安、困、妙	♀ ⊕ ♂ ≡ ≳
3	Parallel forms [並疊體, lit. “stacked forms”]	Undulating [or iterative] sound
	炎、圭、鑫、森、淼	◎ ∞ 《》 W §
4	Interwoven forms [交織體]	Textural sound
	中、天、來、東、垂	€ ¥ ₩ \$ Ø
5	Compound forms [複合體]	Structural sound
	窮、獄、爽、樂、燕	※+○ ☆+₩ △+⊕+◎

*a cappella* mixed chorus, chamber music songs, orchestral songs, or other vocal works, rather like bamboo shoots after a spring rain this plethora of works has enriched the field of vocal composition. Examples from my own oeuvre include *And So Comes the Night* 《所以一到了晚上》 (1986), a piece for voice and orchestra, which features chanting alongside singing as a way of enriching the connotations of the vocalisations. In *The Somnambulist Girl* 《夢遊女》 (2014) for *a cappella* eight-part mixed chorus, the main melody wanders back and forth among all the vocal parts; I was trying to evoke here a fantastical scene as dazzling as fireworks.

## **VI. Symphonisation and Refinement of Percussion Writing**

Traditionally, percussion instruments are categorised according to the “eight sounds” 八音 [characterised by the material of which they are made]: metal, stone, silk, bamboo, gourd, earth, leather, and wood.<sup>4</sup> Arguably any object that can be made to produce sound, be it conventional or unconventional, can be considered a percussion instrument. Some produce musical sounds and some noise; they may have fixed pitches or no discernible pitch. This is evident in the proliferation of detail relating to percussion instruments, and their “symphonisation”—in other words, the advent of works for dedicated percussion ensemble; there has also been a notable refinement in the use of percussion instruments in solo, chamber and orchestral works, showcasing a dazzling array of options. An example from my oeuvre is the series of Five Pieces for Percussion Ensemble (1985-).

## **VII. The Intervention of Exotic Aesthetics and Reflection of Traditional Aesthetics**

The inheritance and spread of European classical music aesthetics can be said to be ubiquitous. There are many other musical aesthetics, however, from non-European regions such as northeast, southeast, south, west and central Asia—each of which has its own characteristics, which in turn differ significantly from the various musical aesthetics of Africa, the Americas and Australia. They each form their own systems, as if obvious from performances of these musics. Whether the cultural exchange be bilateral or a fusion of multiple different sources, whether it be contingent or inevitable, interpolation and self-reflection [on the part of composers] gives rise to productive collisions and conflicts, and this has had an enormously influential impact. We can perceive how the serendipity of these encounters, be it through instances of uniqueness, regional similarity, or wider commonality, is indirectly driving changes in aesthetic thought and musical style.

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<sup>4</sup> [See Falkenhausen (2000, 106) citing the Zhou Li Zhengyi 周禮正義 (Rituals of Zhou) (Zheng 1927).]

## VIII. Application of Improvisation and Aleatoric Elements

Since ancient times, composers have always sought novelty and variation. Needless to say, [Western art music] composition has been influenced by folk, pop and by factors by indigenous and exotic. There has been [in the modern age] a great collective exploration from many different composers, with an evolution of thematic materials, instrumentation and musical forms giving rise to collages and chance processes; transformations of notation have given rise to graphic and text scores; a multiplicity of considerations, including data-based and conceptual approaches, use of variant and invariant structures, freedom and constraint, repetition and omission, quotation of retro styles versus radical innovation and both the broadening and narrowing of perspectives, have led to many great artistic expressions. Also crucial have been the secondary creative contributions of performers, who indirectly share the role of the composer. My sequence of three pieces for improvisation by any musician *Kaleidoscope* 《萬花筒》 (1986-), for example, transforms non-musical elements into music. *Labyrinth—Promenade* 《迷宮·逍遙遊》 (1988-) is a series of eighteen pieces utilising chance methods in determining both its form and instrumentation. *Labyrinth—Promenade* consists of 26 segments represented by the letters of the English alphabet, which performers combine into works according to the composer's instructions. The instrumentation can be a solo instrument or a chamber ensemble, thus highlighting the works' potential for infinite variability.

## IX. Dialogue and Mediation between Tradition and Modernity

“Tradition and modernity” have always been contentious topics in the music world, and especially so in late 20th-century Taiwan, where Chinese and Western music rarely interacted. Instruments are “innocent”: they depend entirely on the uses composers make of them. In light of this, as a “young calf unafraid of tigers,” I called for funding from the Council for Cultural Affairs 文建會 (now the Ministry of Culture 文化部) and the Taipei Chinese Orchestra 台北市立國樂團 to recommend instrument demonstration lecturers. I organized the “Traditional Instrument Demonstration and Performance

Seminar” and invited interested parties to attend and listen. In 1991, nine composers were invited to write chamber music for traditional instruments, with the resulting “Dialogue between Tradition and Modernity” 「傳統與現代的兩極對話」 silk and bamboo chamber music concert held in Taipei, Taichung, and Kaohsiung, which sparked broad and profound repercussions. The Beijing Huaxia Silk and Bamboo Orchestra 北京華夏絲竹樂團 and the Taipei Little Giant Silk and Bamboo Orchestra 台北小巨人絲竹樂團 were established, writing modern-style chamber music for traditional silk and bamboo ensemble,<sup>5</sup> creating something of a fashionable trend.

Eastern traditional music excels in heterophonic musical languages, with “ornamentation of single tones” being a central aspect of the beauty of the music. I have successively completed solo, chamber and orchestral works for silk and bamboo instruments, promoting dialogue and integration between tradition and modernity. After years of studying both the traditional musical vocabulary and modern music syntax, I emphasise “dialogue and integration,” seeking unity in variation and variation in unity. For example, in my *Traditional Instrument* series (1991-) I make particular use of a distinctive guzheng tuning of my own devising (Example 1):

1. I extend the bass range to F#1 (a minor sixth lower than traditional tuning) to achieve the slacker sound of the former silk strings [on the metal-wound strings].
2. I avoid the traditional pentatonic tuning system and prevent the guzheng from becoming merely a transposing instrument in twenty-one keys [i.e. one for each string], by fixing the first note of each of the upper four octaves as D, and arranging the middle two octaves symmetrically around the axis of the central D4;
3. I retain the traditional pentatonic “shang” mode 商調 in the highest octave, but conversely in the lowest octave I use a sequence of intervals that expand semitonally from a whole tone to a diminished

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<sup>5</sup> [A traditional ensemble originating from the Jiangnan region of Southern China and usually comprising combinations of erhu 二胡, pipa 琵琶, dizi 笛子, guzheng and zhongruan 中阮.]



and Western musics (despite the inevitable controversies surrounding accusations of musical cultural colonization and outsourcing) will surely bring new prospects.

The habitual method that I've devised for myself for handling mixed Eastern and Western instrumental forces could be summed up as follows: from the "ornamentation of skeleton tones", via the "symbiotic relationship between skeleton and flesh", to the creation of a "sonic ideorealm built on skeleton chords".<sup>6</sup> The best example of this approach is my aforementioned series of twelve pieces for mixed instrumentation titled *East and West*.

## XI. Integration of Music and Interdisciplinarity

Music is an independent, abstract, and specialized art. Musical performance is interpretation, not performing art [表演: lit. acting, demonstration]. Musical performances can be solo instrumental or vocal, chamber music, orchestral, choral, operatic, or oratorio. Only opera's interdisciplinarity relates it to the performing arts; the other types of musical performance do not fall within the realm of the performing arts. In the European music education system, when music is taught together with the performing arts, the institution is called a university of music and performing arts, which differs from the classification in the developing world. Music education and the evaluation of performance, moreover, are distinctly separate from the performing arts. Viewing music as a performing art eventually leads to its becoming background music, diminishing its status. There is a narrower definition of art that divides it into the performing arts and the visual arts, but a more logical division would be: music, the performing arts and the visual arts. Of course, the integration of music and interdisciplinarity is very common, such as with the performing arts, visual arts, installation art, literature, architecture, technology, multimedia and so on. In music theatre, it is music that naturally dominates, otherwise it becomes "theatre music". My work *Da Deng Dui* 《大燈對》 (2018/19), for instance, commissioned for the 50th anniversary of the Taipei Symphony Orchestra and premiered

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<sup>6</sup> In the original, 「骨幹音的潤飾」, 「骨肉相隨」 and 「骨幹和弦的音響意境」 respectively.

at the Taipei City Stage and the Taichung National Theater, was designed and performed with a dual focus on the orchestra and a dance troupe.

## **XII. The Impact of Science and Technology**

Electronic music (electroacoustic music) and the use of science and technology, computer programming, performance monitoring systems, greater understanding of the acoustics of venues and techniques of amplification, as well as the use of recording and broadcasting technology, multimedia performances, remote collaborations, etc., are all new resources that emerged in the mid-20th century, enriching concert performances and enhancing the effect of live performance. As for pure electroacoustic music or combining electroacoustic music with live instruments, music theatre and opera performances, they still hold a prominent place in the activities of the Asian Music Festival (APMF) 亞太音樂節 organised by the Asian Composers League (ACL) 亞洲作曲家聯盟, as well as the International Society for Contemporary Music (ISCM)'s World New Music Days (WNMD).

## **XIII. Juxtaposition and Assembling of Diverse Styles**

The discourse regarding whether to value uniformity or eclecticism of repertoire and style, amounts to a controversy about whether to value purity or hybridity. The significant conceptual disparity between Europe and America on this point [arguably] aligns closely with the aesthetic spirits of Modernism and Postmodernism. In fact, throughout the evolution of music, avant-garde and retrograde forces have not at all stayed constant. Thus, different aesthetic movements in music history, be it the Baroque, Classical, Romantic, Impressionist, Expressionist, Primitivist, Neoclassical, Serialist, Neo-Romantic, Mosaicist, Modernist, Postmodernist, Minimalist, Nationalist, [New-]Complexity or Spectralist movements, have all competed and shone in their respective eras.

Today, ancient and modern blend seamlessly, East and West coexist harmoniously, even artistic and naturally occurring sounds coexist symbiotically. My works, such as the *Bei-Guan Concertos* 《北管協奏曲》

series (2005-) or the trilogy of works *New Images of Taiwan* 《台灣新映象》 series (2015-), explore both the juxtaposition and superimposition of multiple styles. For example, the second piece in the *New Images of Taiwan* trilogy, *Soundscape of Kuroshio* 《黑潮聲景圖》 (2016), which is a concerto for Chinese orchestra, explores the transformation of poetry into music. My response to a relatively unfamiliar scene was to compose this poetry, which I then transformed into music:

### I. *Largo*

黑潮暖流，磅礴無垠。  
 分流擴展，生態劇場。  
 汪洋浩瀚，洄游傳奇。

*The Kuroshio Current, vast and boundless.  
 Diverging and expanding, an ecological theatre.  
 The vast ocean, a migratory legend.*

### II. *Moderato–Adagio–Andante*

珊瑚繽紛，爭奇鬥艷。  
 海陸共生，繁衍生息。

*Corals in vibrant colours, competing in beauty.  
 Sea and land coexist, thriving and reproducing.*

### III. *Largo–Grave–Moderato*

強取豪奪，資源環保。  
 驚濤駭浪，禍福相依。  
 海洋頌歌，歷久彌新。

*Seizing and plundering... Protection of environmental resources.  
 Surging waves and stormy seas, fortune and misfortune intertwined.  
 An ode to the ocean, ever-fresh and enduring.*

## Conclusion

The three essential elements of musical composition are originality, vision and professionalism. A piece of advice for beginners: analysing classic works of the Masters is a shortcut to innovative music.

- a. Analyse and elucidate classic works of the Masters.
- b. Imitate (style writing).
- c. Alter as you transcribe.
- d. Get your music premiered.
- e. Post-premiere: Revise and finalise.

One can distinguish three levels of musical composition:

- a. “Learn and employ”: the honing of one’s craft.
- b. “Practice and discard”: the refinement of one’s art.
- c. “Assimilate and transform”—akin to “eating pork to grow muscle”: digesting and adapting things for one’s own purposes, to transcend oneself.

[Translation: George Holloway]

## CHAPTER TWO

# MEDIA SCORES: USING NEW MEDIA TO CREATE GENERATIVE AND INTERACTIVE NOTATION FOR MUSICAL PERFORMANCE

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In this article I will talk about how new technologies have specifically affected how we think about music notation, some of the historical background to these phenomena, and show you some examples of how this has manifested itself in my own work. I have called this article ‘media scores’; it’s a term that I have just recently began using because it could include many practices, including graphic, video, audio, interactive or generative approaches. I’ll explain later what these are.

To begin with, we can ask the question, what is the role of score and notation in traditional classical music?

One can argue that the score has the double function of both organising musical ideas, preserving them, and through publishers, distributing them, and eventually making money out of them. However, given that we have finally moved from the Gutenberg era of the printing press to the digital age, what remains of the role of the traditional score?

Preservation of musical ideas has moved from paper to various recorded mediums such the record, tape, CD and now the cloud. So what of organising musical ideas?

The possibilities of new technology afford us the opportunity to realign these relationships. It also gives composers and musicians new tools to go beyond static and linear forms of musical organisation. So at the twilight of

print technology, will we see the end of 'paper' composition, and something else coming in its place?

The traditional score has afforded an increasing complexity in how musical ideas can be organised, the apex of which could be said to have been the New Complexity compositions of the last century. This pushed the limits of what could be expressed in a linear form, with the conventions of Western musical notation. Highly trained musicians at the limits of their virtuosity devoted to the realisation of the imagination of the composer: what does that say about the social structures that engender these relationships?

Jacques Attali, French cultural philosopher, writes in *Noise*: “Music is all too often only a disguise for the monologue of power” (Attali 1985, 8-9). What he means to show is how the socio-economic structures underpinning the practice of classical music are rooted in hierarchical structures that are all too often apparent in the relationships between the composer, the score, the musicians, the audience, and the infrastructure that supports it.

The score sits in the middle of this chain of production, but it also acts like a screen between the musician and the audience, a secret text, a graphic language that is translated into sound by the musician. One could argue that this relationship works in a time when music, or music alone was prioritised as the ultimate form of expression (in the 18<sup>th</sup> and 19<sup>th</sup> centuries). Does this work as an art form in an age which is so visual?

The possibilities of new technology afford us the opportunity to realign these relationships. It also gives composers and musicians new tools to go beyond static and linear forms of musical organisation. So at the twilight of print technology, will we see the end of 'paper' composition, and something else coming in its place?

The basis for these kinds of works lies in different disciplines from the previous century, namely, open-form scores, graphic notation, animated scores, visual music, interactive scores and generative music. To give a sense how these practices have informed the development of new media scores, I will touch on each one.

## Open (Form) Scores

Though never originally referred to as ‘open scores’, the term has recently come to be applied to many works of the American experimental tradition from the 1960’s and beyond where there is high level of ‘indeterminacy’ (Cage’s preferred term) and interpretation needed by the performer. These can refer to the ‘open form’ works of Cage and Earle Brown, but also to works that utilise various media to construct a musical work.

An interesting example showing the limits of ‘paper’ technology, pushing one boundary into another, is Cage's *Variations* series. These are mostly graphic or text-based works which allow the performers to create their own scores within specific guidelines. By using transparent sheets in these pieces he tried to bring another dimension as it were to the linear score.

In *Variations I* (1958), the musician(s) must construct the score from a series of transparent sheets of squares, lines and dots by 'dropping perpendiculars', literally throwing them onto a surface, measuring them and translating the data into musical parameters. Obviously, the construction of the score in *Variations I* has to be done before the performance (although one could incorporate this as part of the performance itself). This piece, like the rest of the *Variations* series, does not qualify as a graphic score, in that there are specific guidelines about how the elements are to be measured and interpreted.

What is fascinating about the series, specifically *Variations I-IV*, and also a related piece, one of my favourites, *Cartridge Music*, is that Cage not only utilises abstract graphic elements printed on transparent sheets, but that the musical “output” is largely dependant on the user physically manipulating the materiality of the score. Cage has managed here to make a fixed medium, namely print, behave in a fluid way. Examining the piece from the vantage point of the 21st century, one could observe that Cage was perhaps trying to dematerialise the medium of paper years before digital media managed it (the transparencies could be taken as a sign of the dissolution of fixity).

The beauty of a score like this is that, though it refers very specifically to the technology of the record player, and the cartridge of the record stylus,

each generation can interpret it in their own way, utilising the technologies or instruments at their disposal.

Many of these types of so-called 'open scores' not only require an 'openness' from the role of the performer, but also a certain understanding about how each piece should be approached. There is not one style, technique or perspective that would encompass all these types of work. Terms such as 'improvisation', which Cage himself did not find appropriate, could be a misleading term, in that the context and terms of the composition need to be understood by the player, and not simply played with free expression. Even works such as *Edges* (1968) by Christian Wolff (written for the improvised music collective AMM), which instructs musicians to interpret a set of signs as “limits or points that can be reached but not exploited”, avoided the term improvisation.

## Graphic Scores

A graphic score uses images, shapes and pictures instead of notes. Composers use graphic scores because they allow them to express musical ideas that could not be described by traditional notation.

Cornelius Cardew, known for the graphic score *Treatise*, writes that “a musical notation that looks beautiful is not a beautiful notation, because it is not the function of a notation to look beautiful” (Cardew 1961, 29). Quite a statement from the composer of probably the most beautiful graphic score.

Another composer often working with graphics deriving from traditional notation is Sylvano Bussotti. This kind of notation, like Cardew's create enigmas or problems that the musician must solve in a creative way. It seems to be speaking the same language as musical notation, but it breaks all the rules.

Other types of graphic score might include photographs rather than drawings or graphics. In Annea Lockwood's *Jitterbug* (2007), the musicians are called upon to interpret photographs of rocks as graphic scores. A pre-recorded surround-sound score draws on aquatic insects recorded in Montana. This work has been recorded by my ensemble Maze (Maze 2022).

## Animated Scores

Following on in the tradition of open and graphic scores, animated scores became more prevalent at the turn of the 21st century. Composer Ryan Ross Smith defined this as “any score that contains perceptibly dynamic characteristics that are essential to the symbolic representation of the compositional idea”.<sup>1</sup>

His work, as well as that by the Icelandic group S.L.Á.T.U.R., developed this approach in animated scores that contained “dynamic scoring that features perceptible contact and intersection between elements in a notational fashion” (R. R. Smith 2025).

Another pioneer of this work is Cat Hope, who with her group Decibel explores the possibilities of animated scores. She defines the term ‘Screen-score’ as one that can be one or more photographic images, film or a GUI [graphical user interface] . . . usually put into motion by way of software on a computer”. Many of these scores are not necessarily intended to be shown to the audience but to the musicians only. This is partly because the graphic element in combination with sound result could force the listener to experience the music in a too prescriptive way, constantly comparing the notation with the sonic result rather than listening in a more undirected, freer way.

## Visual Music

From the perspective of the visual arts, there has been a fascination, perhaps from the beginning of the 20th century, and most notably in the work of artist Wassily Kandinsky, with translation of sounds or music into a visual form. His pre-war friendship with composer Arnold Schoenberg (1874-

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<sup>1</sup> [The source of this specific quotation is unknown. On Smith’s website, he writes: *In short, I define Animated Notation as a subset of dynamic scoring that features perceptible contact and intersection between elements in a notational fashion. Beyond that, Animated Notation can offer composers the ability to create quite complex music that is quite easily read and realized by performers of all levels. Furthermore, I believe that the dynamic qualities of these scores (particularly those that are generated in real-time), introduce some very interesting approaches to time and form.* (R. R. Smith 2025)