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Liquid identity in music composition

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https://doi.org/10.17077/etd.4wfg-s7qa

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LIQUID IDENTITY IN MUSIC COMPOSITION

by

Alexandros Spyrou

A thesis submitted in partial fulfillment
of the requirements of the
Doctor of Philosophy
degree in Music in the
Graduate College of
The University of Iowa

August 2019

Thesis Supervisor: Professor David K. Gompper
To my parents
δῆλον γάρ ως ἡμεῖς μὲν ταῦτα πάλαι γιγνώσκετε, ἡμεῖς δὲ πρὸ τοῦ μὲν ἡμεθα, νῦν δὲ ἡπορήκαμεν

[For manifestly you have long been aware of what you mean when you use the expression “being”. We, however, who used to think we understood it, have now become perplexed]

Plato
Sophist 244a
ACKNOWLEDGEMENTS

First, I would like to thank my supervisor Professor David Gompper for his valuable artistic and academic guidance throughout my doctoral degree. Further, I would like to thank my doctoral committee members Assistant Professor Jean François Charles, Professor Christine Getz, Professor John Muriello and Associate Professor Gregory Hand for their academic support. Moreover, I would like to thank Josh Levine for his guidance in composition during my 3rd year of studies.

In addition, I would like to thank Beat Furrer and Dimitri Papageorgiou for their precious advice and ideas during the course of my research and composition in Austria.

Finally, I would like to thank the following institutions for their financial support and mentorship throughout my studies: the Fulbright Foundation, the Graduate College of the University of Iowa, the Endowments Office of the City Council of Ioannina, the Stanley Foundation, and the Austrian Agency for International Cooperation in Education and Research.
ABSTRACT

The question of identity in music composition is interrelated with the condition of musical material and form and the qualities which make musical ideas traceable. The mechanisms for creating musical identity during much of the modern period were based on the elements of pitch, rhythm, harmony and form.

Until the twentieth century musical identities were regulated according to traditional systems. The advent of modernism in music was marked by the new solid identities, timbre and texture to the foreground as significant identity-bearing musical elements, and at the same time saw blurring of the traditional concepts of identity. The avant-garde movements of the post-World-War-II period in particular challenged the established identity concepts by liquefying the very essence of the musical work. The modern conceptual tools need to be replaced with new ones in order to address the current state of precariousness of musical material and form. In my original composition for sinfonietta entitled \textit{rh}, I propose liquid identity as a new concept of musical identity.

Liquid identity is based on a new image of musical sound which embodies the internal difference of sound in a self-existing conceptual model. In a state of liquidity all hierarchies flatten and the concept of development is rendered obsolete. The composer then writes constantly “in the middle” and compositional decisions are taken here and now. Consequently, the process of composition becomes a creative anarchic praxis without an end goal.
Identity in music composition deals with the nature of musical material and form and how they are recognized in a composition. For the most period of the history of Western classical music, identity was created by manipulations of the elements of pitch, rhythm, harmony and form.

Until the twentieth century, musical identity in Western classical music was based on the elements of pitch and rhythm that influenced harmony and determined form. After the twentieth century, composers invented new systems of organization of material and explored additional parameters of musical sound such as timbre and texture. The revolutionary artistic movements in Western classical composition after 1945 further challenged the traditional concept of the musical work. In order to understand the current condition of the musical material and form we need to redefine the concept of identity. In my original composition for sinfonietta entitled rh, I propose the concept of liquid identity as a new idea of thinking about musical identity.

Liquid identity is a new understanding of the way musical material and form is created and re-produced in a music composition. It is based on the idea of starting from a liquid point and progressing without a predetermined plan. The composer chooses the musical material every moment by responding only to the local environment, rather than to a hierarchy of musical elements.
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INTRODUCTION

The aim of this dissertation is to address artistic and conceptual problems which have arisen from my compositional praxis. In this context, by praxis \([\pi ρ\acute{\alpha}ε\varsigma]\) I mean the collection of actions, procedures, activities, trials and errors, and reflections which take place during the composition of a piece of music. I further use this term to signify a way of composing which is free of regulations, hierarchies or authorities and focuses on the composer’s practice in its most intuitive and unfiltered state. According to the Oxford Dictionary of Philosophy, praxis “is also connected with genuinely free, self-conscious, authentic activity as opposed to the alienated labour demanded under capitalism.”

The main focus of my artistic enquiry is the question of identity with regard to musical material and form and its implications on the conception of the musical work as a whole. In the context of music composition, I use the term musical identity to refer to the array of qualities and conditions that indicate what a musical idea is, as well as the processes which make this idea traceable in its multiple forms and instantiations. The nature of my question is not factual, analytical, or speculative, but rather artistic. I do not intend to provide scientific knowledge but rather to address an artistic question in an epistemologically sound manner. I depart from the premise that a composer’s creative process is a source of artistic knowledge and the composition itself is an outcome of artistic research. My research questions evolve through the artistic praxis as an instrumental part of a creative process; they are not a static starting point. I do not offer absolute answers or universal solutions; I rather focus on the essence of creativity by attempting to find “the conditions under which something new is produced” (Deleuze and Parnet 1987, vii). I approach the arising questions using references from music, philosophy, sociology, urban planning and geography which pertain to my compositional thinking.
The methodology which I follow is delineated by the concept of artistic research which has emerged since the 2000s as a form of enquiry across several fields of performing and visual arts. This methodology combines academic research and creative practice in an integrated approach. In this dissertation, the artistic outcome of my creative practice is an original composition entitled *Rh*. *Rh* is a piece for sinfonietta with a duration of 11 minutes from which my proposed concept of liquid identity in music composition emerged. In Figure 1 below, I show Smith and Dean’s (2014) cyclic model of artistic research, processes, and outcomes.

Figure 1: A model of creative arts and research processes: the iterative cyclic web of practice-led research and research-led practice (Smith and Dean 2014, 20).

In artistic research the methodological virtues of established sciences are maintained but they merge with the process of artistic production. Literature review, analytical thinking, scholarship, skill in argument and writing are equally important with the knowledge produced
during the compositional process. This knowledge is not scientific but rather an aesthetic knowledge; it is a kind of sensory knowledge in the literal meaning of the term aesthetic.\(^1\) Juha Varto describes the form of knowledge produced through artistic thinking as “inspective.” (Mika, Vadén, and Suoranta 2014, 61)

However, while in the established sciences researchers interfere minimally with the research object, in artistic research the object and the method often overlap. For example in laboratory research, ideally all the external circumstances affecting the research object are known and controlled. In specific fields of humanities, such as ethnographic research, the level of involvement increases. In artistic research, the artistic praxis itself is the research method, in a way that any change effected by the research directly feeds into the practice itself. In this sense, my compositional practice generated new artistic ideas which were theorized through research on the topic of musical identity, while the research generated new theoretical concepts which were developed in my compositional practice.

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\(^1\) From *aesthesis* [αἴσθησις] meaning sense-perception or sensation.
CHAPTER 1: ON MUSICAL IDENTITY

Contemporary music scholars are faced with a number of definitions and usages, often unrelated, of the term musical identity. The concept is discussed by scholars in the fields of musicology, music education, music psychology and cognition, music analysis and philosophy of music with a variety of nuances. Musicological scholarship uses the term in the context of identity-shaping according to nationality, race, class and gender. It focuses primarily on the socioeconomic and political developments of the nineteenth and twentieth centuries and their role in the emergence of the concept in musicology. For example, Annagret Fauser (2015) examines the role of musical identity in the shaping of collective identities of musicians, and audiences in mid-19th to mid-20th century Europe and the United States. Pauline Fairclough (2016) examines musical identity under conditions of repression and state censorship and the role of music in creating the cultural identity of the Soviet Union, while David Trippett (2016) illustrates Wagner’s immersion in the German musical aesthetics of his time through the identity of melody. A number of other studies focus on the role of self-identification among artists; Nadine Hubbs (2004) shows how a group of Manhattan-based homosexual composers created a characteristic American sound, while Raymond MacDonald (2009) takes a multidisciplinary approach to studying the development of personal identity through music.

In music education and music psychology research, the concept is approached from the point of view of the sociocultural self-identification and development of musicians and listeners across different cultures. Kadri Põder (2015) researches the way students’ training as music teachers determines their musical identity and compares musical, educational, personal and social components in a scale of musical identity. Lucy Green (2011) provides a collection of ethnographic case studies on the construction of personal and communal musical identities.
through music education across 20 different regions of the world. In music analysis and philosophy of music, musical identity is synonymous with the concept of the musical work. In a rare occurrence, James Anderson (1982) uses the term in the context of the ontology of the musical work in order to propose an amended definition of the concept as a performed sound structure previously stated by Jerrold Levinson (1980). From a Schenkerian perspective, Nicholas Cook (1999) is looking for the essential features of the identity of a musical work within its structure.

1.1 Musical Identity in Composition

The term musical identity is used sporadically and without general agreement by composers to relate the aforementioned definitions to their own work. But the essence of identity has to do with idem; it denotes sameness, the property of being identical in a number of repetitions, a recurrence of the same. According to the Oxford Dictionary of English, identity is “the quality or condition of being the same in substance, composition, nature, properties, or in particular qualities under consideration; absolute or essential sameness; oneness; sameness.”

In the context of music composition, this quality or condition is cognized in musical material and form. Claus Steffen Mahnkopf (2004) argues that “identity in music is only constituted in the structure: the syntactic-tectonic constellation of music material” (13). Indeed, descriptions of sameness, or identical repetition are employed by composers and theorists to refer to enunciations of musical ideas. Further, they are used to refer to sameness or to describe the distinctive quality of the parts which constitute the form of a composition. To that end, I use the term identity to discuss both musical material and form, and in relation to their

\[2\] My understanding of musical material starts with Adorno’s definition and extends to new materialisms. Texts such as Claus Steffen Mahnkopf’s (2012) Musical material today and Samuel Wilson’s (2018) Notes on Adorno’s ’Musical Material’ During the New Materialisms have been influential to the conception of my musical material.
conceptualization by the composer while nuancing the definitions of other fields of music research. However, *musical identity* is not merely an umbrella term under which the notions of musical material and form can be fitted; it rather signifies the qualitative distinctiveness of something being itself, the criterion of \( a=a \);\(^3\) it fulfills the principle of - here, musical - individuation.

The necessity of undertaking research on *musical identity* in composition stems from my difficulty in articulating my compositional thinking with the existent terms and concepts. The theoretical concepts and analytical tools developed to address the music of the common practice era and the period of musical modernism are not always valid for the music of today, as the present condition of musical material and form has long rendered them inadequate. Additionally, while the concept of *musical identity* remains insufficiently researched within compositional practice, its frequent use with a variety of meanings further perplexes its signification.

The lack of appropriate conceptual tools to address the current *status* - or rather, as I will claim later, *liquidus* - quod of composition and the plethora of definitions currently circulating not only cause terminological havoc, but also impedes the advancement of both creative practice and research. As a result, when composers attempt to theorize about their artistic practice, they, in the best case, come up with personal terms and definitions of various validity, or resort to methods and concepts coming from fields other than music, or, even worse, adhere to primitive or generic descriptions lacking any epistemological credibility. The latter would not be a serious problem if it were not taking place within academia; but the inability to produce original

\(^3\) The symbolic representation of the law of identity in logic.
compositional concepts poses a threat to the position of music composition as a valid field of music research within academia.

In this chapter I do not intend to present a universal definition of *musical identity* in composition, but rather to review existing understandings of it in order to prepare for a new concept which has emerged from my artistic praxis. For this, I will assess modern concepts of identity in Western music which have been influential in the development of my own compositional thinking and thereafter explain why they are not adequate for the current mode of my artistic practice. Drawing from premodern and postmodern Western thought as well as non-Western practice, I will introduce the concept of *liquid identity* in music composition and explain the way it operates together with examples from my composition *rh* for sinfonietta. While the path connecting practice and theory is bidirectional, the starting point is my practice. For that reason, I examine the concept of identity according to the order that it developed in my work.

### 1.2 Modernity and Solidity

The identities of modernity\(^4\) in music, as in other arts, have been solid and, to some extent, fixed. The dominant model of presentation and development of musical ideas is based on a clearly demarcated thesis with measurable dimensions, usually in dialectical opposition to its antithesis, and encompasses the domains of melody, rhythm, meter and harmony. Such manifestations of identity-thinking are apparent in most of the music of the common practice era. The presentation of a subject in a Baroque fugue, a theme in a classical sonata-form

---

\(^4\) I use the distinction between *modernity* and *modernism* as nuanced in the writings of key new musicology scholars such as Georgina Born (1995), Jonathan Cross (2006) and Richard Taruskin (2005). *Modernity* denotes the historical period that starts, if not earlier, with European Enlightenment, while *modernism* denotes an aesthetic category defined by the cultural period that starts in the late 19th century. All derivative terms such as *modern* and *modernist* are used respectively.
movement, or a leitmotiv in a romantic opera, all define a solid musical object, upon which the composition is developed hierarchically. Typically, the object which is temporally presented first is treated as privileged, indicating the archetype from which all developments or transformations derive. In fact, every transformation, regardless of its degree of deviation, further solidifies the overall identity as it reiterates its similarity to the privileged object.

Musical objects of distinct and measurable properties, posing either as theses or antitheses, not only stipulate a solid identity, but further insinuate their development within forms of structural coherence, unity and integration, which themselves constitute solid identities. Due to these characteristics, common-practice forms are often labeled as fixed identities or, even worse, reduced to templates or containers in which composers fit their musical material. While forms such as the sonata-form or the rondo present a high degree of conformity, they are far from simplistic formulaic patterns. As Edward Campbell (2013) observes, “no composer of worth produces a stereotype or clone of some notional model of sonata form, and the great works in the genre, from those of Haydn, Mozart and Beethoven onwards, amaze us with their innovation in terms of form, treatment of thematicism, harmony and overall tonal construction, to name only some key qualities” (6). Nevertheless, they do constitute solid identities in that they point to the formal archetypes by which we perceive them. The concept of solid identity does not refer to only one aspect of a musical work - be it form, content or performance - and is not limited to a specific genre or style, but rather addresses a hierarchy and a dualistic perception of music which has deep cultural roots in the western world.5 As Campbell (2013) notes, “it may be said that everything from folk song melodies to late-Romantic symphonies are often viewed, at a number of levels, through the prism of a principle of identity, which favours

5 I refer to the dualistic patterns of thinking on which the Western worldview has been based until the 20th century. These are traced back to Platonic and Aristotelian thought and Christian theology.
privileged enunciations and forms and highlights the confirmation of expectations and of deviations from those expectations” (6). Therefore, the dialectical and, at the same time, supplementary relationship between solid identities and its implications for material and formal development can be equally observed in the binaries of a Bachian *subject-countersubject*, a Beethovenian A-B form, a Schoenbergian *Hauptstimme-Nebenstimme* or in Webernian complementarity.

### 1.3 Replacing Old Solids

The advent of musical modernism might have brought about a fundamental shift in materials, techniques and aesthetics but not an equally radical change in identity-thinking. Concomitant with the rejection of nineteenth-century aesthetic principles was the scrutiny of nineteenth-century compositional concepts and practices, and such scrutiny became the driving force for the invention of new aesthetic ideals capable of expressing the modernist world. After all, modernism never intended to eliminate solids altogether and emancipate music from its postulated identities, but rather to replace them with updated solids. Modernist solids, lasting and reliable, came to replace the disintegrated solids of the nineteenth century which had long exhausted their creative dynamics and become deficient. The new, dependable solids, hammered by the blacksmiths of instrumental rationality would become the perfect materials to forge the modernist “brave new world”. Modernists thought that this new world of scientific and technological progress, industry, positivism, mechanization, and urbanization demanded not merely a critical stance towards history but an overall rebellion against tradition, or as Marx would put it “the most radical rupture with traditional ideas.”

In a lecture given at Mary Austin House, Santa Fe in 1936, Varese proclaims:
At a time when the very newness of the mechanism of life is forcing our activities and our forms of human association to break with the traditions and methods of the past in the effort to adapt themselves to circumstances, the urgent choices which we have to make are concerned not with the past, but with the future. (Fisk and Nichols 1997, 196)

The plasticity of modernist solids allows for non-repetitive transformational variations which cause fundamental changes on the domains of pitch, rhythm and harmony. In his Collège de France lectures in 1976, Boulez explains how composers of the Second Viennese School abolish repetition by avoiding “doubling the components within an object, non-repetition of objects, no literal return of ideas, no literal reprise of formal elements” (Boulez 2005, 256). Although pre-war modernists tend towards identity variation, they do not abolish the connecting patterns of identity. In their free atonal period, they favored variation over repetition on the basis of a prototype being subject to transformative processes. While Schoenberg explains that he repeats “little or nothing,” his material demarcates a solid identity creating variation with “an apparently low degree of resemblance to its prototype, so that one finds difficulty in identifying the prototypes within the variation” (Schoenberg 1975, 102-3). In Webern’s early works there is no literal repetition, but identity is still at play in the iteration of intervallic content which Boulez describes as a kind of thematicism intimately related to the privileging of particular intervals (Boulez 2005). Even in Erwartung, according to Friedheim “Schoenberg’s “only lengthy work in an athematic style” where no musical material returns once stated over the course of 426 measures” (Zizek 2015, 169) identity-thinking is solidified in the return of the “virtual theme”, the ideal prototype which is never stated. Boulez (2005) interprets this as an “absence of themes based on the determining return of privileged figures”, which actually

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*A term coined by Boulez to refer to Webernian athematicism which he also embraced in his early works. Boulez situates athematicism “in rejecting an absolute form of a theme, in order to end up with a notion of a virtual theme, (1) where the elements are not fixed at the beginning in a totally defined form, (2) where priority is not given above all to the intervals as the source of musical development, but where the other elements, duration in particular, can play a more important role to which the pitches are subordinated” (Boulez 2005, 223).*
constitutes “the extreme point of thematic atomisation” (210-11). Upon Webern’s return to repetition as the ‘easiest way to ensure comprehensibility’ (Webern 1975, 22), a solid concept of the motive as “the smallest independent particle in a musical idea” (ibid. 25-26) is already reinstated. With serialism dominating a growing number of musical parameters, the new patterns of identity after World War II were fixed upon serial the techniques. The series is for postwar modernists a universal credo, to the extent that “any musician who has not experienced - I do not say understood”, Boulez proclaims, “but truly experienced - the necessity of dodecaphonic music is useless. For his whole work is irrelevant to the needs of his epoch” (Fisk and Nichols 1997, 413).

1.4 Determinism/Indeterminism and Autopoiesis

Postwar modernists who departed from Webernian pointillism of privileged intervals, augmented the connecting patterns of identity of modernist solids and extended their functionality within superstructural schemata. In integral serialism the modernist musical identity found its “symbolic power” to dominate the cultural - and consequently the economic and political - sphere as the absolute logical achievement of Western music, an achievement that embodied the universality and superiority of Western musical culture over the musical cultures of the rest of the world. The determinism of self-referential modernist systems, manifested in Boulez’s attempts to unify serial materials and large-scale form, in Babbitt’s superarrays or in Stockhausen’s Gruppen, consolidates the modernist musical identity as the result of progress; a progress which reifies the musical work through a systematic and objective autopoiesis. In this context, autopoiesis refers to the process of creating musical identity through self-contained,

7 A concept coined by Pierre Bourdieu (1979) to refer to the implicit, unconscious modes of cultural and social domination.
self-referential systems from which all materials, forms and, therefore, content, derive. Mário Vieira de Carvalho (1999) claims that autopoiesis, although mostly known as a concept in biology, appears in music composition of the 1950s with the serial thinking of Stockhausen and Goeyvaerts, and certainly many years before the term is introduced by Maturana and Varela in biology.

Taking an alternative path to autopoiesis, avant-garde figures such as Xenakis and Cage rejected the absolute determinism of serialist-induced identities to explore chaos and chance. Although their technical and aesthetic approaches to indeterminism differ, both composers rely on some degree of indeterminism. Xenakis, on the one hand, takes the Western approach of *logos*, using science and philosophy to control chance. He employs stochastic theory “to control sound masses both in their invention and in their evolution” (Xenakis 2001, 255). Cage, on the other hand, takes the Eastern approach of *mythos*, using traditional systems of signs and symbols and Zen Buddhism to embrace chance. His understanding of chance is not scientific; as he explains: “Chance, such as I use it, is not something that I must control, nor that it must control me. It is not the chance of the physicist. But that does not mean the physicist’s chance shouldn’t exist” (Cage 1995, 147-8).

1.5 Regulation

It is clear that what connects Xenakian and Cagean chance is indeterminism, and what connects indeterminism and determinism is autopoiesis. What is more, indeterministic and deterministic compositional systems fed off each other to keep evolving; both Xenakis and Cage used serialist techniques, and serialists such as Boulez and Stockhausen progressively started integrating elements of controlled chance in their work. It also is clear that musical identities which emanate from autopoietic systems - either deterministic or indeterministic - are self-
regulated identities. But what is the relation between the modernist self-regulated identity and the traditional identity of the common-practice era?

The short answer is that both are regulated. Earlier in this chapter, I described the musical identities of the era of early and classic modernity as solid and went on to explain how modernism replaced the traditional solid identities of the common-practice period. If the mechanism of identity creation for modernism is autopoiesis, for the common practice period it primarily has been development, expressed in a variety of techniques and styles ranging from motivic and thematic development to transformation, or what Schoenberg summarizes with the term developing variation. Therefore, if the modernist identity is self-regulated, the common practice period identity is regulated by tradition. The factor of regulation or, in other words, the reference system of identity creation, of the modernist identity is an autopoietic system, while the factor of regulation of the common practice period identity is the tonal system. It is, however, historically ironic that both eras are labeled as modern or modernist; in fact, both the seventeenth-century stile moderno and the twentieth-century musical modernism are historically and stylistically part of the era of modernity which gave rise to regulated musical identities.

1.6 Modernity and Identity Creation

In a larger context, modernity is the era of identity regulation, rationalization and colonization. The codification of musical materials and forms, genres, and performance practices in theoretical systems and nomenclatures, which was achieved by filtering out divergences from the canon, established the modern concept of musical identity. The regulation of musical identity follows a parallel movement in cultural and social evolution.

---

8 By tradition here I mean the collection of melodic, rhythmic, metric, harmonic, timbral, and formal mannerisms that shaped the Western musical language of the common practice period.
The Brazilian sociologist Rafael Luis Pompeia Gioielli writes:

“The reflexive movements (Giddens 2001) that characterise modernity and the discursive practices created the concept of a “normal identity”… What stands out in the modern experience is a strong characteristic of “colonization” in identity experience. The term “colonization” refers, on the one hand, to the process in which identities seem to be always in the process of production by discursive practices… On the other hand, it refers to the strategic role assumed by these identities within the great modern project” (Mateos-Aparicio Martin-Albo, de Gregorio-Godeo 2013, 7).

In that sense, a process of musical colonization is exemplified in the structural development of a theme in the sonata-form allegro of classical modernity. For example, in the first movement of Beethoven’s Symphony No. 5 in C minor, the distinctive primary theme permeates the entire fabric of the movement on a melodic, rhythmic, harmonic and formal level. Particularly in the section of development, the theme reaches the most remote corners of the movement through an architecture of dramatic climax.

According to Berman’s (1988) tripartite model, later elaborated by Osborne (1992), modernity consists of three periods: a) early modernity (1500–1789 or 1453-1789), b) classic modernity (1789-1900) and c) late modernity (1901-1989). If we relate this model to the periods of Western music, early modernity roughly corresponds to Renaissance and Baroque music, classic modernity to Classical and Romantic music, and late modernity to 20th-century music. With regard to identity creation, these periods are marked by distinct mechanisms. In Renaissance music, musical identity aims at representation which is achieved through imitation. This mechanism of identity creation, which is based on the technique of imitatio along with other contrapuntal devices and styles⁹, is an attempt to revive the ancient Greek ideal of

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⁹ Renaissance music draws on a variety of aesthetic values and ancient rhetorical concepts such as imitatio, varietas, and aemulatio. However, many Renaissance works are non imitative in style, or employ a style in between musical repetition (redictae) and variety (varietas).
mimesis. As contrapuntal imitation becomes increasingly freer and makes structural use of antithesis, it evolves to variation and development during the Baroque and Classical period. The expansion of motivic, harmonic and formal functions in Romantic music gives rise to the concepts of transformation and metamorphosis. If the identity of early modernity aims at representation, the identity of classical modernity strives to fully unfold itself in every possible way in order to achieve its maximum potential; through a discursive process of synthesis it strives to colonize the most distant parts of the whole work. This tendency to colonize the whole is what I term anaptyxis, an identity creation mechanism that encompasses the relevant developmental devices of form and material. In the beginning of the 20th-century, anaptyxis gives way to autopoiesis, which has been discussed earlier as the primary identity creation mechanism of the twentieth century. To review, the three mechanisms of creating musical identity in the period of modernity are as follows:

1. Mimesis is the identity creation mechanism which aims at representation. It revives the ancient Greek ideal of mimesis and employs imitation and other contrapuntal techniques.

2. Anaptyxis is the identity creation mechanism which aims at unfolding and colonizing. It uses dialectical antithesis structurally and employs advanced developmental techniques on both musical material and form.

3. Autopoiesis is the identity creation mechanism which aims at self-regulation. It rejects traditionally-regulated identities and employs deterministic or indeterministic self-referential systems to procreate itself organically.

\[ \text{Greek } \mu\text{i} \text{m} \text{eis}, \text{ meaning imitation, representation, emulation.} \]

\[ \text{Greek } \alpha\nu\text{πατυ\text{	extperiodcentered}ς}, \text{ originally meaning unfolding, gaping, and later development, growth.} \]

\[ \text{Greek } \alpha\upsilon\text{τοποι\text{	extperiodcentered}ς}, \text{ meaning self-creation, self-making.} \]
In figure 2 below, I present the evolution of musical identity-creation mechanisms of modernity as a primary-color gradient from the beginning of early modernity (1453) until the end of late modernity (1989).

<table>
<thead>
<tr>
<th>Periods of modernity</th>
<th>Identity creation mechanism</th>
<th>Periods in the history of music</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early modernity</td>
<td>Mimesis</td>
<td>Renaissance</td>
</tr>
<tr>
<td>Classic modernity</td>
<td>Anaptyxis</td>
<td>Classical</td>
</tr>
<tr>
<td>Late modernity</td>
<td>Autopoiesis</td>
<td>20th-century</td>
</tr>
</tbody>
</table>

Figure 2: Mechanisms of creation of musical identity throughout modernity presented as a gradient of primary colors (red: mimesis, green: anaptyxis, blue: autopoiesis).

However, in the history of music this evolution has been neither linear nor without reversals; in every period more than one identity-creation mechanisms as well as hybrids of them have been in use. Such hybridity can be observed in the themes used in free atonality; while their pitch content is derived from autopoietic systems, their rhythmic content, and their harmonic progressions are handled freely without any serial ordering. Moreover, their mode of development is based on traditional models coming from classical and romantic music and their identity is created through a mechanism of anaptyxis. Similarly, the themes of continuous variations in Baroque music do not function as complete melodic, rhythmic, and harmonic
identities as do the ones of sectional variations, but they nevertheless permeate the whole form as structural units.

The categorization in figure 2 is not intended to present an all-encompassing typology of musical identity-creation, but rather to provide a representation to account for the richness of musical identities. What is in all cases apparent is that the main identity-bearing musical elements in modernity have been pitch, rhythm, harmony, and form. By identity-bearing musical elements I mean the musical elements that suggest the qualitative distinctiveness which fulfills the principle of musical individuation; it is through these that musical identities are created. When pitch, rhythm, harmony, and form suggest a thesis with clearly demarcated dimensions, such as a specific pitch set, a rhythmic motive, a harmonic field or a formal model, a solid identity is created.
CHAPTER 2: LIQUID IDENTITY

In the previous chapter I discussed the concept of musical identity and presented an outline of identity-creation mechanisms. I also defined musical identities with clearly demarcated dimensions of musical elements as *solid*. In the end, I explained that the main identity-bearing musical elements of modernity have been pitch, rhythm, harmony and form. But what is *liquid identity*? And how is it related to musical identity found in composition?

In order to answer these questions, we must first consider the meaning of the word *liquid*. Among the definitions of the Oxford Dictionary of English, we can find that liquid as a noun is:

1. a substance that flows freely but is of constant volume, having a consistency like that of water or oil.

As an adjective, it denotes:

1. having the consistency of a liquid;
   1.1 having the translucence of water; clear;
   1.2 denoting a substance normally a gas that has been liquefied by cold or pressure;
   1.3 not fixed or stable; fluid.

From the point of view of chemistry, the Oxford Dictionary of Chemistry (7 ed.) describes the liquid condition as:

A phase of matter between that of a crystalline solid and a gas. In a liquid, the large-scale three-dimensional atomic (or ionic or molecular) regularity of the solid is absent but, on the other hand, so is the total disorganization of the gas. Although liquids have been studied for many years there is still no comprehensive theory of the liquid state. It is clear, however, from diffraction studies that there is a short-range structural regularity extending over several molecular diameters. These bundles of ordered atoms, molecules, or ions move about in relation to each other, enabling liquids to have almost fixed volumes, which adopt the shape of their containers. It is much more difficult to construct a theory of liquids than theories of gases or solids.
In Oxford Reference alone, 9,725 entries include “liquid” in their definition; what is consistent among all of these definitions is that liquid is a state or “phase” in which something is not fixed or stable. When something is liquid there is no large-scale regularity, but no total disorganization either. While it is difficult to propose a general theory about liquids, we may say that they have only short-range structural regularity, they move freely, and every moment they take the shape of their container.

If we consider the aforementioned qualities of liquids in relation to musical identity, we may infer that liquid identity can be defined as an identity which is not stable or fixed. What I described in 1.1 as the criterion of musical individuation is here to be re-considered; the identity-bearing musical elements are in a phase which is fluid. In musical liquid identities, there is no fixed pitch, rhythmic, harmonic, or formal content that defines the development of material; we do not start from a solid thesis, such as a motive, a theme, or a series, with clearly measurable dimensions, but rather from material which is in a liquid condition. This does not mean that the material is disorganized or random, but that it is constantly in a state of becoming. In terms of pitch, it means that the material does not feature clearly defined pitches, but rather sounds which are in an unstable condition between pitch and noise. Furthermore, these sounds are not organized in patterns according to a rational or aleatoric system but move freely and only in relation to each other. Consequently, the rhythms and harmonies that emerge each moment are only byproducts of the flow; again, we do not start with a solid rhythmic or harmonic formation, but rather from a fluid interaction which constantly changes. In terms of form, there is no predetermined grand design according to which the composition is developed.

\[13\text{ I will not go as far as speaking about a musical “de-individuation” or “non-individuation”. Although I found these terms in a number of papers mostly pertaining to linguistics and philosophy, proposing a relevant concept in music composition is beyond the scope of this dissertation.}\]
but rather a free flow of material with short-range structural regularity. In this sense, in a liquid identity there is a constant process of formation.

Since liquid identity is not determined by the dimensions of solid identity-bearing musical elements, it is largely dependent on time. The inconstancy of the material’s condition upgrades time to the main bearer of identity. Time is, here, the container whose shape the material takes every moment.

In his preface to *Liquid Modernity*, Zygmunt Bauman (2015) writes:

> While solids have clear spatial dimensions but neutralize the impact, and thus downgrade the significance, of time (effectively resist its flow or render it irrelevant), fluids do not keep to any shape for long and are constantly ready (and prone) to change it; and so for them it is the flow of time that counts, more than the space they happen to occupy: that space, after all, they fill but ‘for a moment’. In a sense, solids cancel time; for liquids, on the contrary, it is mostly time that matters. (2)

In a composition of liquid identity, the spatial dimensions of material do not matter for too long, as they are subject to constant change. The bonding forces within musical elements are weak as in the molecules of liquids. Musical materials move about in relation to each other without a preordained long-scale structure and the concept of identity is liquefied.

### 2.1 Melting the Solids

But how are identities liquefied? And how did this process take place in music? The transition between the classical and the late period of modernity is marked by the expansion of identity-bearing musical elements and a process of blurring the traditional ones. The coloristic explorations of musical impressionism established *timbre* as a significant identity-bearing musical element while obscuring traditional elements such as form, harmony and rhythm. French impressionist composers turned away from romantic large-scale forms, functional harmony, thematic unity and development, favoring small forms, harmonic planing, and work-
specific developmental techniques to express common impressionistic topics, such as water, reflection, reverie. The “status” of temporality is also different; time is no longer an agonizing frame in which a solid identity strives to expand, but rather a plateau on which identity floats. Although orientalism in music can be traced back to the Baroque period, it is with Debussy’s piano works such as the Pagodes from Estampes that western music approaches for the first time the eastern Asian non-linear perception of time. As Campbell (2013) notes “Debussy’s own music shares something of the static temporality of gamelan” (112).

Until the twentieth century, texture remained another largely unexplored identity-bearing musical element. With Xenakis’s spatial conception of sound masses created through long-scale glissandi or “clouds” of sound, pitch and rhythm are demoted to secondary status. In works such as Metastaseis and Pithoprakta, texture and timbre create identity. Campbell (2013) explains that “Xenakis produces spatial structures in which the individual sound is unimportant in its own right acting instead as an infinitesimal particle in a global mass of sound” (93). In the evolution of these sound masses the listener is unable to follow individual voices and focuses on the textural and timbral qualities of the sound mass. A similar approach to textural identity can be observed in Ligeti’s and Penderecki’s works. However, Ligeti’s micropolyphonic masses are much more fluid and intricate than Penderecki’s sonoristic sound blocks. In works such as Atmosphères, both pitch continuity and discontinuity are integrated within the body of the sound mass. In works such as Threnody to the Victims of Hiroshima and Polymorphia, by contrast, sound masses are internally more static.

The expansion of identity-bearing musical elements to timbre and texture and the blur of traditional ones, led to the gradual untying of musical identity from its traditional roots. Identity no longer depends on the arrangement of pitches and rhythms in linear patterns. At the
same time, the concept of a harmonic identity is replaced with aggregate chromatic collections that have little to do with the overtone series.

2.1.1 Sound as Model of Identity

The timbral heritage of the “French sound” along with Varèse’s experiments with electronic sound and Messiaen’s tone colors were influential for postwar modernists such as Boulez, Stockhausen and Xenakis and was ultimately passed on to the postmodern spectralists of the 1970s. Identity-creation in spectral music is not based on a traditional or an autopoietic system according to which musical elements are organized, but on the acoustic properties of sound itself (the sound spectrum), which is analyzed and re-synthesized with specific spectral techniques. For example, in Grisey’s Périodes, from Les espaces acoustiques, the ensemble “re-synthesizes” a trombone’s low E, while in Murail’s Gondwana, the orchestra simulates a ring modulation between a bell sound and a trombone sound.

In spectral music there is no distinction between harmonic and timbral content. Harmony is timbre and timbre is harmony. Tristan Murail claims that it is unnecessary to distinguish between the two.

He eloquently sums up his argument in the following quotation:

Why try to distinguish the concept of harmony from that of timbre?… One can progressively separate timbres to create the effect of a harmony, and conversely, progressively fuse harmonic relations until they create a timbral effect. Sometimes with very little change a quite differentiated conglomerate can become a single sonic object, fused. (Murail 1984, 158)

For spectral composers, this single sonic object becomes the source from which harmony, melody, rhythm, form, and orchestration derive. And while spectral music typically eschews

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clear melodic and contrapuntal elements, its formal structure and approach to musical time is
directed by the duration and timing of the spectra it employs.

With regard to musical identity, whether spectral music is a recuperation of a lost natural
resonance or a scientific dive into the components of sound, the spectrum is all-encompassing
identity-regulator which establishes a revised system of hierarchy derived from the acoustical
properties of sound itself. Jonathan Harvey (2000) points out that “working with pitches of the
harmonic series (played by the cello in the case of Advaya) one has a basis for a cogent hierarchy:
the natural series is an equivalent to the tonic in tonality: any child can hear it” (12). In the case
of his 4-track tape piece Mortuos Plango, Vivos Voco, the return to the structuralist thinking of the
past is apparent. ‘There, the spectrum of a bell was treated with Schenkerian hierarchical
thinking by means of modulatory partial-pivots” (ibid., 13). Therefore, in spectralism timbre is
the main identity-bearing musical element and spectrum is the factor of regulation.\textsuperscript{15}

2.1.2 Deregulation

In the first chapter I discussed how modernity gave rise to musical identities regulated
by traditional or autopoietic systems and, in the previous subchapter, how spectralism used the
acoustic properties of sound itself to re-regulate musical identity. What I describe as liquid
identity presupposes the deregulation of musical identity without re-regulation by other factors.
That means that any identity-bearing musical elements, if present, are not directed or controlled
by any reference system rooted in tradition, reason, chance or nature. In liquid identity, patterns
and configurations are no longer predetermined, as there is no factor of regulation. The bonding
ties within musical elements are loose, scattered, incidental and prone to change. In the absence
of long-term connections, the void is filled by “fleeting forms of association” (Sennett 2015, 24).

\textsuperscript{15} The reference system of identity creation; see page 20.
Any relations between pitches, rhythms, harmonies or timbres are coincidental and must be thought as “sprouting formations of varying degrees of durability, but invariably unstable, hotly contested and devoid of foundations to rely on” (Bauman 2015, 193).

This condition of liquidity is not only to be observed in the relations between musical elements but also within the elements themselves. Apart from questioning the spatial or time interval between two sounds, we further need to question the identity of sound itself. In a liquid identity, the musical elements of sound are deconstructed;\(^{16}\) any perception of pitch or rhythm is non-signifying and without a fixed meaning. A “deregulated sound” may consist of a constantly variating mix of noise and pitch; and in the case that it provides any pitch perception at all, that pitch does not categorize it as part of a regulated system such as a pitch class, or a spectrum. The identity-bearing elements of the sound itself are not stable, and any temporary fixities do not suggest its belonging to a reference system. Therefore, sound itself is a liquid identity.

2.2 Liquidity: a Modus Essendi

But do we really need a new definition of musical identity? Is it possible to address such a liquid condition with the existing conceptual tools?

The notion of “liquidity” or “fluidity” has been employed since the 1990s by a number of social theorists and philosophers to delineate the social and economic processes in an increasingly complex and deregulated world. Bauman (2015) describes the current phase of modernity as liquid, John Urry (2004) speaks of global fluids, Manuel Castells (1996) of a space of flows, Ulrich Beck (2014) of fluid structures, and Umberto Eco (2017) of a liquid society. Earlier in

\(^{16}\) According to The Oxford Companion to Western Art, deconstruction is “a procedure of poststructuralism, often used as a label for this trend in thinking. It is a method of textual analysis that works to establish the instability of textual meanings and, concomitantly, to show that there are no authoritative interpretations of texts. The method was founded by Jacques Derrida (1930– ), who used it to mount a radically sceptical critique of the assumption, supposedly prevalent in Western culture, that meanings are fixed and determinate. In particular, deconstruction opposed structuralist claims that discourse has underlying structures that furnish and support its meanings”. 

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the 1980s, post-structuralist thinkers Gilles Deleuze and Felix Guattari created the main ontological ground for a non-linear ontology of becoming by developing the concept of the *rhizome*[^17] in *A Thousand Plateaus: capitalism and schizophrenia*. More recently, Ash Amin and Nigel Thrift (2013) use fluid ontologies in urban planning theory “often exacted through the design of flows as a set of serial encounters which construct particular spaces over time” (83), and Jonathan Murdoch (2006) explores the *in-between spaces* of assemblages and networks. Based on Deleuze, Jean Hillier (2017) develops a multiplanar theory of fluid planning and governance as experimental practice. Table 1 summarizes the main theoretical contributions to the concept of liquidity across various disciplines.

<table>
<thead>
<tr>
<th>Authors</th>
<th>Poststructural philosophy</th>
<th>Social theory</th>
<th>Poststructural geography</th>
<th>Planning and governance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deleuze and Guattari</td>
<td>rhizome, image of thought, lines of flight</td>
<td>Baumann, Beck, Eco, Castells, Urry</td>
<td>Amin and Thrift, Murdoch, Murdoch</td>
<td>Hillier</td>
</tr>
<tr>
<td></td>
<td></td>
<td>liquid modernity, fluid structures, liquid society, space of flows, global fluids</td>
<td>fluid ontology, in-between spaces</td>
<td>fluid planning</td>
</tr>
</tbody>
</table>

In music, literature and the arts, notions of liquidity can be traced back to the avant-garde movements of Dada, Fluxus, and Situationism. The primary objective of these movements was an artistic rebellion against the bourgeoisie through the ridicule of its values, employment of shock and provocation and happenings which disrupt public complacency. Artists affiliated with Dada, Fluxus, and Situationism did not suggest a uniform style or aesthetics, but

[^17]: The rhizome is a complex concept developed by Deleuze and Guattari that may be defined as an acentered multiplicity. A more detailed discussion of musical rhizome will follow in 2.3.1.
commonly used techniques of collage, montage, and nonsensical poetry. While these movements challenge the ontological status of the work of art, their approach to liquidity is on the surface. The music of composers-artists such as La Monte Young, George Brecht, Dick Higgins, and Yoko Ono deals with the identity of the work as a concept. The concept itself is the work, while the identity of the material and the aesthetic experience are narrowed down to the manifestation of the concept. This is what Harry Lehmann (2018) articulates as the “principle of an isomorphic mapping between idea and work. On the one hand, the idea of the artwork manifest(s) itself entirely in the piece, and on the other hand, every perceivable aspect of the artwork is a representation of that idea.” Contemporary conceptual composers have followed similar artistic approaches; from Jennifer Walshe’s musical happenings to Johannes Kreidler’s multimedia works, the actual identity of the material is of secondary importance, while the manifestation of the concept is the driving force of the artwork.

If we are to expand our understanding of the current state of art music and free ourselves from the paralysis of past conceptual models, we must address current issues of musical identity with new conceptual tools. “The transition to a new age requires a change in our perception and conception of space-time, the inhabiting of places, and of containers, or envelopes of identity” (Donkel 2001, 340), as Luce Irigaray notes. While the ideal of integralist composition based on binary antitheses synthesizing into a coherent unity is long ossified, composers and music theorists have not developed modes of thinking which integrate an ontology of liquidity. What I describe as liquidity with regard to musical identity is a state of being based on contingency rather than essentialism; the features of identity-bearing elements do not preexist in their topological construction but are emergent over time. It is an ontological category in which identity is a flow, signification and meaning and are fluid, temporary, and
always in a state of becoming. It sees the ontological model of sound as a potential, not as a structure. This mode of thinking does not simply loosen the bonds between materials but actually liquefies the very identity of sound itself. In this liquid condition, musical material and form is conceived through an ontology of immanence, through the work of complex networks, “fluid-like flows” and “in-between spaces.”

2.2.1 Identity of Musical Sound

The tonal model of Western classical music is based on a specific abstraction of sound which excludes or ignores any internal difference of sound. This regulated sound has its origins in the medieval tone model of Western church music particularly as it developed after Guido d’Arezzo’s codification. The identity of this musical sound is “purified”, stable, neutral, and genderless; it has been rendered an abstraction which can be reproduced and notated using specific signs. It is based on a tonal model which “applies transcendental models to the empirical in an attempt to clearly and neatly codify it and thus filter out any surplus sensory noise that might interfere with signal recognition” (Hulse and Nesbitt 2016, 64). The empirical is in this case any signal components classified as noise, as well as instability in pitch, dynamics, or timbre as a result of the physical procedure of sound production.

This model of sound conception and recognition suppressed any internal difference of musical sound as an ontological unit, and went unquestioned until the twentieth century. The evolution of research on acoustics and the electronic compositions of Luigi Russolo, Edgar Varèse, Pierre Schaeffer, Bernard Parmegiani, Luc Ferrari, Karlheinz Stockhausen, Iannis Xenakis and Fausto Romitelli to name just a few, provided new insights into the design and production of sound and had a significant impact on the model of sound conception. Russolo’s futurist manifesto The Art of Noises, first published in 1913, is a turning point in the integration
of noise as a component of musical sound, but it does not point to a sonic art based on a noise identity. Such noise-based concepts of identity have recently emerged from the experimental music of Japanese noise artists such as Hijōkaidan, Maso Yamazaki and Merbow (Hegarty 2001).

A similar evolution can be argued for instrumental music in which the development of extended instrumental techniques and the influence of the acoustic properties of electronic music challenged the traditional tonal model of musical sound and obscured the boundaries between sound and noise. Helmut Lachenmann’s work is a characteristic example of use of extended sounds in instrumental music. In his 1966 essay *Sound types of new music*, Lachenmann attempted a provisional taxonomy of sounds of new music in categories and subcategories, based on a model of two sound types:

a) sound as [fixed] state, and

b) sound as process.

As Lachenmann (1996) explains that means:

a) sound with undefined length (which is determined in its duration only from outside)

b) sound with a duration intrinsically defined by a characteristic shape [or development].

Each of these sound types includes subtypes categorized according to their shape, and relation to other sounds. A summary of Lachenmann’s taxonomy of sound types of new music is presented in Table 2 below.
While Lachenmann’s sound palette includes a broad spectrum of sonic materials traditionally not considered part of the identity of a musical sound, the primary focus of his musique concrète instrumentale is the physicality of sound. Lachenmann is interested in bringing to the foreground the sound surplus produced during the process of performance, which was previously filtered out of the tonal model of Western music. In works such as Guerro, the pianist does not play a single note on the piano keyboard, and instead explores the sounds of sliding his/her fingertip along the keys and tapping on the key tops or the side of the wooden blocks of the piano frame. In Accanto, Lachenmann almost creates, in photographic terms, a sonic negative of Mozart’s concerto for clarinet. The clarinetist produces a number of surplus sounds scratching, rubbing, scraping the body of the instrument, while recorded excerpts of Mozart’s concerto fade in and out of the loudspeakers. The clarinet sounds, described by Lachenmann (1996) as “pointillistic decaying elements” (169) and “splintered fragments of the old language” (ibid.), are an example of his dialectical approach to the past and to the aesthetics of Western tonal music. In his essay On Structuralism, he articulates his attitude of dealing with past structures with his concept of dialectical structuralism (Lachenmann 1995). This concept signifies his argument related to the sound type of structural-sound, in which a sound can never be conceived as existing only in itself and for itself. Ming Chao (2014) argues that

<table>
<thead>
<tr>
<th>Sound as [fixed] state</th>
<th>Sound as process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadential-sound</td>
<td>Timbral-sound</td>
</tr>
<tr>
<td>i) impulse-sound</td>
<td>i) fluctuation-sound</td>
</tr>
<tr>
<td>ii) attack-sound</td>
<td></td>
</tr>
<tr>
<td>iii) decay-sound</td>
<td></td>
</tr>
<tr>
<td>Textural-sound</td>
<td></td>
</tr>
<tr>
<td>Structural-sound</td>
<td></td>
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</tbody>
</table>

Table 2: Sound types of new music according to Helmut Lachenmann’s taxonomy.
“Lachenmann’s Strukturklang recuperates these rhetorical qualities from tonal music with a structural thinking from the post-war generation of serial composers in order to create an expressive language always mediated by the materiality of sound and sound production” (236). Lachenmann’s compositional process, which he calls “rigidly constructed denial” (Lachenmann 1996, 153), is centered on the intentional exclusion of the habitual sounds of classical performance practice, rather than the potentiality of sound. Therefore, we can say that Lachenmann’s identity of sound, based on a dialectical opposition with past structures, elevates the physicality of sound production to the primary focus of identification, but does not conceptualize an ontology which integrates the internal difference of sound.

2.2.2 In-betweenness

The quest for a difference independent of identity, the critique of signification and authority and the deferral of meaning are central to poststructuralist philosophy. Jacques Derrida introduced the concept of différance to point out the endless deferral of any ultimate meaning in deconstructive readings. In Difference and Repetition, Deleuze poses the problem of thinking about difference without defining it in terms of identity or representation. He argues that Western thought, from Plato to Hegel, has failed to conceptualize real difference. Traditional Western thought, claims Deleuze, sees difference in relation to some sort of identity — identity as an opposition to difference — therefore subordinating difference into a system regulated by a consistent identity, or a “solid identity”. In order to think in terms of a musical

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18 According to the Oxford Dictionary of Literary Terms (4 ed.), différance is “a term coined by the philosopher Jacques Derrida to combine two senses of the French verb différer (to differ, and to defer or postpone) in a noun which is spelt differently from différence but pronounced in the same way. The point of this neologism is to indicate simultaneously two senses in which language denies us the full presence of any meaning: first, that no linguistic element (according to Saussure’s theory of the sign) has a positive meaning, only an effect of meaning arising from its differences from other elements; second, that presence or fullness of meaning is always deferred from one sign to another in an endless sequence.”
difference on the elemental level of musical sound, we need to conceptualize a model of musical sound which from the very moment that comes into being it is different than itself, and, as it evolves it is always differing, always prone to change. As Peter Hallward (2006) puts it “before it differs with other anything external to itself, a differing ‘differs with itself first, immediately’ on account of the internal and self-differing power that makes it what it is” (153). But how is it possible to conceptualize such an elusive idea in musical sound?

What I propose in my compositional work, is a molecular fluid image of musical sound which ontogenizes the internal difference of sound. This image is a point, in a geometrical sense, without a preordained identity of musical elements such as pitch, duration or timbre; it occupies an in-between, liminal interval which opens space and time to a musical ontology of liquidity. It is neither a “fixed state”, nor a “process” as in Lachenmann’s taxonomy, “neither clearly space nor time but a kind of leakage between the two, the passage of the one into the other” (Grosz 2001, 110). This point is an indeterminate reservoir of potentiality, from which autonomous flows and migrations spring. This image of musical sound is neither in dialectical opposition with the past, nor seeks to advance the identity of noise. Rather, it seeks to explore the in-between interval which makes space and time for a liquid condition, from which a new liquidus quo emerges. While acknowledging the heritage of the tonal model of Western music, a sound ontology of in-betweenness neither embraces nor rejects it, for the identity of a deconstructed sound is non-signifying. Since its musical elements are deconstructed, musical identity does not come pre-sorted but emerges with time. Such a liquid musical identity aims to incorporate a radical différence, through a sound conception that embodies the internal difference of sound in its ontological model.

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19 This is a wordplay that I use to denote liquidity as an established state of affairs, rather than a transitional condition or a temporary imbalance.
2.2.3 Liquidity and Fuzzy Logic

In order to approach “in-betweenness” in terms of logic we may look into fuzzy logic. Fuzzy logic is a multi-valued logic that allows degrees of imprecision with intermediate values defined between conventional binary evaluations like yes/no, true/false, black/white. For example, if ‘1’ denotes truth, and ‘0’ falsity, \( p \) might be true to degree 0.75 and false to degree 0.25. In general, if \( p \) is true to degree \( n \), then \( p \) is false to degree \( 1 - n \). In fuzzy logic, a proposition may be to some extent both true and false and a proposition and its negation to some extent both true. Fuzzy logic is useful to show that several natural categories, such as hotness/coldness are relative and have intrinsically indistinct boundaries. It is used in a variety of disciplines, including artificial intelligence and control engineering in order to improve precision in applications such as facial pattern recognition, medical diagnosis and treatment plans, and stock trading.

With regard to the notion of in-betweenness, fuzzy logic can help us conceptualize in logical terms a constantly variating condition of being which never had a solid state to begin with. Although fuzzy logic is in some way a “deconstructed logic” as it allows a proposition to be its negation at the same time, it models difference as a spectrum between two absolutes, for example truth/falsity, hot/cold. The assumption of two opposite absolutes brings us back to the problem of difference depending on identity, which Deleuze addresses in *Difference and Repetition*. This is where the “weakness” of fuzzy logic lies. That is, it does not provide an image of multiplicity which can exist on its own, but rather considers difference as an intermediate between a binary of two absolutes. In figure 2 below, I present a graphic representation of an intermediate condition between two absolutes in comparison to a moment of a constantly variating difference-based multiplicity which exists on its own.
Our difficulty in conceptualizing a liquid ontological model which embraces internal difference goes beyond music. It is rooted in the regulating forces of modernity which allowed for the rationalization, mechanization, and progress in sciences and technology. Robert Chia (1999) argues that we assign an implicit superiority to concepts of stability and linear progress over flux and heterogeneous becoming.

He explains:

There has been little attempt to understand the nature of change on its own terms and to treat stability, order and organization as exceptional states. This is because, for most of us, our deeply ingrained habits of thought surreptitiously work to elevate notions of order, stability, discreteness, simple location, identity and permanence over disorder, flux, interpenetration, dispersal, difference and change. (Chia 1999, 210)

However, learning to think “liquidly” is not merely a necessary condition in order to conceive a difference-based sound model, but also an increasingly important skill in a complex, fast-changing, fuzzy, and uncertain world.

2.3 Morphallaxis: A Modus Operandi

But can an elusive, difference-based, non-signifying, liquid, molecular image of musical sound develop? What kind of shapes can it take and how do these work in the form of a composition?
In twentieth-century music, serialism’s fixation upon unity and rationality suppressed any elements of internal difference and complexity, and restricted formal thought to the binary-based notions of complementarity and synthesis. The formal thinking of musical modernism is based on a model of engineered rationality which assumes two grand counter-positions: a binary of a solid thesis and a solid antithesis. Any elements of difference, complexity or immanence, are conceived and perceived as processes or mediations between the two opposing theses. This model of formal dialectics, exemplified in the structural thinking of Schoenberg and philosophically elaborated by Adorno in his *Negative Dialectics*, has been questioned since the 1950s by composers such as Sylvano Bussotti, John Cage, Mauricio Kagel, Dieter Schnebel, Jani Christou and Anestis Logothetis. Working with graphic scores, improvisation and interdisciplinary approaches to performance, these composers rejected traditional concepts of form, grand structures and linear narrative in favor of discontinuity, experimentation and multi-directionality. In works such as Bussotti’s *Piano piece for David Tudor 4*, famously featured by Deleuze and Guattari in their introduction to the rhizome, or in Logothetis’s *Styx*, the sonic outcome of reading the score is always more or less open to the realization of the performers. In her 1978 book *Geste, texte, musique*, Ivanka Stoianova places such works not in the realm of the musical work but rather in the realm of musical enunciation [*énoncé musical*]. Stoianova (1978) considers graphic scores as impulsion texts [*textes-impulsions*], or scores of programmed actions [*partitions-programmes d’action*] which are open to “deviation, ramification, decentralization, and pulverization” (189).

Since the 1980s the discussion about musical form among progressive compositional circles has focused on postmodern terms. Musical thought seems to have taken an irreversible turn: in the place of dialectic we have deconstruction, instead of focusing on coherence we focus
on fragmentation, and instead of aiming at synthesis we aim at paradox. Fundamental structural concepts of musical modernism based on binary oppositions such as sound/silence, determinacy/indeterminacy, opus/open work, have exhausted their dialectical potential and have been rendered obsolete. What we can observe as an antidote is a plateau of multipolarity, non-linearity, plurivalence, skepticism, and liquidity. Structural oppositions are dissolving because everything might as well be its opposite, the fabric of musical material has been permanently broken without any possibility of traditional development, and the very identity of musical work has undergone a wholesale shift. Mahnkopf labels this process as musical deconstruction and goes on to argue that it signifies a paradigm shift which followed Luhmann’s model of sociological paradigm shift. In his essay On Musical Deconstruction, he notes: “the musical work is damaged in its identity in a twofold fashion: through the immanent subversiveness of its fabric and structure and through its eternally ‘partial’ realization” (Mahnkopf 2004, 9-10).

In the music of new complexity composers such Brian Ferneyhough, Michael Finnissy, and James Erber, the “complex, multi-layered interplay of evolutionary processes occurring simultaneously within every dimension of the musical material” (Fox 2001) places the concept of identity in a constant state of becoming. In Finnissy’s English Country Tunes the rhythmic and melodic complexity of lines and the non-repetitive nature of the material not only challenges the concept of identity structurally, but also place the work in a state of partial realization. On the other hand, Ferneyhough’s approach to complexity seems more structuralist. In the first movement of his String Quartet 4, for example, there are straightforward elements of motivic presentation and development which, however, function as pixels of an image of intentional
informational overload, or what the composer himself calls “too muchness” (Ferneyhough 1995, 259).

The challenges introduced by postmodernism with regard to form, like material, point to the need for new conceptual tools. In an effort to address these challenges, I propose the concept of morphallaxis. This term signifies a shift towards conceptualizing musical form not as a fixed end goal, but rather as a byproduct of a liquid condition. Morphallaxis is an abstraction for the processes taking place in a musical form which is in a constant state of becoming. This state is a result of liquid musical material operating within a liquid form; when deliberately fluid, non-regulated materials become the constituents of a composition, form can only be unpredictable, unstable, volatile, and instantaneous. The already loose connections between musical materials may be dismantled and reassembled at short notice or without any notice. Contrary to the modernist ideal of compulsive and obsessive development, formal thinking here is based on assembling materials in a whole of radical difference. This whole is multiple, complex, fast-changing, and therefore fuzzy, uncertain, and paradoxical. In using the term morphallaxis, I do not refer to a single standard process according to which form is designed, but rather to the outcome of the multiplicity of unpredictable ways in which materials interact. The interaction of materials in a process of constant morphallaxis is not a result of pre-compositional design. Since the materials themselves are unregulated, there are no fixed hierarchies as the relationships between them are constantly under negotiation.

20 Morphallaxis is a composite of Greek morphe [μορφή] meaning form, and allaxis [ᾰλλάξις] meaning change, from the verb allazein [ᾰλλάζειν] (to change). It is found as a term in zoology where it denotes the regeneration by transformation of existing body tissues. Here I use it in a musical context to suggest the process of a constantly changing form.
2.3.1 Arborescent versus Rhizomatic

The absence of hierarchies and the embracement of multiplicities are fundamental in the concept of the *rhizome* as proposed by Deleuze and Guattari. In *A Thousand Plateaus*, Deleuze and Guattari claim that Western thought has been based on arborescent (tree-like) structures which emphasize hierarchies and categorizations. This way of thinking can be seen in the structure of corporations, in data organization, and even in social relations. A tree, having its roots under the ground, grows vertically from a trunk which extends to branches. Every branch further creates subbranches which again generate their own subbranches hierarchically. On the other hand, a botanical rhizome such as a ginger root grows in a horizontal way towards multiple directions without a central root, point of origination or logical pattern. Figure 4 below shows a photograph of an oak tree by Ansel Adams, next to a photograph of a ginger root.

![Figure 4: A photograph of an oak tree (left) and a photograph of a ginger root (right).](image)

Unlike the hierarchically structured branches of arborescent systems, the Deleuzo-guattarian concept of the *rhizome* consists of lines which can connect any of its points. While tree-like structures unfold in structured and limited ways, the rhizome has unlimited
possibilities of growth. As Deleuze and Guattari (1987) note, while arborescent systems have “hierarchical modes of communication and pre-established paths, the rhizome is an acentered, nonhierarchical, nonsignifying system” (21) in which “semiotic chains” of different “regimes of signs” (7) can connect in any number of ways. In a rhizome “communication runs from any neighbor to any other, the stems or channels do not preexist, and all individuals are interchangeable, defined only by their state at any given moment” (ibid., 17). Figure 5 above, shows a graphic representation of an arborescent and a rhizomatic system.

Rhizomes are not structures, but processes. They have no beginning or end, but rather they are constantly in the middle. Rhizomes are non-genealogical multiplicities which cannot be reduced to solid identities. As Deleuze and Guattari (1987) note “the fabric of the rhizome is the conjunction, ‘and … and … and …’” (25). They consist of lines which grow toward multiple directions without any predetermined organization, but rather pertain “to a map that must be produced, constructed, a map that is always detachable, connectable, reversible, modifiable, and has multiple entryways and exits and its own lines of flight” (ibid., 21). Therefore, they cannot be analyzed or re-synthesized using any type of structure.
For Deleuze and Guattari music is a rhizomatic art par excellence. In *A Thousand Plateaus*, they note: “Music has always sent out lines of flight, like so many “transformational multiplicities,” even overturning the very codes that structure or arborify it; that is why musical form, right down to its ruptures and proliferations, is comparable to a weed, a rhizome” (Deleuze and Guattari 1987, 11-12). Deleuze and Guattari also describe how a rhizomatic system can be “translated” in musical terms. For them, the tonal system is an arborescent system which must be replaced by a what they call “generalized chromaticism” (Deleuze and Guattari 1987, 95) in which all of the “sound components – durations, intensities, timbre, attacks” are “in continuous variation” (ibid.). With generalized chromaticism “music itself becomes a superlinear system, a rhizome instead of a tree” (ibid.). With regard to perception, a system of generalized chromaticism echoes Wallin’s biomusicological theory of musical patterns, or “nucleations” which “are the results of fluctuations between deterministic versus indeterministic, stochastic aspects of tonal structure as interpreted by the nervous system” (Wallin 1991, 323). From a creative perspective, although compositional approaches related to aleatorism, free improvisation and graphic scores offer a kind of continuous variation, they do not satisfy an important characteristic of Deleuzoguattarian rhizomatic multiplicity. A rhizome is not a result of chance or improvisation, but rather “it must be made” (Deleuze and Guattari 1987, 6).

For French composer Pascal Dusapin, the concept of the rhizome has been greatly influential. In his opera *Faustus, The Last Night* he worked with cut-up techniques similar to that of film-maker Jean-Luc Godard. Dusapin composed the music and the text of the opera at the same time; the text was created by “bits and pieces of texts, bits of memories of books, miscellaneous citations, from films, newspapers, things heard here or there, in a word from
everything that was at hand” (Dusapin 2009, 170). He claims that his way of working is not based on any grand design or plan and that he begins “with the first note of bar 1 without knowing what will happen with bar 2” (Stoïanova 1993, 188). He argues that his main goal is to find “new ways of increasing flux”, without having a “central idea”, but rather “junctions” which constantly extend to new lines and ramifications (Dusapin 2009, 22).

In his music theater work the Greek composer Georges Aperghis has experimented with assemblages of texts, music, actions, sounds, visuals and electronic media. Since his foundation of ATEM (L’Atelier théâtre et musique) in 1976, he has developed his personal techniques and methods of working with musical composition, literary writing and stage production. Aperghis, while employing systematic process of material production, has no fixed plan and each of his works is developed in an empirical, experimental way. For example Avis de tempête is an assemblage of molecular musical, sonic, linguistic, gestural and visual elements in which signification constantly leaps from one milieu to another. In his 2011 musical theater piece Luna Park as well as in his recent Thinking Things (2018), the use of technology, including speakers, microphones, cameras, monitors, lights, and even robots, adds an extra layer of signification which questions the relationship between material, form, and meaning. In an interview with VAN Magazine the composer says that the connection between the different elements is “basically a question of function. The musical function has to be a function of the video, which is a function of the actors, and all of that functions together. Everything is done spontaneously, so the music isn’t created in a specific order from beginning to end. There are a lot of pieces of music, fragments of 30 seconds or two minutes, and I put all of that in place with everyone, with the lighting, with the video, and that’s when I decide the order of the music. The music isn’t fixed from the beginning”.

40
Aperghis’s rhizomatic approach to musical theater can be traced back to his early instrumental or vocal works such as *Simata* (1971) and *Récitations* (1978), where deconstructed fragments of music and text are assembled in conglomerations which unfold in multiple directions. Aperghis (1993) talks about a “polyphony, consisting of many micro-languages, capable of creating a physical or emotive energy resulting in violent confrontations between the meaning of an image or a sound, and a significance which is purely formal” (113) as a technique for conceiving his music theater works. The concept of form in Aperghis’s work is nuanced by signification which operates in non-semantic manners. Campbell (2013) writes that “Aperghis’s works are multiplicitous assemblages which defy any kind of unilinear reading, and there is always much more happening at any given moment than any human listener or viewer can grasp completely or make conventional sense of” (54). The result is a process of continuous *morphallaxis* in which form is not a design but rather the consequence of the interaction of heterogeneous elements across all different milieus.

### 2.3.2 Development versus Growth

In 2.2.2 I discussed the concept of “point” as a molecular fluid image of musical sound which embodies the internal difference of sound. In a state of continuous morphallaxis this molecular sonic image becomes a point in a rhizomatic system without hierarchies. As previously explained, this point has no dimensions but is a source of potentiality. With this in mind, we can return to the question about the potential shapes of a multiplicity raised in the beginning of 2.3 and consider whether the concept of development is still relevant for an elusive, difference-based, non-signifying, fluid, molecular image of musical sound which operates in rhizomatic system.
According to the Oxford Companion to Music, *development* is “the procedure, particularly in a Sonata form movement, by which some or all of the thematic material from the first section (the exposition) is reshaped motivically, harmonically or contrapuntally, or in any combination of those ways” while *transformation* is “the process of modifying a theme so that in a new context it is different but yet manifestly made of the same elements.” It is clear that in this context there is no theme, and what is more, there is no motive with measurable dimensions of pitch or rhythm. Therefore, the concept of development as we have known it in modernism is irrelevant.

This is where the concept of *growth* enters the picture. Unlike development, the process of growth is not predicated upon an object of fixed dimensions which develops hierarchically. Growth refers to the process in which a sonic point can unfold rhizomatically towards multiple directions. A point may grow in a nonlinear manner, in multiple timescales, and may connect to another point of any part of a rhizome. A process of growth in a musical rhizome may be interrupted and continued on a different temporal level or on a different musical element. Growth is not a process which has been planned on a precompositional level but is rather directed by the momentary encounters of the musical material. While a process of musical development implies construction of a solid musical identity, a process of musical growth implies a constant emergence of musical identity. Development starts from a solid musical object with measurable dimensions, whereas growth departs from the “ground zero” of a musical point which has no dimensions.

The different points of a rhizomatic system occupy a decentralized space without hierarchies in which they grow or stand idle. These points are held together through consolidation in what Deleuze and Guattari call a *territorial assemblage*. This process results in a
liquid state of perpetual becoming rather than a fully organized and integrated structure. As a concept, growth challenges structures of fixed thought and introduces a milieu of perpetual transformation consisting of causal or arbitrary connections and links. In this milieu identity and meaning are liquid as they are constantly becoming. Therefore, it is no longer relevant to ask what a musical composition means, or what its structure is, but rather we must ask what it does, and what it is becoming.
CHAPTER 3: THE PRAXIS OF RH

In this chapter I will provide some insights into the compositional process of rh for sinfonietta. At the same time, I will show how the concepts discussed in previous chapters emerged from the compositional praxis and how concepts from other disciplines, such as philosophy and sociology, informed the compositional praxis. This process was multidirectional, nonlinear and nonsystematic. It was not based on the application of one or more given theories into music composition, but rather on a continuous inquiry of both artistic theory and praxis. The process of composing the score and writing the text was at times synchronous. Sometimes a compositional problem and its solution were immediately reflected on a theoretical level, while other times there was an infiltration by existing theories. In all cases the impulse for the research and development of concepts was the praxis of composition. In figure 6 below, I show a schematic representation of how the composition, the research on musical identity and on existing philosophical, artistic or social theory informed each other.

During the course of composition, I changed my route several times as I adjusted to the locality of molecular flows of material. I assembled my material in a mode of “anarchic and creative associationism” (Hayden 1995, 293) creating links across multiple spaces, temporalities, and plateaus. I used the temporal relationships emerging from the interaction of materials on a rhythmic and metric level. The relationships between tones were treated as loose, momentary associations; I did not use them to create intervallic patterns which develop hierarchically. I rather employed sounds with nuances of pitch to delineate an internally variable flow of points. But what was the starting point of the compositional process?
3.1 Liminality

I started composing \( rh \) from the title and from a point defined in the sense that I described it in 2.2.2. The initial title of the composition was \( rhegma \), from Greek \( ρηγμα \), which means rupture. This original title would signify a rupture between my current way of composing and my older modernistic style, as well as a rupture in the concepts of musical form and material. During the creative process I changed the title to \( rh \) which is the first letter \( [\rho] \) of the previous title. The new title alludes to a multiplicity of meanings without necessarily concluding to one and, therefore, provides a deconstructive foundation. That the letter \( \rho \) is in Greek a hemiphone, or a sound between a consonant and a vowel, also resonated well with my approach to in-betweenness.

The starting point was what I describe in the performance notes of the composition as “a single click” using vertical bowing and a very “heavy” bow. The first click was later deleted so that there is no actual initial point. My decision to delete this first click echoes the idea of
‘rootlessness’ in rhizomatic multiplicities. This click, performed by the string instruments, is not intended to have the notated duration but rather to mark a point without dimensions. Marking the point in this way conforms what I described in 2.2.1 and 2.2.2 as a fluid image of musical sound which integrates the internal difference of sound. The resulting sound is a sonic grain which does not provide a sense of pitch and I thus notate it as a performative action on the string on which it is played on, as seen in figure 7.

![Figure 7](image)

Figure 7: On the left side, the notation of a single click which signifies a fluid difference-based image of musical sound. On the right side, an excerpt from m. 38 of *rh* in which the second violin and the viola play “single clicks”.

In practical terms, every performance of a click is slightly different and has indeed some infinitesimal duration. However, if it is performed with precision the listener perceives a point approaching the limits of finite pitch and duration. Therefore, this click becomes the “reservoir of potentiality” which may grow in an unlimited number of ways. For example, a click might grow into a process of granulation produced through vertical bowing. Figure 8 shows an example of parallel granulation processes, in which the graphic density of grains corresponds to the density of sonic granulation.
The point is articulated in the wind instruments in a variety of ways. In both woodwinds and brass there is the common sound of a toneless accented inhale which must be performed as short as possible. In the flute, there is the toneless effect of tongue attacks produced by inserting the tongue into the mouthpiece and without blowing any air into the flute. In the rest of the woodwinds and brass there are several percussive sounds produced by the technique of slap tongue. In this case, the result conveys a sense of pitch and noise which vary according to each performance. Figure 9 shows the notation of a slap tongue and an excerpt with slap tongues from the score.

Figure 8: Parallel granulation processes in the string section in mm. 132-133 of *rh.*
In the percussion, the individual punctuations accentuate the occurrence of single points throughout the piece. Although individual points create formations, the rhythmic content of these groupings does not suggest any solid rhythmic identity. Figure 10 below shows an example of a single point performed by the high woodblock in m. 72 of *rh*.

Another group of in-between sounds includes air tones in wind instruments and notes played using harmonic pressure on the left hand in the strings. The performer is asked to achieve a result which includes only glimpses of pitch. The result is again a variating amount of pitch and noise which in all cases is unstable and unpredictable. The sounds can be performed alone, in small groupings, or they can grow into lines of internal variance articulated through micro-glissandi. In the latter case, the performer is asked to simulate a “trembling effect” following a graphic representation of micro-glissandi in various directions and rates of pitch.

Figure 9: On the left side, the notation of a slap tongue in both woodwinds and brass. On the right side, an excerpt from m. 37 of *rh* in which the bass clarinet and the horn play slap tongues.

Figure 10: A single point performed by the high woodblock in m. 72 of *rh*. 
change, that are combined with the overall direction of the glissando. Figure 11 shows examples of air tones in winds and notes played with harmonic pressure on the left hand in strings, in this case performed in groupings.

Figure 11: Air tones in winds and notes performed with harmonic pressure on the left hand in strings in m. 85 of *rh.*
The notated pitches do not follow any predetermined pattern and are not directed by any general system of regulation. They are rather occasional formations with loose bonds which delineate the growth of a point. Figure 12 shows such sounds growing to lines of internal variance with micro-glissandi.

![Figure 12: Notes performed with harmonic pressure on the left hand growing to lines of internal variance with micro-glissandi in strings in mm 105-107 of *rh*.](image)

What all of these sounds and effects have in common is that they are liminal. They exist on the threshold between pitch and noise, in an undefined area between a tonal concept of musical sound and the physicality of its production. At its extreme point, this idea is reduced to the concept of a single musical point. This point is not the same tonal point as that of Webern’s pointillism, for it embraces the internal difference of sound. It is rather a deconstructed image of twentieth-century pointillism with a constantly emerging identity, which exists autonomously as I explained in 2.2.2. I arrived at the idea of a fluid point without pitch or duration after deconstructing my own material. I reached a limit where I realized that my musical material did not fit the existing definitions and I needed to research and eventually propose new ones. After I
started thinking about what my material is, I started questioning the identity of not only the material, but also musical form and musical work in its totality.

3.2 Without Horizon: Ateleological Writing

In the previous subchapter, I described how I started from a point focused on the identity of musical material. Here I will describe how my starting point operated in terms of form, and I will provide some reflections about my way of working during the composition of rh. The starting “single click” of the cello, which I later deleted, was not intended to occupy a specific place in the form of the piece. On the contrary, it was placed in an unidentified space without having in mind a predetermined formal structure. I did not conceive form as an arborescent structure with an inherent hierarchy ranging from local to global, but rather as an empty field in which a rhizome of multiple connectivities can grow. This was a conscious and planned decision; in other words the overarching plan was to have no structure.

Instead of composing linearly after inserting the first single click, I worked toward multiple directions. Without a structure designed in the precompositional process, I kept composing “in the middle.” This middle was the space out of which everything grew and where everything remained. As Deleuze (1995) points out in Negotiations, “things and thoughts advance and grow out of the middle, and that’s where you have to get to work, that’s where everything unfolds” (161). A musical point can ceaselessly establish connections to other points in the composition regardless of their proximity. It may also traverse to a different plateau and establish a new semiotic chain. For example, the single click of the viola in m. 10 was connected to the slap tongue of the flute in the same measure and to the single click of the second violin in m. 12. I initially treated the rhythmic relationship between the click of the viola and the slap tongue of the flute as an occasional temporal formation. I later traversed this relationship on a
metrical plateau and inserted a measure of 3/16 in between measures 2 and 4. In this measure of 3/16 (m. 3), I inserted a 5 against 3 tuplet in the percussion because I connected the initial single click of the viola in m. 10 with the single click of the first violin articulated in the quintuplet of m. 7. These relationships are constantly prone to change, migrate to new territories and create new allusions. Figure 13 provides a schematic representation of my way of working towards multiple directions and on multiple plateaus.

![Figure 13: A schematic representation of composing towards multiple directions and on multiple plateaus. The different shades of grey represent migrations to different plateaus.](image)

Music is, however, a temporal art; whether due to cultural or physiological reasons, the listener, or at least the Western listener, experiences musical time linearly and reconstructs a musical narrative based on memory. Furthermore, unless a composer chooses interactive systems of notation, open scores or text scores, music is notated following the convention of a left to right representation of musical time. In *rh*, as in most of my recent pieces, I worked in a mode of linear representation of time which gives way to a non-linear unfolding of musical

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21 Refer to the score in order to follow the lines of thought connecting these points.

22 While there is research pointing toward both directions, I tend to believe that listening is mostly cultural. In non-Western musical cultures, but also in premodern Western musical culture, the concept of temporality and the perception of time is different than the established Western model which stems from the nineteenth century. However, such cultural conventions may eventually be transformed by the over-saturation of sonic stimuli in our digitized informational society.
thought. In other words, although the piece is notated from left to right, it was composed and conceived in a mode close to what I described in the previous paragraph. This is a way of composing without horizon; there is no end or telos.

According to the Oxford Dictionary of Critical Theory, teleology is:

The study of, and the implicit assumption that everything has, a final purpose. Derived from the Greek word ‘telos’ meaning end, teleology is a philosophical position premised on the idea that human action has a purpose. This purpose is sometimes considered divine, where teleology is equated with God’s design, and may be compared to fatalism. But there is also a secular version in which teleology and history are equated. On this view of things, which is often described as a social Darwinist perspective, all human society is constantly evolving towards some as yet unknown, but certainly higher and more sophisticated form.

As with the word end in English, telos [τέλος] in Greek has the dual meaning of both the final part of something, and the goal or desired result. A musical work which has no end, has no goal. Rh has no purpose and no fixed meaning. The absence of solid structures and solid identities renders all meanings elusive, and all end goals unattainable. In the way I compose, there is no beginning or end, but only a middle. Although there are formal edges, these are just incidental punctuations within a middle ground of internal variance, without having any function in a grand design which has been predetermined. I call this way of composing ateleological writing. Ateleological writing places the concept of form in a continuous morphallaxis, and challenges the listeners’ perception of the musical work. While listeners may experience musical time linearly, they are unable to reconstruct a narrative which leads toward an end goal.

### 3.3 Hic et Nunc

How does one make compositional decisions without a reference system and in a state of liquidity? In the previous subchapter I explained that I composed rh by always writing “in
the middle.” Every moment I designed my material locally, focusing on short-scale interactions and emerging shapes. With materials in a state of precariousness and the connections between them disintegrated, any sense of long-term security is nostalgia. In this state of “deliberate precarization,” (Bauman 2015, 163) constant presentism, and liquefaction, all decisions are taken in a mode of “here and now.” For example in mm. 22 - 24 of rh shown in figure 14 below, diverse materials including air tones, harmonic sounds, percussive sounds, granulation effects, inhale sounds and multiphonics are put together in an assemblage of loose bonding ties. When writing this passage, I reacted solely to the impulses of the moment; the superposition of different meters, rhythms, articulations, timbres, and dynamics was only considered locally.

Consequently, the resulting form was shaped by the know-how of the moment. It is a praxeomorphic form as Baumann would put it: a form which is morphed every moment by the praxis of the creator, rather than a grand design.

Figure 14: An assemblage of materials including air tones, harmonic sounds, percussive sounds, granulation effects, inhale sounds, and multiphonics in mm. 22-24 of rh.
On pages 59-62, I explained that writing in the middle means that there is no end, neither in the sense of the final part, nor in the sense of the final goal. Moreover, on page 53, I referred to the mode of assembling my materials as “anarchic and creative associationism” to emphasize the loose bonds between materials and the absence of regulation. Writing in the middle also means that there is no beginning. Arche \[\alpha\rho\chi\eta\] in Greek has the dual meaning of both the beginning part of something and the rule or power. Considering both of these senses, \textit{rh} is an anarchic work because it has no beginning and no rules. The material placed in the beginning of the score does not function as a beginning neither rhetorically nor perceptually, and could be placed in a different part of the piece.

So what remains in a composition without a beginning or an end, and without rules or purpose? The Greek word \textit{meson} \[\epsilon\sigma\nu\] means both the middle part of something and the means or medium. In figure 15, I present a schematic representation of writing structurally in comparison to writing in the middle.

![Figure 15: Schematic representation of writing structurally (left) and “writing in the middle” (right). In structural writing there is a beginning and end, as well as rules and end goals.](image)

Without an \textit{arche} or a \textit{telos} there is only a \textit{meson} out of which everything grows and where everything remains. The musical work becomes a \textit{meson} of immanent \textit{aporia}\textsuperscript{23}, and the listener is placed in a state of perplexity as in Plato’s excerpt quoted in the epigraph of this dissertation.

\textsuperscript{23} \textit{Aporia} \[\alpha\pi\omicron\iota\alpha\] from \textit{aporo} \[\alpha\pi\omicron\rho\omicron\omicron\] “impassable”, means perplexity, query, or doubt. It is also used as a term in rhetoric to denote an expression of doubt, and in philosophy to denote an irresolvable internal contradiction or logical disjunction in a text, argument, or theory. According to the Oxford Dictionary of Philosophy (3 ed.) “deconstruction is often credited with uncovering the concealed aporetic nature of texts upon which it is practised.”
CHAPTER 4: RH FOR SINFONIETTA

*Rh* is an original composition for sinfonietta which I composed between August 2017 and May 2019 in Vienna, Austria, Lausanne, Switzerland, Athens and Ioannina, Greece, and Iowa City, USA. The duration of the piece is approximately 11 minutes.
Alexandros Spyrou

rh

for sinfonietta
rh

for

flute (doubling alto flute and piccolo)

oboe

clarinet in Bb (doubling bass clarinet)

bassoon

horn

trumpet in Bb

trombone

percussion

violin I

violin II

viola

violoncello

double bass
4.1 Performance Notes

General

ppp as soft as possible
fff as loud as possible

The level of dynamics must be adjusted according to the conditions of the concert hall.

linear glissando. The rate of pitch change is stable.

non linear glissando. The rate of pitch change changes according to the curve.

non linear glissando in multiple directions.

micro-glissandi in various directions and rates of pitch change, combined with the overall direction of the glissando up or down; “trembling effect”.

bisbigliando.

pitch bend less than a semitone, unless specified differently.
Flutes

- Air tones, only glimpses of pitch.

- Tongue pizzicato.

- Tongue ram (sound a major 7th lower).

- Flutter tongue.

- Tongue attacks produced without blowing air into the flute. The technique can be produced by either inhaling or exhaling (toneless).

- Rhythmicized exhale (toneless).

- Accentuated inhale covering the whole mouthpiece (toneless).

- Vocal fry. Produce a grating sound with your throat, resembling suffocation/asphyxiation. Blow through the tube of the instrument covering the whole mouthpiece while playing the indicated fingering. The graphic density of grains should correspond to the density of sonic granulation.
Oboe

- air tones, only glimpses of pitch.
- slap tongue.
- rhythmicized exhale (toneless).
- accented inhale covering the whole tube opening (without reed and toneless).
- vocal fry. Produce a grating sound with your throat, resembling suffocation/asphyxiation. Blow through the tube of the instrument covering the whole mouthpiece while playing the indicated fingering. The graphic density of grains should correspond to the density of sonic granulation (without reed and toneless).

Clarinet

- air tones, only glimpses of pitch.
- slap tongue.
rhythmicized exhale (toneless).

accented inhale covering the whole mouthpiece.

teeth on reed. Produce a high pitched tone with unstable, unidentified harmonics.

Bassoon

air tones, only glimpses of pitch.

slap tongue.

rhythmicized exhale (toneless).

accented inhale.
Horn

- Air tones, only glimpses of pitch.
- Slap tongue.
- Flutter tongue.
- Rhythmicized exhale (toneless).
- Accented inhale.
- Unpitched static noise.

Trumpet

- Air tones, only glimpses of pitch.
- Slap tongue.
flutter tongue.

rhythmicized exhale (toneless).

accented inhale.

Trombone

air tones, only glimpses of pitch.

slap tongue.

flutter tongue.

rhythmicized exhale (toneless).

accented inhale.

non linear glissando as fast as possible. Combine the intervallic glissando pattern (as indicated) and the overall glissando up or down.
Percussion

\[\text{tom 8\textquotedbl}}\]

\[\text{tom 10\textquotedbl}}\]

\[\text{tom 12\textquotedbl}}\]

\[\text{tom 14\textquotedbl}}\]

\[\text{bass drum}\]

\[\text{woodblock (high)}\]

\[\text{woodblock (low)}\]

\[\text{thunder sheet, rub with supernal mallet}\]

\[\text{hard bass drum stick}\]
hard stick

super ball mallet

rute drumstick

rub the rute drumstick on the head of the instrument in order to produce a granulated sound. The graphic density of grains should correspond to the density of sonic granulation.

Strings

use half pressure (harmonic) on the left hand.

a single “click” using vertical bowing and very “heavy” bow. It is not intended to have the notated duration or pitch.

scratch tone. Apply overpressure in order to produce a grating sound.
Ricochet. The upper stems indicate the duration of every bouncing. The lower stems indicate the fingered pitches.

Vertical bowing. Scrape across the string with the bow hair (toneless). The graphic density of grains should correspond to the density of sonic granulation.

Non linear glissando as fast as possible. Combine the intervallic glissando pattern (as indicated) and the overall glissando up or down. When the initial noteheads are square, use overpressure. When the initial noteheads are diamond, use harmonic pressure.
4.2 Score

rh

Alexandros Spyrou

*flute sounds an octave higher, bass clarinet and double bass sound an octave lower.*
REFERENCES


Tsao, Ming. 2014. “Helmut Lachenmann’s ‘Sound Types’”. Perspectives of New Music. 52, 1, 217-238.


