

HEARING WITH THE BODY: POETICS OF MUSICAL MEANING
IN NOVALIS, RITTER, HOFFMANN AND SCHUMANN

by

ALEXIS B. SMITH

A DISSERTATION

Presented to the Department of German and Scandinavian
and the Graduate School of the University of Oregon
in partial fulfillment of the requirements
for the degree of
Doctor of Philosophy

June 2017

DISSERTATION APPROVAL PAGE

Student: Alexis B. Smith

Title: Hearing with the Body: Poetics of Musical Meaning in Novalis, Ritter, Hoffmann and Schumann

This dissertation has been accepted and approved in partial fulfillment of the requirements of the Doctor of Philosophy degree in the Department of German and Scandinavian by:

Jeffrey Librett	Co-Chair
Dorothee Ostmeier	Co-Chair
Kenneth Calhoon	Core Member
Margret Gries	Core Member
Stephen Rodgers	Institutional Representative

and

Scott L. Pratt	Dean of the Graduate School
----------------	-----------------------------

Original approval signatures are on file with the University of Oregon Graduate School.

Degree awarded June 2017

© 2017 Alexis B. Smith

DISSERTATION ABSTRACT

Alexis B. Smith

Doctor of Philosophy

Department of German and Scandinavian

June 2017

Title: Hearing with the Body: Poetics of Musical Meaning in Novalis, Ritter, Hoffmann and Schumann

The question of whether or not music can be considered a universal language, or even a language at all, has been asked for centuries—and indeed, it is still being addressed in the 21st century. I return to this question because of the way the German Romantics answered it. Music becomes embodied in not only human language in Novalis’ concept of *Poesie* in “Die Lehrlinge zu Sais” (1802), but also nature and the human body in Johann Wilhelm Ritter’s scientific speculations in *Fragmente aus dem Nachlasse eines jungen Physikers* (1810). Seen as the manifestation of the world soul, this embodiment was an attempt to come closer to naming the unnamable, and, I argue, became the perfect platform for E.T.A. Hoffmann to develop his pseudonym and literary character Johannes Kreisler and the mysterious power of music he experiences in the collection of musical critiques and essays, *Kreisleriana* (1810-1814), and the novel, *Lebens-Ansichten des Katers Murr* (1819/1821). Finally, I argue that Hoffmann’s musical literary style can be heard and ‘felt’ in Robert Schumann’s piano cycle, *Kreisleriana*, Op. 16 (1838), as other scholars have also analyzed, but that there is also a ‘mixing of discourses’ involved, including Schumann’s own words about the suite. Music is not a universal language—at least, not as understood by the mind and described through words.

These writers and composer grapple with the observation that music has a powerful influence over the body—can music then be seen as a ‘language’ received and understood by the body? If so, can an interdisciplinary approach to music and language through science lead to better understanding, as was already exemplified by the collaboration among the German Romantics?

CURRICULUM VITAE

NAME OF AUTHOR: Alexis B. Smith

GRADUATE AND UNDERGRADUATE SCHOOLS ATTENDED:

University of Oregon, Eugene
University of Northern Colorado, Greeley

DEGREES AWARDED:

Doctor of Philosophy, German, 2017, University of Oregon
Graduate Certificate in Nonprofit Management, 2017, University of Oregon
Master of Arts, German, 2008, University of Oregon
Bachelor of Arts, Music and German, 2005, University of Northern Colorado

AREAS OF SPECIAL INTEREST:

German Language and Literature
German Music and Music History
Nonprofit Management and Grant Writing

PROFESSIONAL EXPERIENCE:

Graduate Teaching Fellow, Department of German and Scandinavian, University
of Oregon, Eugene, 2011 to present

Pre-school German Instructor, Sophie Scholl Schule, Corvallis, Oregon, 2013-
2014

German Instructor, German Department, Western Oregon University, Monmouth,
2009-2012

Graduate Teaching Fellow, Department of German and Scandinavian, University
of Oregon, Eugene, 2006-2008

GRANTS, AWARDS, AND HONORS:

Philip Hansen Graduate Fellowship Scholarship, Department of German and
Scandinavian, 2016, 2013

Astrid M. Williams Award, Department of German and Scandinavian, 2015-2016

Graduate Summer Translation Award, Translation Studies Working Group, *Elsa Asenijeff's Unschuld (1901)*, 2015

Graduate Research Forum Award: Imaginative Design, Art, and Performance, Graduate School, 2015

Julie and Rocky Dixon Graduate Innovation Award, Graduate School, 2014-2015

Roger Nicholls Memorial Scholarship, Department of German and Scandinavian, 2013

Fulbright Scholarship, Baden-Württemberg Seminar for American Faculty in German and German Studies, 2010

Conference Travel Awards, Department of German and Scandinavian, 2013-2016, 2008

Festival junger Künstler Bayreuth (Bayreuth Festival for Young Artists), Music Composition Workshop, 2004

PUBLICATIONS:

Asenijeff, Elsa. *Innocence: A Modern Book for Girls* (1901). Trans. Eva Hoffmann and Alexis B. Smith. Ed. Natalie K. Brenner and Robert Mottram. Riverside, CA: Ariadne Press, (forthcoming).

“Ritter’s Musical Blood Flow Through Hoffmann’s Kreisler.” *The Early History of Embodied Cognition 1740-1920: The Lebenskraft-Debate and Radical Reality in German (Medical) Science, Music, and Literature*. Ed. John A. McCarthy, Stephanie Hilger, Heather Sullivan, and Nicholas Saul. Leiden & New York: Brill|Rodopi, 2016. 145-162.

ACKNOWLEDGEMENTS

I extend many thanks to the Department of German and Scandinavian for its continual financial support during my graduate studies. I would like to thank Professors Jeffrey Librett and Dorothee Ostmeier for their many years of support and assistance and for serving as co-chairs in the preparation of this dissertation. Special thanks are also due to Dr. Margret Gries, whose expertise and interest in (especially) German music history, philosophy, and science and whose suggested resources helped me bridge the interdisciplinary nature of my dissertation. I would also like to thank Dr. Stephen Rodgers for his assistance on the Schumann chapter and analysis, and Professor Kenneth Calhoun for directing me to the quote by Carlos Santana (included, with gratitude, at the beginning of the “Conclusion” to my dissertation). I am very grateful to Dr. Roger Grant, who served on the committee during the early years of the dissertation before leaving the UO, and Dr. James Fittz, for serving as an honorary member from afar. And last, but certainly not least, I would like to thank the members of the department and all of my friends and family for the incredible teamwork that went into caring for Eleanor and completing this project.

To my sister, Tara, for always being by my side (even from a distance) as we continue to follow our dreams, and to the Farm, with gratitude, for all that it brought into my life.

TABLE OF CONTENTS

Chapter		Page
I.	INTRODUCTION: READING MUSIC IN LANGUAGE AND LANGUAGE IN MUSIC	1
II.	A ‘CHORD PROGRESSION’ OF LEIBNIZ’S PRE-ESTABLISHED HARMONY IN NOVALIS’ “DIE LEHRLINGE ZU SAIS”	15
III.	SOUND, LIGHT AND LANGUAGE: NOVALIS AND RITTER ON THE <i>KLANGFIGUREN</i>	57
IV.	RITTER’S MUSICAL BLOOD FLOW THROUGH HOFFMANN’S KREISLER	101
V.	“SO SPRACHVOLL AUS DEM HERZEN:” POETIC EXPRESSION IN THE INNER VOICES OF ROBERT SCHUMANN’S <i>KREISLERIANA</i> , OP. 16	135
VI.	CONCLUSION.....	172
	REFERENCES CITED.....	183

LIST OF FIGURES

Figure	Page
2.1. Table 1 from <i>Entdeckungen über die Theorie des Klanges</i> , 1787	61
2.2. From William Henry Stone (1879) <i>Elementary Lessons on Sound</i>	68
4.1. Piece 1, A Section, mm. 1-8	156
4.2. Piece 1, B Section, mm. 9-14	157
4.3. Piece 1, mm. 15-17. The inner melody disappears in a transition back to the A Section.	157
4.4. Piece 2, mm. 1-8	158
4.5. Piece 2, mm. 9-18	160
4.6. Piece 2, Intermezzo I (section B), mm. 38-45	161
4.7. Piece 2, Intermezzo II (section C), mm. 92-96	162
4.8. Piece 2, “Langsamer (erstes Tempo)” (section D), mm. 119-128	163
4.9. Piece 3, “Sehr aufgeregt” (section A), mm. 1-19	164
4.10. Piece 3, “Etwas langsamer” (section B), mm. 33-45	166
4.11. Piece 4, “Sehr langsam” (section A), mm. 1-6. In measure 5 Robert’s voice enters.	167
4.12. Piece 4, “Bewegter” (section B), mm. 12-17	168

CHAPTER I

INTRODUCTION: READING MUSIC IN LANGUAGE

AND LANGUAGE IN MUSIC

Any musicologist realizes that music is probably a universal fact (it appears that there is no civilization without music), and realizes that the ‘faculty of music’ is written into the genetic destiny of humanity, like ‘faculty of language.’ The moment this is realized, however, the musicologist must be able to relativize the concept of music, and acknowledge that western musicology is itself merely a form of culturally conditioned knowledge. (...) There is not a music, but many musics—and, one could even say, many musical phenomena.¹ (Jean-Jacques Nattiez in *Fondements d’une Sémiologie de la Musique*)

The following project began as an investigation into the ‘location’ of music in the literature and philosophy of early German Romanticism—how it exists not only in time as it is played or sung, but is also embodied in language, occupies space, lingers in the body, and reaches beyond all the senses. It is even treated as a mysterious, universal language—or at least an integral part of an evasive universal language.

The question of whether or not music can be considered a universal language, or even a language at all, has been asked for centuries—and indeed, it is still being addressed in the 21st century. That music is a “universal language,” or more specifically,

¹ Translation from: *Music and Discourse: Toward a Semiology of Music* (1990), 60. In a critique of Jean-Jacques Nattiez’s *Fondements d’une Sémiologie de la Musique* in his essay “The Semiology of Music” (1981), Roger Scruton argues that by having titled his work “a semiology of music,” Nattiez left room for other semiologies of music, undermining its status as a “science.” Scruton criticizes further, “In the sixties it became fashionable to invent it. Roland Barthes presented his *Elements de Sémiologie* in 1964, borrowing from Saussure, Jakobson and Hjelmslev all the premature technicalities of the unformed science of linguistics, and displaying them with a beguiling irreverence that at times seemed like insight” (75). Despite the harsh criticism, music semiologists continued with their work. Nattiez attempted a “post-structuralist” view of music semiotics in his book, *The Battle of Chronos and Orpheus: Essays in Applied Musical Semiology* from 2004—acknowledging both the lack of a closed system, and language’s inadequacies at describing music. He moves from a “structural conception of music and semiology to a dynamic, open conception of musical function, based on Jean Molino’s tripartitional semiological theory of 1975” (4).

a “universal language of emotions” has now become a cliché and has lost credibility “among worldly folk” (Lidov 1). Essentially repeating Jean-Jacques Nattiez’s statement above from 1975 (first translated into English in 1990), composer and music theorist David Lidov writes in 2005, “Regarding *universality*, we know now that ‘music’ takes a plural” (2).

Beginning in the 20th century, music theorists adopted a semiotic approach to attempt to answer the question of what music *means*. A product of structuralism, the study of semiotics originated in the work of Ferdinand de Saussure (1857-1913), who addresses the complexity of human languages as a system of signs in his *Course in General Linguistics* (1916). As Jonathan Culler explains of Saussure’s work, noises (and, by association, music) can be considered a language if they are a part of “a system of conventions that relate noises to ideas” (28). However, many have found a semiotic approach even to language to be too restrictive. Semiotics requires a closed system, and languages, for the most part (in regard to especially modern languages which are still in use), are ever expanding. Regardless, this did not stop the use of the approach—and indeed, other disciplines have adopted semiotics as a model for their own analytical processes.

The semiology of music, which is believed to have originated in the work of Eero Tarasti (1948-), a Finnish musicologist and semiologist currently teaching at the University of Helsinki, has since become a growing field. However, attempting to establish a semiology of music has not been entirely successful—again, because ‘music,’ too, is not a closed system—and the field has received harsh criticism (see especially

Theodor Adorno, Henry Orlov, and Fred Lehrdahl and Ray Jackendoff).² While many have already answered the question of whether or not music can even be considered a language (primarily with the definitive answer, “no”), it is still being asked because it is clear that music *communicates* something. Henry Orlov explains:

It is not possible to determine when music was first thought of as a language. In many primitive societies and in many civilizations of the past, including that of medieval Western Europe, music was worshipped as a language of divine revelation. The eighteenth-century doctrine of affects (*Affektlehre*) claimed that music was the language of passions and emotions, as had Plato and the thinkers of the ancient Orient earlier on. For Beethoven music was the language of a higher wisdom, and for the Romantics, the language of beauty and poetic truth, to mention only a few definitions. (131)

Instead of writing off establishing a “music semiotics” as impossible, as many have done, David Lidov points to a limitation in linguistics itself, which ignores important aspects of language (and therefore also music), namely, those aspects which cannot be studied as “systematic articulations,” such as the “musical side of speech—the feeling tones and gestural character of speech. In part, the bias is the bias of writing, the prejudice of

² As an early example, Theodor Adorno proclaims in his essay, “Music and Language: A Fragment” from 1956, that music is not a language, but it resembles language: “Music resembles language in the sense that it is a temporal sequence of articulated sounds which are more than just sounds. They say something, often something human. The better the music, the more forcefully they say it. The succession of sounds is like logic: it can be right or wrong. But what has been said cannot be detached from the music. Music creates no semiotic system” (1). See also: Orlov, Henry. “Toward a Semiotics of Music.” *The Sign in Music and Literature*. Ed. Wendy Steiner. Austin: University of Texas Press, 1981. 131-137; Lehrdahl, Fred and Ray Jackendoff. *A Generative Theory of Tonal Music*. Cambridge, MA: MIT Press, 1983.

regarding what can be written as more essential to the medium than what cannot be” (3).³ Music is not a closed system, not even within a given culture. However, what about musical styles of the past, or an analysis of one complete musical work?⁴ Lidov dives into his analysis to uncover language with which to describe these possibilities. However, he acknowledges that even then, assigning terminology to elements of music does not necessarily bring about clearer “meaning.” “The moment it takes musical form, the somatic sign is veiled by complications and its source obscured. It evolved through networks of qualification, ambiguation, and manipulation from a mode of reaction to become a mode of ideation” (153).

In spite of the efforts to address and allow for the limitations in language’s ability to describe musical meaning, the analyses by music semiologists are also still largely locked inside of the language of music analysis and semiotics, and the above quote by Lidov sounds just like the same evasive meaning of music as understood during early German Romanticism. The music is still “veiled,” “obscured,” “ambiguous.” For this reason, music semiotics cannot answer my questions in the following chapters directly,

³ In *Is Language a Music? Writings on Musical Form and Signification*, David Lidov offers a detailed analysis of the state of music semiotics as of 2005, with particular focus on and response to Nattiez (and Nicolas Ruwet as well).

⁴ By focusing on music from the past, music semiologists have been able to make compelling cases for closed systems of individual works. However, as Henry Orlov already added to this discussion in his essay, “Towards a Semiotics of Music” in 1981, “[t]hat music may be described in semiotic terms does not necessarily mean that the terminology and theory of semiotics will help us to understand music better” (131). And in “The Ideal of Music and Language” (2009), after providing a “highly abbreviated mapping” (17) of the different thoughts and opinions on the language characteristics of music, Kofi Agawu concludes that “[t]he most imaginative music analysts are not those who treat language as a transparent window into a given musical reality but those who, whether explicitly or implicitly, reflect on language’s limitations even as they use it to convey insights about music. (...)” (18).

especially because the music (with the exception of Robert Schumann's composition, which contains no words) is referred to or embedded in the texts.⁵

I still return to this question of whether or not music can be considered a “language” because of the way the early German Romantics answered it. There is an interesting ‘lineage’ of ideas present in selected literary and scientific writings by the Jena Romantics Novalis (1772-1801) and Johann Wilhelm Ritter (1776-1810), followed by music critiques and literature by E.T.A. Hoffmann (1776-1822) and a musical composition by Robert Schumann (1810-1856). Music becomes embodied in not only human language in Novalis’ concept of *Poesie* in “Die Lehrlinge zu Sais” (“The Novices at Sais,” 1802), but also in nature and the human body in Johann Wilhelm Ritter’s scientific speculations in *Fragmente aus dem Nachlasse eines jungen Physikers* (*Fragments from the Estate of a Young Physicist*, 1810). Seen as the manifestation of the world soul, this embodiment was an attempt to come closer to naming the unnamable, and, I argue, became the perfect platform for the development of E.T.A. Hoffmann’s pseudonym and literary character Johannes Kreisler in the collection of musical critiques and essays in *Kreisleriana* (1810-1814) and the novel, *Lebens-Ansichten des Katers Murr* (*The Life and Opinions of Tomcat Murr*, 1819/1821) as well as (via Hoffmann) the “literary,” musical structure in Robert Schumann’s piano cycle, *Kreisleriana*, Op. 16 (1838). Music is not a universal language—at least, not one as understood by the mind and described through language in scholarly analysis or poetic commentary. These

⁵ However, music semiology does provide important background for a theory I would like to further develop in my next project relating Johann Wilhelm Ritter’s theory of musical blood flow to biosemiotics, as I describe in my “Conclusion” to this dissertation.

writers and this composer grapple with the observation that music has a powerful influence over the body. Can music, then, be seen as a ‘language’ or perhaps containing ‘language’ received and understood by the body?

In my approach to these texts, I consider in which forms music, language and imagery depict each other reciprocally. The question becomes, how can one read music in language and language in music (that is, especially music that does not contain vocal lines with words)? On the aesthetic experience of reading, American film and literary critic Seymour Chatman writes:

(...) *mere* reading is not an aesthetic experience, just as merely looking at a statue is not one. They are simply preliminary to the aesthetic experience. The perceiver must at some point mentally construct the ‘field’ or ‘world’ of the aesthetic object. The aesthetic object of a narrative is the story as articulated by the discourse, what Susanne Langer would call the ‘virtual’ object of the narrative. A medium—language, music, stone, paint and canvas, or whatever—actualizes the narrative, makes it into a real object, a book, a musical composition (vibrating sound waves in an auditorium or a on a disc), a statue, a painting: but the reader must unearth the virtual narrative by penetrating its medial surface. (27)

How can a reader or listener “unearth the virtual narrative by penetrating its medial surface,” as Seymour Chatman writes above, if the references in a work are abstract, analogical and intermedial? My reading of these texts requires drawing on cross-textual references among these writers and this composer in order to offer a window into how the

Romantic discourse itself holds keys, however seemingly separate and fragmented, to better understanding the abstract meanings and connotations in both the literary language and the music.⁶

In Chapter Two I trace musical metaphors in Novalis' concept of *Poesie* as the development of a universal language in his literary fragment, "Die Lehrlinge zu Sais" ("The Novices at Sais," 1802). Novalis writes of novices searching for a lost, universal language, the pronunciation of which is a "wonderful song."⁷ Music becomes a metaphor for the song-like quality of *Poesie*, Novalis' universal language. For Novalis, it is *Poesie*, in the sense of *Poiesis* (creation) that 'represents the unrepresentable'.⁸ Novalis presents this quest in the form of a dialogue between the novices. The purpose of dialogue for the Jena Romantics (represented in this current project with a primary focus on Novalis and Ritter) was to develop and reveal a language that could be available to everyone—the answer to this was through poetic language.

As literary scholar Jane Kneller explains of the Jena Romantic's view of their collaborative project, "Poetry is expansive by nature and true poetry exists when one seeks to expand one's poetry to increasingly incorporate the work of others" (115).

⁶ While my dissertation focuses solely on Novalis, Johann Wilhelm Ritter, E.T.A. Hoffmann and Robert Schumann and I cannot represent the complete "Romantic discourse," I see them as representative of (and as "a window into") the Romantic discourse through the connections among their writings on the question of what music means. In my further research for the book project, I look forward to further connecting work from this and other discourses—especially perspectives of 20th and 21st century science, as I discuss in the "Conclusion" to my dissertation.

⁷ Andrew Bowie and Barbara Naumann address the role of rhythm in Novalis' texts, which is not the focus of my analysis. See: Andrew Bowie, *Aesthetics and Subjectivity: from Kant to Nietzsche* (Manchester University Press, 2003) and Barbara Naumann, *Musikalisches Ideen Instrument: Das Musikalische in Poetik und Sprachtheorie der Frühromantik* (Metzler, 1990).

⁸ As Andrew Bowie also addresses in *Aesthetics and Subjectivity*, 93.

Polyphonic discourses were integral in realizing this ideal. While James Hodkinson points to Jacob Böhme and the Reformation doctor and amateur theosophist, Paracelsus as primary influences on Novalis' thinking (13), I argue that there is another voice to consider in Novalis' polyphonic approach; not only in the overall narrative structure of "Die Lehrlinge zu Sais," but also in the language he uses, too—that of Gottfried Wilhelm Leibniz (1646-1716). Novalis' language and imagery contain a remarkable resemblance to Leibniz's theory of the monads and *prästabilierte Harmonie* (pre-established harmony) of the universe, as I also demonstrate from selected fragments in *Das Allgemeine Brouillon* (*The General Notebook*, 1798/1799).⁹ The pre-established harmony (with which Novalis was familiar from Leibniz's *Theodizee*), is a harmony comprised of countless and small elementary units known as "Monaden," which, created and choreographed by God, represent the fundamental substance of the universe. The multiple levels and existences of monads, which Leibniz proposes, are revised by Novalis' concept of *Poesie* and in the development of his characters. However, a pre-established harmony would signal an end form, and this is not their final destination. Therefore, although Novalis references Leibniz's theory as a foundation for his musical concept in *Poesie*, he goes beyond this idea by acknowledging that language, and especially "universal language" does not have a final, static form or meaning, but is instead constantly evolving. However, analyzing Leibniz's influence on Novalis' text does not bring us closer to understanding what this language actually looks or sounds like. Therefore, a further approach is required.

⁹ Translated as "Notes for a Romantic Encyclopedia: *Das Allgemeine Brouillon*" by David W. Wood.

Elaborating on the musical nature of language in Novalis' work, Chapter Three adds contemporary scientific perspectives of this period and inquires into Novalis' and Johann Wilhelm Ritter's (1776-1810) reception of Ernst Florens Chladni's (1756-1827) *Klangfiguren* ("sound figures," known today as the Chladni Figures). In his "Appendix" to *Fragmente aus dem Nachlasse eines jungen Physikers (Fragments from the Estate of a Young Physicist)* (1810), Ritter includes a portion of his correspondence with Danish physicist and chemist Hans Christian Ørsted (1777-1851), in which Ritter speculates that these visual images of sound from the *Klangfiguren* resemble the earliest written languages. He therefore proposes that ancient people were 'in tune with' the visual nature of sound, suggesting that the written signs for the first human languages were not arbitrary signifiers, but were directly related to the sounds of which they were a part. Ritter sees sound, and specifically music as intimately related to language, echoing also Johann Gottfried Herder (1744-1803), who argues that the sensations from music come from within, and that all sounds in nature are music (an important reference to Ritter's work)—music is nature's voice. Herder writes that tones, such as cries, were the origin of human language.¹⁰ For Ritter, the *Klangfiguren* represent this connection as both sound and written sign in one. My Reading of Ritter's "Appendix" in conjunction with selected fragments from Novalis' *Das Allgemeine Brouillon*, "Physikalische Fragmente" from the "Freiburger naturwissenschaftliche Studien 1798/99," and "Fragmente und Studien 1799-1800," shows that Novalis was working closely with the *Klangfiguren* as well in his

¹⁰ See: *Abhandlung über den Ursprung der Sprache* (1772) (1: 697-810). Further theories and commentaries on the origin of language are vast, and it is out the scope of this current project to discuss them further.

literary work, “Die Lehrlinge zu Sais”—and indeed, with a very similar interpretation as Ritter. Novalis also performed experiments on the *Klangfiguren* himself (Sünner).¹¹ This is made especially clear in the fragments in which he lists different materials to test, just as Ritter records his experiments.

In Chapter Four I return to Ritter, because in a brief section of his “Appendix,” he departs from the similar ideas he shares with Novalis and makes the startling claim that tones carry their own consciousness.¹² While he writes about the language-nature of the *Klangfiguren* as a hypothetical wish in the subjunctive, he asserts in the indicative, “Töne sind Wesen, die einander verstehen, so wie wir den Ton”¹³ (476). Suddenly, tones take on a life of their own, and, according to Ritter, only composers have the ability to take control over this “race.” I open with this passage in Chapter Four in order to introduce

¹¹ Literary critic Rüdiger Sünner writes, “Novalis besass Chladni’s Buch ‘Entdeckungen über die Theorie des Klanges’, führte selbst ähnliche Experimente durch und kam dadurch zu der Erkenntnis, dass die ‘musikalischen Verhältnisse’ die eigentlichen ‘Grundverhältnisse der Natur’ zu sein schienen. Dass auch Töne und Klänge eine verborgene, aber visualisierbare Zeichensprache besaßen, war für ihn ein weiterer Beleg seiner Annahme, dass alles sinnlich Wahrnehmbare auf eine tiefere geistige Ordnungsschicht verweise, in der Schönheit, Weisheit, Zweckmässigkeit und unvorstellbare Kreativität herrschen müsse. Novalis glaube an die Existenz eines einstigen ‘Goldenen Zeitalters’, in dem Priester noch Kenntnisse von solchen Dingen gehabt hätten. In unserer heutigen Zeit seien es vielleicht noch die ‘Genies’ in Kunst und Wissenschaft, die eine Ahnung davon besäßen, aber in Zukunft müsse dies wieder zum Allgemeingut aller Menschen werden.” (“Novalis owned Chladni’s Book, *Discoveries on the Theory of Sound (Entdeckungen über die Theorie des Klanges)*, even carried out similar experiments himself and thereby came to the realization that the ‘musical relations’ appeared to be the actual ‘fundamental relations of nature.’ The fact that tones and sounds also possessed a hidden but visible language of signs was for him a further proof of his assumption that everything perceptible by the senses points to a deeper mental order in which beauty, wisdom, expediency and unimaginable creativity prevail. Novalis believed in the existence of a one-time ‘Golden Age’, in which priests still had knowledge of such matters. In our time, perhaps, the ‘geniuses’ in art and science had an inkling of it, but in the future it would have to become the common property of all mankind.”) (My translation) See: <http://www.ruedigersuenner.de/novalis8.html>.

¹² An earlier version of this chapter under the same title was published in *The Early History of Embodied Cognition 1740-1920: The Lebenskraft-Debate and Radical Reality in German (Medical) Science, Music, and Literature*. Ed. John A. McCarthy, Stephanie Hilger, Heather Sullivan, and Nicholas Saul. Leiden & New York: Brill/Rodopi, 2016. 145-162.

¹³ “Tones are beings which understand each other, as we do tone.” (Translation by Holland 477)

Ritter's further scientific investigations related to the *Klangfiguren* in his *Fragmente aus dem Nachlasse eines jungen Physikers*. Ritter's work displaces the importance of the ear as the receptor for hearing music, further explaining how music resides inside and travels through nature and the human body. In several scattered fragments, Ritter provides scientific reasoning derived from his experiments in animal magnetism for how music comes from the spirit realm into the blood via iron, and then travels to the human heart—the “true” magnet directing the electric current. Music transfers from one human being to another, and to and from objects of nature, signaling a universal, musical life force prevalent in everything.

E.T.A. Hoffmann adopts and expands Ritter's theory of music in the blood to explain his pseudonym and literary character Johannes Kreisler's experience of music in the *Kreisleriana* texts (1810-1814) and the novel, *Lebens-Ansichten des Katers Murr* (*The Life and Opinions of Tomcat Murr*) (1819/1821).¹⁴ Hoffmann takes his representation of Ritter's theory further, not only completing cycles Ritter proposes, but also making the musical blood flow connection biological by heritage, giving a quite literal meaning to the English familial idiom that music “runs in the blood” (also known as “runs in the family,” which became common usage in the 1600s and 1700s).¹⁵

¹⁴ This detailed connection between Ritter's and Hoffmann's musical blood flow has gone unnoticed in the literary scholarship until this current project. I first published on these findings in “Ritter's Musical Blood Flow Through Hoffmann's Kreisler.” *The Early History of Embodied Cognition 1740-1920: The Lebenskraft-Debate and Radical Reality in German (Medical) Science, Music, and Literature*. Ed. John A. McCarthy, Stephanie Hilger, Heather Sullivan, and Nicholas Saul. Brill/Rodopi: Leiden & New York, 2016. 145-162. Chapter Four of this dissertation goes beyond this early analysis—correcting oversights, and drawing further connections.

¹⁵ See: <http://idioms.thefreedictionary.com/run+in+the+blood>. In German it is more commonly stated, “es liegt in der Familie” (“it lies in the family”). However, as I show in Chapter Five, Robert Schumann states

However, the scientific claims that Ritter makes in his *Fragmente* are lost in Hoffmann's writings, bringing the theory into the realm of the uncanny. Hoffmann's Kreisler is overcome by the power of music and cannot control it—it takes on a creative life of its own.

Robert Schumann was among the composers who felt connected to this flow of music through the body. Informed by Hoffmann's *Kreisleriana* texts, the novel *Lebens-Ansichten des Katers Murr*, as well as the diary entries, letters and musical critiques by Schumann, Chapter Five investigates the movement of language and literature back into music, Schumann's piano suite, *Kreisleriana*, Op. 16 (1838). I consider to what degree the piano suite can be considered an "intersemiotic translation" from language into music, to use Roman Jakobson's terminology, which goes beyond mere words and metaphors (114). In his writings related to and about the suite, Schumann describes not only the mingling of the senses, but also a synthesis of thoughts, images, people, and ideas—all mediated through the music. While Schumann titles the cycle *Kreisleriana*, referencing Hoffmann's collection of essays and musical critiques, music theorists point to Hoffmann's novel about Kreisler, *Lebens-Ansichten des Katers Murr*, as the more likely influence on the composition. Schumann however writes in a letter that the music is about Clara Wieck, his fiancé at the time—he even wished to dedicate it to her (but did not, for reasons I explain in the chapter). What Schumann "intends" is lost in the musical score and when it is performed, except perhaps for those who have *read* first. Musical

in a letter to Clara that his music is "so sprachvoll aus dem Herzen" ("so full of language from the heart") (*Jugendbriefe* 280).

meaning, as we typically understand it, must always be explained in words, except for the physical experience of music; in this case, the body is no longer an object but the subject of experience.

In my case study analysis of the first four pieces of the suite, I show how Hoffmann's literature and Schumann's own words about his music are reflected in Schumann's treatment of what I identify as the "outer, virtuosic passages" and the "inner, poetic voices" of the music. Rather than a detailed musical analysis of these pieces, which would not bring further *meaning* to them in the purview of this project, I analyze the role of the performer's body in executing these passages to bring out the voices in the music. I use Elisabeth Le Guin's approach in *Boccherini's Body: An Essay in Carnal Musicology* (2006) as a model. Le Guin argues that the performer's identification with the composer is elemental in the proper performance of a historical work. The body plays an integral role in this identification, as the notes on the score also require something specific of the body in order to execute a piece. Le Guin explains, "Because the performer's relationship to the work of art must have an extensively explored bodily element, a performing identification with a composer is based on a particular type of knowledge which could be called carnal" (14).¹⁶ Discovering the "nature of the music" from the performer's perspective is a "physical" rendering of the score: "On this level, perusal of the score becomes an anticipatory kinesthesia, a sub-verbal, sub-intellectual

¹⁶ Although Le Guin's book focuses on Luigi Boccherini (1743-1805), who was an Italian classical era composer and best known today as a virtuoso cellist in the second half of the eighteenth century, she acknowledges that her carnal approach to musicology can be applied to other composers as well. She continues on page 14, "It is the rendering of this knowledge, which by its nature contains an extremely fine grain of detail, into concepts that are usefully transferable to other works, to other points of contact with the composer, and eventually to points of contact with other composers altogether that will concern me for the remainder of the book."

assessment of questions such as, “What do I need to do in order to play this? Where will I put my hands, and how will I move them?” (17). Schumann’s composition is physically demanding—and the poetic context, especially, is expressed in the sound through intricate motions of the body. My analysis shows that Schumann’s concept and application of the “inner voice” in his piano music plays an integral role in his concept of musical communication from the body.

Gathering and working with these cross-textual references is crucial in understanding the “virtual narrative” of each work (Chatman 27) as it is based on the dialogues between poetic, scientific, and musical texts. This dissertation reveals music as a language of the body by demonstrating the benefits of cross-textual analysis of interdisciplinary and intersemiotic translations.

CHAPTER II

A 'CHORD PROGRESSION' OF LEIBNIZ'S PRE-ESTABLISHED HARMONY IN NOVALIS' "DIE LEHRLINGE ZU SAIS"

Today we know that sometimes hieroglyphs stand for the things of which they are the images, but more frequently they possess a phonetic value. Following the fabulous interpretation of Horapollus, however, the scholars of the fifteenth, sixteenth, and seventeenth centuries believed that they signified mysterious and mystical truths, understandable only by initiates. They were divine symbols, able to communicate not merely the names or forms of things but their very essences, their true and deeply mysterious meanings. They were thus considered the first instance of perfect language. (Umberto Eco, *Serendipities: Language & Lunacy* 56)

About three months after Novalis began working on his literary fragment, "Die Lehrlinge zu Sais" in 1798, Napoleon began an expedition to Egypt. One of his soldiers discovered the Rosetta Stone the following year, which offered the first modern understanding and side-by-side translation of an ancient hieroglyphic text into demotic as well as Greek. This decree from 196 BC is even thought to have been originally placed in or near the temple in Sais. In his fictional literary fragment, "Die Lehrlinge zu Sais," Novalis writes of novices searching for a lost, universal language at the temple of Sais. However, the hieroglyphs are not the lost language for which Novalis' novices are searching. Having arrived at the temple of Sais, it is from *within their own conversations* that these novices appear to find precisely what they were looking for:

(...) Ihre Aussprache war ein wunderbarer Gesang, dessen unwiderstehliche Töne tief in das Innere jeder Natur eindringen und sie zerlegten. Jeder ihrer Namen schien das Lösungswort für die Seele jedes Naturkörpers. Mit schöpferischer Gewalt erregten diese Schwingungen alle Bilder der Welterscheinungen, und von ihnen konnte man mit Recht

sagen, daß das Leben des Universums ein ewiges tausendstimmiges Gespräch sei; denn in ihrem Sprechen schienen alle Kräfte, alle Arten der Tätigkeit auf das unbegreiflichste vereinigt zu sein. Die Trümmer dieser Sprache, wenigstens alle Nachrichten von ihr, aufzusuchen, war ein Hauptzweck ihrer Reise gewesen....¹ (1: 106-107)

The traditional desire to lift the veil to discover hidden truths is translated from the outer visual to the inner auditory realm.² The novices appear to discover the universal language within themselves as they converse with each other; they are a part of the universal, never-ending, thousand-voiced conversation. This ‘musical language’ is to be accepted into their experience as a result of their journey. It can be interpreted, in other words, as a passive unveiling, as nothing is physically lifted. This universal language is not composed of instrumental or vocal music, but rather takes the form of speech—the pronunciation of which is a “wonderful song.” This novel conflation of disparate art forms is not only an effective representation of some aspects of Friedrich Schlegel’s *Universalpoesie*, in which music becomes a metaphor for the “song-like” quality of poetry, but also alludes to Gottfried Wilhelm Leibniz’s theory of the *prästabilierte Harmonie* (*pre-established harmony*). As is clear in his examination and combination of

¹ “Their speech was a wondrous song, its irresistible tones penetrated deep into the inwardness of nature and split it apart. Each of their names seemed to be the key to the soul of each thing in nature. With creative power these vibrations called forth all images of the world’s phenomena, and the life of the universe can rightly be said to have been an eternal dialogue of a thousand voices; for in the language of those men all forces, all modes of action seemed miraculously united. To seek out the ruins of this language, or at least all reports concerning it, had been one of the main purposes of their journey....” (Translation by Manheim 113)

² As in Schiller’s poem “Das verschleierte Bild zu Sais” (1: 242-244). Schiller’s novice lifts the veil in his desire to know ‘the whole truth’, and although we do not know what he sees, the reader is advised not to follow his example.

the sciences in his encyclopedia project, *Das Allgemeine Brouillon* (1798/99), Novalis includes music, and in particular in an entry mentioning Leibniz. Leibniz himself did not establish a musical theory as a foundation for his pre-established harmony.³ However, it is not surprising that many 17th and 18th century thinkers adopted Leibniz's *Monadenlehre* and *prästabilierte Harmonie* with a musical interpretation.⁴ Rather than using "harmony" as a blank metaphor for combining the different philosophies and sciences, Novalis integrates a particularly musical approach to harmonizing language.

In order to attain a new perspective on the question of music and language in early German Romanticism, this chapter investigates the role of music in Novalis' "universal language" in relation to the influence of Leibniz's *prästabilierte Harmonie* on his polyphonic approach in "Die Lehrlinge zu Sais."⁵ Novalis' language and imagery

³ As is compellingly addressed by Yves Belaval in "Die Idee der Harmonie bei Leibniz," 561.

⁴ Herder used the *Monadenlehre* as the foundation of a music theory in *Viertes kritisches Wäldchen* in 1769 (*Gesammelte Werke*, Hrg. von B. Suphan, Bd. 4, Berlin 1878). He also mentions it briefly in a musical context in *Abhandlung über den Ursprung der Sprache*: "So wenig hat uns die Natur als abgesonderte Steinfelsen, als egoistische Monaden geschaffen! Selbst die feinsten Saiten des tierischen Gefühls (ich muß mich dieses Gleichnisses bedienen, weil ich für die Mechanik fühlender Körper kein besseres weiß!), selbst die Saiten, deren Klang und Anstrengung gar nicht von Willkür und langsamen Bedacht herrühret, ja deren Natur noch von aller forschenden Vernunft nicht hat erforscht werden können, selbst die sind in ihrem ganzen Spiele, auch ohne das Bewußtsein fremder Sympathie, zu einer Äußerung auf andre Geschöpfe gerichtet. Die geschlagne Saite tut ihre Naturpflicht: sie klingt!" (127). It was in the early 17th century that theorists began using the term to describe a single tone as a part of a chord (including Johann Lippius (1612), Wolfgang Caspar Printz (1676), and Johann Georg Sauer (1661), who wrote about monads in his dissertation *De Musica*). Leibniz was therefore not the first to use the term. It first entered his philosophy in 1696. Other writers who referenced or utilized Leibniz's theory in the 18th century include organist and composer Johann Heinrich Buttstett (1666-1727), Johann Adolph Scheibe (1708-1776) in his *Compendium musices* (around 1730), and Johann Mattheson (1681-1764) in his *Phthongologia systematica* (1748). For more information see Ulrich Leisinger's *Leibniz-Reflexe in der deutschen Musiktheorie des 18. Jahrhunderts*, 98-110.

⁵ The secondary literature indicating Leibniz's influence on Novalis has focused primarily on Novalis' scientific and philosophical writings, as in Johannes Hegner's book *Die Poetisierung der Wissenschaften* and Remigius Bunia's *Romantischer Rationalismus. Zu Wissenschaft, Politik und Religion bei Novalis*. The Jenaer Romantics, including Schlegel, Novalis, and Johann Wilhelm Ritter received Leibniz's writings positively and integrated his theories into their works. Leibniz's influence is particularly clear and

contain a remarkable resemblance to Leibniz's theory of the monads and *prästabilierte Harmonie* of the universe, as is clear from selected fragments from Novalis' *Das Allgemeine Brouillon* (1798/1799). However, Leibniz's static system is transformed into Novalis' dynamic poetic process.

The pre-established harmony, with which Novalis was familiar from Leibniz's *Theodizee*, is a harmony comprised of countless and small elementary units known as "Monaden," which, created and choreographed by God, represent the fundamental substance of the universe. The multiple levels and existences of monads, which Leibniz proposes, can be seen in Novalis' *Poesie* and in the development of his characters. However, Leibniz's monads are "windowless," meaning that no outside forces can influence their internal make-up. By contrast, Novalis' novices gain important internal transformations through their outer world experiences. Therefore, although Novalis references Leibniz's theory as a foundation for his musical concept of *Poesie* as is first clear in *Das Allgemeine Brouillon*, he goes beyond him by acknowledging that language, and especially this 'universal language' does not have a final, static form or meaning, but is instead constantly evolving, as more voices and language from different disciplines are integrated. The question I ask is this: Is Novalis arguing that the role of musical language,

representative in Schlegel and Novalis' encyclopedia project from 1798 to 1799, which sought not to define individual areas of study (as one traditionally expects of an encyclopedia) but rather to uncover the connections among concepts and categories, ultimately establishing a *Tranzendentalpoesie*. For more information, see Steffen Dietzsch's article, "Marginalien zur Leibniz-Rezeption in der Jenaer Romantik." As Remigius Bunia also explains, "Ganz im Sinne des rationalistischen Elementaritätsaxioms, der besonderen Spielart des Äquivalenzaxioms, geht Novalis davon aus, dass der Kreativität, mit Legosteinen die Welt nachzubauen, keine Grenzen gesetzt sind. Der Kalkül und die Mathematik sind mithin keine Hindernisse bei der möglichst universalen Beschreibung der Welt, sondern effektive Hilfsmittel dazu. Es geht darum, alle Lebensbereiche zu kombinieren." (Bunia 99-100)

specifically *Poesie* (and its many layers of meaning that unfold in its process), as similar to but also departing from the *Monaden*, the fundamental substance that connects the world, which is invisible, unreachable, indescribable—just as Leibniz proposed with his *prästabilierte Harmonie*? More precisely, is *Poesie* Novalis’ monad?

“Der Mensch spricht nicht allein—auch das Universum *spricht*—alles spricht—unendliche Sprachen. Lehre von den Signaturen”⁶ (Novalis 3: 267-68, Nr. 143). James Hodkinson notes that Novalis’ concept of the plurality of voices in the universe, as representative in this quote from his *Das Allgemeine Brouillon* from 1798, came from his interest in Jacob Böhme and the Reformation doctor and amateur theosophist, Paracelsus, both of whose holistic models were not supported by musical allegories (13). Hodkinson concludes in this context that Novalis’ concept of the plurality of voices in the universe specifically is more likely originally traceable to Paracelsus. However, what he does not mention is Leibniz’s role in this concept.

Novalis’ approach to representing a plurality of voices takes on a few forms at the turn of the 18th century: first, in his encyclopedia project titled *Das Allgemeine Brouillon*, in which he combines not only concepts from different thinkers but also across disciplines—especially poetry, mathematics, and the sciences. Of the notebook David Wood reports: “its purpose was at once breathtakingly universal and ambitiously idealistic: to discover the common principles underlying all the different arts and sciences” (xii). Novalis never completed this project nor published it. However, an

⁶ “It is not only man that speaks—the universe also *speaks*—everything speaks—infinite languages.” (Translation by Wood 24, Nr. 143)

unfinished product of his effort to bring poetry and the sciences together was his fragmented novel, “Die Lehrlinge zu Sais,” which he worked on simultaneously with his encyclopedia project. Novalis comments in late 1798:

[231.] Gravitationslehre – und Arythmetika universalis will ich zuerst durchgehn. Jener soll Eine Stunde, dieser 2 Stunden gewidmet werden. Was mir nebenher einfällt, wird in das *allg[emeine] Brouillon* mit hineingeschrieben. Die übrige Zeit wird theils dem Roman, theils vermischter Lektüre gewidmet – und d[er] Chymie und Encyclopaedistik überhaupt.⁷ (3: 278-280)

With his time carefully divided between several projects, it is not surprising that they had an influence on each other. The goal of this multi-faceted project is exemplified in the following quote from the notebook:

282. MENSCHEN-BILD[UNGS]L[EHRE]. Um die Stimme auszubilden, muß man sich mehrere Stimmen an bilden – dadurch wird sein Organ substantieller. So um seine Individualität auszubilden muß er immer mehrere Individualitäten anzunehmen – dadurch wird er z[um] substantiellen Individuum. Genius.⁸ (3: 290)

⁷ “I will first of all work through the theory of gravitation—and the *arithmetica universalis*. I will devote one hour to the former, and 2 hours to the latter. Whatever else occurs to me will also be written down in the *universal brouillon*. The remaining time will be partly devoted to the novel, partly to miscellaneous readings—and to chemistry and encyclopedistics in general.” (Translation by Wood, “Introduction” xii)

⁸ “282. THEORY OF HUMAN DEVELOPMENT. In order to develop the voice, a person must cultivate many voices—thereby making his organ more substantial. Thus in order to develop his individuality, a person must constantly take on many individualities, and know how to appropriate them—thereby becoming a substantial individual. Genius.” (Translation by Wood 42)

James Hodkinson analyzes the role of the poet's voice in this above passage as follows:

[I]n Novalis, all things appear able to speak for themselves. This appears to generate a tension. For Novalis, there is some form of universal whole governing the discursive activity of the individuals comprising it, yet *also* allowing for the free discursive agency of those individuals. (...) The poet must develop and articulate his own voice; (...) implying that the poet's singular voice is dialogical (to use Bakhtin's term) composed of many strands, which he has inherited—or here, taken—from others. And whilst, furthermore, (...) the poet must also learn to assimilate himself. So, the poet's voice must not replace the voices it echoes, but integrate itself into a manifold, which preserves the integrity and position of those other voices. (17-18)

However, where did Novalis get his approach to this 'intersubjective discourse,' to use Hodkinson's term (13)? He combines not only different fields of knowledge in his development of *Poesie*, but also integrates the 'voices' of the thinkers from whose work he is drawing. What has not yet been analyzed in the German literary scholarship and represents this "universal whole" that Hodkinson describes above (which also allows for the "free discursive agency of those individuals"), is precisely Leibniz's voice entering Novalis' *Poesie*.

Just as one cannot find a systemized critique or analysis of Leibniz's or any one else's work in Novalis' philosophical and theoretical writings, one can also not expect to

find it in Novalis' prose and poetry.⁹ For Novalis' goal was precisely the unification and *poetization* of these scientific and philosophical ideas—where else better to explore this synthesis of ideas than in his first poetic prose fragment? But first, it will be necessary to quickly summarize Leibniz's theory and his influence in early German Romantic thought.

Leibniz's first comprehensive theory of the monads was published in 1710 in the *Theodizee*. The *Monadologie*, which appeared between 1714 and 1720, summarizes his philosophy on the *Monaden* and their role in the *prästabilierte Harmonie* as presented in the *Theodizee*.¹⁰ I will utilize it here to provide a concise summary of Leibniz's thoughts, focusing on the elements that will be most useful for the analysis of Novalis' text.

Leibniz describes the pre-established harmony as that which unites the universe. Leibniz's solution to the mind-body problem quickly de-emphasizes the role of God, shooing him, as it were, offstage. Where the Occasionalists, like French philosopher Nicolas Malebranche, believed that God intervenes in every moment with every action, constantly performing miracles, Leibniz argues that God 'planted seeds', so to speak (my terminology)—the countless and small elementary units known as *Monaden*, which are pre-established to grow into their own unique existences.

⁹ As Steffen Dietzsch also points out in his article, "Marginalien zur Leibniz-Rezeption in der Jenaer Romantik" (234). In his chapter article, "Novalis und Leibniz," Daniel Lancereau also explains that Novalis romanticized Leibniz's concept of "Aufmerksamkeit" in his understanding that there is no waking state without a sleeping state, and no sleeping state without a waking state. The waking and sleeping states both inform and are a part of each other. Novalis' understanding of this concept played an integral role in both "Die Lehrlinge zu Sais" and *Heinrich von Ofterdingen*. Lancereau's analysis makes compelling comparisons to Leibniz's sleep and waking theories outlined in the *Theodizee*. For more information see Daniel Lancereau: "Novalis und Leibniz" (169-191).

¹⁰ The *Monadologie* was first published in 1714/1720 in French, and was first translated into German by Johann Christoph Gottsched (1700-1766) in 1744 making it available to German readers (Leisinger 113).

They are maximally simple substances, lacking any parts, and are termed “die wahrhaften Atome der Natur”¹¹ (*Monadologie* 435, Nr. 3). Yet, they are postulated as being smaller than atoms—contrary to atoms, however, they are not physical in nature. They each have specific qualities, even though they cannot be divided into parts. For example, they do not have “windows.” Leibniz writes, “Die Monaden haben keine Fenster, durch die etwas hinein- oder heraustreten könnte”¹² (*Monadologie* 436, Nr. 7). This also means that the monads cannot be derived from or acted upon by any outside force other than God—they are, in a sense, protected by a ‘veil’. Each monad is unique from all others. In addition, some monads, which Leibniz refers to as “souls” (*Seelen*), carry the capacity for perception and memory. The highest level of monad he calls the “spirit” (*Geist*), which carries the capacity for “reason” (*Vernunft*). According to Leibniz, any changes that happen to a monad are a consequence of its pre-established harmony. Leibniz writes:

11. Hieraus folgt weiter, daß die **natürlichen Veränderungen** der Monaden **aus einem innern Prinzip** erfolgen, da **eine äußere Ursache** ja keinen Einfluß auf ihr Inneres haben kann.¹³ (*Monadologie* 437, *Theodizee* § 396, § 400)

This inner principle to which Leibniz refers is precisely the *prästabilierte Harmonie*. The internal changes that a monad experiences are, in a modern sense, pre-programmed to

¹¹ “Monads are the real atoms of Nature.” (Translation by Carr 32)

¹² “The monads have no windows by which anything can enter in or go out.” (Translation by Carr 38-39)

¹³ “11. It follows that the natural changes of the monads depend on an *inner principle*, because, as we have shewn, an external cause can produce no effect on the inner being of the monad.” (Translation by Carr 45)

occur. However, the monad's perception of reality is limited—it is not capable of understanding or knowing representations outside of its vicinity. In fragment 60 Leibniz writes:

60. Hieraus begreift man weiterhin die apriorischen Gründe dafür, daß die Dinge keinen andren Verlauf nehmen können. Denn Gott hat bei der Regelung des Ganzen auf jeden Teil Rücksicht genommen insbesondere auf jede Monade, die, da sie ihrer Natur nach zur Vorstellung geschaffen ist, durch nichts darauf beschränkt werden kann, nur einen Teil der Dinge vorzustellen, wengleich man zugeben muß, daß diese Vorstellung, was die Besonderheiten des Universums anlangt, nur verworren und nur bei einem geringen Teil der Dinge, nämlich bei solchen, die für die Monade die nächsten oder größten sind, distinkt sein kann, denn sonst wäre jede Monade eine Gottheit. Nicht im Gegenstande also, sondern in der verschiedenen Art der Erkenntnis des Gegenstandes haben die Monaden ihre Schranken. Sie beziehen sich alle in verworrener Weise auf das Unendliche, auf das Ganze, sind jedoch durch die Grade der distinkten Perzeptionen begrenzt und von einander verschieden.¹⁴ (*Monadologie* 449)

¹⁴ “60. Further, in what I am now going to say, we may see the *a priori* reasons why things cannot be other than they are. It is because God in regulating the whole must have had regard to each part and particularly to each monad. Since the monad's nature is representative its representation cannot be restricted to a part of things only. It is true that in regard to the detail of the whole universe this representation is confused, and each monad's distinct representation is confined to a small part only, namely, to those things which are nearest to it or else of greatest moment in relation to it, for otherwise each monad would be a divinity. It is not in the object but in the modification of the knowledge of the object that the monads are restricted. They

While all monads represent the whole, what distinguishes them from each other is their individual view-points, which, as can be interpreted, are based on the ‘location’ and experience from their bodies. This is a point from which Novalis is trying to deviate from Leibniz’s theory by making the monads ‘windowless’. In essence, Novalis is wishing to expand consciousness—to show how the creation of *Poesie*, a universal language, would expand the monads’ ability to perceive both nature and humanity through developing the senses further. Even though Novalis is moving away from the limitations of Leibniz’s monads, Leibniz’s theory still provides this space because of his concept of becoming within the pre-established harmony.

Respected scholar John H. Smith addresses the central role that Leibniz played in the major shifts of German thought from the late eighteenth to the early nineteenth century in his essay, “Leibniz Reception around 1800: Monadic Vitalism and Aesthetic Harmony.” Although Spinoza was a leading figure in his conception of God as the creator of nature itself, in which humans play an integral part (see his philosophical treatise, *Ethics*, written between 1664 and 1665 and first published in 1677), he had been criticized by many, including Enlightenment thinkers such as Johann Gottfried Herder, Johann Wolfgang von Goethe, Karl Philipp Moritz and the Romantics Friedrich Schleiermacher, Friedrich Schlegel, and Friedrich Schelling, for not having a conception of *becoming*, which is precisely where Leibniz’s contribution of the pre-established harmony gains importance in their thoughts. John H. Smith explains,

all, in their confused perception go to infinity, to the whole, and they are limited and distinguished by the degrees of their distinct perceptions.” (Translation by Carr 103)

if Spinoza's otherwise mechanistic conception of *deus sive natura* was to be made palatable, it had to be 'activated,' 'brought to life' ('belebt' in the words of Schelling), and 'individualized'; Leibniz's philosophy offered such a dynamic vision of nature. Hence, even though he was often openly criticized, Leibniz was a linchpin in a new version of a living God, living nature, and living religion. (210)

In the reception of Leibniz's thought around 1800, Smith explains that there were two important elements considered:

first, given his understanding of the continuous and infinite flux of organic substances, life and death themselves become mere moments of transformation (...). Second, the order that is guaranteed to exist within the structured totality of substances is one of harmony. (218)

The implications underlining these concepts include that everything in life is undergoing ceaseless transformation—including souls, animals, and objects of nature—and that human beings can experience and achieve the beauty of this harmony, by producing “individual works (of nature or of artifice)” (218).¹⁵

¹⁵ After a brief summary of the general status of Leibniz reception around 1800, Smith provides analyses of Leibnizian thought structures in key features of Friedrich Schlegel's novel, *Lucinda*, and Schleiermacher's speeches *Über die Religion (On Religion)*, both from 1799. He explains that Schleiermacher and Schlegel had planned a collection of “Anti-Leibniz” fragments—however, even though their aim was to polemicize his thought, “notions of (pre-stabilized) harmony, radical individuality, and all-permeating vital forces entered their thought from the apparent target of their attacks” (210). Smith quotes Leibniz: “One could learn the beauty of the universe in each soul if one could unravel all that is rolled up in it but that develops perceptibly only with time....it is not only a mirror of the universe of creatures but also an image of divinity. The spirit not only has a perception of the works of God but is even capable of producing something which resembles them, though in miniature.” (*Leibniz* 640) (218-219)

Herder engaged with Leibniz's work early on in his career, especially in "Wahrheiten aus Leibniz" ("Truths from Leibniz"), "Über Leibnizens Grundsätze von der Natur und der Gnade" ("On Leibniz's Principles of Nature and Grace"), and *Gott: Einige Gespräche* (*God: Some Dialogues*, 1787). Herder introduced a "vitalistic reading of Spinoza," one that fused Spinoza's thought with Leibniz's (John Smith 209). Smith explains:

[Herder] rejected the notion that the monads were 'windowless' and had no interaction with each other. Rather, in a way that already leads him toward Spinoza, he saw the plenum of monads as making up one complete field of interactive being (which he came to call 'Dasein' or 'being')—which is, nonetheless, not the same as the one substance and its infinite 'modifications' à la Spinoza. (220)

However, Goethe, Schelling, Schleiermacher, and Friedrich Schlegel sought to polemicize Leibniz's thought, though unsuccessfully, as Leibniz's philosophy entered theirs. As mentioned earlier, "notions of (prestabilized) harmony, radical individuality, and all-permeating vital forces entered their thought from the apparent target of their attacks" (210). In his essay, "Über die bildende Nachahmung des Schönen" from 1788, Moritz translates Herder's "religiously and metaphysically inflected treatment" of Leibniz "into an aesthetic theory." Smith continues,

In doing so, he introduces conceptions of perspectivism and living force that change the Spinozan pantheism that dominated the new poetics of the day. Thus, the beautiful artwork is not just an example of *pars pro toto*,

(...) but also a kind of self-contained entity, a monad, whose unity is generated only from within. (224)

Friedrich Schlegel held a series of lectures on “Tranzendentalphilosophie” from 1800-1801, in which Leibniz plays a key role in his argument. In a footnote at the end of the Introduction to his lectures, Schlegel writes: “Zwischen *Spinoza* und *Fichte* liegt *Leibnitz* in der Mitte, so daß er gleichsam an beyde anstreift. So sehen wir, besteht auch die Geschichte der Philosophie wie ihre Methode [in der Synthesis der Gegensätze]”¹⁶ (12: 30). Schlegel “assigns Leibniz the role of harmonizing historically opposed forms of philosophy” (227). Schleiermacher also worked on Leibniz, after having worked extensively on Spinoza, largely through Jacobi (227). As John H. Smith notes, he “recognizes in Leibniz a richness that captures the Romantic principle of the in Hölderlin’s formulation ‘internally differentiated unity’ (‘Eins-in-sich-unterschiedene’)” (228).¹⁷

Novalis, therefore, enters a nuanced and diverse discussion by the time he began work on *Das Allgemeine Brouillon* and “Die Lehrlinge zu Sais.” In a letter to Friedrich Schlegel dated February 24, 1798, Novalis writes that he has begun work on his first

¹⁶ “Between *Spinoza* and *Fichte* lies *Leibnitz* midway so that he touches both. Thus we see the very history of philosophy and its method consist [in the synthesis of opposites].” (Translation in John H. Smith 227)

¹⁷ Schleiermacher writes: “Die Harmonie scheint aus den verschiedenen Antinomien entstanden zu sein. 1.) Alles ist nur eins, und jedes Individuum ist doch ein Ganzes. 2.) ideal ist alles nur analytisch und real ist alles synthetisch. 3.) alles physische soll nach Naturgesetzen erfolgen und alles hängt doch mit dem geistigen zusammen. Leibniz sagt selbst im Disc. Prelim.: jede Antinomie sei Indikation auf etwas großes.“ (#44; *KGA* 2:88) (228) (“The harmony appears to have arisen out of the different antinomies. (1) Everything is only one and each *individuum* is nonetheless a totality in itself. (2) In the ideal everything is only analytical and in reality everything is synthetic. (3) Everything physical follows natural laws and yet everything is structurally connected to the spiritual. Leibniz himself says in Disc. Prelim.: each antinomy is an indication of something grand.”) (Translation in John H. Smith 228)

literary prose piece under the title “Der Lehrling zu Sais.” He explains to Schlegel, “Die Wissenschaften müssen alle poetisiert werden. (...) Die Poesie ist das ächt absolute Reelle. Dies ist der Kern meiner Philosophie. Je poetischer, je wahrer. (...) Der Poet versteht die Natur besser wie der wissenschaftliche Kopf”¹⁸ (4: 383). Novalis believes that because philosophy lacks poetry, it is not an effective form of communicating and grasping the aspects of nature. In regard to Fichte and Kant, for example, Novalis writes later that year in *Das Allgemeine Brouillon*, “Fichtes und Kants Methode ist noch nicht vollständig und genau genug dargestellt. Beyde wissen noch nicht mit Leichtigkeit und Mannichfaltigkeit zu experimentiren – überhaupt nicht *poëtisch*. – Alles ist so steif, so ängstlich noch”¹⁹ (3: 445, Nr. 924). And just as Friedrich Schlegel writes, “Zwischen *Spinoza* und *Fichte* liegt *Leibnitz* in der Mitte”²⁰ (as quoted earlier), Novalis writes in Fragment 1098:

Fichtens Ich ist die Vernunft – Sein Gott und *Spinotzas* Gott haben große Aehnlichkeit. Gott ist die übersinnliche Welt rein – wir sind ein unreiner Theil derselben. Wir denken uns Gott persönlich, wie wir uns selbst persönlich denken. Gott ist gerade so persönlich und individuell, wie wir – den unser sog[enanntes] Ich

¹⁸ “The sciences need to be poeticized. (...) The Poesy is the genuine absolute Real. This is the seed of my philosophy. The more poetic, the more true. (...) The poet understands nature better than the scientific mind.” (My translation)

¹⁹ “The method of Fichte and Kant is not yet complete or presented precisely enough. Both still do not know how to experiment with facility and diversity—absolutely *unpoetic*—Everything is still so awkward, so tentative.” (Translation by Wood, 164, Nr. 924)

²⁰ “Between Spinoza and Fichte lies Leibniz in the middle.” (My translation)

vid. Göthens Fragment aus Faust.

Ist nicht unser wahres Ich, sondern nur sein *Abglanz*.²¹ (3: 469)

This limitation in Fichte's thought, which Novalis critiques, is representative also of the general early Romantic critique of Fichte and Kant's thought through Leibniz, as Steffen Dietzsch explains:

Ihre Leibniz-Sicht ist aber keineswegs, wie man es gut kantianisch erwarten dürfte, auf die überaus treffende Leibniz-Kritik der *Kritik der reinen Vernunft* oder auf eine Theodizee-Kritik fixiert. (...) [Sie versuchten] die transzendente Methode (Kants und Fichtes) durchaus zu verbessern, d.h. sie handhabbarer zu machen, um mit ihr dann auch andere als nur erkenntnis- und wissenschaftstheoretische Sachverhalte und Problemstellungen erfolgreich zu bewältigen.²² (234)

Novalis situates the importance of Leibniz's thought in the discussion in fragment number 1096 (which is a direct quote from a letter he wrote to Caroline Schlegel on January 20, 1799):²³

²¹ "Fichte's ego is reason—His God and *Spinoza's* God are strikingly similar. God is the pure supersensible world—we are an impure part of it. We conceive God personally, just as we conceive ourselves personally. God is just as personal and individual as we are—for our so-called ego

cf. Goethe's *Faust* fragment.
is not our true ego, but merely a *reflection* of it." (Translation by Wood 183, Nr. 1098)

²² "Their Leibniz view, however, is by no means meant to be fixated on the highly appropriate Leibniz critique of the *Critique of Pure Reason* or as a critique of the Theodizee, as one might well expect from Kantianism. (...) [They attempted to] better the transcendental methods (of Kant and Fichte), to make them more manageable, in order to successfully cope with other situations, as well as epistemological and scientific theories and problems." (My translation)

²³ In his endnote regarding this passage, Wood points out, "Immediately before this passage 'these gentlemen' are named: 'Tieck's *Don Quixote* is also underway. Write to me soon about *Ritter* and Schelling. Ritter is a knight and we are merely his pages. Even Baader is but his poet." (262)

Das Beste in der Nature sehn indeß diese Herrn doch nicht klar. Fichte wird hiernach seine Freunde beschämen, und Hemsterhuis ahndete diesen heiligen Weg zur Physik deutlich genug. Auch in Spinoza lebt schon dieser göttliche Funken des Naturverstandes. Plotin betrat, vielleicht durch Plato erregt, zuerst mit ächtem Geiste das Heiligthum – und noch ist keiner nach ihm wieder so weit in demselben vorgedrungen. In manchen älteren Schriften klopft ein geheimnisvoller Pulsschlag und bezeichnet die Berührungstelle mit der unsichtbaren Welt – ein Lebendigwerden. Göthe soll der Liturg dieser Physik werden – er versteht vollkommen den Dienst im Tempel. Leibnitzens Theodicee ist immer ein herrlicher Versuch in diesem Felde gewesen. Etwas ähnliches wird die künftige Physik, aber freylich in einem höhern Style. Wenn man bisher in der sog[enannten] Physikotheologie nur statt Bewunderung ein ander Wort gesetzt hätte.²⁴ (3: 469)

Novalis is working with many voices in his thought. While Novalis mentions Spinoza here and more often in the fragments of *Das Allgemeine Brouillon*, he only mentions Leibniz in relation to musical concepts (as I show in the following analysis).

²⁴ “1096. However, these gentlemen still plainly fail to see the best within Nature. Fichte will henceforth put his friends to shame, while Hemsterhuis clearly anticipated this sacred path to physics. Even Spinoza harbored that divine spark of natural understanding. Plotinus, perhaps inspired by Plato, was the first to grace the Holy Sanctuary with a genuineness of spirit—and yet no one after him has again ventured so far. In numerous ancient writings there beats a mysterious pulse, denoting the place of contact with the invisible world—a coming into life. Goethe shall be the liturgist of this physics—for he perfectly understands the service in the Temple. Leibniz’s Theodicy has always been a magnificent attempt in this field. Our future physics will achieve something similar, yet certainly in a loftier style. If only one had used another word within so-called physicotheology, instead of ‘admiration’.” (Translation by Wood 183)

Novalis takes Leibniz's levels of the monads and his concept of the pre-established harmony and expands it, as the thinkers before him had, by making the monads 'full of windows,' rather than "windowless." On the level of the narrative, he first establishes the pre-established harmony that all of the novices follow with their individual paths. Here, Novalis presents the theory of the monads as the novices' internal search through the outer world and objects as mediated through language. Contrary to Leibniz's theory of the monads (which are not physical in nature and have various levels of unique inner and outer qualities) as the fundamental substance for the pre-established harmony of the universe, Novalis' approach is based on a complicated, multi-layered understanding of language. Novalis' contribution to the Leibniz discussion, therefore, is the role of the development of *Poesie* as similar to the pre-established harmony of the monads—not only from their internal processes, but also as influenced from outer engagement with the world, showing that the monads cannot be windowless. The characters, therefore, too, as monads of a higher level containing a spirit (*Geist*) with the capacity for reason (*Vernunft*), are following their individual paths toward an understanding of nature. The 'destination' in both Novalis and Leibniz, so to speak, is pre-established. On this larger level, the pre-established harmony in both is most clear in the relationship between the smallest parts of existence to the entire universe, which Novalis represents with Leibniz's four levels: the monad, the body, the spirit, and the entire universe.

Novalis read Leibniz's *Theodizee* as early as 1791. He was particularly familiar with the oscillation between the waking and sleeping states in Leibniz's theory, as Daniel Lancereau has analyzed in "Novalis and Leibniz," and, as I will demonstrate in my

analysis, Leibniz's concept of the *prästabilierte Harmonie*. There are not only clear references to Leibniz in Novalis' *Das Allgemeine Brouillon*, which was written within months after he started "Die Lehrlinge zu Sais," between September 1798 and March 1799, but also Leibniz's thought is central to Novalis' theoretical development of his encyclopedia. As David Wood explains in the introduction to his translation, Novalis was:

(...) concerned with scientific procedure and method, with interrelations and interactions between different scientific disciplines. (...) Inspired by the combinatorial and mathematical theories of Gottfried Wilhelm Leibniz (entry 547) and Karl Friedrich Hindenburg (entry 648), Novalis understood his theory as a kind of 'scientific grammar . . . or theory of composition' (entry 616). (xxviii)

Therefore, Novalis not only worked in Leibniz's ideas in several of the entries, their form as "fragments" is also characterized by the form of Leibniz's unsystematic fragments (as was also adopted by Schlegel and Schleiermacher). Because he worked on these fragments side by side, I will introduce them along side related quotes in "Die Lehrlinge zu Sais."

In fragment 750 of *Das Allgemeine Brouillon* Novalis defines various levels of the *prästabilierte Harmonie*, including its presence in the success or constitution of the moral world, beauty, and God's consciousness.

750. Die **praestabilirte Harmonie** wird der **Erfolg**, oder die **Constitution der vollk[ommen] moralischen Welt** seyn. **Schönheit** beruht auch auf

praestabilerter Harmonie. Im **B[ewußt]S[eyn] Gottes** findet eigentlich **praest[abilirte] Harmonie** statt. Durch das Fichtische System wird sie bewiesen und *necessitirt*.²⁵ (3: 414)

Here Novalis acknowledges not only the moral implications of a pre-established harmony, which comes into play in the literary fragment in man’s careful, poetic relationships with nature, but also Leibniz’s assertion that the pre-established harmony is a God-created phenomena. Most important to this notion, as mentioned earlier, is that while God created this phenomenon by planting the monads as ‘seeds’ (again, my terminology) he also steps back from this creation and lets it unfold. Then, in fragment 772, Novalis notes that Leibniz labeled material as the substantial phenomenon of the world, and in 773, he connects the system of causal occasionalism with physical influxes to the pre-established harmony:

772. Leibnitz nennt die Materie – ein Phaenomenon substantiatum.

773. Systema caussarum occasionalium – Influxus physici.

\ /
Harmoniae praestabilitae.²⁶ (3: 418)

These notes seem especially important to the concept that John H. Smith also addresses regarding the pre-established harmony as a representation of the continuous flow of life and death, and, I will add here, the waking and sleeping life, as the unveiling of

²⁵ “750. Preestablished harmony will be the result or constitution of the perfect moral world. Beauty also relates to preestablished harmony. Actual preestablished harmony takes places in the consciousness of God. It will be proven and *necessitated* by the Fichtean system.” (Translation by Wood 139)

²⁶ 772. Leibniz calls matter—a *phaenomenon substantiatum*.

773. *Systema caussarum occasionalium—influxus physici*.

\ /
Harmononiae praestabilitae. (Translation by Wood 142)

Rosenblütchen that Hyazinth experiences is during a dream (as I discuss in the following section).

Novalis' Version of the Monads in "Die Lehrlinge zu Sais"

For Novalis in this early fragment, self-knowledge comes from understanding the elusive and (as of yet) undefined universal language of nature. As mentioned earlier, Novalis takes the traditional story of 'the search for the veil in Egypt' and internalizes the unveiling process from the outer visual, to the inner auditory realm in his focus on the musical pronunciation of this language. However, he first presents the story of a visual, physical veil in the fairy tale of Hyazinth and Rosenblütchen toward the beginning of Part 2, "Die Natur." While in a dream, Hyazinth reaches his destination and lifts the veil of Isis and Rosenblütchen falls into his arms (the love he had left behind to go on his journey).

(...) Es dünkte ihm alles so bekannt und doch in niegesehener Herrlichkeit, da schwand auch der letzte irdische Anflug, wie in Luft verzehrt, und er stand vor der himmlischen Jungfrau, da hob er den leichten, glänzenden Schleier, und Rosenblütchen sank in seine Arme. Eine ferne Musik umgab die Geheimnisse des liebenden Wiedersehns, die Ergießungen der Sehnsucht, und schloß alles Fremde von diesem entzückenden Orte aus.

(...)²⁷ (1: 95)

²⁷ "(...) It seemed to him all so familiar and yet of a radiance such as he had never beheld; the last trace of earth vanished as though dissolved in air, and he stood before the heavenly maiden. A distant music

The outer journey for which he left the love of his life brought him, mysteriously, right back to her. However, what the novices experience later is quite different. The desired focus on uncovering an *internal veil* is present in the beginning of the fragment.

Interestingly, this internalization process is described as happening in the search through the outer world when observing anything in nature. As the opening paragraph to Part 1, “Der Lehrling” states:

Mannigfache Wege gehen die Menschen. Wer sie verfolgt und vergleicht, wird wunderliche Figuren entstehen sehn; Figuren, die zu jener großen Chifferschrift zu gehören scheinen, die man überall, auf Flügeln, Eierschalen, in Wolken, im Schnee, in Kristallen und in Steinbildungen, auf gefrierenden Wassern, im Innern und Äußern der Gebirge, der Pflanzen, der Tiere, der Menschen.... (...) In ihnen ahndet man den Schlüssel dieser Wunderschrift, die Sprachlehre derselben.... Nur augenblicklich scheinen ihre Wünsche, ihre Gedanken sich zu verdichten.²⁸ (1: 79)

Through this individual process of internalization the novices hope to discover by drawing comparisons from their observations of nature that all of nature has the same

surrounded the mysteries of the lovers’ meeting, the outpourings of yearning, and excluded all that was alien from this lovely place. (...)” (Translation in Manheim 67)

²⁸ “Various are the roads of man. He who follows and compares them will see strange figures emerge, figures which seem to belong to that great cipher which we discern written everywhere, in wings, eggshells, clouds and snow, in crystals and in stone formations, on ice-covered waters, on the inside and outside of mountains, of plants, beasts and men.... (...) In them we suspect a key to the magic writing, even a grammar.... Only at moments do their desires and thoughts seem to solidify.” (Translation by Manheim 3/5)

original substance... a *Sprachlehre*. This *Sprachlehre* is the key to the *Wunderschrift* of nature. The desire to find the key to the *Wunderschrift* is precisely the elusive, undefined pre-established harmony of their search.²⁹ The nameless novices and travelers of this story search for meaning in what they've observed through their conversations and lament the separation that has happened between man and nature. They all follow their own paths and make their own discoveries in order to compare their thoughts and discover their own internal truths by comparing the phenomena of nature. This implies, in turn, that it does not matter which path one follows—they all lead to the same place: internalization. This is made clear in the desires expressed by their teacher. At the beginning of the literary fragment, Novalis presents the Lehrling (novice), who is aware that he needs to spend time in thought while the others are out searching for objects (which the teacher allows). The novice narrates:

Doch ist der Lehrer mir gewogen, und läßt mich in Gedanken sitzen, wenn die Anderen suchen gehn. (...) Mich führt alles in mich selbst zurück. (...) Vielmehr will er, daß wir den eignen Weg verfolgen, weil jeder neue Weg durch neue Länder geht, und jeder endlich zu diesen Wohnungen, zu dieser heiligen Heimat wieder führet (...).³⁰ (1: 81-82)

²⁹ The nature of Novalis' concepts of the *Sprachlehre* and *Wunderschrift* will be taken up again in more detail in Chapter Three.

³⁰ "Yet the teacher is devoted to me and lets me sit thinking when the others go out to search. (...) Everything leads me back into myself. (...) He wants us rather to go our own way, because every new road goes through new countries and each in the ends leads anew to these dwellings, to this sacred home." (Translation by Manheim 13/17)

In his quiet contemplation, the novice states that everything he observes leads him back to himself. That all paths lead to the same ‘destination’ is precisely an internal pre-established harmony. This also coincides with Novalis’ *Das Allgemeine Brouillon*, in which multiple aspects of scientific and philosophic thought merge into a *Tranzendentalpoesie*. This can be seen as a result of the multiplicity inherent in each philosophy, in each subject, in each sentence, in each word.

Novalis begins by describing the characteristics of his version of the monads, emphasizing the unique make-up of each monad whether representing humans or objects of nature, as Novalis writes, “Man steht mit der Natur gerade in so **unbegreiflich verschiedenen Verhältnissen wie mit den Menschen...**”³¹ (1: 85). Leibniz describes the characteristics of the monads similarly:

16. Wir erfahren in uns selbst **eine Vielheit in der einfachen Substanz**, wenn wir finden, daß der geringste Gedanke, dessen wir uns bewußt werden, **eine Mannigfaltigkeit des vorgestellten Inhalts** in sich begreift. Es müssen demnach alle, die die Seele als einfache Substanz anerkennen, diese Vielheit in der Monade zugeben (...).³² (*Monadologie* 439)

Leibniz’s monads, which are smaller than atoms, still contain a multiplicity within them.

Novalis describes each as unique, just as each human is unique—a simile which is

Novalis’ addition. Novalis continues shortly after, “Es ist ein geheimnisvoller Zug nach

³¹ “Our relations with nature are as inscrutably various as with men....” (Translation by Manheim 27)

³² “16. We ourselves experience multiplicity in a simple substance since the least thought of which we can be conscious embraces a variety in its object. Thus all who acknowledge the soul to be a simple substance must recognize this multiplicity in the monad (...).” (Translation by Carr 53)

allen Seiten in unsrem Innern, aus einem unendlich tiefen Mittelpunkt sich rings verbreitend”³³ (Novalis 85). Immediately this “Mittelpunkt” (“middle point”), which is never-endingly deep and spreads out in all directions suggests the pre-established growth and movement from the inside. While there is this movement outward, Novalis, in turn, writes of the “mannigfaltige Verbindungen” in the bodies of nature:

So hat sich auch nur allmählich **unser Innres** in so **mannigfaltige Kräfte** zerspaltet, und mit fortdauernder Übung wird auch diese Zerspaltung zunehmen. Vielleicht ist es nur krankhafte Anlage der späteren Menschen, wenn sie das Vermögen verlieren, diese zerstreuten Farben ihres Geistes wieder zu mischen und nach Belieben **den alten einfachen Naturstand** herzustellen, oder **neue, mannigfaltige Verbindungen** unter ihnen zu bewirken. **Je vereinigter sie sind, desto vereinigter, desto vollständiger und persönlicher fließt jeder Naturkörper**, jede Erscheinung in sie ein: denn der Natur des Sinnes entspricht die Natur des Eindrucks und daher mußte jenen früheren Menschen **alles menschlich, bekannt und gesellig vorkommen....**³⁴ (1: 83)

³³ “Within us there lies a mysterious force that tends in all directions, spreading from a center hidden in infinite depths.” (Translation by Manheim 29)

³⁴ “It was only gradually that our inwardness split into such various forces, and with continued practice this splitting will increase. Perhaps it is only the sickly predisposition of later men that makes them lose the power to mix again the scattered colors of their spirit and at will restore the old, simple, natural state, or bring about new and varied relations between colors. The more united they are, the more united, complete and personal will every natural object, every phenomenon enter into them; for to the nature of the sense corresponds the nature of the impression, and therefore to those earlier men, everything seemed human, familiar, and companionable....” (Translation by Manheim 19/21) It is important to note, although it is not a focus of my analysis, that Hans-Joachim Mähl explains that the triadic understanding of the history of nature and mankind can be found throughout the story. He writes, “Hier wie überall wird das idealische Bild der Natur in eine ferne, sagenhafte Vergangenheit verlegt, um den Glauben an eine künftige

Novalis writes that mankind's inner world has split into various forces, suggesting an original complete source. Leibniz calls this a "Vielheit in der einfachen Substanz" ("multiplicity in the simple substance") (439). For Novalis, though, this splitting has had a negative effect, and the novices desire to bring back the "zerstreuten Farben ihres Geistes" ("scattered colors of their spirit") back to the natural state.

Here, Novalis already makes his commentary on the 'monads of *Poesie*' explicit. Although Leibniz explains that there are many different types of monads, and some of them can be classified as spirits with the capacity for reason, Novalis focuses primarily on monads in relation to mankind. His concern is on the level of the human spirit in regard to nature: a "splitting" of the senses has occurred, just as the scattered colors of a ray of light, and it would be desirable to bring them back together. One interpretation of this splitting in Novalis can be seen as due to the human body itself, which separates sense perceptions via different sense organs. By retraining the rational mind to perceive them through the language of nature, it is only on the inside of the body that these senses can be brought back together. The narrator continues later, as though a variation on the same theme:

So wie man nie **das kleinste Korn der festen Körper, nie die einfachste Faser finden werde**, weil alle Größe vor- und rückwärts sich **ins Unendliche verliert**, so sei es auch mit den Arten der Körper und Kräfte;

Wiederherstellung der alten Verbundenheit zu wecken" (356). ("Here, as everywhere, the idealistic image of nature is transposed into a distant, fabulous past to arouse the faith in a future restoration of the old bond.") (My translation) This deserves further exploration in the context of my larger project.

auch hier gerate man auf neue Arten, neue Zusammensetzungen, neue
Erscheinungen bis **ins Unendliche**.³⁵ (1: 88)

The never-endingly deep “Mittelpunkt” (from page 85 in the narrative) now becomes
“Das kleinste Korn” (“the smallest grain or the simplest fiber,” as Manheim translates it).
The splitting is not only never-ending, but now also *lost* into infinity (“*sich ins*
Unendliche *verliert*”). And, conversely, new creations appear on into infinity, further
describing how there is a forwards and backwards movement into infinity, an increasing
and diminishing, which continues on into the future.

Novalis is not merely copying Leibniz’s theory of the monads, but uses it as a
foundation to develop his own approach. As established earlier, the point at which
Novalis and the other early Romantics (and late Classicists) differ from Leibniz, is
especially in the “windowlessness” of the monads. It is as though Novalis is “breathing
tones” (Novalis 86) into Leibniz’s theory.³⁶ He is breaking down the barriers of the

³⁵ “Never can we find the smallest grain or the simplest fiber of a solid body, since all magnitude loses
itself forwards and backwards in infinity, and the same applies to the varieties of bodies and forces; we
encounter forever new species, new combinations, new phenomena, and so on to infinity.” (Translation by
Manheim 39)

³⁶ Here I am applying Novalis’ concept of “breathing tones into nature” that he also describes at a different
point in the narrative: “Dazwischen waren andre sinnigere Seelen, die in der gegenwärtigen Natur nur
große, aber verwilderte Anlagen bemerkten, und Tag du Nacht beschäftigt waren, Vorbilder einer edleren
Natur zu schaffen. – Sie teilten sich gesellig das große Werk, die einen suchten die verstummen und
verlorenen Töne in Luft und Wälder zu erwecken, (...) **hauchten in die lebendigen Glieder Töne, um sie
zu entfalten, und in heitern Schwingungen zu bewegen**, (...). Bald lernte die Natur wieder freundlichere
Sitten, sie ward sanfter und erquicklicher, und ließ sich willig zur Beförderung der menschlichen Wünsche
finden.“ (1: 86) (“In between, there were other, more contemplative souls, who found in the nature before
them only large but neglected gardens, and busied themselves creating prototypes of a nobler nature.—For
this great work they broke into companionable groups, some sought to awaken the spent and lost tones in
the air and in the forests, (...) **breathed tones into living things, that they might unfold and move in
joyous rhythms**, (...). Soon nature learned friendlier ways again, she became gentler and more amiable,
more prone to favor the desires of man. Little by little her heart learned human emotions, her fantasies
became more joyful, she became companionable, responding gladly to the friendly questioner, and thus
little by little she seems to have brought back the old golden age, in which she was man’s friend, consoler,

monads at the levels of mankind, making humanity's experience between the inner and outer world transparent ("windowless") so that sound³⁷ can travel through and influence the various bodies:

(...) die **Außenwelt** wird **durchsichtig**, und die **Innenwelt mannigfaltig und bedeutungsvoll**, Den Inbegriff dessen, was uns rührt, nennt man die Natur, und also steht die Natur in einer unmittelbaren Beziehung auf die Gliedmaßen unsers Körpers, die wir Sinne nennen. Unbekannte und geheimnisvolle Beziehungen unsers Körpers lassen unbekannte und geheimnisvolle Verhältnisse der Natur vermuten, und so ist die Natur jene wunderbare Gemeinschaft, in die unser Körper uns einführt, und die wir nach dem Maße seiner Einrichtungen und Fähigkeiten kennen lernen.³⁸ (1: 97)

Novalis sees nature as an integral tool for mankind to understand the self. Nature has only become a tool and object of mankind due to the separation that occurred in the creation of human language. The ability to 'see inside' nature, to uncover her secret language, is therefore to uncover the secret language within one's own human body (especially within

priestess and enchantress, when she lived among men and divine association made men immortal.”
(Translation by Manheim 31/33/35))

³⁷ ...and light, as I explain in Chapter Three.

³⁸ “(...) the outer world becomes transparent and the inner world becomes varied and meaningful; The epitome of what stirs our feeling is called nature, hence nature stands in an immediate relation to the functions of our body that we call senses. Unknown and mysterious relations within our body cause us to surmise unknown and mysterious states in nature; nature is a community of the marvelous, into which we are initiated by our body, and which we learn to know in the measure of our body's faculties and abilities.”
(Translation by Manheim 77)

the soul), that which unites humans with nature. The body, just like nature, offers a mirror of the universe in Novalis' text, just as Leibniz asserts:

62. Wenngleich somit **jede geschaffene Monade das ganze Universum vorstellt**, so stellt sie doch in distinkterer Weise **den Körper** vor (...). Da nun **dieser Körper** vermöge der Verknüpfung aller Materie im erfüllten Raume **das ganze Universum** ausdrückt, so stellt **die Seele** auch **das ganze Universum** vor, wenn sie den ihr in besondrer Weise zugehörenden Körper vorstellt.³⁹ (*Monadologie* 450)

Even though the monads themselves disappear into infinity and cannot be seen or grasped, Novalis still finds value in further studying the inner workings, the inner structure of the body. Novalis elaborates further:

(...) man sieht wohl, daß diese **innern Verhältnisse und Einrichtungen unsers Körpers** vor allen Dingen erforscht werden müssen, ehe wir diese Frage zu beantworten und in die Natur der Dinge zu dringen hoffen können. Es ließe sich jedoch auch denken, daß wir überhaupt erst uns mannigfach im Denken müßten geübt haben, ehe wir uns **an dem innern Zusammenhang unsers Körpers** versuchen und seinen Verstand **zum Verständnis der Natur** gebrauchen könnten, und da wäre freilich nichts natürlicher, als alle möglichen Bewegungen des Denkens hervorzubringen und eine Fertigkeit in diesem Geschäft, sowie eine Leichtigkeit zu

³⁹ “62. Thus although each created monad represents the whole universe, it represents more distinctly the body (...). As this body expresses the whole universe through the connexion of all matter in the plenum, so the soul also in representing its body, which belongs to it in an especial way, represents the whole universe.” (Translation by Carr 109)

erwerben, von Einer zur Andern überzugehen und **sie mannigfach zu verbinden und zu zerlegen.**⁴⁰ (1: 97-98)

Novalis makes an interesting turn from Leibniz here. His windowless monads can also gain new knowledge of themselves by “passing” (“hervorbringen”), “combining” (“verbinden”) and “subdividing” (“zerlegen”) thoughts in numerous ways. It is through developing new forms of thought processes that the novices can gain further understanding of nature and, in turn, themselves. In their ability to create and separate, Novalis’ monads tend toward divine ability.

The next hierarchical level in the manifestation of the monads, *die Geist* (spirit), has the capacity for *Vernunft* (reason). Novalis argues that only man, who is the only living entity that contains the capacity for reason, is able to comprehend nature—and specifically the secret language of nature (the *Sprachlehre*, which is the key to the *Wunderschrift* of nature). It is due to this capacity that man has the gift to become the messiah of nature, “Meister der Nature.” With this, Novalis prioritizes man’s role as the keeper and decipherer of nature. This all comes together in the voice of “ein ernster Mann” (a serious man):

Einklang streb sein Inneres zu verkünden, zu verbreiten. Er wird in die
Unendlichkeit hinaus stets einiger mit sich selbst und seiner Schöpfung

⁴⁰ “Clearly, these inner relations, these faculties of our body must first of all be studied, before we can hope to answer this question and penetrate the nature of things. It might also be thought, however, that we must have extensive practice in thinking, before trying our mettle on the inner structure of our body and applying its intellect to an understanding of nature; and indeed, once we had this practice, nothing would be more natural than to call on every possible process of thought, to acquire nimbleness and lightness in this craft, to pass from one process to another, to combine them and subdivide them in innumerable ways.” (Translation by Manheim 79)

um sich her sein, und mit jedem Schritte die ewige Allwirksamkeit einer hohen sittlichen Weltordnung, der Veste seines Ichs, immer heller hervortreten sehn. **Der Sinn der Welt ist die Vernunft**: um derentwillen ist sie da, und wenn sie erst der Kampfplatz einer kindlichen, aufglühenden Vernunft ist, so wird sie einst zum göttlichen Bilde ihrer Tätigkeit, zum Schauplatz einer wahren Kirche werden. Bis dahin ehre sie der Mensch, als **Sinnbild seines Gemüts**, das sich mit ihm in **unbestimmbare Stufen** veredelt. **Wer also zur Kenntnis der Natur gelangen will**, übe seinen sittlichen Sinn, **handle und bilde dem edlen Kerne seines Innern** gemäß, und wie von selbst wird die Natur sich vor ihm öffnen. Sittliches Handeln ist jener große und einzige Versuch, in welchem **alle Rätsel der mannigfaltigsten Erscheinungen** sich lösen. Wer ihn versteht, und in strengen Gedankenfolgen ihn zu zerlegen weiß, ist ewiger **Meister der Natur**.⁴¹ (1: 90)

However, it quickly becomes clear that not any man is capable of this close connection with nature. “Ein schöner Jüngling” adds to this discussion, that it is not just any man, but

⁴¹ “His heart strives to proclaim and diffuse harmony. As he moves into the infinite, he becomes more and more at one with himself and his creation round him, and at every step he sees the eternal, all-embracing efficacy of a high, ethical world system—the citadel of his self—emerge more clearly. The meaning of the world is reason: for the sake of reason the world exists; at first it is the battleground of a childlike, burgeoning reason, but some day it will be the divine image of reason’s workings, a true cathedral. Until then, let man honor it as the symbol of his spirit, which is ennobled as he is ennobled, in uncharted stages. Therefore let him who would gain knowledge of nature, practice his ethical sense, let him act and mould according to the noble core of his inwardness, and nature will freely reveal herself to him. Ethical action is the one great experiment by which all the mysteries of the most manifold phenomena are solved. He who understands this experiment and closely reasoning can break it into its parts, is the eternal master of nature.” (Translation by Manheim 51)

specifically the poet, who is able to read, understand, and communicate this language of nature:

Nur die Dichter haben es gefühlt, was die Natur den Menschen sein kann. (...) Alles finden sie in der Natur. Ihnen allein bleibt die Seele derselben nicht fremd, und sie suchen in ihrem Umgang alle Seligkeiten der goldenen Zeit nicht umsonst. Für sie hat die Natur alle Abwechslungen eines unendlichen Gemüts (...).⁴² (1: 99)

The first man who spoke chimes in on the same theme and embellishes it:

Um die Natur zu begreifen, muß man die Natur innerlich in ihrer ganzen Folge entstehen lassen. (...) Die sorgfältige Beschreibung dieser innern Weltgeschichte ist die wahre Theorie der Natur; durch den Zusammenhang seiner Gedankenwelt in sich, und ihre Harmonie mit dem Universum, bildet sich ein Gedankensystem zur getreuen Abbildung und Formel des Universums. Aber die Kunst des ruhigen Beschauens, der [102] der schöpferischen Weltbetrachtung ist schwer, unaufhörliches ernstes Nachdenken und strenge Nüchternheit fordert die Ausführung, und die Belohnung wird kein Beifall der mühescheuenden Zeitgenossen,

⁴² “Only the poets have felt what nature can be to mankind. (...) They find everything in nature. To them alone its soul remains no stranger, and not in vain do they seek all the ecstasies of the golden age in its presence. For them nature has all the variety of an infinite soul [better translation: infinite *mind*] (...).” (Translation by Manheim 85)

sondern nur eine Freude des Wissens und Wachens, eine innigere
Berührung des Universums sein.⁴³ (1: 101-102)

In this variation on the theme, the first man emphasizes that in order to understand nature, one must let nature follow its inner course, or in other words, its full development as a monad. But what does he mean by its “ganzen Folge”—its “full sequence,” if a pre-established harmony continues into infinity (even in the sequence between life and death)? Is Novalis giving man the capability of determining an end to a pre-established harmony? He is then giving man the ability of divine creation and destruction—on the level of the poet and his work as an artist—his role as a creative ‘Genius’—this is perhaps less problematic.

Later in the fragment, Novalis describes the outer world as transparent (*durchsichtig*) and the inner world as diverse and meaningful (*mannigfaltig und bedeutungsvoll*). It is not the outer appearances, but rather the inner workings of the world that carry the most meaning. For Novalis, this meaning comes through poetic language—but it is more than that. This becomes especially clear when he expresses this in a music metaphor. Taking a look at the beginning of the fragment again, Novalis writes:

⁴³ ““In order to understand nature, we must allow nature to be born inwardly in its full sequence. (...) A meticulous account of this inward universal history is the true theory of nature. The relations within this thought world and its harmony with the universe will give rise to a philosophical system that will be the faithful picture and formula of the universe. But the art of pure contemplation, of creative metaphysics, is difficult, requiring earnest, unremitting thought and strict self-discipline, and the reward will not be the applause of his trouble-shunning contemporaries, but only the joy of knowing and being awake, a closer contact with the universe.” (Translation by Manheim 91/93/95)

Keiner Erklärung bedarf die heilige Schrift. Wer wahrhaft spricht, ist
 des ewigen Lebens voll, und wunderbar verwandt mit echten
 Geheimnissen dünkt uns seine Schrift, denn sie ist **ein Akkord aus des**
Weltalls Symphonie.⁴⁴ (1: 79)

Novalis expresses the musical nature of the universe as it is connected to language. Those who *truly speak* contribute to the chord of the universal symphony. Novalis alludes to this as well in his *Allgemeinen Brouillon*.

In fragment 245 Novalis writes that “Unsere Sprache (...) muß wieder Gesang werden”⁴⁵ and in 367 that dialects and pronunciations should be treated as in music: “So hat jedes musical[ische] Stück seinen Grundton – auch sein *Thema. Moll – und Dur.*”⁴⁶

⁴⁴ “The holy scripture needs no explanation. He who speaks true, is full of eternal life, his written word seems wondrously akin to the mysteries, for it is a chord taken from the symphony of the universe.” (Translation by Manheim 5)

⁴⁵ “245. Musik. (...) Über die allg[emeine]n *Sprache* der Musik. Der Geist wird *unbestimmt* angeregt – das tut ihm so wohl – das dünkt ihm so bekannt, so vaterländisch – er ist auf diese kurzen Augenblicke in seiner indischen Heymath. Alles Liebe – und Gute, Zukunft und Vergangenheit regt sich in ihm – Hoffnung und Sehnsucht. / Vers[uch] *bestimmt* durch die Musik zu sprechen. **Unsre Sprache** – sie war zu Anfang viel musicalischer und hat sich nur nach gerade so prosaisirt – so *entönt*. Es ist jezt mehr *Schallen* geworden – *Laut*, wenn man diese schöne Wort so erniedrigen will. **Sie muß wieder Gesang werden.** Die *Consonanten* verwandeln den *Ton in Schall*.” (3: 285) (“245. Music. (...) On the universal *nth* language of music. The spirit becomes free, *indeterminately* stimulated—which is so beneficial for it—and seems so familiar to it, so patriotic—that for this short moment it is transported to its Indian homeland. All love—and goodness, future and past are aroused in it—hope and longing./Attempts to speak *musically*. Our language—was much more musical to begin with, and has gradually become so prosaic—so *unmusical*. It has now become more like *noise-sound* [*Laut*], if one thus wishes to degrade this beautiful word. It must become *song* once *again*. The *consonants* transform *tones into noise*.” (Translation by Wood 37))

⁴⁶ “367. Die **Dialecte und Pronunciationen** werden durch Consonanten und Vocale im Großen gebildet. Lippensprache – Gaume – Kehle – Zunge – Zähne – Nase etc. Manche Sprache wird aus dem e, u, o etc. gesprochen. So hat jeder Mensch seinen Hauptvocal. vid. Schocher. Es ist damit, **wie in der Musik – So hat jedes musical[ische] Stück seinen Grundton – auch sein *Thema. Moll – und Dur.***” (3: 306) (“367. On the whole, dialects and pronunciations are formed through consonants and vowels. Labial language—gingival—guttural—lingual—alveolar—nasal languages etc. Many languages are articulated out of e, u, o etc. Hence every person has his primary vowel. Cf. Schocher. It is the same as in music—Thus every piece of music has its own fundamental tone and *theme. Minor*—and *major*.” (Translation by Wood 55))

However, music alone is not what Novalis is after... it is the musical nature of language as it is present in his concept of *Poesie*. This musical nature is what separates *Poesie* from regular *Gedichte*. In fragment 545 he writes, “Wenn man manche Gedichte in Musik setzt, warum setzt man sie nicht in Poësie.”⁴⁷ It is only two fragments later, in fragment “547. Musikalische Mathematik” (“Musical Mathematics”) that he continues with this concept. He mentions Leibniz in parentheses and describes language as a “musicalisches Ideen Instrument,” fusing mathematics, music, and language together:

547. **Mus[ickalische] Mathem[atik]**. Hat die Musik nicht etwas von der Combinatorischen Analysis und umgekehrt. Zahlen Harmoniereen – Zahlen acustik – gehört zur Comb[inatorischen] A[nalysis].
 Die Zähler sind die mathematischen Vokale – alle Zahlen sind *Zähler*.
 Die Comb[inatorische] Analys[is] führt auf das ZahlenFantasiren = und lehrt die *Zahlen compositionskunst* – den mathemat[ischen] **Generalbaß**. (Pythagoras. **Leibnitz**.) Die **Sprache ist ein musicalisches Ideen Instrument**. Der Dichter, Rhetor und Philosoph *spielen* und componiren grammatisch. **Eine Fuge** ist durchaus *logisch* oder wissenschaftlich – Sie kann auch **poëtisch** behandelt werden. (...) ⁴⁸ (3: 360)

⁴⁷ “545. Poëtik. **Wenn man manche Gedichte in Musik setzt, warum setzt man sie nicht in Poësie.**” (3: 360) (“POETICS. If we are able to *set* numerous poems into *music*, then why can’t we set them to poesy?”) (Translation by Wood 96)

⁴⁸ “547. MUSICAL MATHEMATICS. Doesn’t music exhibit something of combinatorial analysis, and vice versa? The harmonies of numbers—and the acoustics of numbers—are a part of combinatorial analysis. Numerators are mathematical vowels—all numbers are *numerators*. Combinatorial analysis leads to numerical imaginings—and teaches the *art of the composition of numbers*—mathematical *basso continuo*. (Pythagoras. Leibniz). Language is a musical instrument of ideas.

His mention of the role of a Fugue being logical, scientific, and poetic exemplifies his attempt at polyphony in the literary fragment. In order to compose a musical fugue in which all of the related themes can be heard while overlapping each other, one must carefully craft the voices in order to be heard. The compositional process is at once both creative and calculated. Limited by the linear form required of the narrative, Novalis can only present one voice to the reader at a time. However, there are a few points within the story when the narrator takes over and allows the reader to also step back and hear the overall conversation, and the performance of the musical poetry can be ‘heard.’

Der Lehrling hört mit Bangigkeit **die sich kreuzenden Stimmen**. Es scheint ihm jede Recht zu haben, und eine sonderbare Verwirrung bemächtigt sich seines Gemüts. Allmählich legt sich der innre Aufruhr, und über die dunkeln sich an einander brechenden Wogen scheint ein Geist des Friedens heraufzuschweben, dessen Ankunft sich durch neuen Mut und überschauende Heiterkeit in der Seele des Jünglings ankündigt.⁴⁹

(1: 91)

This moment occurs after the speaker declares man as “Meister der Natur,” the “master of nature” (90). Interestingly, Novalis describes the voices that the Lehrling heard as crossing each other, as though melodic lines of a fugue. However, the linear line of the

The poet, rhetorician and philosopher *play* and compose grammatically. A fugue is thoroughly *logical* or scientific—It may also be treated poetically. (...)” (Translation by Wood 97)

⁴⁹ “Anxiously, the novice listened to the crisscrossing voices. Each seemed to him right, and a strange confusion overcame his spirit. Little by little the inward tumult subsided, and a spirit of peace seemed to soar over the crashing dark waves, bringing new courage and contemplative serenity to the young man’s heart.” (Translation by Manheim 51)

narrative restricts Novalis' ability to present the multilayered effect of a fugue. By having each voice take up themes from previous voices and elaborating on them, Novalis presents a musical structure in the linear narrative by mimicking the role of individual voices in a fugue. With this particular break in the conversation, the reader takes a moment to recall the recent voices that the Lehrling is processing in his mind, as though allowing the *collective music* to be heard. The next moment happens after the fairy tale of Hyazinth and Rosenblütchen is complete:

Die Lehrlinge umarmten sich und gingen fort. Die weiten hallenden Säle standen leer und hell da, und **das wunderbare Gespräch in zahlosen Sprachen unter den tausendfaltigen Naturen**, die in diesen Sälen zusammengebracht und in mannigfaltigen Ordnungen aufgestellt waren, dauerte fort. Ihre innre Kräfte spielten gegen einander. Sie strebten in ihre Freiheit, in ihre alten Verhältnisse zurück. **Wenige standen auf ihrem eigentlichen Platze, und sahen in Ruhe dem mannigfaltigen Treiben um sich her zu.**⁵⁰ (1: 95)

This moment is not as “musical,” although the conversation is taking place in “zahlosen Sprachen unter den tausendfaltigen Naturen” (“innumerable languages among the thousandfold natures”). Instead there is discord among the speakers—their “inner forces” are playing against each other—yet a few of them were quiet, taking in all that was going

⁵⁰ “The novices embraced one another and departed. The broad, echoing halls stood empty and bright, and the wondrous colloquy continued in innumerable languages among the thousandfold natures, which had been gathered together in these halls and arranged in various orders. Their inner forces played one against the other. They strove back towards their freedom, their old relations. Some few stayed in their proper place and calmly watched the multiform stirrings about them.” (Translation by Manheim 69)

on around them (just as in the previous moment with only the Lehrling listening). A third instance exposes the musical nature again, after the novices proclaim in plural (the narrator states that “sie sagten,” “they said,” as though in unison): “O! daß der Mensch...die innere Musik der Natur verstände und einen Sinn für äußere Harmonie hätte. (...)” (1: 95). As soon as the voices stop, the narrator takes over:

Wie sie so sprachen, strahlte die Sonne durch die hohen Fenster, und in ein sanftes Säuseln verlor sich der Lärm des Gesprächs; eine unendliche Ahndung durchdrang alle Gestalten, die lieblichste Wärme verbreitete sich über alle, und **der wunderbarste Naturgesang** erhob sich aus der tiefsten Stille.⁵¹ (96)

Accompanied by rays of light from the sun and as the “noise” of their voices became a “gentle murmur,” the most wonderful *Naturgesang* rose from the deepest silence.⁵² Here, the musical effect of *Poesie* takes over.

To place this in context, I will now return to the first quote from the beginning of this chapter, which appears to be the climactic moment of the fragment. But first, it is important to look at a couple of lines that precede this passage:

(...) Während eine Musik aus der Ferne sich hören ließ und eine kühlende Flamme aus Kristallschalen in die Lippen der Sprechenden hineinloderte,

⁵¹ “As they spoke, the sun shone through the lofty windows, and the sound of their words was lost in a gentle murmur; an infinite surmise permeated every shape, a tender warmth spread over them all, and a wondrous song of nature rose from the deepest silence.” (Translation by Manheim 73)

⁵² The importance of these rays of light will be taken up in Chapter Three.

erzählten die Fremden merkwürdige Erinnerungen ihrer weiten Reisen.

(...)⁵³ (1: 106)

Here one is reminded of the passage from the fairy tale of Rosenblütchen and Hyazinth. Just as Hyazinth reaches his destination, lifts the veil, and Rosenblütchen falls into his arms, a “ferne Musik” surrounds them. Novalis establishes the importance of the following moment experienced by the novices by echoing the climactic moment of the fairy tale. This *Naturgesang* appears to be only perceptible by the narrator, who steps back from ‘tuning in’ to the conversations to hear the overall sound:

(...) **Ihre Aussprache war ein wunderbarer Gesang**, dessen unwiderstehliche Töne tief in **das Innere jeder Natur** eindringen und sie zerlegten. Jeder ihrer Namen *schien das Losungswort für die Seele jedes Naturkörpers*. Mit schöpferischer Gewalt erregten diese Schwingungen alle Bilder der Welterscheinungen, und von ihnen konnte man mit Recht sagen, daß **das Leben des Universums ein ewiges tausendstimmiges Gespräch sei**; denn in ihrem Sprechen *schienen alle Kräfte, alle Arten der Tätigkeit auf das unbegreiflichste vereinigt zu sein*. **Die Trümmer dieser Sprache, wenigstens alle Nachrichten von ihr, aufzusuchen, war ein Hauptzweck ihrer Reise gewesen...**⁵⁴ (1: 106-107)

⁵³ “While music was heard from the distance and a cooling flame from crystal goblets poured into the lips of the company, the strangers related strange memories of their travels.” (Translation by Manheim 111)

⁵⁴ “Their speech was a wondrous song, its irresistible tones penetrated deep into the inwardness of nature and split it apart. Each of their names seemed to be the key to the soul of each thing in nature. With creative power these vibrations called forth all images of the world’s phenomena, and the life of the universe can rightly be said to have been an eternal dialogue of a thousand voices; for in the language of those men all forces, all modes of action seemed miraculously united. To seek out the ruins of this language, or at least

Mankind's understanding of the inner music of nature—similar to Leibniz's "wahrhafte Atome der Natur" ("true atoms of nature")—and of the outer harmony of the universe is what constitutes the pre-established harmony in this story. As the editors to the critical edition, Paul Kluckhohn and Richard Samuel write,

Sind doch diese Gespräche nicht eine dialektische Auseinandersetzung, sondern eine Dichtung von musikalischem Kompositionscharakter mit Wiederkehr des gleichen Themas in verschiedenen Modulationen. Es sind wesentlich die Anschauungen von Novalis selbst, die wir vernehmen.⁵⁵ (1: 75)

However, this seemingly euphoric moment toward the end is placed into question by the language itself. At this point it is important to note that although this moment happens toward the end, Novalis expected to expand this story into a novel, so this is not the "final destination" he had in mind. Some observations are certain, and others only appear to be the case, as indicated by the verb *scheinen*. Their names only *appear* to be the key to the soul of every natural body, and it *only seems* that they come close to uniting themselves with the incomprehensible. Novalis writes with more confidence, however, that their pronunciation was a 'wonderful song', and that one could certainly say that the life of the universe is an 'eternal thousand-voiced conversation'. Yet, even with the uncertainty present in the wording of these experiences, it is clear that "Die Trümmer dieser Sprache,

all reports concerning it, had been one of the main purposes of their journey...." (Translation by Manheim 113)

⁵⁵ "These conversations, however, are not a dialectical discussion, but rather a poem of musical, compositional character with the return of the same theme in different modulations. It is essentially the intuitions of Novalis himself that we hear." (My translation)

wenigstens alle Nachrichten von ihr, aufzusuchen, war ein Hauptzweck ihrer Reise gewesen.” They found (or are finding) what they are looking for—the pre-established harmony of their internal journey. But what exactly are the *Trümmer*, the ruins of this lost language?

Conclusion

An ideogram or hieroglyph is basically a picture that may contain multiple concepts all superimposed upon one another. The alphabet, on the other hand, strings out these concepts so that they become words in a sentence whose meaning depends on their linear sequence. Untangling the multiple ideas coiled within one ideographic image and converting them into a linear code reinforces the belief that one thing follows another, and thus ever so surreptitiously alphabets impose causality upon the thinking processes of those who use them. (Leonard Shlain, *Art & Physics* 30)

Novalis utilizes the unattainable pre-established harmony in his concept of *Poesie* as a narrative strategy and form. He treats music as a necessary component of language, as a metaphor for an ideal multi-voiced conversation, in which all voices can be heard and acknowledged equally through harmony. Everyone is entitled to his or her opinion, and the musical structure of this ‘intersubjective discourse’ (to use Hodkinson’s term, 13) is meant to be all-inclusive, signaling a universal acknowledgement and understanding. However, this literary fragment remains incomplete, and the ideal, elusive “pre-established harmony” is not achieved.⁵⁶ Novalis recognizes this incompleteness as unavoidable. Whereas Leibniz’s system is defined at all levels with static language, going

⁵⁶ Hodkinson also points out that the tale is not all-inclusive, as the female voice is excluded. Both Isis and Rosenblüthe remain passive and silent in the text. He continues his analysis with *Heinrich von Ofterdingen*, which he argues is more successful in realizing a model of polyphony, especially due to Novalis’ inclusion of female voices and discourses, as well as non-Christians voices. See “The Cosmic-Symphonic: Novalis, Music and Universal Discourse” in *Music and Literature in German Romanticism* (20-24).

beyond mere dualities, Novalis' observations deconstruct the possibility of any real structural understanding of the world, leaving room to search for a never-ending, greater understanding. Indeed, his concept of *Poesie* is precisely about the unattainable perfection in striving for universal communication. As Jane Kneller writes,

Poetry (*Poesie*) is universal because it aims at an ideal that is itself never fully articulable and thus 'incomprehensible.' It is progressive because it never gives up *attempting* to comprehend and be comprehensible, that is, it aims constantly to better communicate itself to others, both present and future. (114)

Novalis is not solely representing or adopting Leibniz's or anyone else's philosophy (as others have attempted to analyze in the voices of the novices). For Novalis, that which holds the world together in a pre-established harmony is *Poesie*—Novalis' version of the monad as a poetic process. Moving beyond the ideal association of the hieroglyph as "the first instance of perfect language" (Eco 56), it is precisely this process of musical poetry, which combines all aspects and ideas of language to form a universal language that might make 'true expression' remotely possible.

CHAPTER III

SOUND, LIGHT AND LANGUAGE: NOVALIS

AND RITTER ON THE *KLANGFIGUREN*

The physicist, like any scientist, sets out to break ‘nature’ down into its component parts to analyze the relationship of those parts. This process is principally one of reduction. The artist, on the other hand, often juxtaposes different features of reality and synthesizes them, so that upon completion, the whole work is greater than the sum of its parts. There is considerable crossover in the techniques used by both. The novelist Vladimir Nabokov wrote, ‘There is no science without fancy and no art without facts.’ (Leonard Shlain, *Art & Physics* 16)

While Leibniz’s pre-established harmony explains a possible process by which Novalis conceives of the development of *Poesie*—his concept of a universal language—Leibniz’s concept does not bring us closer to understanding what exactly this language looks, or sounds like. The novices are not trying to uncover the meaning of the hieroglyphs on the walls of the temple of Sais, but are rather searching through objects of nature in order to discover a language that emerges from inside of these objects and themselves, as both sound and written sign in one. Toward the beginning of the story Novalis writes, “Man verstehe die Sprache nicht, weil sich die Sprache selber nicht verstehe, nicht verstehen wolle; *die echte Sanskrit spräche*, um zu sprechen, weil Sprechen ihre Lust und ihr Wesen sei”¹ (1: 79, my emphasis). In the “Einleitung der

¹ “We do not understand speech, because speech does not understand itself, nor wish to; the true Sanskrit would speak in order to speak, because speech is its delight and essence.” (Translation by Manheim 5) Here I provide an alternate translation—Manheim’s translation does not differentiate between “Sprache” (“language”) and “sprechen” (“speech/speaking”): “We do not understand the language, because the language does not understand itself, nor wishes to; the true Sanskrit would speak in order to speak, because speaking is its delight and essence.” (My translation) Of this quote, James Hodkinson writes, “(...) in approaching the truths implied by the signs of nature, the poet finds that these dissolve before his eyes at the crucial moment (SN1:79). As a result, one of the other voices to emerge as the text develops is able to claim: ‘Man verstehe die Sprache nicht, weil sich die Sprache selber nicht verstehe, nicht verstehen wolle [...]’ (SN1:79), that is: the language of nature, like spoken language, does not understand itself and cannot, therefore, enclose or disclose truths that inform our understanding. Thus the language of nature is like music, because it is internally self-referential” (19).

Herausgeber” to “Die Lehrlinge zu Sais,” the editors, Paul Kluckhohn and Richard Samuel, write:

Da Novalis aber schon zu Anfang der Dichtung von “echter Sanskrit” spricht, so darf doch nicht der Eindruck übersehen werden, den Georg Forsters Sanskritstudien auf ihn gemacht haben müssen. Sie finden sich in Forsters Einleitung und Erläuterungen zu seiner Übersetzung von Kalidasas *Sakuntala* (1791) und in einigen Aufsätzen in den “Kleinen Schriften,” die Friedrich Schlegel zu seinen Essays über Forster (*Lyceum*, I, 1, 1797) veranlaßten. Forster, seinem Lehrer Sir William Jones folgend, bezeichnet Sanskrit als die “heilige Sprache” (...).² (77)

However, why would Novalis emphasize the “true” (“echte”) Sanskrit of nature, if he is writing about actual Sanskrit? It seems, rather, that Novalis is proposing a *new* Sanskrit, a new holy writing, one that is not only writing, but also ‘speaks.’ As I briefly mentioned in Chapter Two and promised to return to, for Novalis, all of nature has the same original substance...a *Sprachlehre*. This *Sprachlehre* is the key to the *Wunderschrift* of nature. The script of nature is described as one in **movement**—figures appear and disappear—bringing thoughts and wishes, and, as they are hoping to discover, also **letters** and **words** (which becomes clear later in the literary fragment). The language as described by the narrator and the novices consists of not only writing (“Schrift”), but also images (“Bilder”), figures (“Figuren”), light (“Licht”), and sound (“Klang”). The key to this

² “Because Novalis already speaks of “true Sanskrit” in the beginning, the influence that Georg Forster’s Sanskrit studies must have had on him cannot be overlooked. They can be found in Forster’s introduction and commentary for the translation of Kalidasa’s *Sakuntala* (1791) and in a few essays in the “Short Writings,” that Friedrich Schlegel included in his essays about Forster (*Lyceum*, I, 1, 1791). Forster, following his teacher Sir William Jones, describes Sanskrit as the “holy language” (...).” (My translation)

mysterious combination of attributes is apparent already in the opening paragraph of the fragment. Recall the opening lines (here filling in the text where the ellipses were in Chapter Two):

Mannigfache Wege gehen die Menschen. Wer sie verfolgt und vergleicht, wird wunderliche Figuren entstehen sehn; Figuren, die zu jener großen Chifferschrift zu gehören scheinen, die man überall, auf Flügeln, Eierschalen, in Wolken, im Schnee, in Kristallen und in Steinbildungen, auf gefrierenden Wassern, im Innern und Äußern der Gebirge, der Pflanzen, der Tiere, der Menschen, in den Lichtern des Himmels, **auf berührten und gestrichenen Scheiben von Pech und Glas, in den Feilspänen um den Magnet her, und sonderbaren Konjunkturen des Zufalls erblickt.** In ihnen ahndet man den Schlüssel dieser Wunderschrift, die Sprachlehre derselben... **Nur augenblicklich scheinen ihre Wünsche, ihre Gedanken sich zu verdichten. So entstehen ihre Ahndungen, aber nach kurzen Zeiten schwimmt alles wieder, wie vorher, vor ihren Blicken.**³ (Novalis 79)

All of these figures appear to belong to “this great ciphered writing,” a writing that is found throughout nature. The list of objects and phenomena of nature are suddenly contrasted by the “auf berührten und gestrichenen Scheiben von Pech und Glas, in den

³ “Various are the roads of man. He who follows and compare them will see strange figures emerge, figures which seem to belong to that great cipher which we discern written everywhere, in wings, eggshells, clouds and snow, in crystals and in stone formations, on ice-covered waters, on the inside and outside of mountains, of plants, beasts and men, in the lights of heaven, **on scored disks of pitch or glass or in iron filings round a magnet, and in strange conjunctions of chance.** In them we suspect a key to the magic writing, even a grammar.... **Only at moments do their desires and thoughts seem to solidify. Thus arise their presentiments, but after a short time everything swims again before their eyes.**” (Translation in Manheim 3/5)

Feilspänen um den Magnet her” (“scored disks of pitch or glass or in iron filings round a magnet”). What Novalis describes here are materials used in the formation of *Klangfiguren* (“Sounds Figures”). Ernst Florens Chladni (1756-1827), a German physicist and musician, was the first to perform extensive experiments on the *Klangfiguren* and he published his findings in *Entdeckungen über die Theorie des Klangs* (1787). He is ultimately the one who became famous for them, known today in English as “Chladni Figures.” He showed various modes of vibration on rigid surfaces by placing sand (or other fine material) on a circular, square or rectangular surface and striking a bow along the edge. The sand bounces with the vibration and settles at the nodal points, where there is no vibration. These nodal lines make up the intricate figures that form (see Figure 2.1).⁴ In Novalis’ descriptions above, these images, which bring mankind’s wishes and thoughts into words (“ihre Wünsche, ihre Gedanken sich zu verdichten”), can disappear just as quickly as they appear.

In “Töne-Hören,” Bettine Menke writes that Novalis studied and worked on the *Klangfiguren* in his notes for *Das Allgemeine Brouillon*. In *Absolute Music: The History of an Idea*, Mark Evan Bonds mentions in a footnote that Novalis’ opening paragraph of “Die Lehrlinge zu Sais” contains a reference to Chladni’s *Klangfiguren* (198). I argue that *Klangfiguren* take a prominent role in “Die Lehrlinge zu Sais” in Novalis’ concept of the development of *Poesie* as a universal language and are alluded to through metaphorical imagery. Just as Novalis poeticizes Leibniz’s theory of the monads and pre-established harmony, he poeticizes the *Klangfiguren*—they appear to take on many forms

⁴ Interestingly, these figures became integral in the development of acoustics and instrument building, for which Chladni is named the father of acoustics.

and uses—and are not at all similar to the traditional *Klangfiguren* made with various plates and sands. Their appearances are rather fragmented and only hypothesized,

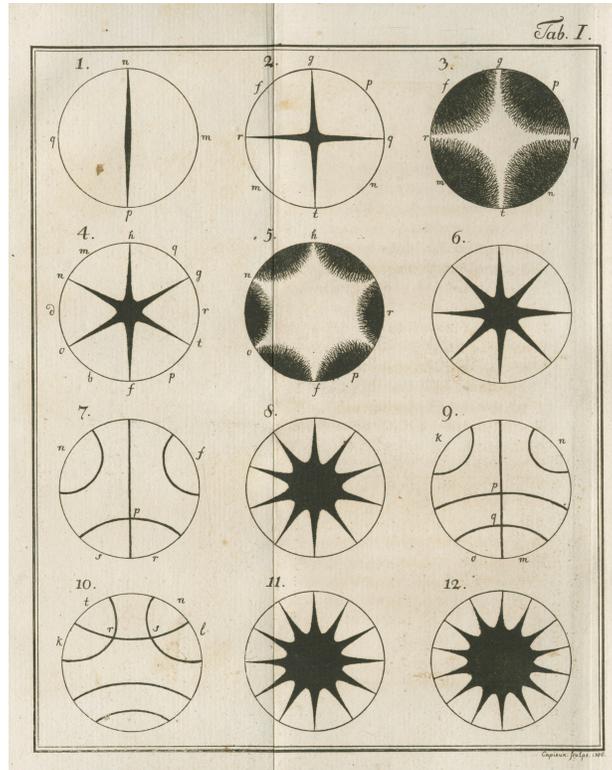


Figure 2.1: Table 1 from *Entdeckungen über die Theorie des Klanges*, 1787.⁵

because the *Lehrlinge* (novices) have not yet experienced them as the *Lehrer* (teacher) has. In addition, the *Klangfiguren* Novalis seems to poeticize are not those directly by Chladni, whose focus was only the vibrational patterns of tone, or as Bettine Menke puts it, “Darstellung der Bewegung, die der Ton ist” (“representation of the movement that is the tone,” my translation, 71), but rather by physicist Johann Wilhelm Ritter (1776-1810), who developed (later along with Hans Christian Ørsted (1777-1851)) a galvanic

⁵ “Chladni 1787 Entdeckungen Table 1”. Via null - https://monoskop.org/File:Chladni_1787_Entdeckungen_Table_1.jpg#mediaviewer/File:Chladni_1787_Entdeckungen_Table_1.jpg

interpretation of the Lichtenberg and Chladni Figures.⁶ Whereas Chladni writes of “Schallwellen,” (“sound waves”) Ritter writes of “Schallstrahlen” (“sound rays”) (Menke 70).

While Ritter addresses the concept from a scientific perspective in his “Anhang” (“Appendix”) to *Fragmente aus dem Nachlasse eines jungen Physikers* (1810), there are elements of *Naturphilosophie* inherent in his thinking. He interprets the *Klangfiguren* as representing the universal language of nature. His perspective, then, as “Naturphysiker” helps clarify Novalis’ poetic and metaphorical reception of the figures, and the two works compliment each other in many ways.

In the following case study analysis, I address these poetic and scientific perspectives of music as the language of nature and precursor to human language in Novalis’ “Die Lehrlinge zu Sais” (1802) and Ritter’s “Appendix” to his *Fragmente aus dem Nachlasse eines jungen Physikers* (1810), by looking at their reception and interpretation of Chladni’s *Klangfiguren*. Ritter’s voice, although difficult to trace, is certainly in the ‘multi-voiced dialogue’ that is embodied in Novalis’ work. Ritter’s fragments, however, also echo many of Novalis’ assertions. Early 20th century Novalis-Ritter scholar, Ernst Heilborn accused Ritter of plagiarism here,⁷ but Benjamin Specht suggests that it was rather a product of their Romantic concept of “Symphilosophie”—the

⁶ For a detailed account on the partnership and collaboration between Ritter and Ørsted, see: Christensen, Dan Ch. “The Ørsted-Ritter Partnership and the Birth of Romantic Natural Philosophy.” *Annals of Science*. 52 (1995). 153-185.

⁷ Heilborn asserts, as is mentioned in Ritter’s letter to Karl von Hardenberg on August 5, 1808, that Ritter “[Novalis’ Nachlasschriften] in seinem Buch >Fragmente aus dem Nachlasse eines jungen Physikers< mit eigenem Material und eignen Einfällen verschmolzen [hat]” (135). For more information, see: Heilborn, Ernst. *Novalis, der Romantiker*. Berlin: G. Reimer, 1901.

integration of many voices into one's own thinking (Specht 159).⁸ Regardless of who had the ideas first, Ritter's scientific and poetic descriptions of these *Klangfiguren* help shed "light," so to speak, on the possible meaning behind Novalis' abstract and metaphorical use of them in "Die Lehrlinge zu Sais." To this end, I will first look at Novalis' reception of the *Klangfiguren* in his collections of fragments, which were written during the same time frame as the literary fragment. Then, I will present Ritter's descriptions of them in his "Appendix" as a prelude to my analysis of Novalis' *Klangfiguren* in "Die Lehrlinge zu Sais" in order bring some *scientific* clarity to his abstract imagery. In turn, Novalis' poetic expression of the figures also brings further meaning to Ritter's scientific speculations.

***Klangfiguren* in Novalis**

In "Comprehending Romantic Incomprehensibility: A Systems-Theoretical Perspective on Early German Romanticism," Edgar Landgraf argues that in his "Monolog" (1798), Novalis challenges the concept that the speaker has authority over his speech, and reverses the hierarchy between consciousness and communication. "(...)
Novalis fundamentally changes the relationship between speaker and language that (following a long tradition) defines meaning in terms of a causal relationship between the intentions of a speaker (what he or she wants to communicate) and his or her speech" (599). In Novalis' lament over the short comings of language, Landgraf points out that "[i]t is precisely where language communicates beyond what was consciously intended that poesy becomes possible" (607). Therefore, communication should constitute rather

⁸ A similar approach is found in music. Composers have been known to take direct melodic quotes from other composers in honor of the composer and quoted piece (known as "borrowing").

than mirror what it expresses. Novalis and many other Romantics found the solution to this problem in Ernst Florens Chladni's discovery of the *Klangfiguren*. For the early Romantics, these figures suggested the possibility of a universal language present within nature, with sound and its written sign in one.

Novalis' approach to discovering a universal language in "Die Lehrlinge zu Sais" places emphasis on *hearing* it through the ear, which was considered the 'organ of the soul' by Samuel Thomas Sömmerring (1755-1830) in *Über das Organ der Seele* (On the Organ of the Soul) (1796). Sömmerring had assigned himself the ambitious goal of offering "final and irrevocable proof not only that the soul exists, but that it has an exact location, too" (Erlmann 152). Veit Erlmann offers a detailed account of Sömmerring's work:

In the same way as water simultaneously transmits to the different sense sensations of **heat, taste, odor, and sound**, so, too, does the cranial fluid 'permit all five sense distinct sensations without disruption.' The evidence for this assertion, Sömmerring informed his readers, had been provided by Ernst Florens Chladni's discovery in 1787 of the so-called *Klangfiguren* or 'sound figures'—geometric patterns that become visible when a glass plate covered with sand is set into vibration with the help of a violin bow. (...) Sömmerring not only believed he had found evidence that 'of all the nerves, none is in so immediate, so naked and bare a contact with the humidity of the brain cavities' as the auditory nerve, but that the optical and auditory nerves also touch the brain cavities at opposite ends, thus preventing the 'movements' transmitted by them from becoming

confounded and thereby ultimately preserving the unity of the conscious mind. To hear, to have a soul, even to live, according to Sömmerring, were one and the same. (155-156)

Sömmerring's belief that he found proof that the ear was the seat of the soul gave the ears priority over the eyes, which marked a significant Romantic shift away from the Enlightenment tendency to privilege the eyes and the rational sense of sight. The problem with pure sight is that it leaves a distance between subject and object, inside and outside. Thus, to hear music through the ear was to reach inside of the soul instantly, but not only that—the entire body, too. The *Klangfiguren* bring unity to the aural and visual expression, thus linking disunity with unity, the irrational soul with the rational soul. As Erlmann points out, Novalis “was fascinated by Sömmerring's transcendental liquor cerebrosplanialis because of the affinity it must have suggested with his own notion of the intermingling of the organic, unbounded fluidity of poetry and the watery World Soul” (158).⁹ Therefore, for Novalis, music represented a solution to the problem of the development of the I's inner/outer relationship between the soul and the world because of its instant contact with the inner body. While Chladni's main concern with the *Klangfiguren* was

to improve on the earlier findings of Daniel Bernouilli, Leonard Euler, and Jacopo Riccati by determining the properties of bodies with elastic curved surfaces such as bells and bowls, and thereby discovering, almost in passing, the longitudinal waves in solid bodies, for many early Romantics they represented this closeness of the inner/outer relationship of sound and

⁹ For more information see Novalis: *Werke, Tagebücher, Briefe*. 3 vols. Ed. Mähl and Samuel, (Munich: Carl Hanser, 1978-1987), vol. 1. 228, 656.

physical bodies, which stimulated an investigation into the ‘spiritual implications of the sound figures.’ (Erlmann 155-156)

Chladni’s experiments themselves were too focused on the scientific—as Johann Wolfgang von Goethe writes to Schiller on January 26, 1803 in reference to Chladni, whom he met in the same month,

Er gehört ... unter die Glückseligen, welche auch nicht eine Ahnung haben, daß es eine Naturphilosophie gibt, und die nur, mit Aufmerksamkeit, suchen die Phänomene gewahr zu werden, um sie nachher so gut zu ordnen und zu nutzen, als es nur gehen will und als ihr angebornes, in der Sache und zur Sache geübtes Talent vermag.¹⁰ (365)

Chladni’s theory, then, needed to be poeticized to bring it into the realm of *Naturphilosophie* and to counter rational ordering.

Novalis’ responses to Chladni’s *Entdeckungen über die Theorie des Klanges* (1787) in fragments 244, 245 and 362 of *Das Allgemeine Brouillon* shed particular light on the poetic imagery that Novalis displays in his literary fragment. Even though Novalis does not mention Chladni by name in the fragments, there are clear references to his work, and his book was found in Novalis’ library. However, he immediately departs from the ‘purely scientific,’ which focuses on classifying and using (“ordnen” and “nutzen,” as Goethe writes above), and interprets them as language through metaphorical images. In fragment 244 he labels “our alphabet” as a “TonSchriftkunst,” (an “art of musical

¹⁰ “He belongs to [...] those blissful persons who have not the faintest idea that there is something as *Naturphilosophy* and who are only attentively trying to observe phenomena which they will then classify and make use of them as well as their natural talent is capable in the matter and is trained for the matter.” (Translation in “Ernst Chladni” from *Monoskop*: https://monoskop.org/Ernst_Chladni)

writing”).¹¹ The editors to the critical edition write in an endnote that this reference to the art of musical writing refers to a work by Christian Gotthold Schocher, whom Novalis read along side of Chladni’s *Entdeckungen*.¹² Most striking are the analogies Novalis makes in fragment 245 to the physical attributes of the *Klangfiguren*: “245. MUSIK. Die Consonanten sind die Fingersetzungen und ihre Folge und Abwechslung gehört zur *Aplicatur*. Die Vocale sind die tönenden Saiten, oder *Luftstäbe*. Die Lunge ist der *bewegte Bogen*.”¹³ These first three sentences call to mind not only a stringed instrument being played by hand, but also a human voice producing sounds with the mouth by way of the movement of air from the lung. “Die Fingersetzungen,” “the fingerings” (as translated by Wood), or better, “finger placements” also remind one of the fingers placed on the edges of a plate to form additional nodal lines of a sound figure, and the “bewegte Bogen,” “moving bow,” which strikes them, stimulates the movement of the sand and sound from the plate (see Figure 2.2). The fragment continues:

(...) Über die allg[emeine]n *Sprache* der Musik. Der Geist wird
unbestimmt angeregt – das tut ihm so wohl – das dünkt ihm so bekannt, so

¹¹ “244. SCIENT[IA] ARTIS LITTER[ARIAE]. Die *Schriftkunst* (Tonkunst) schriftkünstlich behandelt liefert die Wissenschaft von der Schriftkunst (Scientiam artis litterariae). Die Kritik der Schriftkunst bereitet diese Wissenschaft vor. Unser Alphabet ist eine TonSchriftkunst und noch obendrein von einem *individuellen Instrumente*, dem menschlichen Sprachwerckzeugsystem. *Allgemeines, reines* Schriftsystem – und besondere, abgeleitete Schriftsysteme. (vid. das Zahlensystem.) *Noten*.” (3: 283) (“244. SCIENTIA ARTIS LITTERARIAE. The *art of writing* (art of music) treated in an artistic and literary manner furnishes the science of the art of writing (*scientiam artis litterariae*). The critique of the art of writing is a preparation for this science. Our alphabet is an art of musical writing, and over and above this, one from an *individual instrument*: the human organ of speech. *General, pure* system of writing—and special, derived systems of writing. (Cf. the number system.) *Notes*.” (Translation by Wood 36))

¹² See: Christian Gotthold Schocher, “Soll die Rede auf immer ein dunkler Gesang bleiben, und können ihre Arten, Gänge und Beugungen nicht anschaulich gemacht, und nach Art der Tonkunst gezeichnet werden?” Leipzig, 1791. Editor of Novalis’ work Richard Samuel notes that Schocher’s focus is on the “sprachliche Melodienlehre der alten Griechen” (“the teachings of the melody of language of the ancient Greeks”) and he discusses the difference between *Lauten* (“*Sounds*”) and *Tönen* (“*Tones*”) (3: 917-918).

¹³ “245. Music. Consonants are fingerings, and their sequences and alternations belong to the *application*. Vowels are strings of sound, or *batons of air*. The lungs are a *bow in motion*.” (Translation by Wood 37)

vaterländisch – er ist auf diese kurzen Augenblicke in seiner indischen Heymath. Alles Liebe – und Gute, Zukunft und Vergangenheit regt sich in ihm – Hoffnung und Sehnsucht. / Vers[uch] *bestimmt* durch die Musik zu sprechen. **Unsre Sprache** – sie war zu Anfang viel musicalischer und hat sich nur nach gerade so prosaisirt – so *entönt*. Es ist jetzt mehr *Schallen* geworden – *Laut*, wenn man dieses schöne Wort so erniedrigen will. **Sie muß wieder *Gesang* werden.** Die *Consonanten* verwandeln den *Ton* in *Schall*.¹⁴ (3: 283-284)

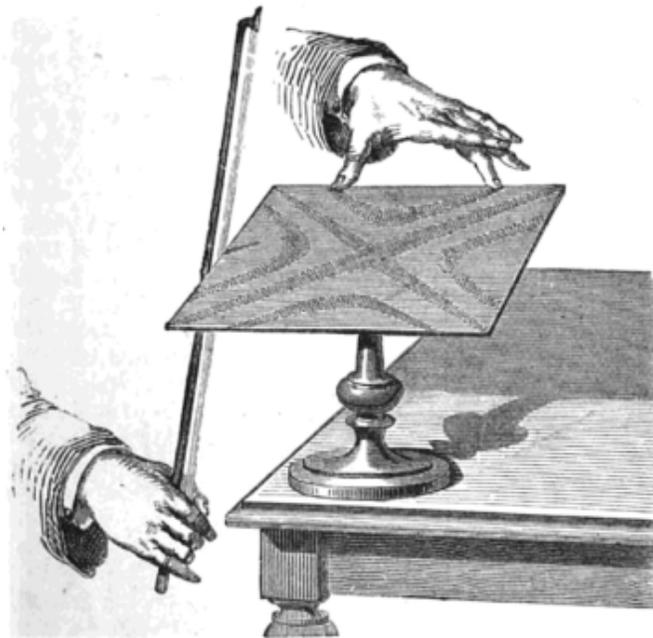


Figure 2.2: From William Henry Stone (1879) Elementary Lessons on Sound.

¹⁴ “ (...) On the universal *language* of music. The spirit becomes free, *indeterminately* stimulated—which is so beneficial for it—and seems so familiar to it, so patriotic—that for this short moment it is transported to its Indian homeland. All love—and goodness, future and past are aroused in it—hope and longing./Attempts to speak *musically*. Our language—was much more musical to begin with, and has gradually become so prosaic—so *unmusical*. It has now become more like *noise-sound* [*Laut*], if one thus wishes to degrade this beautiful word. It must become *song* once *again*. The *consonants* transform *tones* into *noise*.” (Translation by Wood 37, slightly edited by me)

Again, there are clear references to both Schocher's and Chladni's work, as Samuel notes. "Sie muß wieder Gesang werden" is a reference to Schocher. Novalis is poeticizing Chladni's experiments by marking the significance of the figures as the original human language—a language of musical tones, which carry their own writing within them. The *Klangfiguren* Novalis describes sound less and less like Chladni's, who was certainly not concerned with the images as forming a language or a writing. Bettine Menke argues that Novalis' thinking on them is rather "in großer Nähe zu Ritter" ("very close to Ritter") (71).

There is very little information available about the direct friendship and collaboration between Novalis and Johann Wilhelm Ritter. On January 20, 1799, Novalis wrote a letter to Caroline Schlegel: "Ritter ist Ritter und wir sind nur Knappen. Selbst Baader ist nur sein Dichter"¹⁵ (4: 275). Already aware of Ritter's work at this time, it was not until November of 1799 that they met in person. An account of this meeting is described by the unnamed editor's "Prologue" of Ritter's *Fragmente aus dem Nachlasse eines jungen Physikers* (who is assumed to be Ritter himself). The editor explains that they immediately understood each other and felt a great affinity for one another.

Ritter, who was suffering financially at this time, received help from Novalis as his patron. Very few letters survived from Ritter's estate, and none are addressed to or from Novalis.¹⁶ What does survive of Ritter's influence on Novalis are a few notes that

¹⁵ "Ritter [Knight] is a knight and we are merely his pages. Even Baader is but his poet." (Translation by Wood 262)

¹⁶ The unnamed editor of Ritter's "Prologue" mentions that Novalis began a letter to Ritter before his death, which he did not finish, but which reached Ritter nonetheless. "Er wurde ruhiger, als ihm aus dessen hinterlassenen Papieren ein Brief zugestellt wurde, den dieser noch wenige Tage vor seinem Tode an ihn angefangen, aber nicht mehr hatte vollenden können. Er enthielt Ermunterungen an ihn, seinem bisherigen Streben treu zu bleiben, und mehrere Aussichten, die dann ihm ganz notwendig in Erfüllung gehen mußten." (In: *Key Texts of Johann Wilhelm Ritter* 46) ("He became calmer as a letter was delivered to him

Novalis makes in *Das Allgemeine Brouillon*, as well as other scattered fragments in his published notes titled, “Physikalische Fragmente” from the “Freiburger naturwissenschaftliche Studien 1798/99” and “Fragmente und Studien 1799-1800” (3: 73-101; 556-693). Direct evidence of Ritter’s influence on Novalis’ thinking for his literary fragment can also be seen in Novalis’ mention of him in the “Paralipomena zu ‘Die Lehrlinge zu Sais,’” which is a collection of text segments and notes omitted from the work and added as a supplement; Ritter is listed under section six, “Die Naturlehre.” He is also mentioned in Novalis’ fragments several times in reference to the *Klangfiguren*. The majority of Novalis’ references to Ritter are specifically about his work in galvanism. A good example of this is in *Das Allgemeine Brouillon*, where Novalis writes: “647. Ein gutes physicalisches Experiment kann zum Muster eines innern Experiments dienen und ist *selbst ein gutes innres* subj[ectives] Experiment mit (vid. Ritters Experimente.)”¹⁷ (3: 386). Known famously for performing experiments on himself, Ritter sought to further uncover the physiology of the senses by sending up to 50 volts of electricity through parts of his body. Through his tongue, it produced a bitter, alkaline sensation, and through the eyes bursts of flashes, geometric shapes, and colors, to provide some examples. But in the ear canals, no auditory reaction resulted. He began these experiments in 1798, and it was several years later that he introduced other

from the remaining papers, which Novalis had begun just a few days before his death but had not been able to finish. The letter contained encouragements for him to remain true to his previous aspirations as well as several prospects which would most certainly come true for him.” (Translation by Holland 47)

¹⁷ “647. A good physical experiment may serve as the model for an internal experiment, and is *itself* a good *inner* subjective experiment. (Cf. Ritter’s experiments).” (Translation by Wood 118) Wood explains in the footnote to this fragment: “Johann Wilhelm Ritter (1776–1810), German physicist, chemist, and friend of Novalis, who carried out intensive studies on galvanism, reproduced in his principal work *Beweiss, dass ein beständiger Galvanismus den Lebensprocess in dem Theirreich begleitet* (Proof that Galvanism Constantly Accompanies the Process of Life in the Animal Kingdom; Weimar, 1798). Novalis and Ritter first met in November 1799. Also see *Encyclopaedia* entries 649 and 668” (253). (See Novalis: 3: 287-388, Nr. 649; 3: 394, Nr. 668)

materials into the equation for the ear. Veit Erlmann reports in his book *Reason and Resonance: A History of Modern Aurality*, “Depending on the metals used, the size of the battery, the part of the ear being galvanized, and most importantly, whether the circuit was closed or open, he noticed an extraordinary variety of tonal sensations” (192). These experiments, in conjunction with his further experiments on the *Klangfiguren*, led to Ritter’s understanding of the galvanic connections between organic and inorganic matter. Novalis makes important notes in regard to the connection between galvanism and acoustics, as Ritter emphasized that the sound figures exhibit an electric current as well.¹⁸

Of particular relevance to this project is Novalis’ interpretation of the *Klangfiguren*, which is very similar to Ritter’s. This is especially clear in fragment 362 of *Das Allgemeine Brouillon*:¹⁹

362. PHYS[IK] UND GRAMM[ATIK]. Ein gedämpfter, sehr naher Ton
dünkt uns *weit* zu seyn./ Lateralbewegungen der Luft beym Schall.
Figurirte **Schallbewegungen wie Buchstaben**. (Sollten die Buchstaben
ursprünglich *acustische Figuren* gewesen seyn. Buchst[aben] a priori?)
Lateral und figurirte Bew[egungen] des Lichts und der Wärme.

¹⁸ See especially Novalis’ “Physikalische Fragmente” regarding Ritter’s Kugelform (3: 83), Ritter’s Figuren (3: 91). His notes on the relationship between galvanism and acoustics can be found in the “Fragmente und Studien 1799-1800,” under the section titled “Physikalische Bermerkungen” on pages 100, and in fragment 409 (page 621). Viet Erlmann writes, “But while such electric activity could be made visible on things such as glass plates, the constant flow of electricity inside the human body remained largely hidden from view. This is where Ritter’s experiments on his sense organs proved to be of enormous use.” (“Hearing Oneself Hear” 193)

¹⁹ See also fragment 507 of “Physikalische Bermerkungen”: “507. Töne[,] Stimmungen des Gemüths – Kälte befördert die Gedankenabsonderung – sowie Sturm der *Leidenschaft* – und *Zug der Neigung*. *Innre Luft* – Innres Wasser und Licht.
Sollte **Poesie** nichts, als innre *Mahlerey* und Musik – etc. seyn. Freylich modificirt durch die Natur des *Gemüths*.
Man sucht mit der Poesie, die gleichsam nur das mechanische Instrument dazu ist, innre *Stimmungen*, und Gemählde oder *Anschaungen* hervorzubringen – vielleicht auch *geistige* Tänze etc.
Poésie = *Gemütherregungskunst*.” (3: 639)

Farbenbilder sind Lichtfiguren. **Der Lichtstrahl ist der streichende Fiedelbogen.** Was vertritt wohl hier die Stelle des Sandes? Man (zwingt) eigentlich den Schall sich selbst *abzudrucken* – zu *chiffriren* – auf eine *Kupfertafel* zu bringen. Weitere Anwendung dieser Idee. (Bestreuung einer Tafel mit Phosphorpulver – das die Farben des *verschiednen Lichts* annähme, oder das bey einer gelinden *Erwärmung* verschiedengestalteter und mannichfach berührter Körper in sonderbaren Figuren brennte – und leuchtete – Bereitung eines solchen Pulvers.)

Reflex[ion] Refraction und *Inflexion des Schalls*. /Der *schmerzhafte Laut* – Kritzeln auf den Teller etc. Scheidender Ton. / Über das Sprechen der *Staare*. / Natürliche, mimische, bildliche Sprache – Künstliche, zufällige, willkührliche Sprache. (...) Jedes Wort sollte eine acustische Formel seiner Construction, seiner Aussprache seyn – die Aussprache selbst ist ein Höheres, *mimisches Zeichen* einer höhern Aussprache – *Sinnconstruction* des Worts. (...) ²⁰ (3: 305)

Looking at these figures as though they are letters, Novalis sees the basis of the language of nature. With each word then as an “acoustic formula” of its construction and

²⁰ “PHYSICS AND GRAMMAR. A dampened sound in close proximity appears *far* away to us./ Lateral motions of the air in sound. Figurelike motions of sound, like *letters of the alphabet*. (Were letters originally *acoustic figures*? Letters *a priori*?) Lateral and figurelike motions of light and heat. Colored *images* are figures of light. The light ray is the stroked bow of a violin. What takes the place of sand here? One actually (forces) the sound to *impress* itself—to become *enciphered*—on a *copperplate*. Further application of this idea. (Strew phosphorus powder on a plate—so that it absorbs the colors of the *different light*, or after gently *heating*, so that it combusts—and radiates—the differently formed and diversely contacted bodies in strange figures—Preparation of such a powder). Reflection, refraction and *inflexion of sound*./ *Painful noise*—scratching on a plate etc. Piercing sound./ On the speech of *starlings*./ Natural, imitative, plastic language—artificial, accidental, arbitrary language. (The concept of causality, for example, is an *arbitrary sign*, (transcendental sign) of a particular relation.) Transcendental logic./ Every word should be an acoustic formula for its construction and pronunciation—the pronunciation itself is a higher, *imitative sign* of a higher pronunciation—*Construction of the meaning* of a word. (...)” (Translation by Wood 54)

pronunciation, Novalis emphasizes that there should be no separation among the signifier, its sound, and the signified. The word (“Wort”), sound or “acoustic formula” (“acustische Formel”), and meaning (“Sinnconstruction,” which Novalis describes as a “mimisches Zeichen einer hörern Aussprache,” a “mimetic sign of a higher pronunciation”) should ideally be one—but there remains an indefinite referentiality. One recalls the seemingly climactic moment mentioned in Chapter Two, “Ihre Aussprache war ein wunderbarer Gesang...” (“Their pronunciation was a wonderful song...”) (1: 106). These ideas of language intermingle with scientific descriptions of the figures—from the movements of light and warmth, to a description of an experiment with phosphorus powder. It is important to note that Novalis did not rely solely on everyone else’s observations of the sound figures, but also performed the experiments himself.²¹ These notes indicate that he worked with these materials himself, similar to how Ritter records his experimental work and plans. His scientific descriptions are also complemented by combinations of scientific observation and poetic metaphor: “Der Lichtstrahl ist der streichende Fiedelbogen,” (“The ray of light is the striking bow of a violin”) (my translation). However, what does light have to do with the *Klangfiguren*? Johann Wilhelm Ritter makes similar claims as Novalis in his Appendix from 1809-1810, but explains them further. In the following analysis of excerpts from Ritter’s “Appendix,” I show a possible scientific explanation for the imagery that Novalis uses in “Die Lehrlinge zu Sais.”

²¹ As also referenced in the “Introduction,” see Sünner, Rüdiger. “‘Atmendes Denken’: Zum spirituellen Weltbild von Novalis.” *Atlanta* 7 (July 2002). <http://www.ruedigersuenner.de/novalis8.html>. Accessed May 2017.

Klangfiguren in Ritter

Ritter responds to the *Klangfiguren* in his “Appendix” to *Fragmente aus dem Nachlasse eines jungen Physikers* after having read Hans Christian Ørsted’s *Versuche über die Klangfiguren*, published in 1809.²² Ørsted, with whom Ritter studied and was in close contact, was a Danish physicist and chemist who worked with various plates of metal, glass, sand and other materials to produce sound figures. Ørsted modeled his figures after the work of Ernst Florens Chladni (whom Ritter also mentions in his fragments).²³ Together, Ørsted and Ritter were able to displace earlier resonance theories by discovering that no vibration can occur without electricity (Erlmann 194).²⁴ Music as sound also contains electricity, and therefore also light. Ritter is not just writing on a poetic, Romantic notion, but rather sees the electric current in connection with the sound figures as a force necessary for life on multiple levels.

Ritter’s “Appendix” oscillates between passages addressing scientific observations of the *Klangfiguren* and poetic speculations on the relationships between music and language. He also makes a brief claim that tones have their own consciousness, and that only composers have the power to harness them and bring music

²² Walter Benjamin was the first to recognize the importance of the appendix for its conceptual work on the relation of language, music, and writing. See his section referring to Ritter in: *Ursprung des deutschen Trauerspiels* (1928). Frankfurt am Main: Suhrkamp Verlag, 1963. 240-243.

²³ Thomas Strässle argues in “‘Das Hören ist ein Sehen von und durch innen’: Johann Wilhelm Ritter and the Aesthetics of Music” that “Chladni’s and Oersted’s *Klangfiguren* were no more than external visualizations of acoustic phenomena. Ritter’s aim, however, is rather different in that he is attempting to theorize the inner representation of tone” (31). However, Ørsted’s work in *Naturphilosophie* is largely overlooked in the scholarship—his work was more in line with Ritter than with Chladni. See Dan Christensen’s article, “The Ørsted-Ritter Partnership and the Birth of Romantic Natural Philosophy.” *Annals of Science*. 52 (1995). 153-185.

²⁴ Ørsted went on to discover electromagnetism in 1820, which Ritter did not live long enough to experience. “Ørsted’s discovery was probably inspired by Ritter’s failed experiment of 1803 on galvanism and magnetism” (Christensen 164).

into the audible world, which is not relevant to this chapter, and I will discuss this passage further in Chapter Four. I will first introduce Ritter's response to Ørsted on how the *Klangfiguren* are related to language, then how this is related to his theory on the relationship between language and music in general.

The opening first few pages of the "Appendix" closely follow a letter that he wrote to Ørsted, in which he discusses the electrical qualities of the sound figures and speculates on performing similar experiments via chemical materials—thereby creating *chemical* sound figures. Suddenly, in the third paragraph he writes:

—Schön, wäre es, wie, was hier *äußerlich* klar würde, genau auch wäre, was uns die Klangfigur *innerlich* ist:—*Lichtfigur. Feuerschrift**). Jeder Ton hat somit seinen Buchstaben immediate bey sich; und es ist die Frage, ob wir nicht überhaupt nur *Schrift* hören,—*lesen*, wenn wir hören,—*Schrift sehen!*—Und ist nicht jedes Sehen mit dem *innern* Auge *Hören*, und Hören ein Sehen von und durch *innen*?²⁵ (472)

Ritter is speculating on an idea about the relationship between writing and speech. He claims that it would be nice to discover that that which is clear in the outer appearances of the *Klangfiguren*, could be as clear on the *inside*, meaning inside of the body. He suggests the appearance of this language could be connected in an organic, perhaps synaesthetic way within the body as a result of the combined perception from the eyes and ears. In a footnote to this passage after the word "Feuerschrift," Ritter explains that

²⁵ "—It would be nice if that which is *externally* clear here, would be precisely that which the sound-figure is to us innerly:—light figure, *firewriting*). Every tone thus has its letter immediately by itself; and the question is whether we do not in fact only hear *writing*,—*read*, when we hear,—*see* writing!—And is not every seeing with the *inner* eye *hearing*, and hearing a seeing of, and through, *within*?" (Translation by Holland 273)

there are electrical processes, which accompany the emergence of tone as a part of oxidation processes. He therefore questions whether sound is not also accompanied by light, which would suggest a more *natural*, organic connection between that which is visible and that which is audible—that seeing and hearing the language happens at the same time.

In connection with the language-nature of the *Klangfiguren*, Ritter writes about the *Lichtenberg Figuren* (“Lichtenberg Figures”), which were discovered by German physicist Georg Christoph Lichtenberg (1742-1799) and are produced by applying an electric current through solids, liquids, or gases.²⁶ Ernst Florens Chladni had initially received the idea to perform the *Klangfiguren* experiments after having studied Lichtenberg’s *Lichtfiguren*. Ritter explains the connection between the two:

Auch in der Erscheinungswelt noch sieht man Wort und Schrift beständig unzertrennlich. Alle Electricitätserregung ist mit Oscillation begleitet, wenn sie immerhin auch bey den Isolatoren nur äußerlich scheint. Im Grunde aber ist keine, auch die innere, ohne äußere. Alle Oscillation aber giebt Ton, und damit Wort. Aber die erregte Electricität projicirt sich überall sogleich *Gestalt*-formirend, ja die Gestalt geht ihr selbst *voran*, und wohnt schon ihrer *Erregung* bey; sie findet sie in dem Maaße vor, als sie selbst auftritt. Es ist directe Klangfigur, und beinahe könnte man sagen, sie sey nur zufällig zugleich electriche; wiewohl umgekehrt jede Klangfigur eine electriche, und jede electriche eine Klangfigur ist. Die

²⁶ Interestingly, these Lichtenberg Figures can also appear on the surface of the human body, for example, after being hit by lightning—a scarring, or as Ritter would argue, a ‘writing’ that appears on the outside of the body. See, for example: Domart, M.D., Yves and Emmanuel Garet, M.D. “Lichtenberg Figures Due to a Lightning Strike.” *New England Journal of Medicine*. 343: 21, November 23, 2000. 1536.

*Lichtenberg's*chen Figuren sind nichts als Klangfiguren in der
Normalerscheinung.²⁷ (474)

By looking at these figures, Ritter argues that there is an organic connection between writing and the word through electrical processes, and that a sound is always associated with them. Ritter is therefore proposing that there is a natural connection between the word and the sound it produces.²⁸ In addition, Ritter also observes that the shape itself precedes the electricity and is already present in its excitation. What is unclear is what these words signify. Perhaps all he is suggesting is that this writing carries its own sound, while in human alphabets, sounds are arbitrarily “assigned” to the symbols/letters. Does Ritter then suggest that unlike human language, where the signifier and signified are separate from each other, and their connection is arbitrary (as has been made clear in the study of semiotics by Ferdinand de Saussure), this language of nature, the word itself, comes from the object it is describing (as Novalis proposes in Fragment 362 of *Das Allgemeine Brouillon*)? He does not explain this further. Ritter recalls a theory he had already developed “längst einmal” (“long ago”) and shared with Ørsted, about how the

²⁷ “Also in the world of phenomena one still sees word and writing constantly inseparable. All electrical excitation is accompanied by oscillation even if it only appears external at the isolators. Basically, however, there is no oscillation—even no internal one—without being external. All oscillation however yields tone and thereby word. But the excited electricity projects itself everywhere at once as *shape-forming*, indeed the shape *precedes* the electricity and is already present in its *excitation*; [electricity] acquires [shape] in the measure that the electrical excitement occurs. It is direct sound-figure, and one could almost say, it is only at the same time electrical by chance; though, conversely every sound-figure is an electric [shape], and every electric [shape] is a sound figure. *Lichtenberg's* figures are nothing other than the regular appearance of sound-figures.” (Translation by Holland 475)

²⁸ c.f. Novalis, who takes this idea further, suggesting that the word should also be a mimetic sign of its “higher pronunciation,” that is, its “meaning”: “Jedes Wort sollte eine acustische Formel seiner Construction, seiner Aussprache seyn – die Aussprache selbst ist ein Höheres, *mimisches Zeichen* einer höhern Aussprache – *Sinnconstruction* des Worts.“ (3: 305) “Every word should be an acoustic formula for its construction and pronunciation—the pronunciation itself is a higher, *imitative sign* of a higher pronunciation—*Construction of the meaning* of a word.” (Translation by Wood 54)

Lichtenberg figures resemble the shapes of the first and last letters in the oldest written alphabets.

Ich habe dir schon längst einmal geschrieben, wie + (oder *) und ○ sich in den ältesten Alphabeten als Anfangs- und Endbuchstabe derselben vorfinden. Dies sind die beyden *Lichtenberg*'schen Figuren in ihrer einfachsten Gestalt; ich wollte hierauf also die *Ur-* und *Naturschrift* auf electricischem Wege wiederfinden oder doch suchen, fand aber in der That schon von + (Abbraviatur von *) bis ⊗ (Theta, Menschen-, Gottesbuchstabe), in jenen alten Alphabeten mehr *dendritische, Pflanzen-Figuren*, und von ⊗ bis ○ mehr *grundete, Thier-Figuren*. Zugleich sind + und ○ auf die Extreme der *Octave*,—die, in der *Sprache*, sich als Verhältniß des *Selbstlauters* zur *Consonante* ausdrückt. Und da nur *beyde zusammen* einen *Ton* geben, so erhält die Chiffre desselben: ⊗ , sogar *bildliche* Bedeutung. Der Hauch × wird von ○ zurückgeworfen; × ist Selbst-, ○ Mitlauter; von ○ wird ↷ wieder nach dem Centrum oder Ausgangspunct *c* zurückgeworfen, und *sich selbst* offenbar. Es gilt hier die völlige Construction des Bewußtseyns, und einst war alles Bewußtseyn Laut oder Ton, wie vornehmlich *Herder* ganz herrlich zeigte.

(...)²⁹ (474/476)

²⁹ [Note: I view this quote as a graphic rather than text, as I cannot decipher exactly what it means.] “I have already written you long ago, how + (or *) and ○ occur in the oldest alphabets as the first and last letters. These are the two *Lichtenberg* figures in their simplest shape; after that, I therefore wanted to find again or at least seek the *primal-* or *nature-writing* through the electric path, but in fact I found already

One immediately notices that these figures also correspond with the shapes that appear in the *Klangfiguren* (see Figure 2.1 again on page 62). He is suggesting that ancient people were “in tune” with this natural writing inherent in sound.

Ritter’s additional support for his theory, beyond the science of the *Lichtenberg*- and *Klangfiguren*, begins with the assertion that human language is no longer the “natural one” (477). Echoing Johann Gottfried Herder (1744-1803) in “Abhandlung über den Ursprung der Sprache,” (1772) Ritter asserts that sound, and therefore music, was the first human language.

Des Menschen Wesen und Wirken ist Ton, ist Sprache. Musik ist gleichfalls Sprache, *allgemeine*; die *erste* des Menschen. Die vorhandenen Sprachen sind Individualisierungen der Musik; nicht individualisierte Musik, sondern, die zur Musik sich verhalten, wie die einzelnen Organe zum organisch Ganzen. (*Pars est, quae non est Totum, und Totum est, cui nulla pars deest.*) Die Musik zerfiel in Sprachen. (...) So ist jedes von uns gesprochene Wort ein geheimer Gesang, denn die Musik im Innern begleitet ihn beständig.³⁰ (480)

from + (abbreviation of ✱) to ⊗ (theta, human-, divine-letter), in those old alphabets more *dendrite*-like, *plant*-figures, and from ⊗ to ○ more *rounded*, *animal*-figures. At the same time, + and ○ are directed towards the extremes of the *octave*,—which, in *language*, already expresses itself as the relation of the vowel [*Selbstlauter*] to the *consonant* [*Consonant*]. And since only *both* together yield a *tone*, so does its cipher: ⊗, contain even *plastic* significance. The breath × is thrown back from ○; × is vowel [*Selbstlauter*], ○ consonant [*Mitlauter*]; from ○, ✱ is either thrown back to the center or to the starting point *c*, and apparently *itself*. The complete construction of consciousness applies here, and at one time all consciousness was sound or tone, as especially *Herder* has most excellently shown.” (Translation by Holland 473/475)

³⁰ “The essence and activity of man is tone, is language. Music is also language, *general* language; the *first* language of man. The present languages are individualizations of music; not individualized music, but rather ones which relate to music as individual organs do to the organic whole. (*Pars est, quae non est Totum, und Totum est, cui nulla pars deest.* [A part is what is not whole, and a whole is that of which there

Music is classified as *general* language, and *particular* human languages developed from it into *particular* languages. Therefore, music is a part of these languages (even if a forgotten part). Ritter concludes the paragraph with a claim reminiscent of Novalis' description in "Die Lehrlinge zu Sais," "Ihre Aussprache war ein wunderbarer Gesang, dessen unwiderstehliche Töne tief in das Innere jeder Natur eindringen und sie zerlegen."³¹ Where Novalis uses the term "zerlegen" (to "deconstruct" or "fragment") to describe the separation of nature through the novices' pronunciation, Ritter writes, "Die Musik zerfiel in Sprachen," ("The music *disintegrates* into languages") and in the following paragraph, "So ist jedes von uns gesprochene Wort ein geheimer Gesang, den die Musik im Innern begleitet ihn beständig."³² Most important for this discussion, however, is the moment in the text when Ritter fuses scientific and poetic ideas together through metaphor:

Ueberall aber muß die Schrift das von der Sprache, dem Ton, dem Worte, *selbst*, Geschriebene, seyn. Hier erhält man dann für die Musik, oder die *allgemeine* Sprache, die *Hieroglyphe*, oder die völlig vollständig den *ganzen* Ton, den *ganzen* Accord, u. s. w. ausschreibt. Das Sprechende ist dem Ausgesprochenen gleich, da alles nur sich selbst ausspricht. Die *Sache selbst* ist als hier die Schrift, die Note. (...) Alle Schrift zusammen

is no part.) Music disintegrates into languages. (...) Thus every word pronounced by us is a secret song, for music accompanies it constantly on the inside." (Translation by Holland 481)

³¹ "There speech was a wondrous song, its irresistible tones penetrated deep into the inwardness of nature and split it apart." (Translation by Manheim 113)

³² Ritter goes on to differentiate between the levels of comprehension of language in the animal kingdom, which is not relevant to this current project.

muß sich zur Hieroglyphe wie Organ zum organischen Ganzen, (wie die *Partes* zum *Totum*; vergl. oben) verhalten.³³ (488)

Just as the appearance of sound and light are inseparable, so too is the relationship between the spoken and written word. The concept of the hieroglyph carries specific importance here. By the time Ritter wrote this Appendix, the Rosetta Stone had already been discovered,³⁴ so the possibility of translating the hieroglyphs was finally a reality. As symbols that represent not only letters, but also image and sound, the hieroglyphs of ancient Egypt (however static) provide Ritter with an example of how to approach uncovering the multi-layered essence of music as a universal language through the sound figures—not as understood by the mind, but rather by the body. Ritter, here, also sees language, both written and spoken, as an entire, organic system in motion.³⁵ Electricity, in Ritter's thinking, is the means by which light and sound travel—it is what connects humans with nature, and in turn, the entire universe. Music occupies and exists in space, then, not only in time. Indeed, Ritter calls upon the Music of the Spheres to support his claim.³⁶ Most importantly for this analysis, Ritter asks in regard to the sun, "Ist z.B. in

³³ "In general, however, the writing must be that which is written by language, by tone, by the word itself. Here one maintains for music, or the general language, the hieroglyph, or [the one] which completely writes out the entire tone, the entire chord, etc. The speaking [thing] is identical to the spoken since everything only speaks itself. The matter itself is therefore here the writing, the note. (...) All writing must relate to the hieroglyph as organ to organic whole (...)." (Translation by Holland 489)

³⁴ The Rosetta Stone was discovered by Napoleon's team of explorers in 1799 in the town of Rashid (interestingly, it was originally displayed in the temple of Sais).

³⁵ As Walter D. Wetzels writes, the Jena Romantics, inspired by Friedrich Schelling's *Naturphilosophie*, thought of nature as "one huge living organism;" they therefore desired to find the "soul" of this all-encompassing unity of inorganic and organic nature (45). Veit Erlmann adds, "Nature was seen as a coherent whole, with Volta's electric pile being but one element in a long chain joining the organic and inorganic. In fact, the cosmos itself was seen as an immense battery and galvanism as the 'key to the entry into innermost Nature'" ("Hearing Oneself Hear" 191).

³⁶ "Es giebt also eine ewig gleich große Summe von Ton in der Welt, und da die Oscillationen auf mannichfachste in Stärke und Geschwindigkeit verschieden sind, so ist damit die Möglichkeit von Melodie und Harmonie in ihr gegeben. Zur Wirklichkeit wird sie durch die directe Beobachtung. Merkwürdig ist

der Sonne die Musik aller Weltkörper, die zur ihr gehören, nur Sprache, oder—hat von unten herauf, wie bey uns in der Thierreihe, noch immer *Verbindung* von Sprache und Musik start, die erst in der *Sonne* sich völlig trennt?”³⁷ (484) Ritter is suggesting that the music of all worldly bodies travels from the sun through the rays of light—that the music (general language) and the splitting of (specific) languages originate there. He continues this thought:

Die Welt, soweit sie sichtbar ist, und werden kann, ist dieser *Buchstabe*, diese Schrift. Das Wort schreibt, der Buchstabe tönt; beydes in seiner Unzertrennbarkeit ist das Sein, das Bewußtseyn, das *Leben*; so herauf bis zum Gott. Schrift, Wort, Licht und Bewußtseyn fallen in *Eins*. Das *Auge* der Sinn für *Schrift*, die nur am und durch den Ton erkannt werden kann. Der Ton selbst aber ist *Licht*, das ohnehin einem anderen Sinne, als dem

hier für die Erde besonders das Verhältniß von $365 \frac{1}{4}$: 1. Auffallend ist es, daß die erste Zahl nur sehr wenig von $\sqrt[2]{\Omega} \times \Omega^8$ ist, denn die letztere ist 362,038.... Wie immer aber, so ist doch diese Verhältniß auf Erden empirisch, und hier die Sphärenmusik, die komische, nach ihm abgetheilt. Andere Planeten müssen andere Verhältnisse haben, die wieder zueinander in sehr harmonischen Verhältnissen stehen mögen. So wäre es möglich, daß ganze Systeme von Rhythmus und Perioden, „ganze Concert“, sich, höher, wieder in bloß *Einen—höheren—Ton* auflösten, so wie ja schon jeder *unserer* Töne ein *System* von Tönen (Tonelementen) ist (s. Ørsted).” (482/484) (“Thus there is an eternally constant sum of tone in the world, and since the oscillations are of the most variable in strength and speed, so is the possibility of melody and harmony thereby give in it. It becomes reality through direct observation. For the earth the relationship of $365 \frac{1}{4}$: 1 is particularly strange here. It is striking that the first number is only a little off from $\sqrt[2]{\Omega} \times \Omega^8$, for the latter is 362,038.... As always, however, so is this relation on earth empirical, and the music of the spheres, the cosmic music, divided according to it. Other planets must have other relations which may then stand in very harmonious relationships to each other. Thus it would be possible that entire systems of rhythm and periods, “entire concerts” dissolve again in merely *one—higher—tone*, as already every one of *our* tones is already a *system* of tones (tone elements) (see Ørsted).”) (485) Ritter is referring to Ørsted’s essay, “Versuche über die Klangfiguren.” *Journal für die Chemie und Physik* 8.2 (1809). 223-254.

³⁷ “Is, for example, in the sun the music of all planetary bodies which belong to it only language, or—does always a *connection* of language and music occur, as with us in the series of animals, from the bottom up, which first separates *entirely* in the *sun*?” (Translation by Holland 485)

Auge, gehören mußte, weil das Auge das Licht *nicht* sieht, sondern nur
vermittelst des *Lichts = Tons*.³⁸ (484)

Just as there are types of light that are not visible to the human eye (for example ultra-violet rays, which Ritter discovered in 1801), Ritter postulates that there are sounds, too, not audible by the human ear.³⁹ Because sound and light waves do not interfere with each other, Ritter finds them as intimately connected; in fact, toward the end of his Appendix he concludes, “Also: *Ton und Licht stören sich nicht!* —Wie aber im Grunde auch könnten sie es, da sie ja Eins sind?”⁴⁰ (506).

Similar to Novalis’ approach to Leibniz’s pre-established harmony as being never-ending, Ritter also explains that one should not make any claims about pre-established harmony. Again, a pre-destination would signal an end form—and this language, this universe is constantly evolving (492/493). In regard to “knowing the self,” Ritter explains, “(...) was hervorgerufen werden soll, ist schon da. So ist überall das uns Nächste das Schwerstverständlichste, weil *wir es selbst* sind. So müssen wir uns selbstverstehen, um *dies* zu verstehen!”⁴¹ (492) The *Klangfiguren* represent for Ritter the

³⁸ “The *world*, as far as it is and can become visible is this *letter*, this *writing*. The word writes, the letter resounds; each, inseparable is being, consciousness, *life*; and so on up to God. Writing, word, light, and consciousness fall into *one*. The *eye* [is] the sense for *writing* which can only be recognized on and through the *sound*. The sound itself however is *light*, which must already belong to another sense than the *eye* because the eye does not see the light but rather only *by way of light = tone*.” (Translation by Holland 485)

³⁹ Ritter’s claim that sound is light is fascinating in modern terms, as it was not until Heinrich Hertz’s (1857-1894) discovery of radio waves in 1886 that we learned that sound can travel via invisible light waves. Leonard Shlain explains, “Although radio waves are at the far end of the electromagnetic spectrum and are invisible, they are a form of light” (285). I discuss this in more detail in the “Conclusion” to this project.

⁴⁰ “Therefore: *tone and light do not interfere with each other!* How could they however, in essence, since they are indeed *one*?” (507)

⁴¹ “(...) what should be *called forth* is already *there*. Thus in general that which is closest to us is that which is most difficult to understand, because *we* are it *ourselves*. Thus we must understand *ourselves* in order to understand *this*.” (493)

key to the inner workings of not only objects of nature, but also the human body. He suggests then, that like the direct relationship between sound and light, and spoken and written word in these figures, the understanding of the self can be uncovered in the same way by studying this phenomenon in nature—which brings us back to “Die Lehrlinge zu Sais.”

Poetic *Klangfiguren* in “Die Lehrlinge zu Sais”

As mentioned in the introduction to this chapter, in “Die Lehrlinge zu Sais,” “die echte Sanskrit” (“the true Sanskrit”) is described as not only writing (“Schrift” (79)), but also image (specifically, “Wunderbild” (81), “miracle image” and “höher Bild” (82), “higher image”), figure (“Figur” (79/81)), and as containing light (“Licht” (96)) and sound (“Klang” (96)). These descriptions are spread throughout the text and not all of the elements are described at once. This is indicative of the novices’ search for the illusive language that they have not yet experienced, but of which they have heard. A possible explanation for this evasive approach can be found in Novalis’ fragments:

[511.] Die **Poesie** muß nie der Hauptstoff, immer nur das Wunderbare seyn.

Man sollte nichts *darstellen*, was man nicht völlig übersähe, deutlich vernähme, und ganz Meister desselben wäre – z. B. bey *Darstellungen des Übersinnlichen*.⁴² (3: 640)

⁴² “[511.] Poesie must never be the main material, always only the miraculous. One should not represent what one would not fully overlook, distinctly perceive, and of which one would be quite a master—for example in the representations of the *transcendental*.” (My translation)

Because a pre-established harmony of *Poesie* can never be realized (as it is constantly evolving)—it also cannot be represented. Thus, it is always on the side of “das Wunderbare” (“the miraculous”); a representation would require a distinct form. Likewise, according to Novalis, the novices are not able to represent precisely what the teacher experiences in the descriptions of their observations, nor what they personally experience. “Der Lehrling,” “the novice,” who is the narrator of the opening section, explains that only “der Lehrer,” “the teacher” has access to experiencing this language. The Lehrling observes:

Nicht lange darauf sprach einer: „Keiner Erklärung bedarf die heilige Schrift. Wer wahrhaft spricht, ist des ewigen Lebens voll, und wunderbar verwandt mit echten Geheimnissen dünkt uns **seine Schrift**, denn sie ist **ein Akkord aus des Weltalls Symphonie**.“

Von unserm Lehrer sprach gewiß die Stimme, denn **er versteht die Züge zu versammeln, die überall zerstreut sind**. Ein eignes **Licht** entzündet sich in seinen Blicken, wenn vor uns nun die hohe **Rune** liegt, und er in unsern Augen späht, **ob auch in uns** aufgegangen ist das **Gestirn**, das die **Figur sichtbar und verständlich** macht.⁴³ (1: 79)

Here, he describes several elements of the language. The “holy writing” is a chord from the symphony of the universe. Only der Lehrer knows how to bring the “Züge” (“traits”) together—a “Licht” (“light”) emerges from his eyes when he lays the sacred rune before

⁴³ “A little later, there was one who said: ‘The holy scripture needs no explanation. He who speaks true, is full of eternal life, **his written word** seems wondrously akin to the mysteries, for it is **a chord taken from the symphony of the universe**.’ Surely the voice was speaking of our teacher, for he knows how to gather together the traits that are scattered everywhere. A unique light is kindled in his eyes when he lays down the sacred rune before us and peers into our eyes to see whether in us the light is risen that makes the figure visible and intelligible.” (Translation by Mannheim 5/7)

the novices' eyes, and he looks into theirs to see if the image of the "Gestirn" ("star") has formed, that this figure makes visible and understandable.

Oft hat er uns erzählt, wie ihm als Kind der Trieb, die Sinne zu üben, zu beschäftigen und zu erfüllen, keine Ruhe ließ. **Den Sternen** sah er zu und **ahmte ihre Züge, ihre Stellung im Sande** nach. In's Luftmeer sah er ohne Rast, und ward nicht müde **seine Klarheit, seine Bewegungen, seine Wolken, seine Lichter** zu betrachten. Er sammelte sich Steine, Blumen, Käfer aller Art, und **legte sie auf mannigfache Weise sich in Reihen**. (...) In **große bunte Bilder** drängten sich die Wahrnehmungen seiner Sinne: er **hörte, sah, tastete und dachte zugleich**.⁴⁴ (1: 79-80)

This is the first instance in the literary fragment where the Lehrling describes how the Lehrer creates these figures—from the stars, which he imitates in the sand, and from objects he collects from nature, which he lays in rows. Because of these images that are created (described as "Sternen," "stars"), one could interpret them as "manmade" *Klangfiguren*. By gathering objects of nature or tracing the stars in the sand, the Lehrer creates the form that produces the sound (that at this point only he can hear). But it is not just sound—a mixing of the senses occurs—a synaesthetic reaction, which allows for deeper understanding through *feeling*. The teacher's senses mix in the presence of these images—he can hear, see, touch and think at the same time. The stones are mentioned several times throughout the fragment—they are placed in many "rays" that touch each

⁴⁴ "Often he has told us how when he was a child, the desire [to] practice, to busy, and to fulfill his senses left him no peace. He looked up at the **stars and copied their paths and positions in the sand**. Unremittingly he observed the heavens, and never wearied of contemplating their clarity, their movements, their clouds, their lights. He gathered stones, flowers, insects of all sorts, and **arranged them in rows of many different kinds**. (...) The perceptions of his senses crowded into **great colorful images**; he **heard, saw, touched and thought at once**." (Translation by Manheim 7/9)

other, like an image of stars or the sun, which is a common form and variation of the traditional *Klangfiguren*. Recall also Ritter's assertion in his "Appendix" about the physical sun in the universe, which represents the opposite movement—the splitting that happens from music (general language) into specific language is from the source outward (484). Novalis' 'manmade' *Klangfiguren* then represent the retracing of the rays back to the source. The novice describes this imagery again as the child presents the teacher with the missing stone to complete an image:

Der Lehrer nahm es in die Hand, und küßte ihn lange, dann sah er uns mit nassen Augen an und legte **dieses Steinchen auf einen leeren Platz**, der mitten unter andern Steinen lag, gerade wo **wie Strahlen viele Reihen sich berührten**. Ich werde dieser Augenblicke nie fortan vergessen. Uns war, als hätten wir im Vorübergehn eine helle Ahndung dieser wunderbaren Welt in unsern Seelen gehabt.⁴⁵ (1: 81)

The novices do not experience a clear reaction from these images. It is "as though our souls had known a bright and fugitive presentiment of this wondrous world," suggesting that a distant impression of the image may have been experienced by the novices (Translation by Manheim 13). It is already a memory of only a possible past.⁴⁶ Similar to Ritter, Novalis specifically addresses the loss of the "natural language" at the beginning of the second section, titled "2. Die Nature" ("2. Nature"), again, with the metaphor of light rays splitting:

⁴⁵ "The teacher took it in his hand and kissed it a long long while, then he looked at us with tears in his eyes and laid the little stone in an empty space among other stones, where many rows came together like spokes [*better translation: rays*]. Never shall I forget those moments. It was as though our souls had known a bright and fugitive presentiment of this wondrous world." (Translation by Manheim 13)

⁴⁶ As Mähl, again, addresses as the triadic process, 356.

Es mag lange gedauert haben, ehe die Menschen darauf dachten, die mannigfachen Gegenstände ihrer Sinne mit einem gemeinschaftlichen Namen zu bezeichnen und sich entgegen zu setzen. Durch Übung werden Entwicklungen befördert, und in allen Entwicklungen gehen Teilungen, Zergliederungen vor, die man bequem **mit den Brechungen des Lichtstrahls** vergleichen kann. So hat sich auch nur allmählich unser **Innres in so mannigfaltige Kräfte zerspaltet**, und mit fortdauernder Übung wird auch **diese Zerspaltung zunehmen**. Vielleicht ist es nur die krankhafte Anlage der späteren Menschen, wenn sie das Vermögen verlieren, diese zerstreuten Farben ihres Geistes wieder zu [83] mischen und nach Belieben den alten einfachen Naturstand herzustellen, oder neue, mannigfaltige Verbindungen unter ihnen zu bewirken.⁴⁷ (1: 82-83)

With the development of language, man distanced himself from the objects he named.

This distancing is described as comparable to the breaking of a ray of light (into its separate colors). Light takes on a particularly prominent role in the text—it is not only a metaphor for the figures formed in the *Klangfiguren*, but also represents an interior splitting of the senses of mankind, in a negative sense. However, a formation of the “figures” can also happen inside of the body in a positive sense. “Ein muntre Gespieler,” “an animated youth,” addresses the Lehrling, who up until this point had been sitting

⁴⁷ “It must have been a long time before men thought of giving a common name to the manifold objects of their senses, and of placing themselves in opposition to them. Through practice developments were furthered, and in all developments occur separations and divisions that may well be compared with the splitting of a ray of light. It was only gradually that our inwardness split into such various forces, and with continued practice this splitting will increase. Perhaps it is only the sickly predisposition of later men that makes them lose the power to mix again the scattered colors of their spirit and at will restore the old, simple, natural state, or bring about new and varied relations between the colors.” (Translation by Manheim 19)

back and listening to the conversation unfold, and explains to him: “Du hast noch nicht geliebt, du Armer; beim ersten Kuß wird eine neue Welt dir aufgetan, mit ihm fährt Leben **in tausend Strahlen** in dein entzücktes Herz. Ein Märchen will ich dir erzählen, horche wohl”⁴⁸ (91). The rays enter into his heart, so again, in reverse motion to the center.⁴⁹ Later, the novices, as though in unison, lament that humanity cannot hear the inner music of nature anymore, and therefore cannot sense the figures inside of them.

„O! daß der Mensch“, sagten sie, „die **innre Musik der Natur** verstände und **einen Sinn für äußere Harmonie** hätte. (...) Lernt er einmal fühlen? Diesen himmlischen, diesen natürlichsten aller Sinne kennt er noch wenig: durch das Gefühl würde die alte, ersehnte Zeit zurückkommen; das Element des Gefühls ist ein inneres Licht, was sich in schönern, kräftigern Farben bricht. Dann **gingen die Gestirne in ihm auf, er lernte die ganze**

⁴⁸ “You have not yet loved, poor fellow; at the first kiss a new world will open before you, and life like a thousand arrows will flash through your entranced heart. I shall tell you a story. Listen well.” (Translation by Manheim 53)

⁴⁹ Novalis explains in fragment 510 of “Physikalische Bemerkungen” that the Lehrling, in his passive nature, serves as “das Organ des Dichters,” “the organ of the poet” in the novel.

510. Einheiten des Romans.

Kampf der Poësie und Unpoësie.

Der alten und neuen Welt.

Die Bedeutung der Geschichte.

Die Geschichte des *Romans* selbst.

Verschwendung. etc.

Passive Natur des Romanhelden. Er ist das Organ des Dichters im Roman. Ruhe und Oeconomie des Styls. Poëtische Ausführung und Betracht[ung] aller Begegnisse des Lebens. (3: 639-640)

In the beginning section of the literary fragment titled “Der Lehrling,” the Lehrling proclaims that he does not go searching for the objects to form the images, but rather looks inside of them after the others have formed them. In them he is searching for the “Jungfrau,” “maiden,” who lies in a deep sleep. “Mich freuen die wunderlichen Haufen und **Figuren** in den Sälen, allein mir ist, als wären sie nur Bilder, Hüllen, Zierden, versammelt um **ein göttlich Wunderbild**, und dieses liegt mir immer in Gedanken. Sie such’ ich nicht, **in ihnen such’ ich oft**. Es ist, als sollten sie den Weg mir zeigen, wo in tiefem Schlaf die Jungfrau steh, nach der mein Geist sich sehnt.” (1: 81) (“I take delight in the strange mounds and figures in the halls, but to me it seems as though they were only shapes, cloaks, ornaments, gathered round a divine, miraculous image, and this always in my thoughts. I do not search for them, but within them I often search. It is as though they might show me the way to where in deep slumber lies the maiden for whom my spirit yearns.”) (Translation by Manheim 13/15) Here, light will enter his heart in a thousand rays once he knows love.

**Welt fühlen, klärer und mannigfaltiger, als ihm das Auge jetzt
Grenzen und Flächen zeigt. Er würde Meister eines unendlichen
Spiels und vergäße alle törichte Bestrebungen in einem ewigen, sich
selbst nährenden und immer wachsenden Genuße. Das Denken ist
nur ein Traum des Fühlens, ein erstorbenes Fühlen, ein blaßgraues,
schwaches Leben.**⁵⁰ (1: 95-96)

Music of nature, unlike human language, bypasses the mind and reaches the senses directly. Here, *feeling* is prioritized over *thinking*. These stars, which form from within as inner light that separates into “more beautiful, stronger colors,” should ideally teach mankind to *feel* the world. The rich imagery of these inner stars of light is accompanied by light and sound seen and heard from the outside (from the unnamed narrator’s perspective). Recall the narrator, who steps back from ‘tuning in’ to the conversation, reports:

Wie sie so sprachen, **strahlte die Sonne** durch die hohen Fenster, und in ein sanftes Säuseln verlor sich der Lärm des Gesprächs; eine unendliche Ahndung durchdrang alle Gestalten, die lieblichste Wärme verbreitete sich

⁵⁰ “‘O, if only man,’ they said, ‘could understand the inner music of nature, if only he had a sense for outward harmonies. (...) Will he ever learn to feel? This divine, this most natural of all senses is little known to him: feeling would bring back the old time, the time we yearn for; the element of feeling is an inward light the breaks into stronger, more beautiful colors. Then the stars would rise within him, he would learn to feel the whole world, and his feeling would be richer and clearer than the limits and surfaces that his eye now discloses. Master of an endless dance, he would forget all his insensate striving in joy everlasting, nourishing itself and forever growing. Thought is only a dream of feeling, a dead feeling, a pale-gray feeble life.’ (Translation by Manheim 69/71/73)

über alle, und der **wunderbarste Naturgesang erhob sich aus der tiefsten Stille...**⁵¹ (1: 96)

The conversation of the novices turns into a “gentle murmur,” which is accompanied by the light that fills the room through the windows and a wonderful song of nature that can be heard from the deepest silence. The seemingly climactic moment later in the fragment, as also quoted in Chapter Two, is also accompanied by a “cooling flame” from the crystal bowls and music from a distance: “(...) Während eine Musik aus der Ferne sich hören ließ und eine kühlende Flamme aus Kristallschalen in die Lippen der Sprechenden hineinloderte, erzählten die Fremden merkwürdige Erinnerungen ihrer weiten Reisen (...)”⁵² (1: 106).

On a larger scale, one of the novices asks whether this system of nature is a “Sonne” (“sun”) in the universe. Here, Novalis expands the concept of the sun further than Ritter does in his “Appendix”. For Ritter, the sun is the center from which music (and languages) comes. The novices suggest that this entire system of nature is a sun—one that extends out into the universe. But light is sourced from within objects of nature and humanity as well—as though in harmony and communication with each other through both light and sound.⁵³

⁵¹ “As they spoke, the sun shone through the lofty windows, and the sound of their words was lost in a gentle murmur; an infinite surmise permeated every shape, a tender warmth spread over them all, and a wondrous song of nature rose from the deepest silence.” (Translation by Manheim 73)

⁵² “While music was heard from the distance and a cooling flame from crystal goblets poured into the lips of the company, the strangers related strange memories of their travels.” (Translation by Manheim 111)

⁵³ “In der Flamme des Lichts sind alle Naturkräfte tätig, und so repräsentiert und verwandelt sie sich überall und unaufhörlich, treibt Blätter, Blüten und Früchte zusammen, und ist mitten in der Zeit gegenwärtig, vergangen und zukünftig zugleich; und wer weiß, in welche eigne Art von Ferne sie ebenfalls wirkt und **ob nicht dieses Natursystem nur eine Sonne ist im Universo, die durch Bande an dasselbe geknüpft ist, durch ein Licht und einen Zug und Einflüsse, die zunächst in unserm Geiste sich deutlicher vernehmen lassen, und aus ihm heraus den Geist des Universums über diese Natur ausgießen, und den Geist dieser Natur an andere Natursysteme verteilen.**” (102) (“[N]othing is so marvelous as the

Although the search for this language of nature happens through the outer world, it is from within the self that the figures/images can be deciphered and understood. Just like Ritter's assertion that the figures of the *Klangfiguren* are already present before their excitation, so, too is the knowledge of the self already present. In Novalis, this process of deciphering must be *developed* with a combination of outer and inner contemplation. Through this process, Novalis writes, "die Außenwelt wird durchsichtig, und die Innenwelt mannigfaltig und bedeutungsvoll...." The voice continues on:

Den Inbegriff dessen, was uns rührt, nennt man die Natur, und also steht die Natur in einer unmittelbaren Beziehung auf die Gliedmaßen unsers Körpers, die wir Sinne nennen. Unbekannte und geheimnisvolle Beziehungen unsers Körpers lassen unbekannte und geheimnisvolle Verhältnisse der Natur vermuten, und so ist die Natur jene wunderbare Gemeinschaft, in die unser Körper uns einführt, und die wir nach dem Maße seiner Einrichtungen und Fähigkeiten kennen lernen. (...) Man sieht wohl, daß diese innern Verhältnisse und Einrichtungen unsers Körpers vor allen Dingen erforscht werden müssen, ehe wir diese Frage zu beantworten und in die Natur der Dinge zu dringen hoffen können. Es ließe sich jedoch auch denken, daß wir überhaupt erst uns mannigfach im Denken müßten geübt haben, ehe wir uns an dem innern Zusammenhang

great simultaneity of nature. Everywhere nature seems wholly present. In the flame of a lamp all natural forces are active, and thus it manifests itself and transforms itself everywhere, gathers together leaves, blossoms and fruits, and in the midst of time it is present, past and future at once; who knows towards what unique kind of distance it also tends, and **whether this system of nature is not merely a sun in the universe, connected with it by bands, by a light, by an attraction and influences, which first become more clearly perceptible in our spirit and then, gathering from it, diffuse the spirit of the universe over this nature and distribute the spirit of this nature among other systems of nature.**") (Translation by Manheim 95)

unsers Körpers versuchen und seinen Verstand zum Verständnis der Natur
gebrauchen könnten.... (...) Hätte man dann nur erst einige Bewegungen,
als Buchstaben der Natur, herausgebracht, so würde das Deciffrieren
immer leichter von statten gehen, und die Macht über die
Gedankenerzeugung und Bewegung den Beobachter in Stand setzen, auch
ohne vorhergegangenen wirklichen Eindruck, Naturgedanken
hervorzubringen und Naturkompositionen zu entwerfen, und dann wäre
der Endzweck erreicht.⁵⁴ (1: 97-98)

This voice gives the role of deciphering the mysterious language of nature to the body. It is the body that receives the communication and that which responds to it in the form of feelings and sensations. Thinking is an entirely separate phenomenon produced by the rational mind—the rational mind can study the inner workings of the body—here, science takes on an important role (recall Novalis’ notes on the importance of Ritter’s “inner subjective” experiments in fragment 647 of *Das Allgemeine Brouillon*⁵⁵)—but the act of thinking must be studied and developed as well. This again leads to the purpose of

⁵⁴ “The epitome of what stirs our feeling is called nature, hence nature stands in an immediate relation to the functions of our body that we call senses. Unknown and mysterious relations within our body cause us to surmise unknown and mysterious states in nature; nature is a community of the marvelous, into which we are initiated by our body, and which we learn to know in the measure of our body’s faculties and abilities. (...) Clearly, these inner relations, these faculties of our body must first of all be studied, before we can hope to answer this question and penetrate the nature of things. It might also be thought, however, that we must have extensive practice in thinking, before trying our mettle on the inner structure of our body and applying its intellect to an understanding of nature; (...) Once we had evolved thought processes to serve as nature’s code [better translation: “nature’s letter”], the deciphering would become increasingly simple and our power over the movement and generation of thoughts would enable us to produce natural ideas and natural compositions even without any preceding real impression, and then the ultimate end would be attained.” (Translation by Manheim 77/79/81)

⁵⁵ “647. Ein gutes physicalisches Experiment kann zum Muster eines innern Experiments dienen und ist *selbst ein gutes inneres* subj[ectives] Experiment mit (vid. Ritters Experimente.)” (3: 386) (“647. A good physical experiment may serve as the model for an internal experiment, and is *itself* a good *inner* subjective experiment. (Cf. Ritter’s experiments).”) (Translation by Wood 118)

Poesie—to integrate language and concepts from all disciplines in order to create a richer understanding. Their ultimate goal is to understand these figures as letters of an alphabet, so that the language can be deciphered with more ease. Here the base form of the inner *Klangfiguren* is named—first letters must be found (“Buchstaben der Natur,” “letters of nature”), which will then ultimately form words. Recall the following quote included in Chapter Two: “Um die Natur zu begreifen, muß man die Natur **innerlich in ihrer ganzen Folge entstehen lassen...**”⁵⁶ (101). One could interpret this as the inner development of the monad, as discussed in Chapter Two, or as the appearance of the figure or image in a sound figure. This first speaker continues: “(...) die ganze Natur ist nur als **Werkzeug und Medium** des Einverständnisses vernünftiger Wesen begreiflich”⁵⁷ (101). Nature is only understood and utilized as a “tool” or “medium” by rational beings. For the Lehrling, items that were originally foreign are now useful, similar to a “Hausgerät,” “household utensil.”

Wenn **mit diesem Glauben** ich hier umher gehe, so tritt mir alles in **ein höher Bild, in eine neue Ordnung** mir zusammen, und alle sind nach Einer Gegend hin gerichtet. Mir wird dann jedes so bekannt, so lieb; und was mir seltsam noch erschien und fremd, wird nun auf einmal **wie ein Hausgerät.**⁵⁸ (1: 82)

⁵⁶ “In order to understand nature, we must allow nature to be born inwardly in its full sequence....” (Translation by Manheim 91)

⁵⁷ “(...) all nature is intelligible only as an instrument and medium for the communication of rational beings. (...)” (Translation by Manheim 91)

⁵⁸ “When with this faith I look around me here, everything converges into a higher image, a new design; and all my companions are moving towards *one* place. Then everything becomes so familiar, so dear to me; and what before seemed strange and foreign, becomes all at once like a household utensil.” (Translation by Manheim 15)

It is with this belief in the figures that impressions are made—because he believes in them he can see them—an emphasis on the spiritual interpretation of the *Klangfiguren*. Similarly, objects of nature can be tamed like “Haustiere” (“house pets”) through the application of music: “Ist es denn nicht wahr, daß **Stein und Wälder der Musik gehorchen** und, von ihr gezähmt, sich jedem Willen **wie Haustiere** fügen?”⁵⁹ (Novalis 100) Humans, in their position as the only “rational” beings, have access to the key to this mysterious language—it has only been forgotten. As is explained earlier in the fragment, during “die goldene Zeit,” when man still understood and was the master of the language of nature, he could “breathe tones into living things”—that is, tame and domesticate nature:

Sie teilten sich gesellig in das große Werk, die einen **suchten die verstummten und verlornen Töne** in Luft und Wäldern zu erwecken, andre legten ihre Ahnungen und Bilder schönerer Geschlechter in Erz und Steine nieder.... (...) **hauchten in die lebendigen Glieder Töne**, um sie zu entfalten, und in heitern Schwingungen zu bewegen,.... (...) **Bald lernte die Natur wieder freundlichere Sitten**, sie ward sanfter und erquicklicher, und ließ sich willig zur Beförderung der menschlichen Wünsche finden.⁶⁰ (1: 86)

⁵⁹ “Is it not true that stones and woods are obedient to music, that under the spell of music they serve man’s will like house-pets?” (Translation by Manheim 89)

⁶⁰ “For this great work they broke into companionable groups, some sought to awaken the spent and lost tones in the air and in the forests, others fixed their presentiments and images of more beautiful races in bronze and stone, (...) **breathed tones into living things**, that they might unfold and move in joyous rhythms, (...) **Soon nature learned friendlier ways again**, she became gentler and more amiable, more prone to favor the desires of man.” (Translation by Manheim 31/33)

In this way, nature became friendlier—mankind gained control over her cultivation. How this connection was lost came in the creation of human language, as mentioned earlier. Distancing himself from the objects of nature by naming them, led to the “Zerspaltung,” “splitting” of their inner nature like rays of light. So, the novices begin their search in the outer world of nature in order to rediscover their inner connections—the key to which only they have. Some say,

Was brauchen wir die trübe Welt der sichtbaren Dinge mühsam zu durchwandern? **Die reinere Welt liegt ja in uns**, in diesem Quell. (...) Wir brauchen nicht erst lange nachzuforschen, eine leichte Vergleichung, nur wenige **Züge im Sande sind genug, um uns zu verständigen. So ist uns alle eine große Schrift, wozu wir den Schlüssel haben....**⁶¹ (1: 89-90)

However, it is not mankind as a whole who has this particular gift—it is reserved for a special kind of human—the poet. The poet is the one who can make words out of the lines of movement (“mit Worten die Linien der Bewegungen nachschreibt” (1: 102)). He follows the path of the “Forscher” (scientist) and picks up where the Forscher left off (1: 103-104).⁶² With this, he has the gift of reading the “labyrinth paths” like a “map”:

⁶¹ “What need to journey warily through the dismal world of visible things? For the purer world lies in us, in this source. (...) We need not inquire at length; an easy comparison, a few lines in the sand are enough, and we shall understand. Thus all things are a great manuscript to which we hold the key....” (Translation by Manheim 47)

⁶² “(...) Ihren Tritten folgt der **Forscher**, um jedes Kleinod zu sammeln, was sie in ihrer Unschuld und Freude haben fallen lassen, ihrer Liebe huldigt der mitfühlende **Dichter** und such durch seine **Gesänge** diese Liebe, diesen Keim des goldnen Alters, in andre Zeiten und Länder zu verpflanzen.” (103-104) “The **scientist** follows their steps and gathers every treasure they have let fall in their innocence and joy, the **poet**, filled with sympathy, does homage to their love, and seeks in his **songs** to transplant this love, this germ of the golden age, into other times and lands.” (Translation by Manheim 101/103)

Einige sind geschäftig und nehmen im Vertrauen auf die Allgegenwart und die innige Verwandtschaft der Natur, mithin auch im Voraus von der Unvollständigkeit und der Kontinuität alles Einzelnen überzeugt, irgendeine Erscheinung mit Sorgfalt auf, und halten den **in tausend Gestalten sich verwandelnden Geist derselben mit stetem Blicke fest, und gehen dann an diesem Faden durch alle Schlupfwinkel der geheimen Werkstätte, um eine vollständige Verzeichnung dieser labyrinthischen Gänge entwerfen zu können. Sind sie mit dieser mühseligen Arbeit fertig, so ist auch unvermerkt ein höherer Geist über sie gekommen, und es wird ihnen dann leicht, über die vorliegende Karte zu reden, und jedem Suchenden seinen Weg vorzuschreiben. Unermeßlicher Nutzen segnet ihre mühsame Arbeit,** und der Grundriß ihrer Karte wird auf eine überraschende Weise mit dem Systeme des Denkers übereinstimmen, und sie werden diesem zum Trost gleichsam **den lebendigen Beweis seiner abstrakten Sätze** unwillkürlich geführt haben.⁶³ (1: 103)

For Novalis, the poet, alone, has access to the language of nature and can transcribe it into *Poesie* to be heard by humanity through his “songs.” However, this apparently only

⁶³ “Some are industrious, confident in the omnipresence and bosom kinship of nature; hence convinced in advance of the imperfection and continuity of all separate things, they closely examine some random phenomenon; with steady gaze they hold fast **its spirit as it undergoes transformations into a thousand shapes; holding by this thread, they penetrate every secret nook and cranny of the secret workshop in order to map these labyrinthine ways in their entirety. By the time they complete this arduous labor, a higher spirit has come over them unawares, and then it is an easy matter for them to discuss the map as it lies before them and plot a path for every seeker. Immeasurable gain blesses their painstaking labor,** and the outline of their map will coincide surprisingly with the system of the thinker, whom they will involuntarily have consoled, it would seem with **living proof of his abstract theorems.**” (Translation by Manheim 99)

becomes possible due to a “höher Geist,” whose presence makes it possible to read the “map” of the figures. Is this to be interpreted as the “Genius” of the poet, or of Ritter’s galvanic connection between organic and inorganic matter, which carries its own writing, its own communication with it?

Conclusion

584. Ritter sucht durchaus die eigentliche Weltseele der Natur auf. Er will die sichtbaren und ponderablen Lettern lesen lernen, und das *Setzen* der höhern geistigen Kräfte erklären. Alle äußere Prozesse sollen als Symbole und letzte Wirkungen innerer Prozesse begreiflich werden. Die Unvollständigkeit jener soll das Organ für diese und die Nothwendigkeit einer Annahme des Personellen, als letzten Motivs, Resultat jedes Experiments werden.⁶⁴ (Novalis, “Fragmente und Studien 1799-1800,” 3: 655)

After reading both Ritter’s and Novalis’ interpretations of the *Klangfiguren*, this cyptic fragment above from Novalis’ “Fragmente und Studien 1799-1800” (under the section titled “Physikalische Bermerckungen”) becomes clearer. For Ritter, galvanism is the key to the connection between organic and inorganic nature. The sound figures, which represent sound, light (electricity), and image in one serve as a tangible experiment—they show externally that which Ritter wished to discover internally. Ritter proposes that the *Klangfiguren* represent the first and last letters of the earliest written languages, suggesting that people were ‘in tune’ with the writing inherent in sound. This would mean that these first languages were not based on an arbitrary connection between

⁶⁴ “584. Ritter is by all means searching for the real world soul of nature. He wants to learn how to read the visible and ponderable letters and explain the setting of the higher spiritual powers. All external processes are to be understood as symbols and final effects of internal processes. The incompleteness of the former is to be the organ for this, and the necessity of an assumption of the personal, as the last motive, the result of every experiment.” (My translation)

letters, words and their sounds. Ritter does not take this further to make a claim about the meaning of words formed with these letters.

In the form of his fictional literary fragment, Novalis plays with these scientific ideas through abstract, metaphorical imagery. Novalis' approach is multilayered: in my analysis of "Die Lehrlinge zu Sais," I have shown how the characteristics of the *Klangfiguren* appear in the text, including as writing ("Schrift" (79)), image (specifically, "Wunderbild" (81), "miracle image" and höher Bild (82), "higher image"), figure ("Figur" (79/81)), and as containing light ("Licht" (96)) and sound ("Klang" (96)). I also show then how mankind uses the figures—not surprisingly, Novalis gives special access to the poet.⁶⁵ He takes the characteristics of the *Klangfiguren* and separates them into their distinct attributes; they are fragmented through descriptions of inner and outer light rays, and a sound, or rather "musical pronunciation," which, interestingly, can only be heard when stepping back and not listening directly to the words of their conversations. He makes the figures themselves more *tangible* on the one hand, by giving humans (in particular poets) the power to create them via rows of stones and drawing lines in the sand. On the other hand, the sound and sensations these figures appear to make seem to be unreachable, because the novices cannot experience the teacher's inner, subjective experiences, and only he has seen them. In regard to Novalis' concept of the development of *Poesie*, this abstract imagery represents the process required, similar to a never-ending pre-established harmony, in order for *meaning* to be allowed to continue to develop.

⁶⁵ Novalis continues to work on his poetic use of the *Klangfiguren* in the "Klingsohr Märchen" of *Heinrich von Ofterdingen* (written in 1800, published posthumously in 1802), and represents them similarly, as objects laid down in rows to form images, which then produce music (see especially: 1: 292-293). Many thanks to Dorothee Ostmeier for pointing out this passage to me. In his published notes under the title, "STUDIEN ZU KLINGOHR'S MÄRCHEN" (3: 643-645) Novalis also explicitly writes of "Sprache durch Metalleitungen" (3: 644).

There is no end destination—science can be explored further through the expansive nature of poetic language, and new questions can be asked.

Both Novalis and Ritter represent in striking ways an integral relationship between language, sound, and light in the *Klangfiguren*. In many places, Ritter’s imagery and hypotheses on the *Klangfiguren* in his “Appendix” from 1810 echo, if not very closely copy what Novalis asserts in his story from 1798/99. Indeed, the abstract, metaphorical references in Novalis’ text are difficult to interpret as sound figures without also reading Ritter’s interpretation and explanation of them in his “Appendix.” By reading these texts in reverse chronological order (in addition to Novalis’ fragments on the *Klangfiguren*), one can appreciate a ‘scientific connection’ to Novalis’ abstract metaphors of sound and light as attributed to his and Johann Wilhelm Ritter’s investigations on the *Klangfiguren*. Where the two texts differ most strikingly is what I will address in the following chapter—Ritter, amidst his scientific observations and poetic claims about a universal language of nature through the *Klangfiguren*, suddenly asserts that tones have their own consciousness. He makes the assertion likely because of the electricity inherent in sound, seen therefore as a life-force—though he does not explain this explicitly. Whereas Novalis gives the power of deciphering the *Klangfiguren* to the poets (and does mention the influence of a “höher Geist,” a “higher spirit” in their interpretation), Ritter gives the power over tones themselves to composers, who “manage an entire race.” Not surprisingly, this is a theme that E.T.A. Hoffmann takes up for his pseudonym and literary figure, Johannes Kreisler.

CHAPTER IV

RITTER'S MUSICAL BLOOD FLOW THROUGH HOFFMANN'S KREISLER¹

[S]cience will become literature, insofar as literature – subject, moreover, to a growing collapse of traditional genres (poem, narrative, criticism, essay) – is already, has always been, science; for what the human sciences are discovering today, in whatever realm: sociological, psychological, psychiatric, linguistic, etc., literature has always known; the only difference is that literature has not *said* what it knows, it has *written* it. (Roland Barthes in “From Science to Literature” 29)

This chapter includes previously published material, which has been substantially revised and updated. Material from: “Ritter’s Musical Blood Flow Through Hoffmann’s Kreisler.” *The Early History of Embodied Cognition 1740-1920: The Lebenskraft-Debate and Radical Reality in German (Medical) Science, Music, and Literature*. Ed. John A. McCarthy, Stephanie Hilger, Heather Sullivan, and Nicholas Saul. Leiden & New York: Brill/Rodopi, 2016. 145-162.

As discussed in Chapter Three, Ritter’s “Appendix” to *Fragmente aus dem Nachlasse eines jungen Physikers* primarily oscillates between scientific descriptions and poetic ideas about language in regard to the *Klangfiguren*. After his claim that the simplest forms of the *Lichtenberg Figures* (and, as I show, also the *Klangfiguren*) resemble the first and last letters of the earliest alphabets, therefore arguing that tones

¹ An earlier version of this chapter under the same title was published in *The Early History of Embodied Cognition 1740-1920: The Lebenskraft-Debate and Radical Reality in German (Medical) Science, Music, and Literature*. Ed. John A. McCarthy, Stephanie Hilger, Heather Sullivan, and Nicholas Saul. Leiden & New York: Brill/Rodopi, 2016. 145-162. This current version brings further clarity to Ritter’s theory and Hoffmann’s application of it, as it was not clear at the time I wrote the earlier version that there was a connection to the *Klangfiguren* in Hoffmann’s text as well.

carry their own writing within them, the text takes a startling turn in the following paragraph:

—Wie das Licht, so ist auch der Ton Bewußtseyn. Jeder Ton ist ein *Leben* des tönenden Körpers und in ihm, was so lange anhält, als der Ton, mit ihm aber erlischt. Ein ganzer Organismus von Oscillation und Figur, Gestalt, ist jeder Ton, wie jedes Organisch-Lebendige auch. Er spricht sein Daseyn aus. Es ist gleichsam Frage an die Somnambüle, wenn ich den zu tönenden Körper mechanisch afficiere. Er erwacht vom tiefen, gleichsam Ewigkeits-Schlaf; er antwortet; und im Antworten ist er nicht sowohl sicher seiner, sondern, das Leben, der Organismus, der oder das in ihm hervorgerufen wird, ist sich seiner bewußt. Dies Bewußtseyn steht zum Allgemeinen in dem nemlichen Verhältnis, wie das unsere; so wird jeder Ton, nachdem er *Geisterspruch* ist, zugleich auch *Gottesspruch*, dasselbe, was menschliches Bewußtseyn auch ist.² (476)

Suddenly, Ritter claims that both light and sound are “consciousness.” Tones, in particular, “pronounce” their own being—emphasizing that they have their own writing present within when they sound, their own communication. But it is not the tones themselves that are conscious, as he explains, “sondern, das Leben, der Organismus, der

² “—As is light, so too is *tone consciousness*. Every tone is a *life* of the resounding body and *in* it which continues as long as the tone does but vanishes with it. Every tone is an entire organism of oscillation, figure, and shape, just like every organic-living [thing]. It pronounces its being. It is virtually a question posed to the somnambulist, whenever I mechanically stimulate the body to be resounded. He awakes from the deep, quasi-eternal sleep; he responds; and in answering he is not just aware of himself, but rather life, the organism, whichever is called forth in him, is aware of itself. This consciousness stands in the same relation to the general one as ours does; thus every tone becomes, after it is *word of the spirit*, at the same time also word of *God*, the same which human consciousness also is.” (Translation by Holland 477)

oder das in ihm hervorgerufen wird, ist sich seiner bewußt”³ (476). Ritter makes the connection that galvanism, the natural electric current that travels through living things, can also travel through inorganic matter. He found proof of this through the *Lichtenberg-* and *Klangfiguren* (with the *Lichtenberg Figures* being a subset of the *Klangfiguren*, as according to Ritter). Both light and sound carry an electric current within them, signaling for Ritter a life force present in these energy forms. Ritter elaborates further in the following paragraph, equating consciousness of tones and their understanding of each other with “our” understanding of tones:

Töne sind Wesen, die einander verstehen, so wie wir den Ton. (...) Denn der hier sprechende Geist ist derselbe, wie der unsere, und seine Verhältnisse zu seinen Geschwistern sind dieselben, wie die unsrigen zu unsern Geschwistern.⁴ (476/478)

He does not explain further what this “understanding” between tones brings. Ritter then contradicts his claim by calling this association between humans and tones only an *idealized* one, with harmony representing the “image and *ideal* of society,” which is extremely problematic considering how this idea progressed into the 20th century.⁵ But

³ “(...) but rather the life, the organism, whichever is called forth in him, is aware of itself” (Translation by Holland 477).

⁴ “Tones are beings which understand each other, as we do tone. (...) For the spirit speaking here is the same as ours, and its relations to its siblings are the same as our relations to our siblings.” (Translation by Holland 477/479)

⁵ It is out of the scope of this current project to follow this theme further to Richard Wagner and Adolf Hitler, but it should not go unmentioned. Ritter writes: “Jeder Accord schon mag ein Tonverständnis untereinander seyn, und als bereits gebildete Einheit zu uns kommen. Accord wird Bild von Geistergemeinschaft, Liebe, Freundschaft, u. s. w. Harmonie Bild und Ideal der Gesellschaft. (...) Außerdem aber, daß wir am Töne und an der Musik unser Bild und Ebenbild haben, haben wir auch noch unsere Gesellschaft, eine Begleitung, an ihnen, denn im Töne gehen wir mit unsern Gleichen um. *Dieser* Umgang kann zum *höchsten* für uns werden, da hier darstellbar ist, was im Leben so schwer: ein *idealisirter* Umgang mit unserer Umgebung.” (476/478) (“Every chord can already be a relation of tones to each other, and come to us a pre-formed unity. Chord becomes image of the spiritual community, love, friendship, etc. Harmony becomes image and ideal of society. (...) Furthermore, however, in that we have

this contradiction does not change what he states about music's effect on human beings. In music's role as a "consoler" and a "source of cheer," as a "teacher" and a "temptress," "Der Ton ruft uns hervor, wie irgend ein Wort, ein Befehl" ("The tone evokes in us a command, just like a word" 478/479). Just like a word, the tone can command. Unlike in Novalis' "Die Lehrlinge zu Sais," in which the poet has the capability to "breathe tones" into nature, to tame her as a "house pet," and use her as a "household utensil," tones have their own agency. And, rather than Novalis' poets, *composers* have the capability to "manage this race:"

Componisten können zu einer unendlich hohen Würde gelangen. Sie verwalten ein ganzes dem Menschen verwandtes Geschlecht; seine Diener und seine Engel lassen sie erscheinen, und auch seine Teufel können sie aufrufen. Aber das letzte wird ihnen nie zu jenem Grade gelingen, wie das erste; und so sind der herrlichen, guten Erscheinungen in der Musik bedeutendere und weit mehrere da, als der verachtungswürdigen.⁶ (478)

By the 19th century it was well known that sound needs a medium in which to travel. I argue that Ritter takes the concepts of the *Klangfiguren* further in the main body of his fragments and thinks about sound, and in particular, music, as traveling through all physical bodies, including humans (as though instruments themselves) in connection with galvanism. As sound carries its own communication with it, it is as though it contains its

our image and replica in tone and music, we also have our society, an accompaniment to them, for in tone we associate with our own kind. *This* association can become the *greatest* for us, for here is representable what is so difficult in life: an *idealized* association with our environment." (Translation by Holland 477/479)

⁶ "Composers can achieve an infinitely great dignity. They manage an entire race related to mankind; they allow its servants and angels to appear, and they can also summon its devils. They will never succeed in the latter as much as the former; and thus of the glorious, good apparitions in music there are more significant ones, and far more, than the ones which are worthy of contempt." (Translation by Holland 479)

own consciousness through the electric current. In scattered fragments throughout *Fragmente aus dem Nachlasse eines jungen Physikers*, Ritter develops a further theory about music. By reading these fragments together the theory becomes clear: Music, which comes from the spiritual realm, is also internalized in all things, including the human body; it is connected not only to the electrical current in the nerves, but is also inside the blood. Blood becomes the carrier of music that transfers from one human being to another, and to and from objects of nature, signaling a universal, musical life force prevalent in everything—and, as he writes in the “Appendix,” it takes on a life of its own.

In the following analysis I show how Ritter’s elaborate, yet speculative theory of music becomes a perfect platform for E.T.A. Hoffmann’s (1776-1822) pseudonym and literary character, Johannes Kreisler’s experience of music in the *Kreisleriana* essays (1810-1814) and the novel, *Lebensansichten des Katers Murr* (1819/1821). Kreisler’s physiological experiences of music are not only poetic metaphors, but also strongly echo Ritter’s scientific and philosophical investigations. First I will present the background of both Ritter’s and Novalis’ influence on Hoffmann’s texts, and then analyze how Hoffmann’s applies and poetically rethinks Ritter’s theory of musical blood flow.

References to Ritter and Novalis in Hoffmann’s Texts

The creative flow of music that Kreisler experiences can be broken down into two important modes of interaction: electrical current and blood flow. In Hoffmann’s poetic representation of Ritter’s theory, it is first experienced in connection with the electrical current that travels through the nerves.⁷ This is a direct allusion to the then much debated

⁷ R. Murray Schafer explains: “For Hoffmann, the nervous system of music was stretched over the visible, tactile, and olfactory world, reconstituting the elements in dazzling but irrational patterns. But music itself,

alternative science known as animal magnetism, based on the discovery of animal electricity by Luigi Galvani (1737-1798) that referred to muscle contraction stimulated by an electric current. Thus, animal magnetism connotes the electric current that flows through the organic body (Zielinski 167).⁸ Today, one speaks of galvanic effects in biology as electrophysiology. Franz Anton Mesmer (1734-1815) developed a healing practice based on animal magnetism, which he called *Mesmerismus*, to treat patients through electrical/magnetic cures. Music was used during these sessions to create a soothing atmosphere for the patients, but it was not considered the cause or related to the substance of the electrical current. The credibility of his method and the effectiveness of his “cures” were widely questioned and debated, even though he supported his work based on existing theories on the physics and physiological aspects of mesmerism.⁹ Hoffmann’s interest in and creative application of animal magnetism is evident throughout his writings, and analyses of the influence of this practice have appeared in many publications.¹⁰ What informs the following analysis is rather the work by physicist

otherwise invisible, now gains other sense-dimensions so that it begins to take on the appearance of a recognizable though confused cosmology.” In: *E.T.A. Hoffmann and Music*. Toronto and Buffalo: University of Toronto Press, 1975. 153, 156.

⁸ Luigi Galvani began conducting experiments with electricity in 1780, convinced that it was a property of the animal kingdom, and therefore purely organic. For more history on the developments in organic electricity see: Zielinski, Siegfried. “Electrification, Tele-Writing, Seeing Close Up: Johann Wilhelm Ritter, Joseph Chudy, and Jan Evangelista Purkyne.” *Deep Time of the Media: Toward an Archaeology of Hearing and Seeing by Technical Means*. Trans. Gloria Custance. Cambridge: The MIT Press, 2006. 159-203.

⁹ For more information see: Barkhoff, Jurgen. *Magnetische Fiktionen: Literarisierung des Mesmerismus in der Romantik*. Stuttgart and Weimar: Metzler, 1995.

¹⁰ See for example: Rupert Gaderer, *Poetik der Technik: Elektrizität und Optik bei ETA Hoffmann* Freiburg: Rombach Verlag KG, 2009. Monika Schmitz-Emans provides an overview of Hoffmann’s “Der Magnetiseur” and includes the reception of Mesmerism by contemporaries in different disciplines. In: “Magnetische Phantasien: Zur Bedeutung des Mesmerismus für Autoren der Romantik.” *Der Deutschunterricht* 57.3 (2005). 55-62. Ingrid Kollak offers a detailed description of Hoffmann’s writing style as a result of his interest in Mesmerism, as well as the reception of Mesmerism by other authors. In:

Johann Wilhelm Ritter, whose *Fragmente aus dem Nachlasse eines jungen Physikers* (1810), Hoffmann also studied.

Even though the natural sciences were an integral part of early Romanticism, scholars in the Humanities have largely ignored Ritter's role until the last decade or so.¹¹ In his study of seeing and hearing in Ritter's work, Thomas Strässle explains: "The rather abstruse and scientific style of much of Ritter's work has hitherto prevented scholars from accessing his speculative philosophy, and particularly from recognizing his highly original contributions to questions of musical aesthetics" (13). While he was a highly reputed scholar for the majority of his life, the speculative nature of Ritter's writings caused him to lose credibility in his contemporary circles, as he often neglected to supply scientific proof for his theories. His scattered aesthetic reflections in *Fragmente aus dem Nachlasse eines jungen Physikers* also lack a coherent philosophical system, similar to the collections of fragments by the Romantic poets. However, he has since been credited with crucial advances in the understanding of galvanism and in the discoveries of electrochemistry and the ultraviolet spectrum.¹² Subsequent scientific experiments have proved many of his speculative theories to be true.

Perhaps because of Ritter's minimal reception in the Humanities, the influence of his scientific and aesthetic theories on Hoffmann has largely gone unnoticed. The commentary in Hartmut Steinecke and Wulf Segebrecht's critical edition of *E.T.A.*

Literatur und Hypnose: Der Mesmerismus und sein Einfluß auf die Literatur des 19. Jahrhunderts. New York: Campus Verlag, 1997.

¹¹ With the notable exception of Walter Benjamin who endorsed Ritter's work in his *Ursprung des deutschen Trauerspiels* (1928), as also mentioned earlier in Chapter Three. Frankfurt am Main: Suhrkamp Verlag, 1963. 240-243.

¹² As already mentioned in Chapter Three, Ritter performed dangerous experiments on himself. For more information see Zielinski, 175-177.

Hoffmann's Sämtliche Werke offers brief notes on just three passages in the last *Kreisleriana* text, "Johannes Kreislers Lehrbrief" (857-858).¹³ In the footnotes to Martyn Clarke's translation of *Kreisleriana*, David Charlton comments on the same three passages, beginning with Hoffmann's appellation, "the brilliant physicist." The passage reads:

So wie nach dem Ausspruch eines geistreichen Physikers Hören ein Sehen von innen ist, so wird dem Musiker das Sehen ein Hören von innen, nehmlich zum innersten Bewußtsein der Musik, die mit seinem Geiste gleichmäßig vibrierend aus Allem ertönt was sein Auge erfaßt.¹⁴ (FN 453)

Hoffmann completes an exchange between the senses by reversing Ritter's thought. In his *Fragmente aus dem Nachlasse eines jungen Physikers* Ritter remarks: "Das Hören ist ein Sehen von innen, das innerstinnerste Bewusstseyn" (300).¹⁵ This unity between seeing and hearing is a direct reference to the *Klangfiguren*, in which sound and its image appear at the same time, thereby bringing unity between the two senses that are normally

¹³ See: Hoffmann, E. T. A. *Fantasie- und Nachtstücke, Sämtliche Werke*. Ed. Hartmut Steinecke and Wulf Segebrecht, vol 2., München: Winkler Verlag, 1960.

¹⁴ Hoffmann, E. T. A. *Kreisleriana* In: *Fantasie- und Nachtstücke, Sämtliche Werke*. Ed. Hartmut Steinecke and Wulf Segebrecht, vol. III, München: Winkler Verlag, 1960. Further citations will be referred to with the initials of the volume, FN. Hoffmann, E. T. A. *E. T. A. Hoffmann's Musical Writings: Kreisleriana, The Poet and the Composer, Music Criticism*. Trans. Martyn Clarke. Ed. David Charlton. Cambridge: Cambridge University Press, 1989. Subsequent translations will be cited as MW. "Just as hearing, in the words of a brilliant physicist, is seeing from within, so to the musician seeing is hearing from within, attainable only through the profoundest awareness of music, which radiates from everything his eye falls upon, and vibrates in sympathy with his spirit" (MW, Translation by Clarke 164). For the footnote commentary, see Charlton, 164.

¹⁵ "Hearing is an internal seeing, the most innerly internal consciousness" (301). Both the original text and the translation are available in the bilingual book: Johann Wilhelm Ritter, *Fragmente aus dem Nachlasse eines jungen Physikers, Key Texts of Johann Wilhelm Ritter (1776-1810) on the Science and Art of Nature*. Trans. and Ed. Jocelyn Holland. Leiden and Boston: Koninklijke Brill NV, 2010. 122-507. See also Fragment Nr. 429, "Wie Gesicht zu Gehör, so Geschmack zu Geruch. Der Geruch ist eine Art Gehör." ("As sight to hearing, so taste to smell. Smell is a kind of hearing.") (334/335)

perceived as separate. Charlton follows up with comments on Hoffmann's suggestions in the text that the musician is like a Mesmerist and that music is a universal language.¹⁶ Even though Hoffmann's reference to Mesmerism could be attributed to Franz Anton Mesmer himself, Mesmerism does not have a direct connection to music. However, Ritter integrates concepts of music into his Romantic philosophy of physics, and in particular, into his study of electrophysiology. Ritter's influence on Hoffmann's texts (whether "by Kreisler" or about him) is much more involved than is apparent in these footnote commentaries.¹⁷

Portions of two of these passages, which are attributed to Ritter, should also be attributed to Novalis—there is a blurring of authorial voices. For example, Hoffmann writes:

Es ist kein leeres Bild, keine Allegorie, wenn der Musiker sagt, daß ihm Farben, Düfte, Strahlen als Töne erscheinen, und er in ihrer Verschlingung ein wundervolles Konzert erblickt. So wie, nach dem Ausspruch eines geistreichen Physikers, Hören und Sehen von innen ist, so wird dem Musiker das Sehen ein Hören von innen, nämlich zum innerlichsten

¹⁶ See Charlton's additional footnotes on pages 164-165. It is important to note that the composer as a Mesmerist also occurs in the first volume of *Kreisleriana*. (FN 47-48)

¹⁷ Also, Thomas Strässle analyzes "Johannes Kreislers Lehrbrief" as Hoffmann's *detailed dialog* with Ritter. He illustrates how extensive imagery in the story of Chrysostomus directly corresponds to Ritter's philosophy of physics, specifically in the translations between the senses, the morphing of seeing into hearing and of hearing into seeing. In: Strässle, Thomas. "Johannes Kreisler im Dialog mit einem 'geistreichen Physiker': Zu E.T.A. Hoffmanns Auseinandersetzung mit Johann Wilhelm Ritter." *E.T.A. Hoffmann-Jahrbuch* 10 (2002). 96-119.

Bewußtsein der Musik, die, mit seinem Geiste gleichmäßig vibrierend, aus allem ertönt, was sein Auge erfaßt.¹⁸ (FN 324)

In the first sentence, one recalls the Lehrer in “Die Lehrlinge zu Sais,” who hears, sees, tastes, and thinks at the same time in the presence of the “große bunte Bilder” (“the great colorful images”) (1: 80). The second sentence refers specifically to Ritter, which paraphrases a quote from the *Fragmente*, as also mentioned in Charlton’s notes. Then, that which is “attainable only through the profoundest awareness of music,” which resounds (“ertönt”) from “everything his eye falls upon and vibrates in sympathy with his spirit,” (“nämlich zum innerlichsten Bewußtsein der Musik, die, mit seinem Geiste gleichmäßig vibrierend, aus allem ertönt, was sein Auge erfaßt”) sounds like he could also be describing Novalis’ abstract metaphorical version of the *Klangfiguren*, in the way that everything that the narrator lays his eye upon automatically “resounds” and “vibrates in sympathy with his spirit” (MW 164). Therefore, the sentence that points to Ritter directly, if “a brilliant physicist” can be considered direct, is surrounded on both sides by ideas from Novalis’ text. In the second passage, Hoffmann writes:

Bei der individualisierten Sprache waltet solch innige Verbindung zwischen Ton und Wort, daß kein Gedanke in uns sich ohne seine Hieroglyphe – (den Buchstaben der Schrift) erzeugt, die Musik bleibt allgemeine Sprache der Natur, in wunderbaren, geheimnisvollen Anklängen spricht sie zu uns, vergeblich ringen wir danach, diese in Zeichen festzubannen, und jenes künstliche anreihen der Hieroglyphe

¹⁸ “It is no empty metaphor, no allegory, when the musician says that colour, fragrance, light appear to him as sounds, and that in their intermingling he perceives an extraordinary concert. Just as hearing, in the words of a brilliant physicist, is seeing from within, so to the musician seeing his hearing from within, attainable only through the profoundest awareness of music, which radiates from everything his eye falls upon, and vibrates in sympathy with his spirit.” (MW, Translation by Clarke 164)

erhält uns nur die Andeutung dessen, was wir erlauscht. – Mit diesen wenigen Sprüchen stelle ich Dich nunmehr, lieber Johannes, an die Pforten des Isistemples, damit Du fleißig forschen mögest....¹⁹ (FN 324-325)

In this first sentence he writes of the specific language of humans and that no thought or idea can arise without its hieroglyph, referring to Ritter. In the following sentence, the narrator delivers Kreisler at the Temple of Isis so that he may study diligently, like the novices at Sais in Novalis' story. Was Hoffmann aware of the intimate connection between the two texts? It seems that he was, as he blurs references between the two in their references to the *Klangfiguren*. Hoffmann, however, does not explicitly work with *Klangfiguren* in his text as thematic material (beyond music as the language of nature), but does reference Novalis' abstract metaphorical version of them in "Höchst zerstreute Gedanken" when he writes,

Nicht wohl in Träume, als im Zustande des Delirierens, der dem Einschlafen vorhergeht, vorzüglich wenn ich viel Musik gehört habe, finde ich eine Übereinkunft der Farben, Töne und Düfte. Es kömmt mir vor, als wenn alle auf die gleiche geheimnisvolle Weise durch den Lichtstrahl erzeug würden und dann sich zu einem wundervollen Konzert vereinigen müßten....²⁰ (53)

¹⁹ "In any language, there is such an intimate connection between sound and word that no idea can arise in us without its hieroglyph (letters of the alphabet). But music is a universal language of nature; it speaks to us in magical and mysterious resonances; we strive in vain to conjure these into symbols, and any artificial arrangement of hieroglyphs provides us with only a vague approximation of what we have distantly heard. With these few words of wisdom I now deliver you, my dear Johannes, at the gates of the Temple of Isis, so that you might study diligently." (MW, Translation by Clarke 164-165)

²⁰ "Not only in dreams, but also in the state of delirium which precedes sleep, especially when I have been listening to much music, I discover a congruity of colours, sounds, and fragrances. It seems as though they

Hoffmann juxtaposes imagery of light and sound in addition to the mixing of the senses. “Es kömmt mir vor, als wenn alle auf die gleiche geheimnisvolle Weise durch den Lichtstrahl erzeug würden,” sounds very much like Novalis’ uncertain imagery. Charlton explains in his “Prefatory Remarks to Individual Essays,”

What unifies the ‘Thoughts’ is the filter of the writer’s mind: like the physicist Ritter or the geologist Novalis, Hoffmann gathers empirical data on his subject (music and art in the modern world), taking experimental ‘cases’ from intimate knowledge – as in the section on alcohol – or from music history, but then interprets it in a Romantic manner. (63)

“Die Lehrlinge zu Sais” is also “a key” to understanding *Kreisleriana* on a whole, and also specifically ‘The Music-Hater,’ with its paradoxical title, in which the unnamed narrator is told by Kreisler that he is very much like the novice in Novalis’ story (Charlton 71). Hoffmann modeled Novalis’ story to establish this “interior *Bildungsroman*” of Kreisler’s adventures in the world of music and composition (Charlton 28). This theme continues in Kreisler’s inner development in *Lebensansichten des Katers Murr*. However, there are additional similarities to consider in regard to exclusively Ritter’s influence on Hoffmann’s writing.

The scattered fragments dealing with images of blood flow and music in Ritter’s *Fragmente aus dem Nachlasse eines jungen Physikers* (1810) offer ‘scientific’ reasoning as to why Kreisler experiences music in the blood (and they have nothing to do with Novalis). Firstly, they are present not only in “Johannes Kreislers Lehrbrief,” but also in other *Kreisleriana* texts, including “Höchst zerstreute Gedanken” (“Extremely Random

are all produced by beams of light in the same mysterious manner, and have then to be combined in an extraordinary concert...” (MW, “Extremely Random Thoughts,” Translation by Clarke 105).

Thoughts”), which Charlton also addresses in his “Prefatory Remarks to Individual Essays” (but not in relation to the blood flow and electricity imagery), “Johannes Kreislers, des Kapellmeisters, musikalische Leiden” (“Kapellmeister Johannes Kreisler’s Musical Sufferings”) and “Ombra adorata,” which I address in the following analysis.²¹ Then, Hoffmann recapitulates these similarities and expands them in the fragmentary Kreisler biography in *Lebens-Ansichten des Katers Murr* (1819/1821).

Hoffmann’s Application of Ritter’s Theory

By the time E. T. A. Hoffmann adopted the terminology for his musical critiques for the *Allgemeine musikalische Zeitung* in 1810, the portrayal of music as the reflection of a “higher spiritual realm” was already firmly established in the idealist philosophies of Wackenroder, Tieck, Schelling, A. W. Schlegel, Herder, and others.²² Representative is Schelling’s comment in *Philosophie der Kunst* (1802-03):

²¹ There is also a striking passage in “Über einen Ausspruch Sacchinis und über den sogenannten Effekt in der Musik,” which draws these themes together. Because of this essay’s focus on opera, it is out of the scope of this current project. The passage reads as follows: “Lies das Gedicht, richte mit aller Kraft den Geist darauf, gehe ein mit aller Macht deiner Phantasie in die Momente der Handlung; (...) du zürnest, du wütest, du hoffest, du verzweifelst; dein Blut glüht durch die Adern, heftiger schlagen deine Pulse; in dem Feuer der Begeisterung, das deine Brust entflammt, entzünden sich Töne, Melodien, Akkorde, und in der wundervollen Sprache der Musik strömt das Gedicht aus deinem Innern hervor...daß du immer deutlicher und deutlicher deine innere Musik vernimmst, keine Melodie, keine Modulation, kein Instrument entgeht dir, und so empfängst du mit der Wirkung auch zugleich die Mittel, die du nun, wie deiner Macht unterworfenen Geister, in das Zauberbuch der Partitur bannst.” (FN 315) (“Read the libretto, concentrate your mind on it with all your strength, enter into the dramatic situations with all the resources of your imagination; (...) you brood, you rage, you hope, you despair; your blood races through your veins, your pulse beats fast; from the fire of inspiration that inflames your breast emerge notes, melodies, chords, and the drama flows from within you translated into the magic language of music...hear your inner music more and more clearly; no melody, no modulation, no instrument will escape you, and so, simultaneously with the effect, you will conceive the means to achieve it, which you will then commit to the charm-book of the score, like spirit subjugated to your power.”) (MW, “On a Remark of Sacchini’s, and on so-called Effect in Music,” Translation by Clarke 155)

²² Mark Evan Bonds provides a contextual history regarding the repeated Romantic vocabulary and illustrates where Hoffmann adopted and in many cases transformed some of the descriptions by these philosophers. In: “Idealism and the Aesthetic of Instrumental Music at the Turn of the Nineteenth Century,” *Journal of the American Musicological Society*, 50 (1997): 387-420 (411-412).

Die Formen der Musik sind Formen der ewigen Dinge, inwiefern sie von der realen Seite betrachtet werden [...] so bringt die Musik die Form der Bewegungen der Weltkörper, die reine, von dem Gegenstand oder Stoff befreite Form in dem Rhythmus und der Harmonie als solche zur Anschauung. Die Musik ist insofern diejenige Kunst, die am meisten das Körperliche abstreift, indem sie die reine Bewegung selbst als solche, von dem Gegenstand abgezogen, vorstellt und von unsichtbaren, fast geistigen Flügeln getragen wird.²³ (501-503)

Music, in its eternal quality, mostly exists outside of anything tangible.²⁴ In fact, one aspect that links together all of the commentators before Hoffmann is their primary emphasis on the inherent incorporeality of music—that it does not exist in the physical, material world, but rather purely as “die reine, von dem Gegenstand oder Stoff befreite Form” (“the pure form freed from any object or material”). Johannes Kreisler, Hoffmann’s pseudonym and alter-ego beginning with his articles in the *Allgemeine*

²³ Schelling, Friedrich Wilhelm Joseph von. *Philosophie der Kunst*. In: *Sämtliche Werke*. Ed. K. F. A. Schelling, vol. V, Stuttgart and Augsburg: J. G. Cotta, 1856-61. “The forms of music are the forms of eternal things in so far as they can be contemplated from the perspective of the real [...]. Thus music manifests in rhythm and harmony, the pure form of the movements of the heavenly bodies, freed from any object or material. In this respect, music is the art which casts off the corporeal, in that it presents movement in itself, divorced from any object, borne on invisible, almost spiritual wings.” Translation available in: Bonds 403-404.

²⁴ This passage also strongly echoes the words of Wackenroder and A.W. Schlegel. In “Die Wunder der Tonkunst,” Wackenroder writes: “Die Musik aber halte ich für die wunderbarste dieser Erfindungen [the fine arts], weil sie menschliche Gefühle auf eine übermenschliche Art schildert, weil sie uns alle Bewegungen unsers Gemüths unkörperlich, in goldenen Wolken luftiger Harmonieen eingekleidet, über unserm Haupte zeigt.” (407) *Phantasien*. In: *Sämtliche Werke und Briefe*. Ed. Silvio Vietta and Richard Littlejohns, vol. I, Heidelberg: Carl Winter Universitätsverlag, 1991. See also A. W. Schlegel. *Vorlesungen über Schöne Literatur und Kunst. Erster Teil: Die Kunstlehre* (1801-1802). In: *Kritische Ausgabe der Vorlesungen*. Ed. Ernst Behler, vol. I, Paderborn: Ferdinand Schöningh, 1989. 375-381.

Musikalische Zeitung, several of which later became the *Kreisleriana* (1810-1814), emphasizes this too. But he breaks with this tradition by also bringing music down to earth, claiming that it exists *in all things*.²⁵

Kreisler first questions the theory that music exists in all things by recycling the earlier Romantic ideas, including music's role as a universal, yet indecipherable language beginning in the *Kreisleriana* essays. In "Gedanken über den hohen Wert der Musik" he begins by criticizing and questioning artists, especially musicians, when he remarks:

[S]ie nennen sie [die Musik] die romantischste aller Künste, da ihr Vorwurf nur das Unendliche sei; die geheimnisvolle, in Tönen ausgesprochene Sanskritta der Natur, die die Brust des Menschen mit unendlicher Sehnsucht erfülle, und nur in ihr verstehe er das hohe Lied der – Bäume, der Blumen, der Tiere, der Steine, der Gewässer!²⁶

(FN 49)

One notices that he is criticizing these artists by paraphrasing, and in turn, criticizing Novalis.²⁷ He is pointing out a major contradiction in this claim: can music really connect the infinite with the finite, the heavenly with the earthly? If its subject matter is infinity,

²⁵ Kenneth Negus writes: "Hoffmann bestowed highly finite forms on this infinite art, although they are not those of common experience. This is illustrated in his discussions of specific works and composers, where he uses poetic images to describe them." In: *E.T.A. Hoffmann's Other World: The Romantic Author and his "New Mythology."* Philadelphia: University of Pennsylvania Press, 1965. 43.

²⁶ "They call it [music] the most romantic of all the arts since its only subject-matter is infinity; the mysterious Sanskrit of nature, translated into sound that fills the human breast with infinite yearning; and only through it can they perceive the sublime song of – trees, flowers, animals, stones, water!" (MW, Translation by Clarke 94)

²⁷ David Charlton points out in his Introduction to the translation of the essays that Novalis' "Die Lehrlinge zu Sais" had a "fundamental influence on *Kreisleriana*. Whereas Novalis and others emphasized the hidden unity connecting all aspects of nature, and thus the possibility of endless metaphorical transformation, Hoffmann emphasized that our recognition of 'higher natures' (linking man with this normally hidden level of awareness) was particularly to be mediated through certain types of music." (MW, Translation by Clarke 7)

how can music also be the language of nature and bring one closer to the songs of earthly things? Kreisler takes this critical statement and claims it as his own in a turn of romantic irony in the following essay, “Beethovens Instrumental-Musik,” contending with confidence that music is, indeed, the most romantic of all arts, but that it is also more than that:

Die Musik schließt dem Menschen ein unbekanntes Reich auf, eine Welt, die nichts gemein hat mit der äußern Sinnenwelt, die ihn umgibt, und in der er alle *bestimmten* Gefühle zurückläßt, um sich einer unaussprechlichen Sehnsucht hinzugeben.²⁸ (FN 41)

Kreisler agrees that music’s subject matter is “unbekannt” (“unknown”), “unaussprechlich” (“inexpressible”). However, claiming that music also exists in the objects of nature, as Novalis, or rather the “artists” or “unhappy dreamers” (as Kreisler also calls them in “Gedanken über den hohen Wert der Musik”), do, would place a limit on infinity. And, in another turn of romantic irony he also later claims in “Höchst zerstreute Gedanken” that music *is* the “in Tönen ausgesprochene Sanskritta der Natur!” (“Sanskrit of nature pronounced in tones”) (FN 53).²⁹ In order to maintain the infinite quality of music, he describes it as also existing as something much closer, and yet separate from the outer sensual world. This “embrace” of inexpressible longing is experienced *inside* the human body. As Kreisler conjectures in “Johannes Kreislers, des Kapellmeisters, musikalische Leiden:”

²⁸ “Music reveals to man an unknown realm, a world quite separate from the outer sensual world surrounding him, a world in which he leaves behind all precise feelings in order to embrace an inexpressible longing.” (MW, Translation by Clarke 96)

²⁹ Or: “Sanskrit of nature translated into sound,” as translated by Clarke in “Extremely Random Thoughts.” (MW 105)

Wie ist doch die Musik so etwas höchst Wunderbares, wie wenig
vermag doch der Mensch ihre tiefen Geheimnisse zu ergründen! –
Aber wohnt sie nicht in der Brust des Menschen selbst und erfüllt
sein Inneres so mit ihren holdseligen Erscheinungen, daß sein ganzer
Sinn sich ihnen zuwendet und ein neues verklärtes Leben ihn schon
hienieden dem Drange, der niederdrückenden Qual des Irdischen
entreibt? ³⁰ (FN 25)

That music lives in the human breast, or the heart (*Inneres*), as suggested by the translation, is metaphorically not out of the ordinary—as it is said, “music comes from the heart.” However, Kreisler appears to experience and in some ways *embody* music in a unique way.

As the reader is drawn more deeply into Kreisler’s world, the boundary in the relationship between madness and creativity is not clear. Precisely this blurring opens up the possibility for music to reach new areas in Kreisler’s way of thinking.³¹ The narrator, whose voice is apparently distinct from Kreisler’s (though signs himself as Kreisler at the end), explains at the end of the last *Kreisleriana* text, titled “Johannes Kreislers Lehrbrief”:

Der Ton wohnt überall, die Töne, das heißt die Melodien, welche die
höhere Sprache des Geisterreichs reden, ruhen nur in der Brust des

³⁰ “What an utterly miraculous thing is music, and how little can men penetrate its deeper mysteries. But does it not reside in the breast of man himself and fill his heart with its enchanting images, so that all his senses respond to them, and a radiant new life transport him from his enslavement here below, from the oppressive torment of his earthly existence?” (MW, Translation by Clarke 88)

³¹ John T. Hamilton suggests, e.g.: “In referring to aesthetic and psychic experiences that are conceived as fundamentally nonrepresentable, music and madness, as metaphors, open a text up to what no text can properly contain” (195). In: *Music, Madness, and the Unworking of Language*. New York: Columbia University Press, 2008.

Menschen. – Aber geht denn nicht, so wie der Geist des Tons, auch der Geist der Musik durch die ganze Natur? Der mechanisch affizierte tönende Körper spricht ins Leben geweckt sein Dasein aus, oder vielmehr sein innerer Organismus tritt im Bewußtsein hervor. Wie, wenn ebenso der Geist der Musik, angeregt von dem Geweihten, in geheimen, nur diesem vernehmbaren Anklängen sich melodisch und harmonisch aussprache? Der Musiker, das heißt, der, in dessen Innerem die Musik sich zum deutlichen klaren Bewußtsein entwickelt, ist überall von Melodie und Harmonie umflossen. Es ist kein leeres Bild, keine Allegorie, wenn der Musiker sagt, daß ihm Farben, Düfte, Strahlen, als Töne erscheinen, und er in ihrer Verschlingung ein wundervolles Konzert erblickt.³² (FN 325-326)

The unnamed narrator explains that the tone lives everywhere and that melodies themselves *rest* only in the heart of mankind. These melodies must be stimulated—brought back to life mechanically. An informed reader will “hear” this description as a sound figure, and Ritter’s assertion in the Appendix that the sound and writing are already present in the excitation, when the plate is manually played. The moment that this happens the “inner organism consciously emerges” and these “resonances” are only intelligible to “*them*” (or “*themselves,*” “*each other*”), again, just as Ritter claims in his

³² “Sound resides in all things; but notes, that is to say melodies, which speak the higher language of the spirit-realm, repose only in the breast of men. But like the spirit of sound, does not the spirit of music also permeate the whole of nature? A sounding body, when it is mechanically animated and thus brought to life, gives expression to its existence, or rather its inner organism consciously emerges. Cannot the spirit of music, when it is awakened by its votaries, similarly express itself melodically and harmonically in secret resonances intelligible only to them? Musicians, that is to say those in whom music becomes a condition of total awareness, are surrounded on all sides by melody and harmony. It is no empty metaphor, no allegory, when the musician says that colour, fragrance, light appear to him as sounds, and that in their intermingling he perceives an extraordinary concert.” (MW, Translation by Clarke 163-164)

“Appendix.” In fact, everything in the world contains sound. Despite Kreisler’s resistance to the idea toward the beginning of *Kreisleriana*, he now acknowledges that the spirit of music does exist in all of nature. As the agent, then, music uses each body and object of the material world as an instrument—“[d]er mechanisch affizierte tönende Körper.” Surrounded on all sides by music, both the outer world and the inner body, the musician’s or composer’s senses mingle with the larger environment, and music thereby extends and becomes audible in the world.

In order to enter Kreisler’s synaesthetic world (that is, whether we view him as being deranged or not), one must consider for a moment that these descriptions are not to be read as metaphors, but as his bodily experiences. That is what makes these passages so startling for the reader. He does not write that “it is as though...” or “it appeared to be...” as Novalis does, but rather asserts, like Ritter, that this is the truth—Kreisler’s subjective experience—it is not an empty image or metaphor, nor an allegory when a musician describes these experiences. Kreisler senses the movement of music inside his body itself, thereby going beyond the five senses attuned to the outer world. For Kreisler, and later for some of the other characters in *Lebensansichten des Katers Murr*, music is the substance of the creative energy in composers, musicians, and those *initiated* to sense its flow and it contains its own consciousness from the spirit realm.

As is clear beginning in the *Kreisleriana* essays, it is the electrical current that Kreisler experiences that comes from the spirit realm, has its own consciousness and carries the music that directs the creative energy of composers and musicians. For example, Kreisler writes about the “electric flow” through his fingers while playing the piano: “Die Noten wurden lebendig und flimmerten und hüpfen um mich her—

elektrisches Feuer fuhr durch die Fingerspitzen in die Tasten—der Geist, von dem es ausströmte, überflügelte die Gedanken” (FN 30).³³ The music itself, however, appears in a second, altogether different channel: *in the blood*. In “Ombra adorata!” Kreisler asserts:

[A]lle Töne, die in der wunden Brust im Blute des Schmerzes erstarrt,
leben auf, und bewegen und regen sich und sprühen wie funkelnde
Salamander blitzend empor; und ich vermag sie zu fassen, zu binden,
daß sie wie in einer Feuergarbe zusammenhaltend zum flammenden
Bilde werden, das deinen Gesang – dich – verklärt und verherrlicht.³⁴
(FN 35-36)

Just as veins and the heart can experience blood clots restricting the movement of blood, so does the music; the creative force of the composers becomes stuck, as though dead, inside of the veins. Kreisler describes how the music must be revived (“leben auf”), brought back to life and movement (which again is similar to the activation of the *Klangfiguren*).³⁵ While melody then resides in the human heart and is transported and transmitted through the veins, the composer is ultimately the one who has the ability to

³³ “The notes come to life and flutter and dance around me; electric sparks flow through my finger-tips into the keys; the spirit generating them overtakes my thoughts.” (MW, “Kapellmeister Johannes Kreisler’s Musical Sufferings,” Translation by Clarke 85)

³⁴ “Every sound congealed in the blood from my wounded breast will be revived, and stir and spring up and throw out glittering sparks like fire-breathing salamanders. And I shall contrive to harness them, and combine them, so that as if merging into a single burst of fire they form a single flaming image, that transfigures and glorifies your singing and yourself.” (MW, Translation by Clarke 90-91)

³⁵ The reference to the “funkelnde Salamander” (“fire-breathing salamanders”) coming from the sparks resonates with another concept Ritter used. In the Appendix to his *Fragmente* he writes: “Schön wäre es, wie, was hier äußerlich klar würde, genau auch wäre, was uns die Klangfigur *innerlich* ist:—*Licht*figur. *Feuerschrift*.” In Hoffmann’s literary texts, the fire metaphor also plays a role. Ritter explains that when bodies vibrate extremely quickly, they glow, which he calls “Leuchten durch elektrische Schläge.” In his speech for the academy entitled, “Physik als Kunst,” delivered March 28, 1806, Ritter explains that fire is a universal life phenomenon, and reveals itself in all of the senses. There are two kinds of fire, chemical and electrical. See especially pages 558-599 in: *Key Texts of Johann Wilhelm Ritter (1776-1810) on the Science and Art of Nature*, 524-583.

bring this music to other human hearts. Kreisler wishes to “harness” (“fassen”) this power, which must be learned. He is aware that the invisible, electric current ignites this exchange (but not everyone is).³⁶ In this way, some composers and musicians, by way of performing music, could, indeed, be considered similar to Mesmerists. However, Mesmerists do not recognize music as *inside* blood. That is the move Johann Wilhelm Ritter makes.

There is scientific evidence for why Ritter situates the flow of music in the blood, as directed by animal magnetism. In Fragment 51, Ritter claims that “Alle Stoffe auf Erden scheinen zerlegtes Eisen zu seyn. Eisen ist der Kern der Erde, ‘der sichtbare Quellgeist der Erde’ (*Jac. Böhme*).”³⁷ Iron, which is prevalent in all earthly things, is the “visible spirit-source of the earth,” meaning the point of unity between spirit and matter. Iron is an important element in animal magnetism, as it is the strongest magnetic metal, and it is the *only* metal that is tolerated *inside* the human body, according to Ritter at this time. He writes in Fragment 367: “Ist es nicht sonderbar, wie das Eisen das einzige Metall ist, welches organisch-thierische Körper in sich dulden?”³⁸ Therefore, the reason music enters the musician and composer from the higher, spiritual realm through the veins is due to the magnetic nature of the iron in the blood. The music is then directed to the human heart, because the heart itself is also a magnet: “Der wahre Magnet aller

³⁶ Strässle points out that Hoffmann adds this limitation to Ritter’s theory: “*Dem Musiker* wird das Sehen ein Hören von innen, ‘zum innersten Bewußtsein der Musik’. Hoffmanns Adaptation von Ritters Axiom vollzieht dadurch, dass es in einer seiner möglichen Formulierungen am Typus des Musikers zumindest spezifiziert, wenn nicht gar auf ihn reduziert wird.” (“Johannes Kreisler im Dialog” 101)

³⁷ “All materials on earth seem to be decomposed iron. Iron is the kernel of the earth, ‘the visible spirit of the earth’ (*Jac.[ob] Böhme*).” (146-147)

³⁸ “Is it not strange how iron is the only metal which organic-animal bodies tolerate within themselves?” (308-309)

Weltkörper muß ein Herz seyn, und im Menschenkörper, u. a., ist das Herz *der Magnet*.” Bringing this all together, Ritter claims in Fragment 357: “(1801.) Der Begriff, Discant: Bass = -: + zeigt: daß alle rechte Musik nichts seyn könne, als eine Potenzirung beyder Gegensätze. Die vollständigste Musik ist die, welche vom Eisen bis zum Menschen geht.”³⁹ In this concept, that descant (a treble melody) is to the bass as negative is to positive, it is not clear what he means here, but it seems that the high voice(s) of a descant and the low voice(s) of the bass form the “potentialization” of opposites, which forms a unifying relationship. In the second sentence, Ritter explicitly claims that music reaches the human via the iron (as a magnet) in the blood. Therefore, according to Ritter’s theory and Hoffmann’s application of it, music is first brought from the spirit realm via the conscious, electric current, which is attracted to the iron found in blood. The music then travels to the human heart—the “true” (“wahre”) magnet directing the electric current. In essence, the human body becomes the instrument for the music from the spirit realm, and the blood is the channel through which it travels. As iron is also in all earthly things (as Ritter claims in Fragment 51), this implies that music resides in and travels through nature, too.

The importance of blood as the carrier of music takes on particular importance in Hoffmann’s story from Chrysostomus’ childhood in the final *Kreisleriana* text, “Johannes Kreislers Lehrbrief.” The narrator retells the story that Chrysostomus heard from his father about a rock covered with strange mosses and “reddish-colored veins.” A brief summary of this tale is necessary to grasp the importance of these images: A

³⁹ “(1801.) The concept, descant: bass = -: + shows: that all correct music can be nothing other than a potentializing of both oppositions. The most complete music is the kind which goes from iron to the human.” (300-301)

stranger comes to the nobleman's castle. Similar to the uncomfortable feeling one would get in the presence of a Mesmerist (as Hoffmann expresses in other stories), no one can look at him *without an inner shudder*.⁴⁰ Yet, this man is intriguing, and people are drawn to him. The beautiful young daughter of the castle is attracted to his irresistible music, as though under a spell, and he gives her singing and lute lessons. They always meet at the large rock to play music.

One morning, however, the stranger is gone, and the daughter is missing. The father goes to the rock in search for her:

Der Junker glaubte, das Pferd scheue sich vor der wunderlichen Form des Steines, er stieg daher ab, um es vorüber zu führen, aber im Starrkrampf des Entsetzens stockten seine Pulse, und er stand regungslos, als er die hellen Blutropfen erblickte, die dem Stein häufig entquollen. [...] aus dem Blute entstanden aber die wunderlichen Moose und Kräuter, die jetzt auf dem Steine in seltsamlichen Farben prangen.⁴¹ (FN 323)

It is suspected that the stranger killed her with his lute, which they found splintered, covered with blood on the ground. As a young boy, Chrysostomus is drawn to this rock in the forest. As his love for music grows, he begins to take instruction in composing, and only reaches utter frustration that he cannot reproduce the music he hears in his mind.

⁴⁰ Including *Fantasiestücke in Callots Manier* (1813-1815) (see especially "Der Magnetiseur"), *Nachtstücke* (1816-1817), and *Serapions-Brüder* (1819-1821).

⁴¹ "The nobleman thought his horse had been frightened by the weird shape of the rock, and he therefore dismounted in order to lead it past. With a sudden spasm of horror, however, his heart stopped and he stood paralysed, as he noticed bright gouts of blood copiously dripping from the rock. [...] And from the blood sprang strange mosses and wild flowers that bedecked the rock with incredible colours." (MW, Translation by Clarke 161)

This music he hears from the rock is as though cast from the mosses and flowers that grew from the girl's blood. The red-veined covered rock becomes his source of musical inspiration. With this, the story ends, and the narrator explains to Kreisler that there are many lessons to be learned from it. He proffers:

[U]nd erläutere ebenfalls denen, die mit der Geschichte vom bösen Fremden und dem Burgfräulein nichts Rechtes anzufangen wissen, die Sache dahin, daß das wunderbarliche Abenteuer, das so in das Leben des Chrysostomus einwirkte, ein treffendes Bild sei des irdischen Unterganges durch böses Wollen einer feindlichen Macht, dämonischer Mißbrauch der Musik aber dann Aufschwung zum Höheren, Verklärung in Ton und Gesang!⁴² (FN 327)

The narrator implies here that the stranger had a demonic power over the young girl through music, which could be equated to the powerful spell of a Mesmerist. In the Appendix to his *Fragmente*, Ritter explains the manipulative power of composers: “Componisten [...] verwalten ein ganzes dem Menschen verwandtes Geschlecht; seine Diener und seine Engel lassen sie erscheinen, und auch seine Teufel können sie aufrufen”⁴³ (478). As is the case with Mesmerism, the powerful influence of music can be used for good or evil intentions.

⁴² “And to those who do not know what to make of the story of the evil stranger and the noble young lady explain its point: that the extraordinary adventure that exerted such an influence on the life of Chrysostomus is a telling allegory of earthly extinction by the evil workings of hostile powers, of the demonic misuse of music, but finally of the ascent to higher things and of transfiguration through music and song!” (MW, Translation by Clarke 165)

⁴³ “Composers (...) manage an entire race related to mankind; they allow its servants and angels to appear and they can also summon its devils” (479).

Strikingly, Kreisler experiences a similar musical journey as in Chrysostomus' story, when Hoffmann returns Kreisler from his literary absence in the biographical fragments "mistakenly printed" in *Lebens-Ansichten des Kater Murr* (published in two volumes in 1819 and 1821).⁴⁴ As a result Kreisler, too, has the opportunity to find peace in his musical explorations.

Kreisler's first encounter with Princess Hedwiga and Julia as "the stranger" marks the beginning of this parallel. They are both drawn to the stranger they encounter in the woods, however, rather than producing beautiful music, as in Chrysostomus' account of "the stranger," Kreisler struggles to even play the guitar, and later casts it into the bushes. Instead, it is Julia who discovers her own musical spark when she picks up the guitar from the bushes, and involuntarily begins to sing. This instrument gives her "free rein to the full richness of the notes dwelling in her breast:" "Sie begann eine bekannte italienische Canzonetta und verlor sich in allerlei zierliche Melismen, gewagte Läufe und Capriccios, Raum gebend dem vollen Reichtum der Töne, der in ihrer Brust ruhte" (LAKM 64).⁴⁵ The music was already inside of her, just waiting to be released. The magical guitar was the catalyst. Of course, Princess Hedwiga and Julia interpret this later as a result of Kreisler's bewitching powers. Toward the end, Princess Hedwiga concludes: "Und die Musik war das Zaubermittel mit dem er uns umstrickte" (LAKM 329).⁴⁶ Hoffmann's text presents Kreisler's power over the women as problematic, because Kreisler is equally attracted to the music evoked by these women. Ritter offers

⁴⁴ Hoffmann ceased using Kreisler as a pseudonym when the *Kreisleriana* was completed in 1815, and the character Kreisler seemingly disappeared from the literary and music critic world.

⁴⁵ "She began a well-known Italian canzonetta, and lost herself in all manner of delicate melismas, daring runs and capriccios, giving free rein to the full richness of the notes dwelling in her breast." (LOTM 41)

⁴⁶ "And music was his means of ensnaring us." (LOTM 231)

one helpful explanation for this phenomenon: “Bey der höchsten, also bey den schnellsten Schwingungen, oder die den höchsten Ton geben, wird gewiß *am stärksten magnetisirt*.”⁴⁷ Higher tones have a stronger magnetic pull; this could explain Kreisler’s attraction to the female voices, but it does not explain the women’s attraction to Kreisler, which in the end remains a mystery, like the magical spell of a Mesmerist. But Kreisler is not controlling them with his music—the *music* has control over them, even over Kreisler.

This version of the “Chrysostomus story” includes an additional recapitulation of Kreisler’s electrical observations and experiences in music from the *Kreisleriana*, which again, he claims come from the spiritual realm. Because he is not the narrator of this story, as he often is (or appears to be) in the *Kreisleriana*,⁴⁸ the reader has the opportunity to observe the experiences of the other characters—it is not just crazy Kreisler’s internal synaesthetic experiences. For example, “Die Prinzessin blieb, als träfe sie ein elektrischer Schlag, mitten in der Rede stecken, und schlug, blutrot im ganzen Gesicht, die Augen nieder”⁴⁹ (LAKM 66). Here the narrator perceives in a simile that it is “as if she had felt an electric shock,” which causes her face to become blood red. The princess is in general a primary receiver and transmitter of this electrical shock in this story, and for this reason Kreisler thinks to himself after experiencing the “pulse-beat” (“Pulsschlag”) throbbing

⁴⁷ “The ones with the greatest [*better translation*: highest], and thus with the fastest vibrations, or the ones which yield the highest tone, certainly become *magnetized* the *most strongly*.” (502-503)

⁴⁸ With the exception of most of the *Kreisleriana* texts from volume two: “Brief des Baron Wallborn an den Kapellmeister Kreisler,” “Kreislers musikalisch-poetischer Clubb,” and “Nachricht von einem gebildeten jungen Mann” (or specifically the sub-text “Schreiben Milo’s, eines gebildeten Affen, an seine Freundin, Pipi, in Nord-Amerika”). In “Der Musikfeind,” the narrator is perhaps Kreisler until he is referred to in the third person (437), and, finally, “Johannes Kreislers Lehrbrief” is specifically addressed to Kreisler.

⁴⁹ “The Princess stopped in mid-speech as if she had felt an electric shock and cast her eyes down, her whole face red as blood.” (LOTM 42)

while holding her hand later on that she is a kind of organic Leyden jar: “Am Ende ist die Gnädigste eine Art von Leydner Flasche, und walkt honette Leute durch mit elektrischen Schlägen nach fürstlichem Belieben!”⁵⁰ Ritter himself hypothesized about the possibility of an organic Leyden jar in Fragment 265, speculating whether or not the eye could be considered a Leyden jar for light.⁵¹ In combination with the princess, herself, as an organic Leyden jar in Hoffmann’s story, this “pulse-beat” represents an important connection to the pulse of the heart, pumping blood through the veins to her hand, a creative depiction of the electrical current that directs the blood flow through the veins. Kreisler experiences this sensation again later in the story, this time in the form of a dream.⁵² Her strange look (“seltsamer Blick”) transmits the pulsation (“Pulsschlag”) to course through Kreisler’s nerves. It is through the eyes, then, analogous to Ritter’s speculative question, that the electric shock is transmitted to Kreisler. In addition to the motif of electrical current returning from the *Kreisleriana* essays, this text emphasizes a deeper emphasis on blood as the medium of music in the body, which only becomes

⁵⁰ “I suppose her Highness is a kind of Leyden jar and sends electric shocks through honest folk at her gracious pleasure!” (LOTM 106) The Leyden jar was invented in 1745 by Ruggiero Giuseppe Boscovich: “This electrical capacitor realized the principle of storing and boosting electricity, discovered by Pieter van Muschenbroek and Ewald Jürgen von Kleist (an ancestor of the German poet Heinrich von Kleist).” (Zielinski 160)

⁵¹ “Ist das Auge eine Art von Leidner Flasche für das Licht?” (“Is the eye a kind of Leyden jar for light?”) (260/261)

⁵² “Prinzessin Hedwiga stand plötzlich vor ihm, starrte ihn an mit jenem seltsamen Blick der ihr eigen, aber in dem Augenblick dröhnte ein Pulsschlag ihm durch alle Nerven, wie damals, als er zum erstmal der Prinzessin Hand berührte. Doch war ihm auch nun jene unheimliche Angst entnommen, er fühlte eine elektrische Wärme wohltätig sein Inneres durchgleiten” (LAKM 312). (“Princess Hedwiga suddenly stood before his mind’s eye, gazing at him with the strange glance characteristic of her, and at that moment a pulse-beat throbbed through all his nerves, as it had when he first touched the Princess’s hand, yet now that uncanny fear was lifted from him. He felt electrical warmth spread benignly through his inner being.”) (LOTM 219-220)

apparent in the combination of blood and electricity in the “Pulsschlag” exchanged from Princess Hedwiga to Kreisler.

When Kreisler (as the stranger) returns after hearing Julia’s music, Julia sheds tears, and Kreisler asks whether her music stops at the sight of him and turns into tears.⁵³ As music flows into, through, and out of the body, it changes form: the music-filled blood now turns into tears. This imagery returns later in the novel, when the narrator describes Julia and the Princess’ reaction after receiving a blessing from the priest; the tears that flow from their eyes are drops of blood from their wounded hearts.⁵⁴ In Fragment 603, Ritter suggests the other way around, that as water disappears from the earth, the number of people increase, suggesting that water itself becomes blood.⁵⁵ Hoffmann therefore seems to reverse the process that Ritter suggests, offering a complete cycle—not only does water turn into blood, but also blood into water, and specifically *musical blood* into *musical tears*. Hoffmann expands Ritter’s theory by suggesting, then, that music leaves

⁵³ “Und diese Himmelstöne schweigen vor meinem Anblick und zerfließen in Tränen?” (LAKM 65). ((... do those heavenly notes cease at the sight of me and dissolve into tears?) (LOTM 42)

⁵⁴ “Ein namenloses Weh, aus Entzücken und Schmerz gewoben, schien gewaltsam sich loswinden zu wollen aus ihrer Brust, und Blutstropfen, dem wunden Herzen entquollen waren die heißen Tränen, die aus ihren Augen stürzten.” (LAKM 216) (“A nameless melancholy, woven of pleasure and pain, seemed to be trying to wrench itself violently from their breasts; the hot tears that flowed from their eyes were drops of blood gushing from their wounded hearts.”) (LOTM 149) Directly following these tears, they blame Kreisler: “>>Das war *er*<<, lispelte die Prinzessin leise. >>*Er* war’s<<, erwiderte Julie.—Sie verstanden sich.” (LAKM 216) (“‘It was *he*,’ whispered the Princess softly. ‘*He* it was indeed,’ replied Julia. They understood one another.”) (LOTM 149)

⁵⁵ “Das Wasser auf Erden nimmt ab, die Menschen dagegen nehmen zu’,—heißt mit andern Worten: das Wasser wird *Blut*.” (442) (“‘Water on earth decreases, humans however increase’—means in other words: water becomes *blood*.”) (443) The fragment continues: “Hieraus konnte man eins der Worte des Abendmahls deuten. Doch sagt Christus: Dies *ist* mein Leib, dies *ist* mein Blut. Eher also zeigte er damit seine Identität mit dem höhern Organismus an. Die Erde selbst scheint Christus zu seyn, und in Christo die Erde zu erscheinen.” (442) (“From here one could interpret one of the sayings of the Last Supper. Yet Christ says: this *is* my body, this *is* my blood. Before, however, he showed thereby his identity with the higher organism. The earth itself seems to be Christ, and in Christ the earth seems to appear.”) (443)

the body not only through the heart when performed, but also through the liquid of the tears—but that is not all.

Another interesting connection to musical blood in *Lebens-Ansichten des Katers Murr* is the description of Kreisler's *biological* musical blood heritage—implying that musical blood can be passed down from generation to generation—which can be found in a conversation with the Privy Councilor who asked about his youth. Kreisler explains that in a biopsy, or a “biographical dissection,” one would find his musical blood running through his veins and arteries:

Der Prosektor könnte sagen: Es ist gar nicht zu verwundern, daß in dem Innern dieses jungen Mannes durch tausend Adern und Äderchen lauter musikalisches Blut läuft, denn das war der Fall bei vielen seiner Blutsverwandten, deren Blutsverwandter er eben deshalb ist.⁵⁶ (LAKM 108)

The narrator offers a related report that Aunt Tootsie's musical influence can be found in Kreisler's breast, branching out into his veins in gushing hot blood:

Wenigstens mag man nach dem, was Kreisler von Tante Füßchen und ihrer Laute erzählt, nicht daran zweifeln, daß die Musik mit all' ihrer wunderbaren Wehmut, mit all' ihrem Himmelsentzücken, recht in die Brust des Knaben mit tausend Adern verwuchs, und nicht zum

⁵⁶ “The demonstrator might say: ‘It is not surprising that pure musical blood runs through a thousand veins and arteries in this young man's body, for such was the case with many of his blood relations, and for that reason he *is* their blood relation.’” (LOTM 72)

verwundern mag's darum auch sein, daß eben dieser Brust, wird sie
nur leise verwundet, gleich heißes Herzblut entquillt.⁵⁷ (LAKM 125)

Although it appears from this account that Kreisler was not born with musical blood (which would be considered a traditional means of passing a trait down a family line), it grew from inside of him after hearing Aunt Tootsie's music. Aunt Tootsie's biological transfer of musical blood to Kreisler, which happens by *hearing* it, is contrasted by the *physical transfer* of blood in Chrysostomus' story from the girl to the rock. The rock appears to have acquired her music from her blood in the formation of its own red veins. Hoffmann, therefore, further elaborates on Ritter's theory, giving music more ways to transfer from human being to human being, or from human being to nature (through the spill of physical blood) back to human being (through hearing it from the rock). Interestingly, the death of the girl does not mean the death of the music.

The final element connecting Kreisler to the Chrysostomus story, and in turn, Hoffmann's application of the "brilliant physicist's" theory, is found in Kreisler's letter to Master Abraham, which he wrote after having fled. He explains therein that he heard the singing of a powerful male voice walking in front of him, a Benedictine monk, who turned and left the path. Compelled by the music, Kreisler followed him and observed how the monk sat down "auf einen dick bemoosten Stein" (LAKM 275) ("a rock thickly overgrown with moss"; LOTM 193). No further explanation of the rock's appearance is offered, but immediately afterward, Kreisler recognizes the monk as Father Hilarius, who invited him to stay at the Abbey "als lebendige Musik" (LAKM 278) ("as a piece of

⁵⁷ "At least there can be no doubt, from Kreisler's account of his Aunt Tootsie and her lute, that music with all its wonderful melancholy, all its heavenly delights, took root in the boy's breast, putting out a thousand branching veins, and so it is not surprising to find that this same breast, if only slightly wounded, immediately gushes hot blood." (LOTM 83)

living music”; LOTM 195).⁵⁸ At the Abbey Kreisler was well received by none other than *Abbot Chrysostomus*. Suddenly, the character from the story in “Johannes Kreislers Lehrbrief” is in Kreisler’s ‘real’ life, shifting between two fictional realities. Moreover, Abbot Chrysostomus is responsible for the creative environment established at the Abbey. As living music, Kreisler is finally able to calm himself to the point that he is able to compose. Having *embodied* the music he can now produce, Kreisler is in flow with the positive creative life force of music.

Hence, Kreisler’s encounter with Father Hilarius at the moss-covered rock is a turning point in the return of his creative (st)ability, for the Abbey environment opens his musical channels, allowing the melodies to issue from him. In a sense, Kreisler is both the stranger in the Chrysostomus story and Chrysostomus himself; in this dual capacity, Kreisler appears as his own *Doppelgänger*. Kreisler is perceived as the mysterious stranger in the beginning, and ultimately the one to find musical peace after visiting the moss-covered rock with the singing holy man. Viewed in this manner, he represents both sides of the creative energy in music, about which the story of Chrysostomus precisely warns (and as Ritter describes in his “Appendix”). Firstly, music can be misused to exert negative influences on the minds of other people, as in Princess Hedwiga’s interpretation of Kreisler’s bewitching influence over Julia and herself. Secondly, music also offers access to “higher things and [corporeal] transfiguration.” The latter Kreisler achieves due

⁵⁸ In the prologue to his fragments, while explaining Herder’s influence on Novalis and specifically Herder’s role in verbalizing his *Die Älteste Urkunde des Menschengeschlechts* with Novalis, Ritter explains that Herder became “the living hieroglyph of the word:” “Aber Er *Selbst* in diesem Augenblicke, Sein ganzes Wesen, Sein Auge, Angesicht und Seyn, wurde zur lebendigen Hieroglyphe des Worts, für welches die Zunge das zureichende Organ nicht mehr war.” (50) (“But in this moment he himself—his entire being, his eye, his countenance and existence—became the living hieroglyph of the word for which the tongue was no longer the sufficient organ.”) (51) (See Herder 5: 179-488, and specifically the section on hieroglyphs, 5: 267-282)

to Father Hilarius and Abbot Chrysostomus. Kreisler's fragmentary biography ends with some ambivalence, and it is not clear what becomes of him or of the other characters. The important point is that his little adventure in this story led him to inner musical peace: "Musik – fromme Musik war aufgegangen in ihm, Julia hatte gesungen und nicht mehr brauste der Sturm in seinen Innern" (LAKM 447).⁵⁹

Conclusion

In the foregoing I have demonstrated how Johann Wilhelm Ritter's fragmented meditations offer a little regarded model for E.T.A. Hoffmann's exploration of the world of the senses and music. Ritter's influence is apparent not only in the language that Hoffmann adopts in order to mediate between the senses, but also in Hoffmann's reconceptualization of the *system* through which the creative musical force flows. Although Ritter's *Fragmente aus dem Nachlasse eines jungen Physikers* lack a complete philosophical system, the relationship between electric current, blood, and musical flow is clearly described in multi-layered form. He offers a detailed explanation of the path music takes from the spiritual realm into the human via the magnetic pull of iron in the blood. In this way, music reaches the heart and ultimately also the brain—the two major organs of *Lebenskraft* ("life force")—and ceases to be just a metaphor for an out-of-body experience. As Ritter explains in his "Appendix," which clearly echoes Kreisler's claims in the early *Kreisleriana* texts regarding the communicative interconnection between tone and consciousness: "Ton [ist] Bewußtsein. (...) Töne sind Wesen, die einander verstehen,

⁵⁹ "Music—the spirit of sacred music had risen within him, Julia had sung, the storm no longer raged in his heart." (LOTM 315)

so wie wir den Ton. (...) Alles Leben ist Musik, und alle Musik als Leben selbst—zum wenigsten sein *Bild*’⁶⁰ (476/478).

Hoffmann adapted this theory in his depiction of Kreisler, beginning with the *Kreisleriana* texts and continuing with *Lebens-Ansichten des Katers Murr*, where he also applied the concepts to other characters and their environment. Together, the images of electricity and blood describe, then, the musical flow and connection between the characters. They also highlight the similarities between Kreisler’s biographical adventure and Chrysostomus’ childhood story.⁶¹ By describing the medium by which music travels, Ritter’s scientific speculations and investigations also support the lofty claims of Romantic writers for whom music was the expression of a higher spiritual realm. But he did not stop there. According to Ritter (and Kreisler following him), music is also a fundamental substance in nature. For that very reason it has the power to overcome the perceived fragmentation of the universe. What many early Romantics considered an intangible good outside of the earthly realm now is identified as existing in all things, even within the human body itself. In Ritter’s text, Hoffmann found skeptical ‘evidence’ that music permeates all matter as a special kind of energy, capable of connecting and giving life to phenomena that otherwise appear unrelated. That which Kreisler resists in the beginning of the *Kreisleriana* essays overcomes him, taking control over his musical creativity. Whether he agrees with it or not, music, which comes from the spirit realm and

⁶⁰ (“*tone* [is] *consciousness*. (...) Tones are beings which understand each other, as we do tone. (...) All life is music, and all music as life itself—at least its *image*.”) (477/479) Ritter credits Herder’s claim that all consciousness was sound or tone in his *Älteste Urkunde* and *Abhandlung über den Ursprung der Sprache*.

⁶¹ Although Kreisler kills neither Julia nor Princess Hedwiga, as would be expected in a direct parallel to the Chrysostomus story, he is almost murdered himself when he intervenes with Hector courting Julia. Instead he stabs his male attacker to death and subsequently leaves town, never to appear again, as the narrator explains. The only remainder of Kreisler is the bloodstained hat the Gardener finds (LOTM 162; LAKM 234). Even after death, blood still carries music.

travels through the blood, is the creative life force of musicians, composers, and those initiated to sense its flow.⁶²

⁶² I would like to extend my gratitude to Prof. Stefan Höppner for sharing his expertise and offering me feedback on the earlier version of this chapter, and my friend and colleague, Eva Hoffmann, for her commentary and our many discussions that helped bring this chapter to life.

CHAPTER V

“SO SPRACHVOLL AUS DEM HERZEN:” POETIC EXPRESSION

IN THE INNER VOICES OF ROBERT SCHUMANN’S *KREISLERIANA*, OP. 16

“The Poetic,” “das Poetische” is for Robert Schumann the common substance of all of the arts. For the Romantics, the obvious solution to bringing a union of the arts was the art song—instrumental music and poetry united as one. However, the problem became, as Hubert Moßburger puts it, “how to connect these two different manifestations of ‘inexpressible longing’—‘infinite’ instrumental music on the one hand, and vocal music with ‘precise words’ on the other” (42). Felix Mendelssohn Bartholdy responded to this conflict in his “Songs Without Words,” in which the piano performs an exposed melody like a vocal line. And Schumann later played with this idea in his vocal music directly, where he would give the piano the vocal line as well (with or in absence of the singer). However, this poetic expression was also something that Schumann was already working out in his piano music only a few years earlier. In 1835 Schumann writes, “Wer hätte nicht einmal in der Dämmerungsstunde am Klavier gesessen...und mitten im Phantasieren sich unbewusst eine leise Melodie dazu gesungen?”¹ (98) And in a letter to Clara on January 4, 1838, only months before he created his piano suite, *Kreisleriana* Op.

¹ From his reception of Felix Mendelssohn’s Op. 30, *Kritische Umschau: Felix Mendelssohn, sechs Lieder ohne Worte für das Pianoforte [Zweites Heft]*. In: *Gesammelte Schriften über Musik und Musiker*. Bd I. Ed. Martin Kreisig. Leipzig: Breitkopf & Härtel, 1914. “Who of us in the twilight hour has not sat at his upright piano...and in the midst of improvising has not unconsciously begun to sing a quiet melody?” (Translation in Moßburger 48)

16, “Abends phantasire ich Dir in der Dämmerung vor und Du wirst dazu manchmal leise singen”² (*Briefwechsel* 71).

Integral to Schumann’s concept of the poetic in piano music was the “inner voice,” “innere Stimme,” as many scholars have analyzed in his works. In Hubert Moßburger’s analysis, there are two primary meanings to what Schumann calls the “inner voice”: the first is “musical space that is enclosed by the outer voices,” and the second is “a non-existent voice that nonetheless arises inside the player or listener” (45).³ Schumann looked at the inner voice as an “important criterion of a good composition;” this led to his new approach to Romantic polyphony and changes in his treatment of voice leading and the roles of melody (Moßburger 52).

Informed by E.T.A. Hoffmann’s *Kreisleriana* texts (1810-1814), the novel *Lebensansichten des Katers Murr* (1819/1821), and the diary entries, letters and musical critiques by Robert Schumann, this chapter serves as an investigation of the *location* and *movement* of poetic language back into music in Schumann’s *Kreisleriana*, Op. 16 (1838). *Kreisleriana*, Op. 16 is a suite of eight piano pieces. It begins in D Minor, and then alternates between Bb Major and G minor in pieces 2 through 6 (which certainly exhibit drastic changes in character, just as in Hoffmann’s novel). In piece 7 there is a unique switch to C minor/Eb Major, and then the suite concludes in G minor in piece 8. There are no words included except for the tempo and character indications at the beginning of the pieces and in some of the contrasting sections within the pieces, for example, 1. Äußerst bewegt (“Extremely animated”), 2. Sehr innig und nicht zu rasch

² “I’ll improvise for you at twilight, and sometimes you will sing along softly” (Translation in Moßburger 48)

³ See: “‘Inner Voices’ and ‘Deep Combinations’: Robert Schumann’s Approach to Romantic Polyphony.” *Ohne Worte: Vocality and Instrumentality in 19th Century Music*. Leuven: Leuven University Press, 2014.

(“Very inward and not too quickly”), 3. Sehr aufgeregt (“Very excited”), and 4. Sehr langsam (“Very slowly”)—and yet the music seems to carry descriptive content.

In this chapter, I begin with a review of the possibilities suggesting that Schumann’s music was influenced by Hoffmann’s literature. Music theorists have not only linked both Hoffmann’s *Kreisleriana* and *Lebens-Ansichten des Katers Murr* as influences on the composition, but have also made compelling cases for the literary techniques, including the influence of the romantic literary fragment and Hoffmann’s presentation of romantic irony through the ambiguity and discontinuity that Schumann ‘translated’ into the music—an “intersemiotic translation” of style (referring to Roman Jakobson’s term, 114), not necessarily content, for reasons I will discuss. I then move to the words Schumann expresses about the suite’s musical ‘content’ by reviewing entries from his diary entries and letters. Finally, in my analysis of selected sections of the first four pieces of the suite, I offer a query into how Schumann’s treatment of the inner voices reflects not only the Romantic desire to connect the I’s inner/outer relationship with the world in musical form, but also exemplifies a shift in Schumann’s own thinking about music’s role in expressing thoughts and ideas—no longer as a mysterious, indecipherable language, as in Novalis’ pronunciation of *Poesie* and Ritter’s theory of the *Klangfiguren* as music’s natural writing system, but rather “so sprachvoll aus dem Herzen” (“so full of language from the heart”) as a communication received and understood by the body, similar to Ritter’s musical blood flow through Hoffmann’s *Kreisler*. My analysis shows that in order to offer a better understanding of the music, a ‘mixing of discourses’ is needed—one must be an informed reader to appreciate the depths, the poetic expression of the music. The poetic expression of the music is not a

translation of mere words or stories, but rather of images, people, experiences, and ideas, all written into (especially) the inner voices of the piano.

Background

The title for Robert Schumann's piano cycle refers to E.T.A. Hoffmann's collection of essays and musical critiques written between 1810 and 1814; however, many music theorists point to Hoffmann's novel, *Lebens-Ansichten des Katers Murr* (*The Life and Opinions of Tomcat Murr*) from 1819 and 1821 as the more likely influence on the composition. Laura Deahl and Catherine Kautsky, for example, hear a double novel structure with the pieces alternating between the biography of Johannes Kreisler and the autobiography of the intellectual Kater Murr. Charles Rosen also makes this assertion in his book *The Romantic Generation* (672).⁴ In the diagram from Deahl's analysis, the "double novel" structure can be clearly seen, and the motives from pieces 3, 5, and 8 from Kautsky's analysis sound very cat-like (Deahl 133, 136; Kautsky 7-8).⁵ The suite even fades out at the end, just like Kreisler's sudden disappearance at the end of the novel. However, there are no words included in the score except for the tempo and character indications—and yet the music seems to carry descriptive content. While a

⁴ Rosen writes: "The title *Kreisleriana* comes from E.T.A. Hoffmann; the work is based, I think, less on the collection of stories and essays called *Kreisleriana* than on the novel *Kater Murr* (Cat Growl), which has Johannes Kreisler as its hero." (672) His addition of "I think" indicates that he is not sure of this association. Indeed, there are reasons to not be sure, as I explain in my analysis.

⁵ Judith Chernaik also suggests that the suite alternates between episodes written by Kreisler and Kater Murr, with No. 3, 5, and 8 by the cat. (Chernaik 47-48) However, Kater Murr represents another form of play with identities. There is also intertextuality presented in the novel with Murr's story coinciding, though not chronologically, with Kreisler's story (which is of course out of order). Perhaps a listener might hear this intertextuality in the sections of the pieces, which at times, such as A and B sections in pieces one and three (which I describe in more detail later) change so drastically in character. Piece 3 is labeled a "Kater Murr" section in Kautsky's analysis, but when considering the lyrical B section, one might hear Kreisler's introspective world, too (surrounded by Kater Murr's world in the A sections). In this way, a programmatic reading becomes increasingly difficult to identify.

double novel structure through changing authorial voices is apparent in Schumann's contrasting pieces, Deahl acknowledges it is not meant to be a narrative equivalent of Hoffmann's book.⁶

These double novel structure analyses are valuable and compelling. Nevertheless, to disregard Hoffmann's *Kreisleriana* essays as influential to Schumann's understanding of Hoffmann's oeuvre would be misleading—not only because he titles the suite *Kreisleriana*, but also because the first drafts of the second, fourth, and sixth pieces contained the following quote from Hoffmann's essay, "Ombra adorata," written under the pseudonym Johannes Kreisler, as though setting the character from which the pieces were composed:

Wie holde Geister haben mich deine Töne umfassen, und jeder sprach:
„Richte dein Haupt auf, du Gebeugter! Ziehe mit uns, ziehe mit uns in das
ferne Land, wo der Schmerz keine blutende Wunde mehr schlägt, sondern
die Brust wie im höchsten Entzücken mit unnenbarer Sehnsucht erfüllt!“⁷

(FN 38)

Music as representing an inexpressible longing is a theme present in several of the *Kreisleriana* essays.⁸ Similarly, Robert Schumann, in an undated diary entry from 1828,

⁶ Deahl writes, "*Kreisleriana* is in no way the narrative equivalent of Hoffmann's book. However, it finds musical equivalents for stylistic elements, structural frames, themes of opposition and doubleness, changes in authorial voice, and the futile circularity that we find in *Kater Murr*. Hoffmann's fragmented text, carrying us back and forth in time, is echoed in *Kreisleriana*'s sectionalization, both between and within movements, and in the harmonic open-endedness often encountered at the boundaries between these sections." (Deahl 144)

⁷ "Your notes surrounded me like propitious spirits, and each one said 'Lift up your head, you who are bowed down! Come with us, come with us to that far land where suffering no longer inflicts its bloody wounds, but as if in deepest rapture fills the breast with inexpressible longing!'" (Translation by Charlton 90)

⁸ In his famous essay on "Beethoven's Instrumental Music," Hoffmann writes: "Die Musik schließt dem Menschen ein unbekanntes Reich auf, eine Welt, die nichts gemein hat mit der äußern Sinnenwelt, die ihn

also views music as the mysterious, universal language that cannot be properly communicated in words. Schumann writes,

Töne sind verschleyerte Venusformen; wir sehen sie durch den Schleyer lächeln; aber wir dürfen den Schleyer nicht heben; darum stillt die Musik nicht etwa den Streit der Gefühle, sondern regt sie auf u. läßt jenes verworrene, unnennbare Etwas zurück.⁹ (*Tagebücher I* 96)

Schumann captures the “unnamable” through the mysterious draw of music, feminized here as veiled forms of Venus. It is precisely this inability to lift the veil that causes the “Streit der Gefühle,” the “conflict of emotions,” which keeps humanity always wanting more. However, it was only a few years later that Schumann began to see music and literary language as more closely related to each other. As a primary example of this new view, it is well known that Schumann based several pieces from *Papillons*, Op. 2 (from 1831) on Jean Paul’s novel *Flegeljahre*. In order to elevate the comprehension of his music, he asked his mother and sisters-in-law in a letter to read the novel first in order to discover personality qualities of the characters in selected pieces of the suite—“Wina’s angelic love, Walt’s poetic nature, and Vault’s sparkling intellect” (Chernaik 46). They would become informed listeners, thereby focusing their understanding of the music. Schumann had a great gift for improvisation, and in his improvisations he could create “caricatures” of people he knew, which then transferred into imitating literary figures

umgibt, und in der er alle *bestimmten* Gefühle zurückläßt, um sich einer unaussprechlichen Sehnsucht hinzugeben.” (FN 41) (“Music reveals to man an unknown realm, a world quite separate from the outer sensual world surrounding him, a world in which he leaves behind all precise feelings in order to embrace an inexpressible longing.”) (MW, Translation by Clarke 96)

⁹ “Tones are veiled forms of Venus; we see them smiling through the veil; but we are not allowed to lift the veil; for this reason music does not still the conflict of emotions, but instead excites them and leaves this obscure, unnamable something behind.” (My translation)

through music. It was not a particularly difficult task, nor something he did not practice often. *Papillons* marked a major change in Schumann's compositional efforts, namely, composing from musical poetry to create poetic music.

Despite his instructions for musical comprehension, Schumann's music was largely misunderstood by his contemporaries, and even still by many of today's audiences, due to the sudden contrasting styles in his music.¹⁰ The primary reason for this is precisely due to what John Davario calls Schumann's rethinking of "Music as Literature" (55). By breaking normal musical forms, Schumann's listener no longer knows what to expect in the music and how to understand it. Rather than following typical musical structures with related themes and consistent development sections, Schumann's *Kreisleriana* Op. 16, similar to the *Davidsbündlertänze*, Op. 6, is largely based on the form of the literary fragment, which was made popular by the early German Romantic writers. According to Charles Rosen,

[T]he technique of the Fragment was, for a brief time, an unstable but successful solution to the problem of introducing the disorder of life into art without compromising the independence and integrity of the work....

[The] Romantic Fragment...leaves a place — ambiguous and disconcerting — for an unresolved detail which undermines the symmetry and the conventions of the form without ever quite destroying them. (96)

¹⁰ Schumann describes in a letter to Koßmaly on May 5, 1943: "Von den Klavierkompositionen, die ich für meine besten halte, konnte ich leider kein Exemplar auftreiben; es sind das, wie ich glaube: die *Kreisleriana*, sechs Phantasiestücke, vier Hefte Noveletten und ein Heft Romanzen. Gerade diese sind die letzten Klavierkompositionen, die ich geschrieben. Diese Sachen sind alle nur wenig bekannt geworden aus natürlichen Gründen: 1) aus inneren der Schwierigkeit in Form und Gehalt; 2) weil ich kein Virtuos bin, der sie öffentlich vortragen könnte; 3) weil ich Redakteur meiner Zeitschrift, in der ich sie nicht erwähnen konnte; 4) weil Fink Redakteur der andern, der sie nicht erwähnen w o l l t e. (...)" (Ed. Münnich 261-262)

Heinz J. Dill argues that these quick alternations between contrasting sections can also be interpreted as Schumann's application of romantic irony in his musical compositions. Referring to Alfred Einstein, who points to E.T.A. Hoffman and Jean Paul Richter as authors who influenced this aspect of Schumann's compositions, Dill writes, "[i]f 'quick alternation between contrasting sections' is one of the main characteristics of Schumann's music, particularly his piano music, then romantic irony does indeed occupy a position in his works that is not peripheral" (186). Only informed readers can begin to appreciate what he could be offering in the music as listeners. But Schumann is not literally 'translating' the fragmented literature into music. As Aigi Heero explains, "Schumann wechselt nicht von einer Sprache zur anderen, sondern beginnt mit den beiden semantischen Systemen zu operieren"¹¹ (Heero 30).

Schumann famously made the claim that certain composers whose work he admired sounded like his favorite writers. In an undated entry he writes, "Schubert ist Jean Paul, Novalis u. Hoffmann in Tönen ausgedrückt"¹² (*Tagebücher I* 111). It is evident in his diary entries that Schumann became aware of Hoffmann's writings as early as 1828, the same year in which he wrote in his diary that "Töne sind verschleyerte Venusformen," as quoted earlier. He felt a great affinity for Hoffmann because Hoffmann embodied his own two sides—the music critic and musician desiring to become famous a composer. On June 5, 1831 Schumann writes,

¹¹ "Schumann does not change from one language to another, but instead begins to operate with both semantic systems." (My translation) Heero, Aigi. "Poesie der Musik: zur Intermedialität in Robert Schumanns frühen Schriften." *Trames* 11:1 (2007). 15-31.

¹² "Schubert is Jean Paul, Novalis and Hoffmann expressed in tones." (My translation)

Abends im verdammten E.T.A. Hoffmann gelesen. (...) ‘Man müßte die Musick von innen heraus hören.’ (...) Man wage kaum zu athmen, wenn man Hoffmann liebt.¹³ (*Tagebücher I* 336-337)

And on the following day: “Im Hoffmann gelesen, unausgesetzt. Neue Welten”¹⁴ (*Tagebücher I* 337). This quote from Hoffmann’s text (‘Man müßte die Musick von innen heraus hören’) is actually Hoffmann quoting Johann Wilhelm Ritter, the Romantic physicist who developed a theory based on his work in animal magnetism that music flows through the blood in connection with the electrical flow of the nervous system based on his work with the *Klangfiguren*. As detailed in Chapter Four, Hoffmann adopts Ritter’s elaborate theory in his descriptions of Kreisler’s experiences of music. While Schumann does not write about blood or electricity,¹⁵ his music seems to sometimes embody the essence of this startling imagery, as Catherine Kautsky has also heard in the music. Kautsky writes, “Interestingly enough, electricity frequently powers Hoffmann’s supernatural world; he finds it ‘wonderful, splendid, terrible, hilarious, and hideous’” (3).¹⁶

Not surprisingly, Schumann also felt a great affinity for Hoffmann’s Kreisler, the crazy genius composer, known to experience heightened compositional productivity, followed by extreme discontent, leaving him to suddenly throw a manuscript into the fire.

¹³ “In the evening read in damned E.T.A. Hoffmann. ‘One needs to hear music from the inside out.’ One wouldn’t dare breathe, when one reads Hoffmann.” (My translation)

¹⁴ “Read in Hoffmann without stopping. New worlds.” (My translation)

¹⁵ With the notable exception of the quote Schumann included from Hoffmann’s “Ombra Adorata” on the first drafts of the second, fourth, and sixth pieces, which includes blood, as I discuss later.

¹⁶ Kautsky continues, “(...) Clearly, the electrical charge of music was not bounded by the rational in either man, and the men showed themselves as doppelgängers, letting that charge carry them both to the brink of insanity.” (3) I do not agree with this portion of her argument, as nowhere does Schumann mention the influence of the electrical imagery from Hoffmann’s writings on his music.

Kreisler always longs for quiet, peaceful moments in which to compose. Instead of Florestan and Eusebius, Schumann's two pseudonyms and alter egos, which he used both as authors for his musical critiques and as character indications in musical scores, he could imagine Kreisler himself, who exemplifies both personalities in one.¹⁷ To echo Hoffmann's last *Kreisleriana* essay, "Johannes Kreislers Lehrbrief" or "Johannes Kreisler's Certificate of Apprenticeship," Schumann believed that music should lead the listener into the "Geisterreich der Kunst," the "spirit realm of art."¹⁸ In order to accomplish this, a musician must also be a poet, just as the narrator exclaims to Kreisler in the same essay, "Du hast nämlich Dein Hörorgan so geschärft, daß Du bisweilen die Stimme des in Deinem Innern versteckten Poeten (...) vernimmst"¹⁹ (FN 320). Schumann also describes music as coming from within him. In a letter to Clara on July 5, 1838, he

¹⁷ James Martin even argues that Schumann saw himself in Kreisler in his essay, "Schumann, Hoffmann, and *Kreisleriana*" (22). With Florestan and Eusebius, Schumann split himself into two, used both names as authors for his musical critiques, and also wrote their names into musical scores as character or stylistic change indications. He included them in the first edition of the *Davidsbündlertänze* Op. 6, a piano suite composed of two books and 18 pieces in 1837. However, he took them out for the second edition, published in 1850/1851. Perhaps Schumann no longer needed these pseudonyms by the time he composed *Kreisleriana* the following year in 1838—he did not write them into the score once.

¹⁸ Schumann, Robert. *Gesammelte Schriften über Musik und Musiker*. Bd. 1-2. Hrg. Martin Kreisig. Leipzig: Breitkopf & Härtel, 1914. 343.

¹⁹ "You have sharpened your faculty of hearing to such an extent that now and then you perceive the voice of the poet hidden within you (...)." (MW 160) Here, there is an important connection to Novalis. Schumann read Novalis' *Heinrich von Ofterdingen* as well as his fragments. In Schumann's collection of quotes he wrote down from his readings in several notebooks titled *Mottosammlung*, he includes this quote from Novalis' *Heinrich von Ofterdingen*: "In jenen Zeiten hat es sich unter andern einmal zugetragen, daß einer jener sonderbaren Dichter oder mehr Tonkünstler – wie wohl die Musik und Poesie wohl ziemlich eins sein mögen und vielleicht ebenso zusammen gehören, wie Mund und Ohr, da der erste nur ein bewegliches und antwortendes Ohr ist – daß also dieser Tonkünstler übers Meer in ein fremdes Land reisen wollte." (198) He also writes from Novalis' *Das Allgemeine Brouillon*: "Die Musik redet eine allgemeine Sprache..." (501-502)

writes, “Das Leben ist wieder in mich gekommen; ich fühl die Sonne, das Grün der Bäume draußen und innen klingen viele Melodien.”²⁰

Therefore, many theorists have also suggested that the music is primarily about Hoffmann’s pseudonym and alter-ego, Johannes Kreisler. This argument is supported by a letter Schumann wrote on March 15, 1839 about his latest compositions to Simonin de Sire in Dinant, including the *Kinderszenen*, *Fantasie Op. 17*, *Arabeske*, *Blumenstück*, *Humoreske*, and *Kreisleriana*. He writes:

Das Stück ‘Kreisleriana’ liebe ich am meisten von diesen Sachen. Der Titel ist nur von Deutschen zu verstehen. Kreisler ist eine von E.T.A. Hoffmann geschaffene Figur, ein exzentrischer, wilder, geistreicher Capellmeister. (...) ²¹ (Ed. Jansen 134)

Schumann certainly did not choose the title by accident, nor only after he completed it as he claims with other pieces—and nowhere does he mention the novel as his primary influence.²² To make matters more complicated, in a letter to his fiancé, Clara Wieck,

²⁰ “Life has come back inside of me; I feel the sun, the green of the trees outside and inside many melodies are sounding.” (My translation) *Robert Schumann: Ein Quellenwerk über sein Leben und Schaffen. Band 1*. Hrg. Georg Eismann. Leipzig: VEB Breitkopf & Härtel, 1956. 106.

²¹ “I love the piece ‘Kreisleriana’ most from [all of] these. The title is only to be understood by Germans. Kreisler is a figure created by E.T.A. Hoffmann, an eccentric, savage, intellectual Capellmeister. (...)” (My translation)

²² Additionally, the biographical similarities between Hoffmann’s literary figure and Schumann are numerable. Robert Schumann was born in 1810, the same year that Kreisler entered the literary world as Hoffmann’s pseudonym for the publications in the *Allgemeine musikalische Zeitung*, many of which were published in the two *Kreisleriana* volumes. This is, of course, just an interesting coincidence. Similar to Kreisler, Schumann was aware of his heightened musical gift that caused him to be critical of his surrounding musical scene, especially the philistines, and he was also keenly aware as to why his contemporaries misunderstood him and his works. Schumann also experienced periods of heightened creative productivity, followed by deep depression. He ultimately suffered the fate of spending his last few years in an insane asylum; Kreisler’s fate, had Hoffmann finished the third volume of *Lebens-Ansichten des Katers Murr*, would have been to spend his last years secluded in the Abbey.

about the composition, he explains that the music is about her—“so sprachvoll aus dem Herzen” (“so full of language from the heart”).

The Composition

It is well documented that during the time that he composed this work, Schumann was dealing with his turbulent relationship with Clara’s father, Friedrich Wieck. Schumann and Clara wished to marry, but her father would not allow it, for fear of losing control over his bread-winning daughter, who by this time was a very famous concert pianist. Schumann was not well known as a composer at this time, and on March 19, 1838, after receiving news that Clara had been named “kaiserlich-königliche Kammervirtuosin” (“imperial-royal chamber virtuoso”) during her Viennese tour, he was immediately overcome with the urge to prove his worth—both as a composer and a future husband for Clara;²³ this led to his creative musical outpour into *Kreisleriana*, with Clara clearly in mind. In a letter to Clara on April 14, 1838, he explains:

Diese Musik jetzt in mir, und welche schönen Melodien immer! Denke, seit meinem letzten Briefe habe ich wieder ein ganzes Heft neuer Dinge fertig. „Kreisleriana“ will ich es nennen, in denen Du und ein Gedanke von Dir die Hauptrolle spielen, und will es Dir widmen—ja. Dir wie niemandem anderem; – da wirst Du lächeln so hold, wenn Du Dich wiederfindest. Meine Musik kömmt mir jetzt selbst so wunderbar

²³ “(...) eine Nachricht die ich erwartete u. die mir doch auch wieder keine rechte Freude gab. Warum den? Weil ich gar so wenig bin dem Engel [ge]genüber. Nun giebts aber zu thun – u. das Leben leuchtet wie nie – Wäre der Alte [Wieck] ein braver Kerl wirklich, so will ich ihm das Leben verschönen, daß er’s sehen soll.” (*Tagebücher* II, 52) (“(...) It is news that I expected but it doesn’t really bring me joy. Why not? Because I am so inconsequential next to this angel. Now there is much to do—and life shines through as never before. If old [Wieck] were really a good fellow, he’d realize that I too could bring honor to his name, that’s for certain.”) (My translation)

verschlungen vor bei aller Einfachheit, so sprachvoll aus dem Herzen....²⁴

(*Jugendbriefe* 280)

While Kreisler describes the “inexpressible longing” in music, when it comes to the mediation between people and music, especially Clara, Schumann now rather finds the music “so full of language from the heart.” In a diary entry from May 3, 1838, Schumann writes: “(...) die Kreisleriana gemacht in vier Tagen—ganz neue Welten thun sich auf—Kreislerstück in G Moll im 6/8 mit Trio in D Moll im Feuer componirt”²⁵ (*Tagebücher II* 55). The piece he describes is likely No. 8. Schumann’s proclamation that entire new worlds form in these pieces is reminiscent of his first impressions of Hoffmann’s writings—recall his diary entry from June 6, 1831: “Im Hoffmann gelesen, unausgesetzt. Neue Welten” (*Tagebücher I* 337). That he composed the “Kreislerstück” (“Kreisler piece”), “im Feuer” (“in a fiery state”) is reminiscent of Kreisler himself.

What exactly does Schumann mean, then, when he writes that “Clara” and a “thought of her” play the main role in *Kreisleriana*, and that a wild love resides inside of the music? Schumann wished to dedicate *Kreisleriana* to Clara, but not only was Wieck furious at the idea, Clara was also not pleased. In a letter from July 30, 1838 she writes, “ich erschrecke manchmal von Dir, und denke, ist es den wahr, daß das Dein Mann

²⁴ Schumann, Robert. *Aus Robert Schumanns Briefen und Schriften*. Ed. Richard Münnich. Weimar: Gustav Kiepenheuer Verlag, 1956. 184-185. “I’m overflowing with music and beautiful melodies now—imagine, since my last letter I’ve finished another whole notebook of new pieces. I intend to call it Kreisleriana. You and a thought of you plays the main role in it, and I want to dedicate it to you—yes, to you and nobody else—and then you will smile so sweetly when you discover yourself in it—my music now seems to come to me so wonderfully intricate in spite of all the simplicity, so full of language from the heart.” (My translation)

²⁵ “Created the Kreisleriana in four days—entirely new worlds are forming—composed Kreisler piece in G minor in 6/8 with Trio in D minor in a fiery state.” (My translation)

werden soll?”²⁶ (*Briefe einer Liebe* 121) John Daverio points out, “Clara had good reason to take fright: panic, even terror, plays an essential role in her fiancé’s most recent creation” (168).²⁷ Schumann found great joy in writing in code—in sending a message that only the receiver could understand, both in his letters and his compositions—and this is especially clear in his letters to Clara Wieck. One could look for musical cyphers, as many have done in Schumann’s music and I have also attempted in the fourth piece, but locating single “musical words,” such as “C-L-A-R-A,” with L and R representing neighboring or passing tones, will only show us single musical words and will not bring us closer to understanding Schumann’s musical meaning.²⁸ For precisely this reason, it is important to try to uncover all aspects, obvious and hidden, in the unique communication between language and music in Schumann’s thinking. The first is how he hears his inner music through his outer experiences. In the same letter to Clara from April 14, 1838 where he proclaims that the music is about her, he also exclaims:

Es afficirt mich alles, was in der Welt vorgeht, Politik, Literatur,
Menschen; über Alles denke ich nach meiner Weise nach, was sich dann
durch Musik Luft machen, einen Ausweg suchen will. Deshalb sind auch
viele meiner Compositionen so schwer zu verstehen, weil sie sich an
entfernte Interessen anknüpfen, oft auch bedeutend, weil mich alles

²⁶ “I am terrified of you sometimes, and think, is it really true, that this will be your husband?” (My translation)

²⁷ Roland Barthes also writes about an underlying panic in Schumann’s suite in “Rasch” in *The Responsibility of Forms*, 302.

²⁸ Eric Sams notes the possibility that Schumann also used musical cyphers in his music as hidden messages that only the recipient, in this case, Clara, would know. Johann Klüber’s *Kryptographik*, published by Cotta in Tübingen in 1809 offers potential background evidence for Schumann’s interest in writing in code (399).

Merkwürdige der Zeit ergreift und ich es dann musikalisch wieder
aussprechen muß....²⁹ (*Jugendbriefe* 282-283)

Schumann writes of this music that must come through with a sense of urgency—that what he absorbs from his world is translated into music, seems to be his response to Johannes Kreisler’s call in the essay “Höchst zerstreute Gedanken” (“Extremely Random Thoughts”), in which he explains that while artists used to not have to address worldly matters in their art, now a time has come when it must be expressed through music (FN 53, MW 111).³⁰ Later in this passage from the letter, Schumann calls his process of composing “ein Werk des dichterischen Bewußtseins,” “a work of poetic consciousness.” Schumann suggests then that music is produced not only by the mingling of the senses in the formation of emotions, but also through a synthesis of thoughts, images, people, and ideas—all mediated through the music, calling for what I term a ‘synthesis of poetic consciousness.’ Schumann explains his ‘synthetic perspective’ in a review of Hector Berlioz’ symphony in 1835. He explains that composers do not intend to attempt to represent specific thoughts and happenings in instrumental music, but rather:

(...) Unbewusst neben der musikalischen Phantasie wirkt oft eine Idee fort,
neben dem Ohre das Auge und dieses, das immer thätige Organ, hält dann

²⁹ “[E]verything that takes place in the world affects me, politics, literature, people – I think about it all according to my way, which then tries to express itself, to escape into music. That’s why so many of my compositions are difficult to understand, because they refer to distant interests, in many cases significant ones, too, because everything strange of this time touches me and because I in turn must express it again musically....” (My translation) The German is also quoted in: “Selbstanalyse des Schaffenden.” *Robert Schumann im eigenen Wort*. Hrg. Willi Reich. Zürich: Manesse Verlag, 1967. 192.

³⁰ “Welcher Künstler hat sich sonst um die politischen Ereignisse des Tages bekümmert – er lebte nur in seiner Kunst, und nur in ihr schritt er durch das Leben; aber eine verhängnisvolle schwere Zeit hat den Menschen mit eiserner Faust ergriffen, und der Schmerz preßt ihm Laute aus, die ihm sonst fremd waren.” (FN 58) (“What artist has ever troubled himself with the political events of the day anyway? He lived only for his art, and advanced through life serving it alone. But a dark and unhappy age has seized men with its iron fist, and the pain squeezes from them sounds that were formerly alien to them.”) (MW, Translation by Clarke 111)

mitten unter den Klängen und Tönen gewisse Umriss fest, die sich mit der vorrückenden Musik zu deutlichen Gestalten verdichten und ausbilden können. Je mehr nun der Musik verwandte Elemente die von den Tönen erzeugten Gedanken oder Gebilde in sich tragen, von je poetischerem oder plastischerem Ausdrucke wird die Composition sein, und je phantastischer oder schärfer der Musiker überhaupt auffasst, um so mehr sein Werk erheben oder ergreifen wird.³¹

Here, what might be termed a synaesthetic reaction in a listener includes the unconscious transfer from the musical imagination of the composer, a “musikalische Phantasie,” into an idea, “Idee,” just as one might have a synaesthetic experience of music from the ear into distinct images in the eye, implying that we cannot really separate the senses in our conscious or unconscious life. This ‘synaesthetic response’ calls for a mixing of discourses. Schumann asserts that the tones that are created with the most specific thoughts in mind carry the most meaning themselves, with the higher possibility that they could form distinct figures in the listener’s mind. For this reason, he finds that the connection between poetic content and music must be developed in order to create more

³¹ (In: Reissmann, August. *Robert Schumann und seine Werke* 109 – „Symphonie von Hector Berlioz“ – 1835 review) “As regards the difficult question, how far instrumental music may go in the representation of thoughts and occurrences, many are far too timid. People are certainly mistaken if they believe that composers prepare pen and paper with the miserable intention of expressing, describing, and painting this and that. But chance influences and impressions from without should not be under-estimated. Along with the musical imagination an idea is unconsciously operative; along with the ear, the eye; and this, the ever active organ, in the midst of the sounds and tones, then holds fast certain outlines, which, with the advancing music, may condense and develop into distinct figures. The more elements akin to music the thoughts and forms engendered by the tones bear in them, the more poetic and plastic the expressions of the composition will be; and the more fantastically and acutely the musician conceives, the more the work will elevate and move...” From his *Collected Writings on Music and Musicians*. Niecks, Frederick. *Programme Music in the Last Four Centuries: A Contribution to the History of Musical Expression*. London: Novello and Company, Ltd., n. d. 185-6.

meaningful instrumental music, even though he says on many occasions that music can also stand on its own.

Precisely this blurring and the resulting expanded sense perceptions open up the possibility for music to reach new areas of thought.³² Recall this quote from Hoffmann's *Kreisleriana* from Chapter Four in which the narrator, whose voice is distinct from Kreisler's (and is paraphrasing both Ritter and Novalis), explains in "Johannes Kreislers Lehrbrief":

Der Ton wohnt überall, die Töne, das heißt die Melodien, welche die höhere Sprache des Geisterreichs reden, ruhen nur in der Brust des Menschen. – Aber geht denn nicht, so wie der Geist des Tons, auch der Geist der Musik durch die ganze Natur? Der mechanisch affizierte tönende Körper spricht ins Leben geweckt sein Dasein aus, oder vielmehr sein innerer Organismus tritt im Bewußtsein hervor. Wie, wenn ebenso der Geist der Musik, angeregt von dem Geweihten, in geheimen, nur diesem vernehmbaren Anklängen sich melodisch und harmonisch ausspräche? Der Musiker, das heißt, der, in dessen Innerem die Musik sich zum deutlichen klaren Bewußtsein entwickelt, ist überall von Melodie und Harmonie umflossen. Es ist kein leeres Bild, keine Allegorie, wenn der Musiker sagt, daß ihm Farben, Düfte, Strahlen, als Töne erscheinen, und

³² John T. Hamilton suggests, e.g.: "In referring to aesthetic and psychic experiences that are conceived as fundamentally nonrepresentable, music and madness, as metaphors, open a text up to what not text can properly contain." In: *Music, Madness, and the Unworking of Language*. New York: Columbia University Press, 2008. 195.

er in ihrer Verschlingung ein wundervolles Konzert erblickt.³³ (FN 325-326)

Surrounded on all sides by music, the musician or composer's senses mingle. This synaesthetic response creates not only a mixing of the five senses, but also, as especially in Schumann's case, a mixing of discourses. In addition to Heero's explanation from earlier, that "Schumann wechselt nicht von einer Sprache zur anderen, sondern beginnt mit den beiden semantischen Systemen zu operieren"³⁴ (30), Schumann states that in his compositional process he operates with not only words and music, but also ideas, images, and people from his life experiences and perceptions. In essence, as the composer he is responsible for gathering the conceptions, but it is the music that immediately takes over to elevate and move, implying, in this moment, the 'death of the composer'.³⁵ As Roland Barthes writes, "Once the Author is removed, the claim to decipher a text becomes quite futile. To give a text an Author is to impose a limit on that text, to furnish it with a final

³³ "Sound resides in all things; but notes, that is to say melodies, which speak the higher language of the spirit-realm, repose only in the breast of men. But like the spirit of sound, does not the spirit of music also permeate the whole of nature? A sounding body, when it is mechanically animated and thus brought to life, gives expression to its existence, or rather its inner organism consciously emerges. Cannot the spirit of music, when it is awakened by its votaries, similarly express itself melodically and harmonically in secret resonances intelligible only to them? Musicians, that is to say those in whom music becomes a condition of total awareness, are surrounded on all sides by melody and harmony. It is no empty metaphor, no allegory, when the musician says that colour, fragrance, light appear to him as sounds, and that in their intermingling he perceives an extraordinary concert." (MW 163-164) Schumann also writes in his diary, in 1828: "Töne sind höhere Worte" and "Musik ist die höhere Potenz der Poesie." (Schumann *Tagebücher I* 96) He continues, "Die Schubertschen Variationen sind überhaupt ein componirter Roman Göthe's, den er noch schreiben wollte. [...] Wenn ich Beethovensche Musik höre, so ist's, als läse mir jemand Jean Paul vor; Schubert gleicht mehr Novalis, Spohr ist der leibhaftige Ernst Schulze oder der Carl Dolci der Musick" (Schumann *Tagebücher I* 96-97).

³⁴ "Schumann does not change from one language to another, but instead begins to operate with both semantic systems." (My translation)

³⁵ Roland Barthes writes, "As soon as a fact is *narrated* no longer with a view to acting directly on reality but intransitively, that is to say, finally outside of any function other than that of the very practice of the symbol itself, this disconnection occurs, the voice loses its origin, the author enters into his own death, writing begins" (142). Barthes, Roland. "The Death of the Author." *Image – Music – Text*. Trans. Stephen Heath. New York: Hill and Wang, 1977. 142-148.

signified, to close the writing” (147). Therefore, on its own, without a clear indication to read something beforehand, the music is left to speak for itself.

As a purely subjective experience, what does each listener hear in the music? A caricature of Johannes Kreisler? The literary style of the fragmented novel switching between Kater Murr and Kreisler? The inner world of Schumann and his love for Clara? Wouldn't these “distant images” in the music require informed reading on the listener's part? From a listener's point of view, Roland Barthes offers the following in his post-structuralist essay, “Rasch” from 1975:

In Schumann's *Kreisleriana* (Opus 16; 1838), I actually hear no note, no theme, no contour, no grammar, no meaning, nothing which would permit me to reconstruct an intelligible structure of the work. No, what I hear are blows: I hear what beats in the body, what beats the body, or better: I hear this body that beats. (299)

Barthes declares that the piano “speaks without saying anything” (307). He explains, “for as soon as it is musical, speech—or its instrumental substitute—is no longer linguistic but corporeal; what it says is always and only this: *my body puts itself in a state of speech: quasi parlando*” (306). Barthes' focus on how he hears the music in his body is striking in regard to the influence of Ritter's musical blood flow through Hoffmann's writings—but nowhere does he name either of the authors. Like Hoffmann, is Barthes referring to Ritter in his interpretation of Schumann's “beats” (which could sound like a pulse or a heart pumping blood) without naming him?³⁶ In Schumann's composition, music,

³⁶ There is further evidence that may support this case, because Ritter himself wished to remain unnamed in regard to receiving credit from within his circle. As is stated in the prologue to his *Fragmente aus dem Nachlasse eines jungen Physikers*, which is written by an ‘unnamed editor’ (scholars believe Ritter wrote this himself before he died): “Er selbst übrigens liebte die Zurückgezogenheit im höchsten Grade, und

although not universally understood, becomes a ‘language’ that speaks directly to (and from) the body.

Schumann’s poetic expression through the piano calls for a synaesthetic response in the listener. He claims that music composed with thoughts and images associated with it will be more likely to move the listener, and that “distant images” may form. In this reverse embodiment from Schumann’s body into the listener’s requires a third body, that of the performer’s, in the transfer of “musical fantasies” into “ideas.” The performer’s role as the mediator of the music into images is a crucial one—the music Schumann composed demands not only technical skill, but also a lot from the body itself. The way the notes are written on the page tells the body what is needed of it to make the sounds. Through this attention to detail, the music speaks through the performer’s body.

Musical Analysis

Regardless of the potential programmatic readings of Schumann’s pieces, which can only serve the mind’s understanding of the music, what does the body understand of the music? In order to answer this question, the following is a case study analysis of the contrasting voices that can be heard in the first two pieces of Schumann’s *Kreisleriana* Op. 16, with a focus on the struggle between the outer, virtuosic passages to the moments with inner, poetic voices. Schumann shifts from trying frantically to ‘prove his worth’ as a composer to allowing space for ‘true poetic expression’ in the following passages, in

nichts war ihm mehr zuwider, als zu hören, daß unter seinem Namen die Rede von ihm gewesen war. Ich vielleicht besonders verstand ihm hierüber, er hätte am liebsten gar keinen gehabt; und so nenne ich ihn billig auch selbst da noch nicht, wo er mich nun nicht mehr schelten kann.” (26) (“Apart from that, he loved privacy to the utmost, and nothing was for him more distasteful than to hear that one had been talking about him on his behalf. Perhaps I especially understood him in this regard; he would rather have had no name at all; and thus it is proper for me not to name him yet, even there where he can no longer scold me.”) (Translation by Holland 27)

ways that are characteristic of not only Hoffmann's narrative style, but also Schumann's. Rather than a detailed music analysis, which will not bring further meaning in the sense of this project, I offer comments regarding the role of the performer's body in bringing out these voices, modeling Elizabeth Le Guin's approach as described in the Introduction to this project. In the contrasts between the fast, virtuosic passages and the slower sections in which the inner voices can emerge, I show how Schumann sounds not only like Hoffmann's descriptions of Kreisler's music and his experiences of it in *Kreisleriana* Op. 16, but also his own writings in relation to the music, and especially in his desire to prove his worth to Clara and her father.

The first piece is structured in a Rondo ABACABA form (sometimes called palindromic form). The opening line begins as though out of nowhere (see Figure 4.1). It is a labored passage; the performer has to master a proper rolling of the wrist to execute the slurs into the accents on the strong beats. Once this technique is mastered, however, it is almost as though the music takes over the hand as it flows up the keyboard—one has to forget the careful practice that went into learning it and let go. There is also almost no room to breathe—as Schumann writes in his diary, “Man wage kaum zu athmen, wenn man Hoffmann liebt” (“One doesn't dare breathe when one reads Hoffmann”) (*Tagebücher I* 337). The octaves in the bass sound on the weakest beats of the measures, two and four, which Harald Krebs calls “displacement dissonance.”³⁷ This leaves an uneasy feeling in both the performer and the listener—it feels as though the music coming through is out of control and the hands trying to play it are desperately trying to

³⁷ In *Fantasy Pieces: Metrical Dissonance in the Music of Robert Schumann*, Harald Krebs writes: “In the first piece from *Kreisleriana*, the initial displacement dissonance D2+1 (1=8th), created by the nonalignment of right-hand arpeggiated harmonies and left-hand attacks and, in mm. 11-12, by dynamic accents on metrically weak eighth notes, is brought up short at the strongest cadences, where the two hands come together (for instance, at mm. 7-8-Example 6.2)” (144).

keep up. An informed reader may hear Kreisler or even Schumann, out of control at the keyboard in a fiery rage.



Figure 4.1: Piece 1, A Section, mm. 1-8

There is no inner voice to consider here, but in the following B section, beginning in measure 9 (see Figure 4.2), an inner voice emerges in the left hand in the notes with the upward stems (again, as though out of nowhere). When this inner voice first comes in, it is not fully coordinated rhythmically with the left hand because of the sforzando syncopations. It is interesting to note that Kautsky hears electric shocks in these jarring moments (3).

Figure 4.2: Piece 1, B Section, mm. 9-14

The left hand ‘gives in’ in measures 11 and 12, as though accepting the driving movement of right hand temporarily, by steadily falling stepwise with sforzando accents on beats two and four, and again in measures 15 through 16 (see Figure 4.3), as it steadily climbs (mostly) chromatically in eighth notes and fades again into the texture of the A section. It is as though the two hands are in conversation with each other, and the left hand is trying very hard to get a word in, almost shouting with the sforzandi. Because of these two apparent voices in conversation, claiming one character in charge of the piece,

Figure 4.3: Piece 1, mm. 15-17. The inner melody disappears in a transition back to the A Section.

such as Florestan or Eusebius, or Kreisler or Tomcat Murr would be too limiting. This inner voice disappears almost as quickly as it appeared, similar to Kreisler's apparitions. It is not until the second piece that the nature of Schumann's poetic inner voices begins to make a prominent appearance.

The second piece is in Sonata-Rondo form. Schumann plays with the expectations of the listener by bringing in a fourth section (D) before the return of A; thus ABACDA. In the opening line, the performer almost has to breathe in and then sigh with the climbing and falling octave melody in the right hand (see Figure 4.4). Of course this breathing action is not something a singer would do while physically singing this line, but is something that the pianist can do along with the technical execution in the hands. It is as though the chaos from the first piece—the storm—has suddenly subsided, and it is time to relax into the music—the piano is singing.



Figure 4.4: Piece 2, mm. 1-8

The contrasting characters in the different sections of this piece are reminiscent of Kreisler's "Ombra adorata" essay, in which he expresses moments of great joy and melancholy with no transitions. I will summarize it briefly. In the beginning Kreisler writes of the "miraculous thing that is music," and how it expresses an "infinite, inexpressible yearning." Then suddenly the next paragraph speaks of the "worthless banalities of this wretched existence that plague and persecute men, and particularly artists, like poisonous, blood-sucking vermin" (MW 88). The majority of the essay then discusses the aria, "Ombra adorata" by castrato singer and composer Girolamo Crescentini (1762-1846)—a simple composition, which "conveys the state of mind that soars above earthly affliction in the blessed hope of seeing all that has been promised brought to fulfillment in a better world" (MW 89). Finally, in great excitement at the end of the essay, Kreisler writes how music can become congealed in the blood like a blood clot, which must be brought back to life, bringing "glittering sparks like fire-breathing salamanders"³⁸ (MW 90-91). In the midst of rejoicing over music, Kreisler experiences the movement of blood and electric shocks, and attempts to harness and combine these forces into musical compositions. While Schumann's second piece is by no means an intersemiotic translation of Kreisler's text, it exhibits some of the same characteristics. Yet Schumann does not always prioritize the melody as in an aria—see the inner melodies that emerge beginning in measure 5.

In measure 9, the left-hand inner melody takes on a voice of its own, as though in conversation with the right hand (see Figure 4.5). The right hand inner melody is far more interesting than the soprano voice. Here the normal melody line gives way to the

³⁸ "Salamander: Lizard-like animal, or spirit, traditionally supposed to inhabit (or endure) fire. (...) Hoffmann (...) thinks of salamanders as dangerously powerful." (MW, Charlton's footnote 90)

inner, poetic voices. This is a special moment in the piece, because now the two inner voices are different, unlike in measures 5-8—there are two distinct inner voices in conversation with one another—they are more complex, more interesting, more inner.



Figure 4.5: Piece 2, mm. 9-18

During the Intermezzo I (section B), which begins measure 38, while a right hand alto line is still present, the soprano line and the accompanying bass line in mostly sixteenth notes, which serves as a perpetual unifying device that pulls the section together, overpowers the content of the inner voice (see Figure 4.6). While integral to this contrapuntal passage, the inner voice takes a step back and the need for virtuosic technique takes over. This passage is also metrically displaced—the audible downbeats do not coincide with the written downbeats—which is jarring, both for the performer and the listener. This section sounds like Kreisler on display at a public gathering and the fire-

breathing salamanders have just taken over. Recall also Kreisler’s experience during a performance of the Bach variations in the essay, “Kapellmeister Johannes Kreisler’s Musical Sufferings”—the electric sparks are flowing through his fingertips, and the spirit generating them has taken over his thoughts.



Figure 4.6: Piece 2, Intermezzo I (section B), mm. 38-45

In the Intermezzo II (section C) of the second piece, which begins in measure 92, the right hand again carries the melody in the soprano line, which is accompanied by an inner voice in the alto line (see Figure 4.7). Just like the beginning of the suite and Intermezzo I, what seems like the downbeat in the left hand is actually the weakest beat of the measure—the melody begins on beat three as though pick-up notes into the next measure. The bass line then echoes the melody beginning on beat two, another weak beat in the measure. The bar line becomes ambiguous to the listener. What is especially interesting about this passage is the rolling execution required by the hand to bring out the melody

over the inner voice. While the soprano line is the most important voice carrying the melody (which the bass echoes beginning on beat two measure 92, as in a Bach invention), the flow of this line is dictated by the rolling motion of the right hand as it also executes the accompanying alto line. It is the steady flow of this inner voice in sixteenth-note figurations that gives this passage its poetic texture and depth. Without it, only the melody and the accompanying bass line in the left hand would remain as empty, melodic pillars—the structural framework for the passage.



Figure 4.7: Piece 2, Intermezzo II (section C), mm. 92-96

The “Langsamer (erstes Tempo)” section, which is a surprise section D is suddenly slower than the section that precedes it, titled Intermezzo II, but it is unlike the calm of the beginning of the piece (see Figure 4.8 below). The extreme chromaticism and tightly knit contrapuntal lines have the hands crawling right next to each other. This

passage sounds wounded—an inner turmoil comes out in the rich harmonies formed by the many melodic voices—one hears a choir of soft, moaning, crying voices. In measure 122, the left hand suddenly jumps over the right hand to take a soprano melody line, which completely takes over the soprano melody that was in the right hand, and it is heard most prominently. The inner voices, then, are not bound to the middle ranges—they can emerge out from the depths and become the outer voices. One is reminded of Schumann’s inner music that is looking for a way out. This voice disappears again into the rich harmonic texture as the left hand crawls back down, next to the right hand, and returns to the bass clef in measure 126. This chromatic section eventually transitions back into the “A section” of this second piece, which concludes as it began in a peaceful state.



Figure 4.8: Piece 2, “Langsamer (erstes Tempo)” (section D), mm. 119-128

The third piece is in sonata form, ABA with a coda section concluding the piece. It opens in a fast-paced march of sixteenth-note triplets (see Figure 4.9). The right hand “gallops” to play this pattern, as though in a chase up and down the keyboard. The texture

The image shows a musical score for a piece titled "Sehr aufgeregt" (section A), measures 1-19. The score is in 2/4 time, key of B-flat major, and marked "Sehr aufgeregt" and "p". It features a fast-paced march of sixteenth-note triplets in the right hand and a bass line with chords and triplets in the left hand. The score is divided into four systems, with measures 1-4, 5-9, 10-14, and 15-19. The first system includes a "Pedal" marking. The second system has a "3" marking above the right hand. The third system has a "3" marking above the right hand and a "f" marking below the left hand. The fourth system has a "3" marking above the right hand.

Figure 4.9: Piece 3, “Sehr aufgeregt” (section A), mm. 1-19

is thin, with one voice in the right hand and a bass voice in octaves in the left. Similar to the first piece in the cycle, an inner voice emerges as though out of nowhere in measure 11 in replacement of the bass note octaves, which until this point have only served as an accompanying melody to the right hand. The chord-like texture produced gives a stronger emphasis to this inner voice over the right hand melody. It is the same melody as the opening line, but it is now in an inner voice—this echo effect solidifies the importance of the theme for the listener and gives it a stronger presence (rather than being in the midst of the hurried sixteenth note triplets of the right hand). It continues only until measure 16, when the octaves return again in the left hand. Here, again, just like in the first piece, the inner voices are trying to get a word in.

The contrasting B section, “Etwas langsamer,” contains a similar lyrical rise and fall in the opening melody, requesting an inhale to the top and an exhale as the line falls (see Figure 4.10). However, the voice leading this section is not the soprano, but rather the alto voice. This inner voice in the alto line has its own rhythmic accompaniment in the form of sixteenth notes—it fills in the poetic texture as a pedal note on D in the opening measures—otherwise the music would just have rising and falling eighth notes with sustained, bass pedal notes in this opening line. The soprano line begins first on the sustained G in measure 35, as though coming from the alto line.

In measure 36, all of sudden the alto voice steps down into the bass clef as the soprano line continues on; the left hand jumps over the right to continue this soprano line, only to return to the bass immediately in measure 37. Meanwhile, the steady eighth-note alto line that has dropped into the bass clef is now taken over by the left hand. Here, again, the inner voice is not restricted to the middle range of the keyboard. What was the

alto inner voice is now on the outside in the form of the bass texture. The soprano line continues on, singing an aria-like melody, falling and rising gracefully.

The image shows a musical score for a piece titled "Etwas langsamer" (section B), measures 33-45. The score is written for piano and is in G major (one sharp) and 3/4 time. It is divided into three systems. The first system (measures 33-36) is marked with a piano (*p*) dynamic and includes a "Pedal" instruction. The second system (measures 37-41) is marked with a forte (*f*) dynamic and also includes a "Pedal" instruction. The third system (measures 42-45) is marked with a *ritard.* (ritardando) instruction and includes a "Pedal" instruction. The score features a soprano line in the right hand and a bass line in the left hand. Various musical notations are present, including slurs, ties, and fingerings. The tempo is indicated as "Etwas langsamer".

Figure 4.10: Piece 3, “Etwas langsamer” (section B), mm. 33-45

The fourth piece is characterized by its slow, calm tempo, opens in a hopeful, longing, choral-like passage (see Figure 4.11). The structure of the piece is ABA’—the return of the A section in the end is fragmented. The soprano line carries the melody, and is supported by all of the other voices, and in some cases mirrored by them, until measure 5. I hear Schumann imagining Clara singing with him at the piano. Half way through this measure, the right and left hands suddenly go into conversation with each other...here Robert joins in for a duet. The right hand melody is especially angelic in nature, the

soprano and alto lines playing in sixths, and carries a longing hope (but still with a certain lingering melancholy), while the bass line seems to grumble in despair in its thirty-second note runs. The voices come together again in measure 8, until the bass line takes over for the final word of this opening A section in measure 10.

Figure 4.11: Piece 4, “Sehr langsam” (section A), mm. 1-6
 In measure 5 Robert’s voice enters.

The following B section, “Bewegter,” sounds like Robert’s longing for Clara (see Figure 4.12).³⁹ This section is characterized by the structural “pillars” of the quarter-note melody in the soprano line, and the quarter-note bass line. Just as in the Intermezzo II of the second piece, this “pillar” structure makes room for the inner lyrical voice to fill in the poetic essence of the section. The rolling movement of these sixteenth notes which must be shared and played by both the right and left hand, requires a flowing communication between the two hands, similar to the harp-like motive in the B section of the first piece. The upward climbing and falling of the soprano melody is reminiscent of the peaceful opening theme of the second piece.



Figure 4.12: Piece 4, “Bewegter” (section B), mm. 12-17

In my analysis of these excerpts I have shown several ways in which the inner voices, those of which that are written into the score, play important roles in creating the

³⁹ Out of curiosity, I searched for the CLARA theme in this piece. What I found was potential transpositions of the theme, climbing from measures 19 through 21, and just as the notes would literally spell C-L-A-R-A (for example, C B(b) A G(♯) A), the progression of the pattern is evaded.

poetic texture of Schumann's piano suite. These instances are most obvious in the slow, lyrical sections, in which an inner voice or several can clearly emerge from the music. In these passages it is just like in the moments of calm that Kreisler wishes to experience, when he is able to sit down and compose in peace—but more often I hear Schumann's longing for Clara, especially in the fourth piece. The contrasting loud, fast, virtuosic passages are reminiscent of Schumann's rage when he found out that Clara was named the imperial-royal chamber virtuoso combined with his undying wish to prove himself as a composer—or perhaps they are also about Kreisler when he is overcome by electric shocks and apparitions. There are many other inner voices that are physically written into the music that may only be clear when looking directly at the score because they are hidden in the complex, rich passages, and also come in and out of the texture without warning. But the performer is aware of them and can make them “shine” within the textures as they try to ‘get a word in,’ so to speak. In the case of the Intermezzo II section of the second piece and the B section of the fourth piece, the inner voice provides the poetic depth of the passages as accompaniment to the melody; without it, only the thin texture of the soprano and bass lines would remain. And as in the second and third pieces, sometimes the inner voices are not restricted to the voices in the middle. They can emerge from the poetic depths as outer voices. Inner voices can emerge in other places as well—even in the performer's or listener's mind as an imaginary vocal line—which is always left to be a subjective, individual experience.

Conclusion

Influenced heavily by the Romantic literary structures and philosophy, the *Kreiseriana*, Op. 16 was not well understood in Schumann's time due to its unpredictable, chaotic and fragmentary nature. It contains a complex, multi-layered expression—the music mediates and synthesizes all of these words, sensations, images and experiences. Through this extended form of literary synaesthesia, Schumann, with at the very least his title *Kreiseriana*, attempts to lead his audience to experience the literature by E.T.A. Hoffmann from within his music. Just as an informed opera-goer had best read and study the libretto before a performance, an informed listener can better appreciate the complexity of the fragmentary and at times chaotic style of Schumann's musical poetry by, at the very least, first reading Hoffmann's works. Schumann's contemporary audience would of course not have had access to his private diaries and letters—this is a gift we have now (which, in the end, only adds to the ambiguity and complexity of musical meaning in the composition). As “aesthetic subtexts” (Hoeckner's term, 63), the words of Hoffmann, Kreisler, and Schumann are absorbed into a multi-layered, complex expression of not only Kreisler and perhaps Tomcat Murr (although one could argue that it is not about the novel's content at all), but also Schumann's conflict with Friedrich Wieck, and his intense love for Clara.⁴⁰

According to Kreisler, music first comes from the spirit realm and is embodied in nature as the universal, indecipherable language. Schumann, in contrast, experiences

⁴⁰ John Daverio also summarizes Schumann's stance eloquently when he writes: “[I]n Schumann's compositions art and life continually engage in a kind of chemical process of transformation. ‘Biographical’ subjects, ranging from place names to human beings, are converted into ‘aesthetic’ subjects, musical materials, and then back again into more tangible, poetic designations” (131-132).

music as a language of the body, and condenses the recycled early Romantic notion that music comes from the spirit world to rather directly from his own world—the current politics, literature, and people. However, just as with Kreisler, for Schumann melodies themselves come directly from the heart—and most precious are the poetic, inner voices, which can emerge from the music in both ‘literal’ and ‘fantastical’ ways. In order to accurately bring out these inner voices, a performer must *embody* the music—reading the movements required of the body as the composer wrote them into the score. By titling the piece *Kreisleriana*, Schumann is writing in code about his own life through literature. What Schumann ‘intends’ is lost in the musical score and when it is performed, except perhaps for those who have *read* first.

CHAPTER VI

CONCLUSION

Sound immediately rearranges the molecular structure of the listener.¹ (Carlos Santana (1999))

Can an interdisciplinary approach to literature, music, and science better the understanding of musical meaning, as it was claimed by the German Romantics in their collaboration and idea exchanges? In the foregoing project, I have shown how reading selected texts and a musical composition together illuminates meaning that would otherwise go unnoticed. My analysis is based on a two-layered approach. First, I demonstrate how Romantic authors Novalis and E.T.A. Hoffmann reflect on language through references to music and science, while physicist Johann Wilhelm Ritter refers to scientific phenomena through literary, philosophical and musical language. Composer Robert Schumann presents his music through references to literary texts (especially in this project, Hoffmann's, which have integral influences from Novalis and Ritter). The interdisciplinary focus of the work of the individual authors has been widely discussed, however as my title, "Hearing with the Body: Poetics of Musical Meaning in Novalis, Ritter, Hoffmann and Schumann" suggests, I add another dimension to this discussion by showing how all of these approaches are anchored in the experiences of the body. I loosen the hierarchical relationships between body, mind, music and word as they are often favored in scholarly commentaries and focus attention on the body as an expression of a different kind of subjective experience. The body and senses mediate artistic perception and production.

¹ See: <http://www.cbsnews.com/news/santanas-dramatic-comeback/>

In Chapter Two, I have shown how Novalis utilizes the unattainable pre-established harmony of the monads in his concept of *Poesie* as a narrative strategy and form in “Die Lehrlinge zu Sais.” Novalis makes his ‘monads of *Poesie*’ (my terminology) “full of windows,” bringing fluidity to the relationship between the inner and outer world, with a particular focus on the poet. He treats music as a necessary component of poetic language, as a metaphor for an ideal multi-voiced conversation, in which all voices can be heard and acknowledged equally through harmony. Everyone, coming from different fields of knowledge and perspectives, is entitled to his or her opinion, and the musical structure of this “intersubjective discourse” (to use Hodkinson’s term, 13) is meant to be all-inclusive, signaling a universal acknowledgement and understanding. However, this literary fragment remains incomplete, and the ideal, elusive “pre-established harmony” is not achieved.² Novalis recognizes this incompleteness as unavoidable. Indeed, his concept of *Poesie* is precisely about the unattainable perfection in striving for universal communication. As literary scholar Jane Kneller writes,

Poetry (*Poesie*) is universal because it aims at an ideal that is itself never fully articulable and thus ‘incomprehensible.’ It is progressive because it never gives up *attempting* to comprehend and be comprehensible, that is, it aims constantly to better communicate itself to others, both present and future. (114)

² Hodkinson also points out that the tale is not all-inclusive, as the female voice is excluded. Both Isis and Rosenblüthe remain passive and silent in the text. He continues his analysis with *Heinrich von Ofterdingen*, which he argues is more successful in realizing a model of polyphony, especially due to Novalis’ inclusion of female voices and discourses. See “The Cosmic-Symphonic: Novalis, Music and Universal Discourse” in *Music and Literature in German Romanticism* (20-24) for his compelling account of Novalis’ unfinished novel.

Although Leibniz's theory provides further understanding to Novalis' approach to the development inherent in *Poesie*, it does not bring clarification on what this universal language with musical pronunciation looks or sounds like.

Novalis' imagery relating to sound, light, writing, and language in "Die Lehrlinge zu Sais" becomes *clearer* when understanding them as characteristics of *Klangfiguren*. In a sense, in addition to poeticizing science, Novalis supports his poetic imagery with references to the scientific. Although poetic imagery does not need evidence to be considered "poetic," science's need for evidence places further demand on language to depict the discoveries in words. The ability of poetic, musical language to expand to new areas of thinking brings benefit to the scientific inquiries and the poetic representations of them.

Both Novalis and Ritter speculate on the language-nature of the *Klangfiguren*. Novalis uses the subjunctive, especially in relation to the 'inner *Klangfiguren*' (my terminology), which, according to the novices' understanding of the teacher's experiences, form inside the body in the form of "light rays" or "stars" (not in the outer world, as other *Klangfiguren* can be made to appear). This is directly related to Ritter's idea that sound carries its own writing within the body as well—that the body receives this music and responds to it through the formation of *Klangfiguren*. This he writes in the subjunctive, as well. Recall the following quote from his "Appendix:"

—Schön, wäre es, wie, was hier *äußerlich* klar würde, genau auch wäre, was uns die Klangfigur *innerlich* ist:—*Lichtfigur. Feuerschrift**). Jeder Ton hat somit seinen Buchstaben immediate bey sich; und es ist die Frage, ob wir nicht überhaupt nur *Schrift* hören,—*lesen*, wenn wir hören,—

Schrift *sehen!*—Und ist nicht jedes Sehen mit dem *innern* Auge *Hören*,
und Hören ein Sehen von und durch *innen?*³ (472)

According to Ritter, the writing is already present in the sound, and therefore is “pre-established” in Leibniz’s terminology (although Ritter later claims that one should not make any claims about “pre-established harmony”). Novalis and Ritter therefore do not claim that they have actually discovered the language-nature of music, but rather attempt to represent it through poetic expression in order to further imagine its possibility.

Interestingly, Novalis’ and Ritter’s poetic and scientific investigations of the connection between sound and light is no longer considered out of the ordinary. In *Art & Physics: Parallel Visions in Space, Time & Light*, Leonard Shlain explains that it was not until Heinrich Hertz’s (1857-1894) discovery of radio waves in 1886 that we learned that sound can travel via invisible light waves. Shlain explains,

Although radio waves are at the far end of the electromagnetic spectrum and are invisible, they are a form of light. When reporters asked him what practical application his new radio waves might have, Hertz replied that he didn’t know, but he was sure someone would soon find a use for this invisible form of light. He could not anticipate that soon this light no one could see would become music everyone could hear. (284-285)

Then, by 1905, after Einstein “elevated light to a preeminent position as the true constant of the universe, (...) music ceased to be a ‘thing’ composed of oscillating molecules and

³ “—It would be nice if that which is *externally* clear here, would be precisely that which the sound-figure is to us innerly:—light figure, *firewriting*). Every tone thus has its letter immediately by itself; and the question is whether we do not in fact only hear *writing*,—*read*, when we hear,—*see* writing!—And is not every seeing with the *inner* eye *hearing*, and hearing a seeing of, and through, *within?*” (Translation by Holland 273)

instead became a ‘process’ that glowed incandescently. Music converted into light” (Shlain 284). Ritter’s claim that sound and light are the same because they are “one,” now holds some scientific value.

In the startling turn in his “Appendix” Ritter does not use the subjunctive in his claim that tones have their own consciousness, as discussed in Chapter Four. He asserts in the indicative that this is the case, which is also the “tone” that Hoffmann uses as music takes over Kreisler—this uncanny imagery is not written simply as a metaphor or simile. While Ritter’s influence on Hoffmann’s *Kreisleriana* essays has been noted in the scholarship, the larger, detailed way Hoffmann worked Ritter’s theory of musical blood flow into his writing and expanded on it has gone unnoticed until this current project (and publication of an earlier version of Chapter Four under the same title).

In a similar way that there is a “blurring of authorial voices” in Hoffmann’s *Kreisleriana* essays (as Hoffmann paraphrases both Ritter and Novalis almost at the same time in passages only attributed to Ritter in the critical commentary), there is a blurring of voices in Schumann’s musical composition, *Kreisleriana*, Op. 16, on several levels. Not only is it not clear which of Hoffmann’s writings specifically influenced each piece beyond the *Kreisleriana* essay “Ombra Adorata” (a quote from which was written on the first drafts of the second, fourth and sixth pieces), Schumann states that the music is about Clara. This blurring can be further seen in his treatment of the outer and inner voices of the piano suite. The outer virtuosic passages, especially in pieces 1 and 3 in the examples from my analysis, do not make room for an inner voice to emerge—it is as though the inner voice is trying to get a word in, but ultimately has to retreat back into the texture. Inner voices emerge more clearly in the slower sections, where there is space for

them to be heard. Claiming one character in charge of each piece or each section, as music analysts have done, would be too limiting—in some places more than one inner voice emerges “in conversation” with each other harmonically.

Finally, analyzing the role of the body in executing the piano pieces shows another way in which music gets inside of the body—this time the performer’s, who must interpret what the composer wanted from the notation on the score. Following Elizabeth Le Guin’s approach, I describe how when a performer reads the score, the notation tells the performer’s body what to do—that which will be required physically to bring out the music. The opening virtuosic passage of the first piece, for example, is characterized by “displacement dissonance” (to use Harald Krebs’s terminology)—the left hand plays only on the weak beats and the body feels out of sync trying to keep up with the music. The outer chaos must be felt on the inside. The inner voices, which carry Schumann’s poetic content, are reserved for special moments in the pieces. Interestingly, Schumann shows the performer how the inner voices are not restricted to the middle range of the keyboard through his notation that indicates having one hand jump over the other in order to expose the inner melody in a new register, for example. In this way, the inner voices make their way to the outside, just as Schumann describes how the richness of his music first comes from within his body.

This interdisciplinary ‘multi-voiced conversation,’ which took place over time through the written word, provides a useful historical framework for how the same questions about music are addressed from a 20th and 21st perspective. In addition to light and sound now working together in the form of radio waves (as mentioned earlier), Johann Wilhelm Ritter’s ideas about music’s effect on the body and E.T.A. Hoffmann’s

adoption of his theory represent early thinking on concepts that have been further studied by modern science, including biosemiotics and the “mimetic hypothesis.” It has been concluded many times that music is not a “language,” at least as would be understood intellectually by the mind. However, music is now being looked at as a language of the body—a further development to how the German Romantics postulated their answers to the same questions.

Ritter thinks of the flow of music in relationship to the flows and interactions within the body as he deduces from his experiments with animal magnetism, and to and from humans and nature in general. Ritter attempts to work out a biological system of music in his fragments, which places his way of thinking in the pre-history of biosemiotics, and especially in the work of biologist, zoologist, and philosopher Jakob von Uexküll (1864-1944).⁴ Biosemiotics is a field combining semiotics and biology, looking at biological systems through the interpretation of signs and codes. Uexküll is considered the “starter and pioneer of the semiotic approach in biology in the twentieth century” (Kull 1). His research led to a very fundamental understanding that there are sign systems that embrace all living systems, offering for the first time a “theoretical biology” and an “experimental study of organisms’ behavior” (Kull 2). He did not distinguish between humans and animals in a hierarchy, as many scientist before him did, but rather addressed the influence of the inner world (*Innenwelt*) and the outer world (*Umwelt*) of each organism and species as harmonic, unified relationships. His use of music metaphors in *Bedeutungslehre* (1940) was unique because it allowed him to view relationships not only vertically, as with chords, but also horizontally over time, like a

⁴ Jakob von Uexküll’s most influential works include *Umwelt und Innenwelt der Tiere* (1909), *Theoretische Biologie* (1920), *Die Lebenslehre* (1930), *Streifzüge durch die Umwelten von Tieren und Menschen* (1934), *Niegeschaute Welten* (1936), and *Bedeutungslehre* (1940).

melody. According to Brett Buchanan, Uexküll differs from Darwin due to his melodic perspective. Rather than the “vertical model” of natural selection, Uexküll offers a “horizontal model,” examining how organisms behave and relate to things across their respective environments (Buchanan 8).

While Ritter does not address his system based on semiotics, he does think about the relationships between organisms and their environments—including the movement of music within these relationships. The binary opposition between inside and outside plays a key role in Ritter’s thought, similar to Novalis’ poetic investigations. However, Ritter’s approach is focused on the movement of the music to and from the body, which is directed not only by the movement of blood to and from the heart, but also has a life of its own, suggesting that music itself has its own consciousness. Ritter treats music as a living being within his system. However, the structure of Ritter’s fragments, namely, that the musical fragments are scattered throughout his collection, makes it difficult to see the connections without reconstructing them to bring his ideas together. This undermines the ‘incomplete perfection’ of the fragmentary style, but brings to light a suggested system of thought that has otherwise gone unnoticed in the literary (and scientific) scholarship—especially its connection to Hoffmann’s pseudonym and literary character, Johannes Kreisler.

Hoffmann’s descriptions of how music flows inside of and takes control over the body resemble what is known today as the “mimetic hypothesis.” Beginning with the mid- to late-1990s, specific attention was brought to the embodiment of music, and the role of the body in the construction of meaning. In his essay, “Embodying Music: Principles of the Mimetic Hypothesis” (2011), music theorist Arnie Cox begins with a

brief survey of the research that has been done on the “mimetic hypothesis,” which he describes as a hypothesis of “how music becomes internalized into the bodies and minds of listeners. (...) The initial premise of the hypothesis is that part of how we comprehend music is by way of a kind of physical empathy that involves imagining making the sounds we are listening to” (1). Music ‘invites’ bodily movement, so to speak—the most obvious examples include swaying and dancing, but these studies show how listeners even mimic the vocal shapes of the mouth when hearing a singer, or the movements of a bow striking a violin, for example. The primary purpose of Cox’s study is “to establish and clarify the essential role of the skeletal-motor system and its neurological representation in everyday music perception and conceptualization” (2). Rather than defining *mimesis* as referencing art’s imitation of life,

The mimetic hypothesis is much more concerned with the perceptual and cognitive processes whereby music gets into the flesh, blood, and minds of listeners. (...) There is little or no musical imagery that does not involve motor imagery—in other words, thinking about music involves imaging *doing* (making) music. (2)

Indeed, music gets into the blood, just as Ritter hypothesized in the early 19th century, but not as a result of iron in the blood. It has rather been proven to influence blood chemistry by way of neurological processes of the brain. As Cox explains:

Although these representations naturally include neural representations, it is easy to overlook the fact that they also include states and dynamics of blood chemistry and of the skeletal-motor system. Since it may seem strange to speak of blood and muscle *representations*, let us think of it in

the following way. We are biological entities—massively complex organisms comprised of numerous interacting systems—and our condition, or state, is continuously altered by our interactions with the environment. (4)

Examining the communication between biological entities and their environment is the key role of biosemiotics. Cox's approach then is in many ways a biosemiotic one which includes music, not as a working metaphor as in Jakob von Uexküll's work, nor as a physiological entity as in Johann Wilhelm Ritter's theory, but music's influence on human cognition and the response of the body. An additional part of this hypothesis that is important for the purpose of my project is that these bodily movements primarily occur unconsciously (at least, conscious involvement of the individual is not required for the movements to occur). Music, therefore, is somehow in communication with and has influence over the body (via the processing of the brain). From these examples in regard to musical meaning, and relating back to the ideas of the German Romantics, I argue that music therefore plays a role as a language of the body in Novalis' "Die Lehrlinge zu Sais," selected fragments and the "Appendix" to Ritter's *Fragmente aus dem Nachlasse eines jungen Physikers*, Hoffmann's *Kreisleriana* and *Lebensansichten des Katers Murr*, and Schumann's *Kreisleriana* Op. 16, to which the body also responds. However, because the Romantics do not fully understand how music has this effect over the body, it becomes a mysterious force (which becomes a representation of the uncanny in Hoffmann's texts) requiring further interdisciplinary investigation—and indeed, even still today.

Throughout this project, music takes on various forms—it is a metaphor for the song-like quality in Novalis’ universal language, *Poesie*, and can be seen in physical form in the *Klangfiguren*—in turn, for Novalis and Ritter it exposes an important relationship between sound vibrations and the earliest written languages. In contrast to the static, ancient hieroglyphs, the *Klangfiguren* represent a universal language that, according to Novalis and Ritter, is in movement and in a state of becoming. They imagine that this language is to be perceived first from inside of the body in the form of light. With this physical ‘embodiment’ of sound turned into light, music gains consciousness and enters the bloodstream in Ritter’s poetic, scientific fragments, and is translated into Hoffmann’s literary world in full and expanded form in his descriptions of musical blood and electricity, but without the scientific details. Finally, all of these words, which have absorbed the nature of music in the body reach Schumann, who translates them back into music along with the internalization of his own life experiences. Only those who have *read* first can appreciate the intricate connections between these works.

REFERENCES CITED

- Adorno, Theodor W. "Music and Language: A Fragment." *Quasi una Fantasia: Essays on Modern Music*. Trans. Rodney Livingstone. New York: Verso, 1998. 1-6. Print.
- Agawu, Kofi. "The Idea of Music and Language." *Music and Discourse: Semiotic Adventures in Romantic Music*. Oxford: Oxford University Press, 2009. 15-29. Print.
- Barkhoff, Jurgen. *Magnetische Fiktionen: Literarisierung des Mesmerismus in der Romantik*. Stuttgart and Weimar: Metzler, 1995. Print.
- Barthes, Roland. "From Science to Literature." *Literary Theories: A Reader and Guide*. Ed. Julian Wolfreys. New York: New York University Press, 1999. 24-29. Print.
- . "Rasch." *The Responsibility of Forms: Critical Essays on Music, Art, and Representation*. Trans. Richard Howard. New York: Hill and Wang, 1985. Print.
- . "The Death of the Author." *Image – Music – Text*. Trans. Stephen Heath. New York: Hill and Wang, 1977. 142-148. Print.
- Belaval, Yves. "Die Idee der Harmonie bei Leibniz." *Leibniz' Logik und Metaphysik*. Trans. E. Karge. Darmstadt: A. Heinekamp und Fr. Schupp, 1988. 561-586. Print.
- Benjamin, Walter. *Ursprung des deutschen Trauerspiels*. Frankfurt am Main: Suhrkamp Verlag, 1963. Print.
- Bonds, Mark Evan. "Idealism and the Aesthetic of Instrumental Music at the Turn of the Nineteenth Century." *Journal of the American Musicological Society* 50 (1997): 387-420. Print.
- Bowie, Andrew. *Aesthetics and Subjectivity: from Kant to Nietzsche*. Manchester: Manchester University Press, 2003. Print.
- Buchanan, Brett. *Onto-Ethologies: The Animal Environments of Uexküll, Heidegger, Merleau-Ponty, and Deleuze*. Albany: State University of New York, 2008. Print.
- Bunia, Remigius. *Romantischer Rationalismus: Zu Wissenschaft, Politik und Religion bei Novalis*. Paderborn: Ferdinand Schöningh, 2013. Print.
- Carr, Herbert Wildon. *The Monadology of Leibniz*. Los Angeles: University of Southern California School of Philosophy, 1930. Print.
- Chatman, Seymour. *Story and Discourse: Narrative Structure in Fiction and Film*. Ithaca and London: Cornell University Press, 1978. Print.

- Chernaik, Judith. "Schumann's Doppelgängers: Florestan and Eusebius Revisited." *Musical Times* 152 (Winter 2011): 45-55. Print.
- Christensen, Dan Ch. "The Ørsted-Ritter Partnership and the Birth of Romantic Natural Philosophy." *Annals of Science* 52 (1995). 153-185. Print.
- Cox, Arnie. "Embodying Music: Principles of the Mimetic Hypothesis." *Society for Music Theory* 17:2 (July 2011). 1-24. Print.
- Culler, Jonathan. *Ferdinand de Saussure*. Ithaca: Cornell University Press, 1986. Print.
- Daverio, John. *Robert Schumann: Herald of a 'New Poetic Age'*. New York: Oxford University Press, 1997. Print.
- Deahl, Lora. "Robert Schumann's *Kreisleriana* and Double Novel Structure." *International Journal of Musicology*. Vol. 5 (1996). 131-145. Print.
- Dietzsch, Steffen. "Marginalien zur Leibniz-Rezeption in der Jenaer Romantik." *Beträge zur Wirkungs- und Rezeptionsgeschichte von Gottfried Wilhelm Leibniz*. Stuttgart: Franz Steiner Verlag, 1986. Print.
- Dill, Heinz J. "Romantic Irony in the Works of Robert Schumann." *The Musical Quarterly* 73:2 (1989). 172-195. Print.
- Domart, M.D., Yves and Emmanuel Garet, M.D. "Lichtenberg Figures Due to a Lightning Strike." *New England Journal of Medicine* 343:21 (November 23, 2000). 1536. Print.
- Eco, Umberto. *Serendipities: Language & Lunacy*. Trans. William Weaver. New York: Columbia University, 1998. Print.
- Erlmann, Veit. "Hearing Oneself Hear: The Autoresonant Self and the Expansion of the Audible." *Reason and Resonance: A History of Modern Aurality*. New York: Zone Books, 2014. 185-216. Print.
- . "Water, Sex, Noise: Early German Romanticism and the Metaphysics of Listening." *Reason and Resonance: A History of Modern Aurality*. New York: Zone Books, 2014. 151-183. Print.
- "Ernst Chladni." *Monoskop*. https://monoskop.org/Ernst_Chladni. Accessed April 2017.
- Gaderer, Rupert. *Poetik der Technik: Elektrizität und Optik bei ETA Hoffmann*. Freiburg: Rombach Verlag KG, 2009. Print.
- Goethe, Johann Wolfgang von. *Sämmtliche Werke: Vollständig in zwölf Bänden*. Bd. 12. Herisau: Litteratur-Comptoir, 1838. 365. Print.

- Hamilton, John T. *Music, Madness, and the Unworking of Language*. New York: Columbia University Press, 2008. Print.
- Heero, Aigi. "Poesie der Musik: zur Intermedialität in Robert Schumanns frühen Schriften." *Trames* 11:1 (2007): 15-31. Print.
- Heilborn, Ernst. *Novalis, der Romantiker*. Berlin: G. Reimer, 1901. Print.
- Herder, Johann Gottfried von. "Abhandlung über den Ursprung der Sprache." *Werke in zehn Bänden*. Bd. 1. Hrg. Ulrich Gaier. Frankfurt am Main: Deutscher Klassiker Verlag, 1993. 697-810. Print.
- . "Älteste Urkunde des Menschengeschlechts." *Werke in zehn Bänden*. Bd. 5. Hrg. Rudolf Smend. Frankfurt am Main: Deutscher Klassiker Verlag, 1993. 179-488. Print.
- Hertrich, Ernst. "Vorwort." *Kreisleriana* Op. 16. München: G. Henle Verlag, 1977. Print.
- Hodkinson, James. "The Cosmic-Symphonic: Novalis, Music and Universal Discourse." *Music and Literature in German Romanticism*. Ed. Siobhán Donovan and Robin Elliott. Rochester, NY: Camden House, 2004. 13-26. Print.
- Hoeckner, Berthold. "Schumann and Romantic Distance." *Journal of the American Musicological Society*. 50.1 (Spring 1997): 55-132. Print.
- Hoffmann, E. T. A. *Fantasie- und Nachtstücke, Sämtliche Werke*. Bd. 2. Ed. Hartmut Steinecke and Wulf Segebrecht. München: Winkler Verlag, 1960. Print.
- . *E. T. A. Hoffmann's Musical Writings: Kreisleriana, The Poet and the Composer, Music Criticism*. Trans. Martyn Clarke. Ed. David Charlton. Cambridge: Cambridge University Press, 1989. Print.
- Jakobson, Roman. "On Linguistic Aspects of Translation." *Translation Studies Reader*. Ed. R. A. Bower. London & New York: Routledge, 2000. 113-118. Print.
- Kautsky, Catherine. "Music, Magic, and Madness: Tales of Hoffmann, Schumann and Kreisler." *International Piano* (May/June 2006): 44-49. Print.
- Kneller, Jane. "Sociability and the Conduct of Philosophy: What We Can Learn from Early German Romanticism." *The Relevance of Romanticism: Essays on German Romantic Philosophy*. Ed. Dalia Nassar. New York: Oxford University Press, 2014. 110-126. Print.
- Kollak, Ingrid. *Literatur und Hypnose: Der Mesmerismus und sein Einfluß auf die Literatur des 19. Jahrhunderts*. New York: Campus Verlag, 1997. Print.

- Krebs, Harald. *Fantasy Pieces: Metrical Dissonance in the Music of Robert Schumann*. New York: Oxford University Press, 1999. Print.
- Kull, Kalevi. "Jacob von Uexküll: An introduction." *Semiotica* 134-1/4: (2001). 1-59. Print.
- Landgraf, Edgar. "Comprehending Romantic Incomprehensibility. A Systems-Theoretical Perspective on Early German Romanticism." *MLV* 121:3 (April 2006): 592-616. Print.
- Lancereau, Daniel. "Novalis und Leibniz." *Novalis und die Wissenschaften*. Ed. Herbert Uerlings. Tübingen: Max Niemeyer, 1997. 169-191. Print.
- Le Guin, Elisabeth. *Boccherini's Body: An Essay in Carnal Musicology*. Los Angeles: University of California Press, 2006. Print.
- Lehrdahl, Fred and Ray Jackendoff. *A Generative Theory of Tonal Music*. Cambridge, MA: MIT Press, 1983. Print.
- Leibniz, Gottfried W, and Artur Buchenau. *Die Theodizee*. Hamburg: F. Meiner, 1968. Print.
- . "Die 'Monadologie'." *Hauptschriften zur Grundlegung der Philosophie*. Bd. 2. Trans. Artur Buchenau. Ed. Ernst Cassirer. Hamburg: F. Meiner, 1966. Print.
- Leisinger, Ulrich. *Leibniz-Reflexe in der deutschen Musiktheorie des 18. Jahrhunderts*. Würzburg: Königshausen & Neumann, 1994. Print.
- Lidov, David. *Is Language a Music? Writings on Musical Form and Signification*. Bloomington and Indianapolis: Indiana University Press, 2005. Print.
- Mähl, Hans-Joachim. *Die Idee des goldenen Zeitalters im Werk des Novalis*. Heidelberg: Carl Winter Universitätsverlag, 1965. Print.
- Martin, James L. "Schumann, Hoffmann, and *Kreisleriana*." *Clavier* (July/August 1991): 20-25. Print.
- Menke, Bettine. "Töne-Hören." *Poetologien des Wissens um 1800*. München: Fink, 1999. 69-95. Print.
- Moßburger, Hubert. "'Inner Voices' and 'Deep Combinations': Robert Schumann's Approach to Romantic Polyphony." *Ohne Worte: Vocality and Instrumentality in 19th Century Music*. Leuven: Leuven University Press, 2014. 41-63. Print.
- Nattiez, Jean-Jacques. *Music and Discourse: Toward a Semiology of Music*. Trans. Carolyn Abbate. Princeton: Princeton University Press, 1990. Print.

- . *The Battle of Chronos and Orpheus: Essays in Applied Musical Semiology*. Oxford: Oxford University Press, 2004. Print.
- Naumann, Barbara. *Musikalisches Ideen Instrument: Das Musikalische in Poetik und Sprachtheorie der Frühromantik*. Stuttgart: Metzler, 1990. Print.
- Negus, Kenneth. *E.T.A. Hoffmann's Other World: The Romantic Author and his "New Mythology"*. Philadelphia: University of Pennsylvania Press, 1965. Print.
- Niecks, Frederick. *Programme Music in the Last Four Centuries: A Contribution to the History of Musical Expression*. London: Novello and Company, Ltd., n. d. Print.
- Novalis. *Notes for a Romantic Encyclopedia: Das Allgemeine Brouillon*. Trans. and Ed. David W. Wood. Albany: University of New York Press, 2007. Print.
- . *Novalis: Briefe und Dokumente*. Ed. Ewald Wasmuth, vol 4. Heidelberg: Lambert Schneider, 1954. Print.
- . *Novalis Schriften*. Bd. 1-5. Ed. Paul Kluckhohn and Richard Samuel. Stuttgart: W. Kohlhammer, 1960. Print.
- . *Novalis Werke*. Ed. Gerhard Schulz. München: Beck, 1969. Print.
- . *The Novices of Sais*. Trans. Ralph Manheim. Brooklyn: Archipelago Books, 2005. Print.
- Orlov, Henry. "Toward a Semiotics of Music." *The Sign in Music and Literature*. Ed. Wendy Steiner. Austin: University of Texas Press, 1981. 131-137. Print.
- Ørsted, Hans Christian. "Versuche über die Klangfiguren." *Journal für die Chemie und Physik* 8.2 (1809): 223-254. Print.
- Reissmann, August. "Symphonie von Hector Berlioz." *Robert Schumann sein Leben und seine Werke*. Berlin: J. Guttentag, 1871. Print.
- Ritter, Johann Wilhelm. *Fragmente aus dem Nachlasse eines jungen Physikers*. In: *Key Texts of Johann Wilhelm Ritter (1776-1810) on the Science and Art of Nature*. Trans. and Ed. Jocelyn Holland. Leiden and Boston: Koninklijke Brill NV, 2010. 122-507. Print.
- . "Text and Translation: Prologue." In: *Key Texts of Johann Wilhelm Ritter (1776-1810) on the Science and Art of Nature*. Trans. and Ed. Jocelyn Holland. Leiden and Boston: Koninklijke Brill NV, 2010. 20-121. Print.
- Robert und Clara Schumann: Briefe einer Liebe*. Hrg. Hanns-Josef Ortheil. Königstein: Athenäum Verlag GmbH, 1982. Print.

- Rosen, Charles. *The Romantic Generation*. Cambridge: Harvard University Press, 1995. Print.
- Sams, Eric. "The Schumann Ciphers." *The Musical Times* 107:1479 (May 1966): 392-400. Print.
- Saussure, Ferdinand de. *Course in General Linguistics*. Trans. Roy Harris. Ed. Charles Bally and Albert Reidlinger. La Salle, Illinois: Open Court Publishing Company, 1986. Print.
- Schafer, R. Murray. *E.T.A. Hoffmann and Music*. Toronto and Buffalo: University of Toronto Press, 1975. Print.
- Schelling, Friedrich Wilhelm Joseph von. *Philosophie der Kunst. Sämtliche Werke*. Bd. 5. Ed. K. F. A. Schelling. Stuttgart and Augsburg: J. G. Cotta, 1856-61. Print.
- Schiller, Friedrich. "Das verschleierte Bild zu Sais." *Werke und Briefe in zwölf Bänden*. Bd. 1. Hrg. Georg Kurscheidt. Frankfurt am Main: Deutscher Klassiker Verlag, 1992. 242-244. Print.
- Schlegel, A. W. *Kritische Ausgabe der Vorlesungen*. Bd. I. Hrg. Ernst Behler. Paderborn: Ferdinand Schöningh, 1989- . Print.
- Schlegel, Friedrich von. *Kritische Friedrich-Schlegel-Ausgabe*. Bd. 12. Hrg. Ernst Behler, Jean Jacques Anstett, and Hans Eichner. München: F. Schöningh, 1958. Print.
- Schleiermacher, Daniel Ernst. *Kritische Gesamtausgabe*. Bd. 2. Hrg. Ulrich Barth, Konrad Cramer, Hermann Fischer, Günter Meckenstock, and Kurt-Viktor Selge. Berlin: Walter de Gruyter, 1980. Print.
- Schmitz-Emans, Monika. "Magnetische Phantasien: Zur Bedeutung des Mesmerismus für Autoren der Romantik." *Der Deutschunterricht* 57.3 (2005): 55-62. Print.
- Schocher, Christian Gotthold. "Soll die Rede auf immer ein dunkler Gesang bleiben, und können ihre Arten, Gänge und Beugungen nicht anschaulich gemacht, und nach Art der Tonkunst gezeichnet werden?" Leipzig, 1791. Print.
- Schumann, Clara and Robert. *Briefwechsel: Kritische Gesamtausgabe*. Bd. 1. Hrg. Eva Weissweiler. Frankfurt: Störmfeld, 1984-2001. Print.
- Schumann, Robert. *Aus Robert Schumanns Briefen und Schriften*. Hrg. Richard Münnich. Weimar: Gustav Kiepenheuer Verlag, 1956. Print.
- . *Robert Schumanns Briefe – Neue Folge*. Hrg. Friedrich Gustav Jansen. Leipzig: Breitkopf und Härtel, 1886. Print.

- . *Ein Quellenwerk über sein Leben und Schaffen*. Bd. 1. Hrg. Georg Eismann. Leipzig: VEB Breitkopf & Härtel, 1956. Print.
- . *Gesammelte Schriften über Musik und Musiker*. Bd. 1-2. Hrg. Martin Kreisig. Leipzig: Breitkopf & Härtel, 1914. Print.
- . *Jugendbriefe*. Hrg. Clara Schumann. Leipzig: Breitkopf & Härtel, 1886. Print.
- . *Kreisleriana*, Op. 16. Ed. Ernst Herttrich. Munich: Henle, 2004. Print.
- . *Tagebücher*. Bd. I-II. Hrg. Georg Eismann. Leipzig: VEB Deutscher Verlag für Musik, 1971. Print.
- Scruton, Roger. "The Semiology of Music." *The Politics of Culture and Other Essays*. Manchester: Carcanet Press, 1981. 75-79. Print.
- Shlain, Leonard. *Art & Physics: Parallel Visions in Space, Time & Light*. New York: HarperCollins Publishers Inc., 1991. Print.
- Smith, Alexis B. "Ritter's Musical Blood Flow Through Hoffmann's Kreisler." *The Early History of Embodied Cognition 1740-1920: The Lebenskraft-Debate and Radical Reality in German (Medical) Science, Music, and Literature*. Ed. John A. McCarthy, Stephanie Hilger, Heather Sullivan, and Nicholas Saul. Leiden & New York: Brill|Rodopi, 2016. 145-162. Print.
- Smith, John H. "Leibniz Reception around 1800: Monadic Vitalism and Aesthetic Harmony." *Religion, Reason, and Culture in the Age of Goethe*. Ed. Elisabeth Krimmer and Patricia Anne Simpson. Rochester, New York: Camden House, 2013. Print.
- Specht, Benjamin. *Physik als Kunst: Die Poetisierung der Elektrizität um 1800*. Berlin: De Gruyter, 2010. Print.
- Strässle, Thomas. "'Das Hören ist ein Sehen von und durch innen': Johann Wilhelm Ritter and the Aesthetics of Music." *Music and Literature in German Romanticism*. Eds. Siobhán Donovan and Robin Elliott. Rochester: Boydell & Brewer, 2004. 27-42. Print.
- . "Johannes Kreisler im Dialog mit einem 'geistreichen Physiker': Zu E.T.A. Hoffmanns Auseinandersetzung mit Johann Wilhelm Ritter." *E.T.A. Hoffmann-Jahrbuch* 10 (2002): 96-119. Print.
- Sünner, Rüdiger. "'Atmendes Denken': Zum spirituellen Weltbild von Novalis." *Atlanta* 7 (July 2002). <http://www.ruedigersuenner.de/novalis1.html>. Accessed May 2017.
- The Complete Correspondence of Clara and Robert Schumann – Volume I*. Trans. Hildegard Fritsch and Ronald L. Crawford. Ed. Eva Weissweiler. New York: Peter Lang Publishing, Inc., 1994. Print.

Uexküll, Jacob von. *Streifzüge durch die Umwelten von Tieren und Menschen: Ein Bilderbuch unsichtbarer Welten. Bedeutungslehre*. Frankfurt am Main: S. Fischer Verlag GmbH, 1970. Print.

Wackenroder, Wilhelm Heinrich. *Vorlesungen über Schöne Literatur und Kunst. Erster Teil: Die Kunstlehre (1801-1802)*. In: *Sämtliche Werke und Briefe*. Bd. 1. Ed. Silvio Vietta and Richard Littlejohns. Heidelberg: Carl Winter Universitätsverlag, 1991. Print.

Wetzels, Walter D. "Aspects of Natural Science in German Romanticism." *Studies in Romanticism* 10: 1 (Winter 1971): 44-59. Print.

Zielinski, Siegfried. "Electrification, Tele-Writing, Seeing Close Up: Johann Wilhelm Ritter, Joseph Chudy, and Jan Evangelista Purkyne." *Deep Time of the Media: Toward an Archaeology of Hearing and Seeing by Technical Means*. Trans. Gloria Custance. Cambridge: The MIT Press, 2006. 159-203. Print.