Unlocking the Pedagogical Potential of Alfred Uhl’s 48 Etüden für Klarinette: a portfolio of recorded performances and exegesis.

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Table of Contents

Tables ........................................................................................................ iv
Figures ....................................................................................................... iv
Abstract .................................................................................................... v
Declaration ................................................................................................. vi
Acknowledgement ...................................................................................... vii
Introduction ................................................................................................ 1

PART I. Who and Why .................................................................................. 7

Chapter 1 Alfred Uhl .................................................................................... 7
1.1 Issues and Perspectives ....................................................................... 7
1.2 An introduction to the Clarinet and its repertoire ............................... 13
1.3 Clarinet Works of Uhl’s early period ................................................... 17

PART II. What ................................................................................................ 19

Chapter 2 The Etüden ................................................................------------- 19
2.1 Specific Training of Clarinet Performance ........................................... 19
2.2 Content versus technical detail .......................................................... 23
2.3 A Pedagogical Framework .................................................................. 24
2.4 Practice in Action ................................................................................ 27
2.5 Motivation ............................................................................................ 28
2.6 Deliberate Practice .............................................................................. 30
2.7 Practice Design ................................................................................... 32

PART III. How and to Whom ....................................................................... 34

Chapter 3 Practical Application ............................................................... 34
3.1 Tagg’s Communication Model ............................................................. 34
3.2 Musical structure ................................................................................ 37
3.3 An Application of Tagg’s Sign Typology .............................................. 39
3.4 Practical Examples .............................................................................. 40
3.4.1 Etude no. 1 .................................................................................... 40
3.4.2 Etude no. 2 .................................................................................... 46
3.4.3 Etude no. 3 .................................................................................... 48
3.4.4 Etude no. 4 .................................................................................... 52
3.4.5 Etude no. 5 .................................................................................... 54
3.4.6 Repertoire Case Study

Conclusion

Appendix A CD Recordings Track Listings

Appendix B General Playing Issues
B.1 Finger Biomechanics and Regulation
B.2 Fingering Choices
B.3 Alternative Fingerings
B.4 Legato
B.5 Oral Tract Fluctuations
B.6 Intonation
B.7 Articulation

Appendix C Editions
C.1 von *Fünf frohe Weisen für den Wiener Weihnachtsmarkt*, No. 2 Kinderlied
C.2 von *Fünf frohe Weisen für den Wiener Weihnachtsmarkt*, No. 3 Hirtenmusik (Weinachtspastorale)
C.3 *Humoreske*
C.4 *Improvisation über altdeutsche Volksweisen*
C.5 *Serenade* für 12 Blasinstrumente und Kontrabaß
C.6 *Septett* in cis moll

Bibliography
Tables
Table 1 - Extract of Index of Studies with reference to technical elements ..........................26
Table 2 - Tagg’s Sign Typology Overview ...........................................................................38
Table 3 - Exercise Goals ........................................................................................................46
Table 4 - Key movement durations .....................................................................................72
Table 5 - Frequency ratios and expected virtual pitches of selected intervals ....................79

Figures
Figure 1 - Johann Ridinger’s Clarinettist .............................................................................16
Figure 2 - Leopold Wlach ..................................................................................................18
Figure 3 - Figural model of an instructional theory of practicing ......................................27
Figure 4 - Variance in music performance accounted for by deliberate practice .............31
Figure 5 - Tagg’s Communication Model ..........................................................................36
Figure 6 - Uhl’s chimes ......................................................................................................39
Figure 7 - Episodic markers ...............................................................................................40
Figure 8 - Uhl no.1 Legato .................................................................................................41
Figure 9 - Uhl no.1 opening fingerings .............................................................................41
Figure 10 - Etude no.1 annotations ..................................................................................42
Figure 11 - Alternative G4 ...............................................................................................42
Figure 12 - Registers of the Clarinet ................................................................................43
Figure 13 - Ab5 and Bb5 fingerings ..................................................................................45
Figure 14 - Interval legato exercise ..................................................................................45
Figure 15 - Etude no. 2 ....................................................................................................47
Figure 16 - Etude no. 3 ....................................................................................................48
Figure 17 - Joining tones ..................................................................................................49
Figure 18 - Etude no. 3 Rhythmic exercises ..................................................................50
Figure 19 - Slurred octaves ..............................................................................................51
Figure 20 - Overtone exercise ..........................................................................................51
Figure 21 - Contrary finger motions ................................................................................51
Figure 22 - Etude no. 4 ....................................................................................................52
Figure 23 - Rhythmic tonguing .......................................................................................52
Figure 24 - Jettel’s staccato exercises .............................................................................53
Figure 25 - Etude no. 5 ....................................................................................................54
Figure 26 - Sequential exercises .....................................................................................55
Figure 27 - Karl Scheit with lute .....................................................................................56
Figure 28 - Karl Scheit with Alfred Uhl ..........................................................................57
Figure 29 - Carl Dobrauz ...............................................................................................58
Figure 30 - Dobrauz’s Lute Repertoire List .....................................................................59
Figure 31 - Viola d’ amore ...............................................................................................60
Figure 32 - Dobrauz Signature .........................................................................................61
Figure 33 - Fingering and note transitions on the flute ......................................................72
Figure 34 - Mean finger forces in comparison to experience in clarinet playing ..............73
Figure 35 - Process Model for fingering decision-making ...............................................75
Figure 36 - Alternative fingering for Bb4 .........................................................................76
Figure 37 - Study for the alternative fingering of Bb4 ......................................................76
Figure 38 - Just intonation exercise ..................................................................................80
Figure 39 - A Chart of wind articulations ........................................................................80
Figure 40 - Oscilloscope staccato traces .........................................................................81
Figure 41 - Staccato exercise ............................................................................................82
Abstract

The project aims to create a definitive set of performances of Alfred Uhl’s *48 Etüden für Klarinette* (1938), one that sheds new light on the nexus between the composer’s aesthetic and philosophical beliefs, and the ways in which the studies – both individually and collectively – impact directly on the performer’s technical command, analytical acumen and musical development. The study takes the form of a set of CD recordings of the *48 Etüden* supplemented by additional works by Uhl that demonstrate the ways in which the etudes unlock the technical, interpretative and expressive potential of the performer. The recordings are supported by a 15,000 word exegesis that illuminates the research methodology undertaken, and its potential future applications.
Declaration

I certify that this work contains no material which has been accepted for the award of any other degree or diploma in my name in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. In addition, I certify that no part of this work will, in the future, be used in a submission in my name for any other degree or diploma in any university or other tertiary institution without the prior approval of the University of Adelaide and where applicable, any partner institution responsible for the joint award of this degree.

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Peter Handsworth  ________________________________
Acknowledgement

O the depth of the riches both of the wisdom and knowledge of God!
how unsearchable are his judgments, and his ways past finding out!

For who hath known the mind of the Lord? or who hath been his counsellor?

Or who hath first given to him, and it shall be recompensed unto him again?

For of him, and through him, and to him, are all things: to whom be glory for ever. Amen.

Romans 11:33-36 KJV

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Many thanks to Peter Uhl for his permission to use his father’s autographs for this research and to the team at the National Library of Austria who made it possible to locate and acquire scores and other relevant primary sources.

Special indebtedness to all those friends, students and family who have helped challenge me to become a better me through the inevitable trials and successes that such an undertaking afforded. Particular thanks also for the many hours of generous support given by my associate artists and sound recording personnel.

Finally to my astonishingly resilient and ever-loving wife Miriam - celebration for the end of a season and the beginning of a new!
Introduction

... in the end, after walking all ways, stay true to one’s own individuality and calling.

Alfred Uhl

In all that we strive for, and common to us all, is our individuality. As nature teaches us, our differences make our interdependent world adaptive and progressive. Without individual difference synthesis and change are not possible.

The 48 Etüden für Klarinette of Alfred Uhl (1909-1992) provide at once the opportunity to develop performance skills that communicate accurate sonic representations of the text and simultaneously related musical content that may project the unique individuality of the performance and performer. One that fosters both an acknowledgement of what has gone before and the inspiration of what might be. This exegesis offers four CD recordings of performances of the Etudes, underpinned in the current dissertation by a new pedagogical approach to the rehearsal and performance of them – an approach that has potential applications beyond Uhl’s repertoire.

Composed in 1938, the Etudes exist in two contrasting forms. They are: (i) the text and its literal denotative meanings and (ii) what the text stands for in its full context and its related connotative meanings. The ‘physiology’ of these forms can be understood in terms of Phillip Tagg’s definition of music:

   music [is] that form of inter-human communication in which humanly organised non-verbal sound can, following culturally specific conventions, carry meaning relating to emotional, gestural, tactile, kinetic, spatial and prosodic patterns of cognition.²

‘Humanely organized non-verbal sound’ has for some time found itself in the physical form of musical notation. From the time musical notation emerged in western music its primary purpose has been to graphically encode aspects of musical structure (melodic line, chordal spacing and harmonic progression) in temporal terms of rhythmic profile and periodic placement.³ To the trained musician, musical notation provides a set of performance instructions.

Therefore, in one sense the Etudes exist in physical form as a score composed by Alfred Uhl and published by Schott. As a set of musical instructions, the etudes intend to provide a coherent and comprehensive set of studies that serve to establish and extend the clarinetist’s technical and musical capabilities. This was Uhl’s contribution to the clarinet repertoire in response to the ever-greater technical and musical demands placed on instrumentalists in the wake of the extraordinary socio-political upheaval and artistic development in Europe and the resultant orchestral

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¹ Alexander Witeschnik, Alfred Uhl (Wien: Elisabeth Laïte, 1966), 7 [current author’s translation].
² Philip Tagg, Music’s Meanings: A Modern Musicology for Non-Musos (Mass Media’s Scholar’s Press, 2012), 44.
³ Tagg, Music’s Meanings, 122.
repertoire of the early twentieth century. As Uhl notes in his postscript of the first edition:

These studies are intended to complement the existing teaching material for the clarinet, making the budding clarinettist familiar with the difficulties peculiar to modern instrumental music.¹

For clarinetists they represent, prima facie, an identical set of musical instructions defined by a number of sonic parameters. These include duration, rhythm, pitch, volume and timbre. In executing these notated ‘instructions’, it is possible to scientifically test and measure the realisation of these musical parameters with devices such as metronomes, tuning devices and oscilloscopes. In this way it is theoretically possible to procure an interpretation that in a technical sense accurately reflects in an objective way the musical notation. Theoretically good, but in reality human intervention changes everything. This seemingly stable set of instructions will produce anything but identical interpretations from performer to performer. Every performance by every performer allows the material to transcend the mundanely mechanical reconstruction of the text into an aesthetic expression of past, present and future. The interdependence of these cause and effect relationships can be neatly summarized by the pithy and well-known Chinese proverb:

Study the past if you would define the future.⁵

Uhl wrote the Etudes with the understanding that Leopold Wlach would contribute accompanying written explanations addressing the numerous problems focused upon in the Etudes. This did not eventuate and as a consequence there is a missing link to the learning of the Etudes. Two clarinet pedagogues, Michel Lurie and Reiner Wehle, have taken up this question of which technical issues are addressed in the Etudes and how they might be approached. The two complementary approaches are distinct from another in taking qualitative and quantitative standpoints respectively. Though both authors underscore the musical importance of the Etudes, neither gives specific direction as to how their musical nature can be identified, developed and assimilated by the player.

The aim of this study is to derive a critical and analytical interpretation that can inform an effective pedagogical approach to the Etudes. An approach that integrates Uhl’s musical and Wlach’s technical inputs and synthesises a holistic solution to the missing link. Understanding the musical meaning embedded in the literal text requires an analysis of the text’s connotative relationships with Uhl, the life around him and their historical origins. Given that certain elements of Uhl’s compositions stand for something other than and in addition to any denotative meaning, Chandler’s explanation of the concept of textual codes is helpful in grasping the network of connections that exist in an analysis of the 48 Etüden:

Every text is a system of signs organised according to codes and subcodes, which reflect certain values, attitudes, beliefs, assumptions and practices. Codes transcend single texts, linking them together in an interpretive framework, which is used by their

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¹ Alfred Uhl, 48 Etüden für Klarinette (Mainz: Schott, 1940)

⁵ Confucius (551 BC–479 BC)
producers and interpreters. In creating texts we select and combine signs in relation to the codes with which we are familiar. Codes help to simplify phenomena in order to make it easier to communicate experiences. In reading texts, we interpret signs with reference to what seemed to be appropriate codes. This helps to limit their possible meanings. Usually the appropriate codes are obvious, over determined by all sorts of contextual cues. The medium employed clearly influences the choice of codes. In this sense we routinely ‘judge a book by its cover’.  

Musical performance and its reception of it by an audience is a result of numerous semiotic interpretations and reinterpretations, known as semiosis. Each and every interpretation adds to a bank of interpretations that sits within a socio-cultural field encompassing the composer, performer, the score and the instrument itself. Just as an individual mushroom emerges from the earth as a seemingly independent entity it is inextricably connected to other seeming independent mushrooms through a web of mycelium. Similarly, Uhl’s 48 Etüden are a manifestation of a larger interconnected web of music, culture and society.

Musicologists have attempted to understand music in terms of its syntax, semantics and pragmatics often drawing on structure-focused linguistic models. In questioning traditional musicology, Tagg contends that notation’s privileged position in music education has focused our attention on the poietic rather than the aesthetic, that far greater attention is given to the ‘ability to compose, arrange or perform music’ than ‘the ability to recall, recognise and distinguish between musical sounds’. This he believes has undermined our competency in understanding the ‘culturally specific connotations and social functions’ of musical sounds. Tagg goes on to suggest that:

musicological textbooks still tend to deal more with composers, their subjectivity, their intentions and their works, the latter overwhelmingly equated with the poietically focused medium of notation, than with the effects, uses and meanings of that music from the viewpoint of the usually much greater number of individuals who make up the music’s audiences.

The business of ‘our’ music provides common ground upon which the music industry and all its participants, past and present, create a common multifarious social culture. The social conditions that define a common culture also simultaneously provide the means for personal differentiation. If Maslow was right, then herein lies the opportunity for acts of self-actualization, our highest ‘need’:

A musician must make music, an artist must paint, a poet must write, if he is to be ultimately happy. What a man can be, he must be. This need we may call self-actualization.

Anthony Kronman also identifies this opportunity through his emphasis in the value of studying the humanities, in that it

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forces an engagement with intimate questions of meaning and touches on matters of identity and ultimate concern.\textsuperscript{10}

Importantly, Kronman promotes secular humanism’s assumptions that in sharing a common human condition pluralism is compatible with a common human nature and a variety of paths to fulfilment\textsuperscript{11}. In this context, unlocking the pedagogical potential of Uhl’s \textit{48 Etüden} provides an opportunity to explore the studies from a number of perspectives through the current author’s own contemporary context, to revitalize and bring new life to Uhl’s philosophy and music in the now. The outcomes of these endeavours can be heard on the four CD recordings that form the core of this performance-based exegesis.

Alfred Uhl chose to identify and differentiate himself in a unique way within the context of his place and time. Those that come to his music can, within in their own place and time, take something from his music and what it stands for. The research examines the \textit{48 Etüden} against the following artistic credo by Uhl:

\begin{quote}
The creation of art is nothing other than to go along old paths again for the first time and to fill old forms again with new spirit. Therefore, in music, the tone system or form can never be what is primarily ‘new’. What is ‘new’ is the human and what he has to say.\textsuperscript{12}
\end{quote}

In order to explore the ways in which the Etudes articulate the above, and in turn to shed light on the benefits to the performer of acquiring a deeper understanding of the aesthetic and philosophical outlook embedded in the credo, the research is modelled on Tagg’s pragmatic methodology. According to Tagg, performance-based research should aim to establish ‘why and how is who communicating what to whom and with what effect?’\textsuperscript{13} Tagg’s ‘why, how and whom’ forms the basis of the current study’s tripartite conceptual framework and methodology, as outlined below.

\textit{Who and Why?} The musical inertia of Uhl’s life and aesthetic are examined in the context of the dialectic between conservative and Modernist orthodoxy prevalent in Vienna at the dawn of the twentieth century. This is done in the belief that in order to unlock the full potential embedded in the etudes one needs to acquire a full understanding of the dynamic between the composer’s resolute neo-classicism and modernism’s search for the new, and his motivations for articulating that stance in the etudes. As the vehicle for Uhl’s artistic and pragmatic aims, the clarinet’s relationship to the composer is examined as an introduction to its connective role in the relations between composer, text and performer.

\textit{What?} The technical and musical challenges presented by the \textit{48 Etüden} are highlighted by a documentation of the approach to performance practice, as represented in a discussion of six case studies (see Practical Examples 3.4).

\begin{thebibliography}{9}
\bibitem{KronmanEtAl} Anthony T. Kronman, \textit{Education’s End Why Our Colleges and Universities Have Given up on the Meaning of Life} (Yale University Press, 2008), 69.
\bibitem{Kronman} Kronman, \textit{Education’s End}, 76-79.
\end{thebibliography}
Pedagogical approaches to the etudes documented by Lurie and Wehle form a basis upon which a learning model driven by motivated specific practice regimes will be developed.

How and to Whom? The Etudes are shown to serve as an ideal vehicle through which the clarinet performer can develop a more sophisticated understanding of how notions of context, technique, musicianship, training, performance and reception are interdependently related. To that end, Tagg's sociologically informed semiotic approach, which champions the connections between composer, text, performer and audience, will be shown to be of great value in unlocking the pedagogical potential of Uhl's 48 Etüden and by extension other selected works.

With the above framework in mind, the exegesis comprises four CD recordings, underpinned in this dissertation by three chapters (arranged under three main headings), and supplemented with extensive appendices that further contextualise the research undertaken.

Chapter One offers a biographical background to Uhl, and concludes with an overview of his works for clarinet. Chapter Two examines the Etude's aesthetic aims and develops a pedagogical approach that considers practice design, motivation and deliberate practice. Beginning with Tagg's communication model, Chapter Three provides a pedagogical analysis of selected etudes and a repertoire case study. These examinations are used to exemplify the current author's practice strategies and highlight the way in which the Etudes unlock pedagogical benefits through a structured approach to the particular technical requirements posed by the individual Etudes. Uhl's concern with musical content in the Etudes is addressed both directly in each study in the context of his background and aesthetic, and, also through the performance of works composed for clarinet presented on CD3 and CD4.

The appendices dealing with the clarinet and general playing issues are salient to a necessarily holistic view of Uhl's Etudes. Appendices B, C, and D examine the history of the clarinet as mediated through general performance and pedagogical considerations, including finger biometrics, fingerings, and oral tract fluctuations. Appendix E offers an overview of the editorial considerations undertaken by the current author, which culminate in the creation of transcribed editions. The transcribed editions of unpublished manuscripts were made from autographs of selected works located in the Austrian National Library. For purposes of practicality and legibility the autographs have been transcribed and edited into Sibelius notation software. Individual parts, edited as required, were subsequently produced for the performances and recordings.

CD1 and CD2 contain the 48 Etüden. These edited recordings were made over the duration of the project and divided into a number of recording sessions comprising 6 – 12 etudes per session. For each etude the current author aimed to perform the etude at the marked tempo. These recordings were undertaken to reflect the project's aims – that is, they demonstrate the interdependent relationship between the musical and technical content of Uhl's writing.

CD3 and CD4 contain a majority of Uhl's chamber and solo works composed for clarinet. These recordings were purposefully planned as live recordings with a
variety of co-artists in various contexts. Both small and large ensembles, student and professional players have collaborated. In this way, the current author has created a variety of contexts that can inform Tagg’s ‘why and how is who communicating what to whom and with what effect?’. Throughout the project, the variety of styles and orchestrations of these works provided a rich musical resource that has evolved and informed the current author’s interpretation of the Etudes.

The study offers an intellectual and pedagogical platform that unlocks the musical and technical content embedded in Uhl’s *48 Etüden*. That platform, which is exemplified technically and artistically in the recorded performances, constitutes a new way of synthesising the artistic and pedagogical potential of a given repertoire.

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PART I. Who and Why

Chapter 1 Alfred Uhl

1.1 Issues and Perspectives

Uhl’s 48 Etüden were composed in 1938 at a time of extraordinary socio-political upheaval and artistic development in Europe. The aesthetic tension in Vienna between the incumbent conservatism and the tradition-challenging Modernists is reflected in Uhl’s philosophy and life decisions. Arnold Whittall describes ‘High Modernism’ or a ‘suspension of tonality’ as ‘a fundamental aesthetic reaction against a mode of musical organisation and expression – tonality – that imposed precise, multi-layered relations and functions’.\(^{15}\) As a composer, Uhl embraced elements of neo-classicism and neo-romanticism that clearly revered his historical heritage. His charming synthesis of old and new represented a conservative counterpoint to the reverberant wake of the Weiner Moderne.

Towards the end of the nineteenth century, Franz Schubert, esteemed by both Brahms and Bruckner, represented the ‘uniquely Viennese synthesis of international classical greatness and distinctly Viennese traditions’.\(^{16}\) Alfred Uhl felt strongly attached to this tradition, particularly to Schubert. In an interview with his former student Daniel Laubacher, Uhl made the following comment:

> I have a very strong inner relationship to Viennese tradition and was able to spend a very nice childhood ... Schubert was also closely connected to tradition. I somehow feel related.\(^{17}\)

Uhl’s apparent childhood contentment belies what must have been a volatile artistic scene in Vienna during his formative years amidst the backwash and reverberations of Viennese Modernism (1890-1910). Following the deaths of Bruckner (1896) and Brahms (1897) there emerged a new aesthetic dialectic between Viennese modernism and an allegiance to a neo-Wagnerian late Romantic idiom. This tension resulted in an overtly public conflict between Mahler and Schoenberg that strongly polarized modernism and neo-romanticism. It was a time of crisis that Ackerl suggests, was at the time, ‘a necessary element of development, as a potential way of life’. Against the backdrop of vigorous Modernism sentiment across Europe, Ackerl continues:

> …scholars consider European Modernism reached its purest and most concentrated expression in Vienna at the turn of the century. The foundations of twentieth century thought were not created in Vienna alone, but what would this century [twentieth century] have been without Freud’s psychoanalysis, without Arnold Schoenberg’s

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\(^{15}\) Arnold Whittall, ‘1909 and after: high modernism and “New Music”,’ *Musical Times* 150 (2009), 17.


twelve-tone music, without Arthur Schnitzler’s ‘soul-scapes’ or without Gustav Mahler’s music and his interpretation of the music of his contemporaries.\textsuperscript{10} 

The confrontation of modernism and conservatism ‘ran’ says Antonicek ‘parallel with implicit and explicit anti-Semitism’. Amongst others, the important protagonists of Viennese Modernism, notably Schoenberg and Berg, were either Jews or allied with Jews. The defenders of tradition, composers Joseph Marx and Franz Schmidt (Uhl’s teacher), both important figures in conservatory education in the 1920’s and early 1930’s, were Catholic and thoroughly Austrian. Marx and Schmidt frustrated the modernists who were seen by the establishment as lawless, unruly and foreign. In an attempt to find refuge from the critics and the repressive establishment they represented, the modernists were forced to find alternative forums for their artistic expression. This was most famously exemplified by the formation of the Verein für Musikalische Privataufführungen (1918-1921). The ‘establishment’, in echoing broader sociopolitical currents, used their structural power and traditions to protect their conservatism. Particularly relevant to this discussion was the use of two significant cultural vehicles: The Vienna Philharmonic Orchestra and the Vienna Music Academy.\textsuperscript{19} 

Formed in 1842, one of the important musical institutions and expressions of Viennese music has been the Vienna Philharmonic. Antonicek states that in the late 1930’s the Vienna Philharmonic became strongly Nazified and

\begin{quote}
cultivated a well-rehearsed conceit about its sound, instruments and interpretative traditions. This self-appointed role as guardian of an authentic Viennese sound world and legacy, which led to the rewriting of its actual historical relationship to Brahms, Bruckner and Mahler, would dovetail all too neatly in the 1930s with Austrian fascism and Nazism.\textsuperscript{20}
\end{quote}

An explosion of anti-Semitism saw anti-modernist repertory dominating Gesellschaft concerts between 1934 and 1938. 

Franz Schmidt (1874-1939) composed in the Austro-German tradition of Brahms and Reger. His important educational leadership became politicized during his tenure at the Music Academy. Composed between 1935-1937, his oratorio Book with Seven Seals was appropriated as a Nazi celebration with its apocalyptic theme based on St John’s Revelation, a foreboding forewarning of Hitler’s march on Europe. Schmidt was said to have given the fascist salute at its premiere in 1938.\textsuperscript{21} Schmidt’s final work, a cantata Deutsche Auferstehung, included a reworking of his Fuga Solemnis that he himself described as expressing ‘the reawakening of the Reich’s power after the humiliation of the dictated peace terms’.\textsuperscript{22}

Whilst armies uprooted Europe in the early part of the twentieth century, Modernism too was seeking transformational change. Leon Botstein summarises the


\textsuperscript{19} Theophil Antonicek et al., ‘Vienna’, \textit{Grove Music Online}.

\textsuperscript{20} Gesellschaft der Musikfreunde (Viennese Music Society) organized the foundation of the Musik Akademie in 1817 and was seen as the post-war guardian of Viennese tradition.


\textsuperscript{22} Peter Franklin, ‘The Case of Franz Schmidt’, \textit{Musical Times} 130 (1989), 64.
prevailing aims of Modernism as requiring ‘... the shattering of expectations, conventions, categories, boundaries and limits ... the confident exploration of the new.’ However, amid the burgeoning mass culture mediums of film and commercial advertising, modernism in music was not assimilated in a substantive way as in the cases of design and visual media. Botstein continues: ‘film music and commercial advertising music did not come to reflect Modernist innovations’. A schism appeared between the artistic idealism of the modernists and the pragmatism of the conservatives.

Uhl admits to having nothing in common with ‘so-called modernism’ claiming it ‘means the same as already past’. He did however quote the modernist ‘12-tone calling card’ in a parody of serialism in a song Der Philosoph from his cantata Wer Einsam ist, der hat es gut. Uhl uses a 12-tone melody to describe the philosopher’s serious personality ‘who never laughs’. Uhl’s moderate disposition contrasted to the ‘shattering’ aims of Viennese modernism. His choices were suited to a ‘middle way’ that offered both material survival and personal musical expression. A similar path was, as Botstein comments, taken by other conservative composers. He cites Richard Strauss in particular, who ‘sought to craft a synthesis of Modernism and populism.’ Other younger composers, namely, Carl Orff and Werner Egk made a point of distancing themselves from modernist aims. With the official banning of modernism by the Nazi’s in 1938 Uhl’s aesthetic choices offered a means to maintaining a ‘safe’ artistic position in the ferment of pre-war European society.

Alfred Uhl received his first musical impressions playing string quartets with his family. He learnt cello and piano from an early age and wrote some early songs for his sister that he later destroyed. In 1926 he wrote a Mass for his parent’s Silver Wedding anniversary. Uhl was a student of Franz Schmidt at the Vienna Academy from 1927-1932. In a short autobiography entitled ‘Notes to my Life’, Uhl describes leaving Vienna and its dismal economic situation in 1932 and working in Zurich from then until 1938, initially as a bar pianist and from 1933 composing film music. He was very successful, composing music for ca. 60 cinematic advertisements, 24 documentaries and four full-length feature films. The dialogue-less film Symphonie des Wassers, for which he wrote the score, won a Gold medal in 1936 at the prestigious art exhibition La Biennale di Venezia. Not being able to secure a work visa much of this period was spent outside Switzerland. His employer, the Swiss film company Praesens-Filmgesellschaft no longer felt comfortable employing a ‘German’, and he returned to Vienna in 1938. As he had found some years earlier, life in Vienna was financially difficult. However, this time not because of the economy, but rather, in

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keeping his distance from the power brokers and their political regime his employment opportunities were significantly diminished.

In 1940 Uhl was conscripted and after some training was posted as Commander of a concentration camp. In 1941 he was severely wounded by a mine on the Eastern Front. After a partial foot amputation and almost 2 years in recovery he left the army and returned to Vienna. He described the war as ‘the most unfathomable abomination Mankind has invented’. Having recovered from his injury Uhl taught at the Vienna Music Academy from 1943 onwards, was the president of the Österreichischen Gesellschaft für zeitgenössische Musik and became a full professor of composition in 1966.

Erik Werba reporting in Die Welt described Uhl as being ‘the Austrian minstrel of the twentieth century’. Kratochwil comments that this was only part of Uhl’s character:

Behind his music, that as in music of Schubert and Berg, is without doubt strongly influenced by the Austrian countryside, stands a complete human of especially high artistic sincerity and pure humane spirit that is permeated with love and tolerance.

Heindl elaborates, suggesting this characterisation is a reference to both Uhl as a man and also his musical style:

taking its departure in late romanticism, impressionism, and neo classicism, its dominate features are functional tonality and accessible melodies, often dance like rhythms and colourful orchestration.

In encapsulating an important part of Uhl’s music philosophy, Kratochwil quotes Uhl’s credo on the understanding of every genuine artistic creation:

The creation of art is nothing other than to go along old paths again for the first time and to fill old forms again with new spirit. Therefore, in music, the tone system or form can never be what is primarily ‘new’. What is ‘new’ is the human and what he has to say.

It is interesting to note Uhl’s credo echoes the view promoted by the modernist Victor Shklovsky, a Russian literary formalist. Here quoted by Boris Eikhenbaum in 1926 in his essay The Theory of the Formal Method:

The work of art arises from a background of other works and through association with them. The form of a work of art is defined by its relation to other works of art, to forms existing prior to it .. Not only parody, but also any kind of art is created parallel to and

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opposed to some kind of form. *The purpose of the new form is not to express new content, but to change an old form which has lost its aesthetic quality.*

Uhl’s philosophical view supports an aesthetic interpretation that regardless of the means and ends of musical creation, what is truly new in artistic endeavour is the artist as ‘human’ and what this ‘human voice’ has to say. An example of this philosophy into his pedagogical approach was extended to a composition student of his in the 1980s, Daniel Laubacher, who attributes his own musical ‘intention to find my own voice’ to Uhl’s instigation and nurturing support.

Uhl’s ‘own voice’ can be exemplified through two quotes in Witeschnik’s biographical study. Witeschnik refrains from any significant formal analysis of Uhl’s works but opts rather for a biographical account. This sympathetic choice lends support to the notion that Uhl was more interested in the human element of music rather than the formal. Uhl writes in a letter from July 1947:

> suddenly it was clear to me, why our time is so merciless: because we have lost the humility before the ineffable. We analyse with shameless intellect the most sublime things and thereby stifle their substance.

In a lecture given in Linz 1949, Uhl returns to this theme:

> Generally there is much too much lecturing about art. Theory and catchwords poison the atmosphere. There is not enough benevolent love. Dogmatism has taken its place. One analyses and operates with concepts whose sense is pulled apart and, in the end, is transformed into the opposite. Our time has enough ‘coolness’, but not enough equitable cool-minded judgement.

> If we think: The creation of art is none other than going over ancient ways over and over again for the first time, to fulfil ancient forms over and over again with new mind. Hence, the sound system or the form can never be in the music the primarily new. New is always only the human and, that, what he has to say. Remaining in opposition are the natural laws of nature and the limits of what is discernible to the senses. Hence, there can be for the creative artist only one slogan: to walk all finite boundaries and to remain loyal to oneself, to one’s own individuality and calling!

The idea that words and theory denigrate music poses ontological questions regarding the nature of music. If Uhl is correct and we follow his suggestion that the artist should explore all options yet remain true to her or his individuality and calling, then how can his music and its performance be understood. Uhl’s comments appear to condemn both formal and non-formal philosophical accounts of music.

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34 Witeschnik, *Alfred Uhl*, 7 [current author’s translation].

35 Witeschnik, *Alfred Uhl*, 7 [current author’s translation].
Bennett Reimer proposed that music offered a means to develop our feelings in a way that language develops our intellect. As Daugherty points out, Reimer believes that in music ‘we receive an “experience of” feeling rather than the “information about” feeling’. Importantly, he describes Reimer’s position as supporting the notion that a musical work is autonomous in that it is ‘defined by the intrinsic quality of its expressive form’. As a result Reimer believes the ‘musical work’ should be the central focus since symbolic expressive form is embodied in works of art. Furthermore he claims that the ‘excellence of a musical work is decided ultimately by “people trained to make that kind of discrimination” i.e. experts’. Daugherty’s appraisal of Reimer’s philosophy describes the necessity that practitioners, in understanding a work, are required to perceive and qualitatively assess the inherent symbolic form of a work. That is to say the meaning through learned cultural knowledge and practices attributed to the integral musical form of a work.

In contrast to the inherent value Reimer attributes to the musical score, David Elliot, according to Daugherty, asserts that in learning music it is not so much what we learn that makes music meaningful but in how we learn it. Elliot professes that musical works are ‘thought generators – intentionally constructed challenges to our powers of consciousness’.

This study therefore acknowledges the two views of the same coin. The formal design of Uhl’s music is the medium and carrier of any possible meaning it may convey and therefore the structural formulations, choices and interpretations are sources of denotative and connotative meaning. In realising these meanings though practicing his music, the clarinettist also derives a set of personal, contemporaneous second-level outcomes, as a result of applying a set of personal experiences and knowledge.

What is relevant to this study is the pedagogical unfurling of both technical and musical acumen available through the contextual examination and practising of Uhl’s *48 Etüden*, and how developing notions and understandings of those opportunities lead to superior outcomes regardless of the underlying preferences of any particular philosophical stance. It is clear that Uhl’s musical inspiration encompassed a deep regard for tradition, but fell well short of supporting the prevailing nationalist tendencies of the time. Though politics and art may well be difficult to separate, Uhl’s nationalism was a consequence of his artistic rather than his political aspiration. His position between these two manifestations of nationalism was isolating yet resolute and this honourable and patient persistence can provide significant inspiration to musicians who have an affinity to his philosophical standpoint.

The foregoing discussions relating to Uhl’s history and philosophy provide a background from which Uhl’s *48 Etüden* as artefact emerges. The importance of what one understands to be the uniquely Uhl, both the man and his life, determines that

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any interpretation of Uhl’s score is far from arbitrary, that it can never rest solely upon the interpreter’s score-based discretion. The 48 Etüden are not only a carefully composed set of performance instructions but also in their construction an endless array of significations that describe and characterise Alfred Uhl, his times and aesthetics. Equally relevant to this study is the way in which the text signifies and represents, in organological and socio-historical terms, the clarinet. Uhl’s 48 Etüden have become embedded as an important part of the clarinet’s identity: past, present and future. The section following considers Uhl’s clarinet works with that continuum in mind.

1.2 An introduction to the Clarinet and its repertoire

Unlocking the pedagogical potential of Alfred Uhl’s 48 Etüden is intimately connected to the thespian nature of what connects Uhl, the 48 Etüden and the current author: the clarinet. Its role, through history, is one defined by its developing character attributed, most importantly, by composers and audiences. The clarinet’s potential and organological evolution has provided the musical materials for many important composers and players, who in their own ways have developed and highlighted the clarinet as a musical voice of considerable importance. Over time the ‘clarinet’ has gathered to itself particular idiomatic characteristics. These are used and understood as musical markers that provide a collection of communicative signs along a spectrum of clarinet-ness within a subset of a wider collection of musical connotations.

In its simplest sense, the clarinet is an instrument with a single beating reed, which according to Hornbostel-Sachs then includes the saxophone. The clarinet conceived at the turn of the early eighteenth century, displays its greatest point of differentiation from the more recently invented saxophone in its bore. Whilst the saxophone has a conical bore similar to other wind instruments the clarinet’s bore is cylindrical. This construction acoustically determines that the clarinet overblows at a twelfth rather than at an octave which the saxophone’s conical bore allows. Open finger holes and other features of the clarinet’s construction separate it from other single-reed instruments. These significant features determine the idiomatic characteristics of the clarinet’s sound and its technical peculiarities in performance. Its cylindrical and resultant overblown twelfth requires the clarinet to have more keys and tone holes to accommodate this increased range between registers, which can, arguably increase the instrument’s overall technical difficulty. Over its organological history the clarinet has evolved along various lineages with two main forms surviving today; the German Oehler system and the French Boehm system each with their own subtle yet differing characteristics.

It is likely that the clarinet came to life in the workshop of Johann Christoph Denner (1655-1707) at the very beginning of the eighteenth century.\(^{40}\) Denner

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\(^{40}\) Albert R. Rice, *The Baroque Clarinet.* (Oxford: Clarendon Press, 1992), 40. Rice is careful in attributing the ‘invention’ of the clarinet to Denner first made in 1730 by J.G Doppelmayr in *Historische Nachricht von den Nürnbergesischen Mathematicis und Künstlern.* According to Rice, Doppelmayr’s account of Denner includes factual errors and he exaggerated the achievements of other Nuremberg
produced recorders and one of the clarinet’s predecessors, the chalumeau, an instrument invented by the French and a name now used for the lower register of the clarinet. During the first part of the eighteenth century German nobility found the French somewhat fashionable and imported their language, clothes, food and music.\textsuperscript{41} Denner’s improvement of the chalumeau and invention of the clarinet, as described by Doppelmayr, would have been seen as a source of German pride, a foil to French instrument makers like Hotteterre who were famous for their ‘superior craftsmanship’ \textsuperscript{42}. Johann Doppelmayr’s writings, Johann Ridinger’s illustration (Figure 1) and Christian Schubart’s description underline a sense of nationalistic pride and ownership of this new, German-invented instrument of considerable musical and emotive power.

With its predecessors reaching back to the third dynasty of the Egyptian old kingdom (2778-2723 BC), the clarinet has descended from a richly diverse line of idioglots, memets, chalumeaux, and mock trumpets\textsuperscript{43}. Although the physics of their single-reed sound source is identical, the modern clarinet has evolved from these early instruments into a sophisticated musical instrument. With its dynamic scope, varieties of tonal colours and range, the clarinet has become since its early stages of development an instrument of great versatility to composers, a challenge to performers and endeared by audiences. Contemporary musicologists confirm the clarinet’s agility and diverse timbral possibilities. Alfred Blatter writes:

modern performers have expanded the flexibility and technical resources of the clarinet to the point that, in the hands of a good performer, it is just as agile as a flute. ... No other woodwind or brass instrument offers such a variety of tone colour possibilities.\textsuperscript{44}

Christian Schubart (1739-1791) poet, journalist, writer on music and composer, portrayed the clarinet in his ‘popular history of music’ Ästhetik der Tonkunst.\textsuperscript{45} Dubois suggests Schubart’s literary efforts may have been inspired by comments made by the English historian Charles Burney, who suggested Germany had done little to analyse its own distinctive musical character and history.\textsuperscript{46} Schubart, through his travels around the cities of southern Germany describing its musicians and musical activity, provides us with an important, though perhaps rather subjective, historical perspective of the developing styles of that time. He claims that the clarinet’s character:

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artisans. Hoeprich avoids a definitive attribution using the following: ‘The birthplace of the clarinet is traditionally considered to be the workshop of Denner...’ leaving room for further investigation. See Eric Hoeprich, \textit{The Clarinet}, (New Haven: Yale University Press, 2008), 21.
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\textsuperscript{41} Rice, \textit{The Baroque Clarinet}, 16.
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\textsuperscript{42} Rice, \textit{The Baroque Clarinet}, 16.
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\textsuperscript{43} Rice, \textit{The Baroque Clarinet}, 1-38. For a comprehensive overview of the clarinet’s origins and precursors.
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\textsuperscript{44} Alfred Blatter, \textit{Instrumentation and Orchestration}, 2nd ed. (New York: Schirmer, 1997), 108.
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is a romantic feeling and thorough sound of sensitive hearts. Whoever plays the clarinet as Rheinek seems to make a declaration of love to the whole human race. ... whatever lies in its sphere, it expresses with indescribable grace. The sound is so sweet, so languishing, and whoever is able to express the intermediate tones thereon may be certain of his victory over the hearts ... whoever has an ear for music and a sensitive heart can easily learn this instrument.\footnote{47}

Importantly, the text elucidates that Schubart appreciation of the potential and wide-ranging emotional effect music can impart and the clarinet’s inherent ability through accomplished performance to actuate such effects.

The illustration \textit{Youth Playing the Clarinet} by J.E. Ridinger dated between 1750 and 1760 bears a text that flatters the therapeutic powers of the instrument:\footnote{48}

\begin{quote}
The Clarinet, which delights with its penetrating agreeableness
Like the name it bears, it sounds clear and pure\footnote{49},
quite in the manner of a trumpet; yet all \textit{dolce} and sweet;
Ah, had one ever a \textit{virtuoso}
who, on a quiet night, might blow him gently to his rest!
No other kind of reed breaks the air more clearly,
fittingly imitating with its tone the song of the sweet trumpet.
To hear its singing through the friendly stillness of the night
can calm the bodies members, and the mind.
\end{quote}

\footnote{48} David Ross, ‘Ridinger’s ”Youth Playing the Clarinet”, \textit{Clarinet} 7.1 (1979), 34. (translation D. Martin Jenni)
\footnote{49} The translation of ‘klar und nette’ into ‘clear and pure’ is a pun on the German ‘klarinette’.
The clarinet's tonal character has also been used to describe other instruments' qualities. In his article discussing performance practice of Mozart's music, musicologist Peter Walls notes a subtle revision of G.S. Löhlein's violin treatise of 1774 in describing the tonal quality of Stradivari violins. In its first edition these violins are portrayed as having 'a strong, penetrating, oboe-like (and therefore thin) tone.' In the treatise's third revision from 1797, J.F. Reichardt amends the description of these famous violins as having 'a strong, penetrating clarinet-like tone'. Walls interprets this revision as more accurately reflecting the latter eighteenth century view of the instrument as 'masculine, powerful and melodious'.

The nineteenth century Austrian composer and writer Ferdinand Simon Gassner (1798-1851) describes succinctly the clarinet's character in its fully evolved form:

> The large range, the power and tenderness of which this instrument is capable suits it in playing the most brilliant passages as well as the most subtle. It is also the clarinet that is equally important as solo and orchestral instrument. Its tone, which can grow to the greatest strength and vanish to the faintest piano, resembles a full, round female voice.\(^\text{52}\)

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\(^\text{50}\) Hoeprich, *The Clarinet*, 27.

\(^\text{51}\) Peter Walls, 'Mozart and the Violin', *Early Music* 20.1 (1992), 8.

\(^\text{52}\) Hoeprich, *The Clarinet*, 170.
Hector Berlioz (1803-1869) also wrote glowingly of the clarinet's capabilities in his Treatise on Orchestration: *Grand traité d'instrumentation et d'orchestration modernes* published in 1843:

There is no other wind instrument that can produce a tone and let it die away as beautifully as the clarinet. Hence its invaluable ability to render distant sounds, an echo, or the charm of twilight. I know no more admirable example of such shading than the dreamy melody of the clarinet, accompanied by the tremolo of the strings in the *Allegro* of the overture to *Der Freischutz*. Is not the lonely maiden, the blonde betrothed of the huntsman, with her eyes raised to heaven uttering her tender plaint, amidst the rustling noise of the deep forest shaken by the storm? Oh, Weber!53

The preceding discussion and examples of the clarinet’s ‘character’ or ‘personality’ affords a number of general musical goals that direct a pedagogical approach to clarinet study. Primarily, it is the understanding that the instrument has a definable character whose voice needs to be learned and mastered in order for the compositional goals of the composer to be fully realised. This learning is accomplished through a strong co-dependency between a developing technical acumen and culturally shared musical expression.

### 1.3 Clarinet Works of Uhl’s early period

The performances of the quintets of Uhl’s teacher Franz Schmidt in 1923 and 1938 by Leopold Wlach (1902-1956) were widely acclaimed. According to Weston, it was Wlach who inspired Alfred Uhl to write a number of works for clarinet.54 At the time, Wlach was the first solo clarinetist of the Vienna Philharmonic and clarinet instructor at the Academy of Music. It was a fruitful artistic relationship and, significantly, Uhl claims to have found his personal style in the first of these style-consolidating works.55

The first work composed in this early ‘clarinet’ period (1937-1943) was *Kleines Konzert für Viola, Klarinette und Klavier* (1937). It received a rave review in which it was described as a work of genius.56 In the most comprehensive biography available of Uhl, Kratochwil describes this immediately successful work as ‘a sparkling, temperamental, masterpiece savouring dark colours’.57 This success gave Uhl impetus to pursue this productive relationship.

The *48 Etüden für Klarinette* were written in 1938 in close collaboration with Wlach and published by Schott in the same year. Laubacher reports that the Etudes were completed very soon after *Kleines Konzert* as a result of the good collaboration with Wlach and the great need for the etudes.58 The third work was the *Divertimento*...
composed for three clarinets and bass clarinet in 1942 and the fourth, Konzertante Sinfonie für Klarinette und Orchester completed in 1943 and performed between bombing raids in 1944 by Leopold Wlach and the Wiener Philharmoniker under the direction of Clemens Krauss. Laubacher deduces from Uhl’s dedications to Wlach that Uhl was ‘greatly indebted to Wlach for the playability and practicality of the clarinet in the works of this early period’ and also notes that Wlach’s suggestions were ‘invaluable’ in pointing out ‘specific problems unique to the clarinet’.⁵⁹

Leopold Wlach born in Wien studied with Bartholomy and Pollatschek at the Akademie für Musik. After a world tour in 1926 he joined the Wiener Staatsoper in April 1928 and the Wiener Philharmoniker in September the same year. Weston states that ‘Viennese wind playing between 1930 and 1950 is inseparably connected with Wlach whose interpretative influence was profound’.⁶⁰ He became Professor at the Akademie für Musik in 1932. Wlach became a member of the NSDAP (Nazi party) in 1938 – after the ‘Anschluss,’ like many orchestra members. Kargl suggests because membership was not illegal at that time, Wlach may not have been necessarily politically or ideologically committed to the cause.⁶¹ Given the number of Jewish members of the orchestra, national socialist politics took their toll on many members. The two principal clarinettists sat on either side of this political dipole, Wlach a member of the NSDAP and Rudolf Jettel, the husband of a victimized Jew. As a colleague to both clarinettists, Uhl would have been aware of these tensions, which surface in the dichotomy between his modernist excursions and his more traditional, nationalist aesthetic.

Figure 2 - Leopold Wlach⁶²

⁵⁹ Laubacher, Portfolio of compositions, 26.
⁶¹ Email correspondence with Dr. Silvia Kargl, Historisches Archiv, Ballbüro, Wiener Philharmoniker, 4 June 2014
PART II. What

Chapter 2 The Etüden

2.1 Specific Training of Clarinet Performance

Conservatoria have historically offered a locus where technical and expressive training in music are bound together in a vibrant and exacting environment. During the latter eighteenth and early nineteenth centuries many music conservatories were established aimed at training military and professional players. In 1795 the Conservatoire de Musique opened its doors to 600 pupils and 115 teachers, nineteen of whom taught the clarinet. The establishment of many schools of music occurred across continental Europe with the Academy of Music in Vienna opening in 1817.63 These institutions strongly fostered the typically unequal and imitative learning relationship of students with their professors that Hoeprich describes:

As for applying technique to musical interpretation, (clarinettists) try to emulate their favourite teachers, soloists and orchestral players. This of course has been a strategy of musicians for hundreds of years, and it still works well.64

One of the most celebrated professors of clarinet from the eminent Paris Conservatoire, Hyacinth Eléonore Klosé (1808-1880) collaborated with Louis-Auguste Buffet in designing the Boehm clarinet in 1843. In the same year Klose produced the first comprehensive tutor for their new clarinet, entitled Méthode pour server à l’enseignement de la clarinette à anneaux mobiles, et de celle à treize clefs.65

Still in use today in a variety of editions known as Methode complete pour Clarinette, it provides, as Paul Harris describes, a ‘classic’ method for the Boehm clarinet offering a ‘well balanced diet’.66 Similarly in Germany, Carl Baermann’s (1810-1885) Vollständige Clarinett-Schule op.63 was composed in 1864 specifically for the Oehler system. Baermann and Klose contributed greatly to the clarinet’s development both in its systematic tuition and to the compositions and studies they composed. Hoeprich comments that Baermann’s profile as teacher and player typified the clarinettist of second half of the nineteenth century.67 Although a variety of systems emerged through the nineteenth century, by 1900 the Boehm and Oehler systems had become and remain the dominant variants.

As standards and technical expectations rose, the outstanding players of the best orchestras and professors of the conservatoria of large cities began replacing

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64 Hoeprich, The Clarinet, 230.
65 Hyacinth Eléonore Klosé, Méthode Pour Server À L’enseignement De La Clarinette À Anneaux Mobiles, Et De Celle À Treize Clefs (Paris: Messonnier, 1843).
67 Hoeprich, The Clarinet, 175.
independent travelling virtuosi. This new breed of professional clarinettist often also
taught at Conservatoria from their own method books, thus fostering the emergence
of specific styles and schools of clarinet players that to this day can differentiated not
only by country but also region.

Hoeprich’s comprehensive text *The Clarinet* documents the development of the
instrument at the turn of the twentieth century. During the latter half of the
nineteenth century the clarinet was, from a constructional standpoint, fully
developed and has changed very little since. The twentieth century heralded a
marked increase in the application of the instrument’s versatility and popularity with
the clarinet of the orchestra coming of age particularly exemplified by the virtuosity
and prominence of the clarinet parts in the orchestral works of Richard Strauss and
Gustav Mahler. It is at this point in time that instruction at conservatoria begun
providing the basis for the orchestral clarinettist’s training.

The academic obsession with technical mastery grew as the orchestral repertoire
made greater demands on players. Gornston embodies an approach as to how this
technical expertise can be achieved in his 1946 pithy book *Clarinet Mechanisms*. He
explains in his ‘explanatory introduction’ that:

Basic physical synchronization is achieved as a result of playing every conceivable
interval throughout the entire range of the instrument. This book serves as a basis for
such mastery because it deals with every combination in major, minor, chromatic,
pentatonic, and whole tone scales.

For the modern clarinet player, this book does more than just supplement a method: it
is in itself a COMPLETE SCHOOL OF TECHNIQUE.

David Gornston’s (1905-1969) exercises are indeed comprehensive. In aiding their
application as finger exercises they are divorced from the distractions of musical
associations. Counting against them though is their somnolent nature that would
stretch the attention span of any student.

Rudolf Jettel (1903-81) principal of the Wiener Philharmoniker Orchester (1957-
1978) wrote an important method *Klarinetten Schule*, as well as a large number of
technically demanding etudes that privilege technique over artistry. Jettel’s emphasis
on the importance of scales is telling in this regard:

Scales are the most important exercise for a conscientious musician. One might call
them his daily bread. First thing to observe this to proceed slowly and you take care
that the success of tones are uniform, as that is the only way to achieve a pearly
technique.

Not to overstress this truism, Jettel also suggested, ‘the pupil must not be satisfied
with the training of his fingers lips and breath only’. Hoeprich suggests that the
emphasis from profound musical expression became sublimated by technique as a

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means of expression by impressing audiences by ‘playing faster, higher and louder’. Developing ‘profound musical expression’ can only be achieved where the material allows. Scales, though important in their inherent technical purity lack any significant opportunity to develop expression whereby etudes, in their best form, can incorporate both technical and musical challenges.

As Hoeprich mentions above, the attention given to developing technical skills on the instrument prompted many of Europe’s conservatory clarinet teachers to write studies or etudes to accommodate this development. In Vienna during this period, the ‘most important authorities of the great Viennese clarinet tradition’, as Brixel writes, ‘were Leopold Wlach and Rudolf Jettel, both considered as legends today.’ Though Wlach was well known for his warmth and great beauty of tone, he is not known to have composed anything for the clarinet. It seems Wlach may have found at least some of his compositional goals realised through Uhl.

There is no shortage of studies in the clarinet repertoire. Brixel’s Klarinetten-Bibliographie (1978), though somewhat dated, cites no fewer than 120 volumes of original studies that would be equivalent to some thousands of individual items. However, it would be difficult to find a professional clarinettist who does not possess a well-worn copy of Uhl’s contribution. They are regularly found on the syllabi of universities and colleges and, of national and international examination organisations.

Uhl represents one of many composers who wrote for the instrument in close collaboration with a clarinettist: in his case Wlach. Repertoire for the instrument has an over 300 year history that has often been inspired by both technological and stylistic developments. Wolfgang Amadeus Mozart (1756-1791), Louis Spohr (1784-1859), Carl Maria von Weber (1786-1826), and Johannes Brahms (1833-1897) all had close relationships with the respective clarinettists Anton Stadler (1753-1812), Johann Hermstedt (1778-1846), Heinrich Baermann (1784-1847), and Richard Mühlfeld (1784-1847). In all of these cases the composers were allured by the clarinet’s ‘character’ and musical possibilities and composed works that contributed significantly to the instrument’s technical and musical development. In doing so the clarinet’s identity and associated performance practices became established. These historic developments now form the foundations for the clarinettist of today as they learn and perform the revered works of these great composers.

Mozart’s interest in the clarinet was associated with his close friendship with the clarinettist Anton Stadler. When Stadler asked the composer to alter a difficult passage, the composer asked if the notes were on Stadler’s instrument. Stadler confirmed they were whereby Mozart said ‘provided they exist it is your concern to produce them’. This view accepted by Stadler and every ambitious clarinettist since provides a challenge that invites, at whatever level of playing, new ways of learning

the instrument, to overcome through improved technical analysis and practice hitherto ‘unplayable’ passages.

Louis Spohr’s (1784-1859) relationship with Simon Hermstedt (1778-1846) was cemented after a very successful performance of Mozart’s Clarinet Quintet in which Spohr played first violin. Although Spohr admitted to having little knowledge of the instrument, Hermstedt worked tirelessly to remove ‘dull and uncertain notes’ from the instrument to the point of adding extra keys, embracing through the process Spohr’s four extremely difficult concerti. These extra keys, that brought the total from five to thirteen, are described in the forward of the first edition of Spohr’s concerto in 1810. Hermstedt was admired for his excellent technique but was also criticised for his musical taste even by Spohr. Carl Maria von Weber (1786-1826) also remarked that Hermstedt lacked expression and would do well to improve his interpretation by listening to singers, which he did subsequently.

Measured by his musical achievements, no other clarinettist has affected the playing of future generations of clarinettists more than Heinrich Baermann (1784-1847). A recipient of works from Weber, Mendelssohn and Meyerbeer he also trained his son Carl Baermann (1810–1885) who Weston claims became ‘one of the finest teachers there has ever been’.

Johannes Brahms (1833-1897) affectionately knew Meiningen clarinettist Richard Mühlfeld (1856-1907) as ‘meine Primadonna’, ‘Fräulein Klarinette’ and the ‘nightingale of the orchestra’. Having decided to retire from composing in 1890 Brahms was inspired by the clarinettist to write four now famous works: his Trio (Op. 114) for clarinet, cello and piano; a Quintet (Op. 115) for clarinet and string quartet; and two Sonatas (Op. 120 Nos. 1 & 2) for clarinet and piano. Brahms greatly admired Mühlfeld and was widely acknowledged for his special musical abilities. Weston writes:

Mühlfeld was the perfect vehicle for the creative genius in Brahms: not only was he a fine clarinettist, but also an innately perceptive artist, whose sense of style and wealth of expression enabled him to give the composer’s works that richness and vocal quality that are their very essence.

Alfred Uhl’s close relationship with Wlach is likewise an example of a productive composer/clarinettist association. In the first published version of the Etudes, Uhl’s preface states that the aim of the Etudes is to introduce technical problems to the clarinettist brought about by modern repertoire. According to Uhl, Wlach was to write ‘ accompanying explanations addressing the numerous problems focused upon in the studies’. Wlach’s written contribution, however, was never completed.
2.2 Content versus technical detail

The *48 Etüden für Klarinette* were composed in 1938 and first published in 1940 by Verlag Schott, Mainz. In an interview with Laubacher, Uhl explained his intentions and approach in writing instrumental etudes, and did so in a way that emphasises the dynamic between musical content and technique:

As with all etudes I’ve tried to provide a musical content and in doing so I’ve also included a specific technical detail. That goes for all of the etudes I have written because I have come to the conclusion that the player not only wants to develop his/her skills but also would like to practise something with musical substance. I’ve also tried when possible to write the etudes so that each of them fits on a side of a page and then the player doesn’t have to turn the page while playing. Unfortunately, it wasn’t possible with the clarinet etudes but in the later etudes I always tried to accomplish this. From a purely musical standpoint it was important to order them in such a way so that there was contrast between the etudes. There shouldn’t be three slow etudes followed by two or four fast ones. But one also has to consider that the studies should be gradually progressive.83

Uhl’s priority for musical content over technical detail is a vital consideration when approaching the performance of the Etudes. His concern for the ordering of the Etudes and that page turning should be minimised conveys his pedagogical sensitivity for the player. Intrinsic in his statement is the need for technical development to serve musical needs. It is satisfying musical needs in an accessible and stimulating way that has seen these studies become some of the most important instructional materials in the repertoire. Lurie makes the comment that the etudes are practical from the clarinetist’s perspective, not in terms of facilitating playing but rather ‘in teaching problems to overcome’.84

Uhl wrote the Etudes with the understanding that Wlach would contribute accompanying written explanations addressing the numerous problems focused upon in the Etudes.85 This did not eventuate and as a consequence there is a missing link to the learning of the Etudes. Two clarinet pedagogues have taken up the question of which technical issues are addressed in the Etudes and how they might be approached. The two complimentary approaches are distinct from another in taking qualitative and quantitative standpoints respectively. Though both authors underscore the musical importance of the Etudes, neither gives specific direction as to how their musical nature can be identified, developed and assimilated by the player. As stated previously the aim of this study is to derive a critical and analytical interpretation that can inform an effective pedagogical approach to the Etudes. An approach that integrates Uhl’s musical and Wlach’s technical inputs and synthesises a holistic solution to the missing link.

85 Laubacher, ‘Mitchell Lurie’s Approach’, 36.
2.3 A Pedagogical Framework

The first of two attempts to formulate a pedagogical framework to the performance of the Etudes was undertaken by Mitchell Lurie (1922 -2008), whose comments appear in an article by Laubacher, published in *The Clarinet*. The second approach, by Reiner Wehle (b. 1954), appears in the preface to the latest edition of the *48 Etüden für Klarinette* (Uhl 2010). As will be shown, there are deficiencies in both approaches, which the current study offsets.

In his *Approach to the Study of Alfred Uhl’s 48 Etüden für Klarinette*, Lurie comments that the Etudes are amongst the best in the clarinet etude repertoire for fundamental technical problem solving. Although Uhl never played the clarinet, Lurie asserts that:

> Uhl writes for the Clarinet in a way that provides a challenge, yet a naturalness, making it possible to retain the material. Once learned it falls back in place again.

Lurie offers an approach to the study of playing the Etudes by way of instructional comments for each study. The complete comments for the first two and a truncated version of the third follow. They highlight a certain superficiality that does little justice either to the Etudes themselves or sound instrumental pedagogy:

**Book I**

1. I consider the first etude in Uhl’s book a real warm-up because there’s nothing technical and it’s purely a good legato musical line. And what more do we need?

2. With no.2 we get right to business with varying patterns of slurs and articulations. Look at the first group, for example. Between the third and fourth sixteenths there’s a space, isn’t there? To make that an equal kind of articulate sound, there should be space before and after each of the dotted notes. And, as there is a dot over the slurred second sixteenth note in the group, you have to shorten it in order to make a good articulation. To me this etude is a perfect example of lightness, the delicacy and response that a good staccato note should have. I’d like to think of every one of those sixteenth notes as equal Ping-Pong balls.

3. This is my bible of slow and even playing – the moderato 96 to the quarter is almost easy. I think of 96 for the *eighth* rather than for the dotted quarter. In other words, I’m taking it three times as slow ... My teacher, Daniel Bonade, who was one of the great clarinet teachers of all time, used to say the fastest way to accomplish anything is slowly. That’s my philosophy of teaching anyway ...

Reiner Wehle’s approach, while better developed that Lurie’s, is limited in its scope. The most recent edition of Uhl’s *48 Etüden*, published by Schott in a series entitled *Essential Exercises* of instrumental studies, outlines the aim of the series:

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89 Laubacher, ‘Mitchell Lurie’s Approach’, 36.
The *Essential Exercises* series is a library of basic study literature for all instrumentalists. The series includes not only new editions and reprints of successful standard study works but also technical exercises and methodological instructions.

Published by renowned performers and professional teachers, the *Essential Exercises* series is characterised by multilingual prefaces, advice on sensible practicing and high-quality music typography\textsuperscript{90}

Wehle’s preface to the above begins to distil a robust pedagogical model that includes an index of the studies. His preface concludes:

When preparing to play one of these studies one should begin by considering the practice purpose it serves and then proceed to analyse the piece carefully to find out where precisely its particular problems lie. It goes without saying that the piece should not simply be played through, but individual difficult passages practiced in isolation, in a concentrated, slow and disciplined way. Having carried out this essential advance preparation, when it comes to playing the whole study the clarinettist should focus above all on its musical content. Expression and phrasing, differentiation in articulation and a variety of tone colour will then allow the purely technical aspect to take a back seat, making every study into a miniature character piece that effectively helps the clarinettist to reveal his or her own imagination – independently of any difficulties \textsuperscript{91}

What follows is a checklist that summarises the technical elements identified in each etude:

\textsuperscript{90} Wehle, ed., Alfred Uhl, *48 Etüden für Klarinette*, back cover.

Table 1 - Extract of Index of Studies with reference to technical elements

<table>
<thead>
<tr>
<th>ETUDE</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intensive legato</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Light, relaxed legato</td>
<td></td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Strong staccato with full tone</td>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Light, unforced staccato</td>
<td></td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Tonguing stamina</td>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Moving between 1st &amp; 2nd register</td>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Tonal evenness of notes with short air column¹</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fingering of notes with short air column²</td>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Wide intervals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reaction/Variations in dynamics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Differentiation in articulation</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading skills³</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpretation</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Triad patterns/ extended triad patterns</td>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Chromatic passages</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dotted rhythms</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Syncopation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uneven rhythms</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹(f’-b flat’)
²(d flat’-b flat’)
³(sharps and flats/double sharps and double flats)

The above checklist, while useful in specifying the technical focus of each etude, does little to identify a practical approach to their execution, and ignores musical considerations. Good teaching may well bridge these omissions, but Uhl’s aesthetic preferences would determine that technique should serve musical choices. It is interesting to note that Wehle feels that Etude 2 and 3 do not warrant particular attention to ‘interpretation’. This seems to contradict Uhl’s statement regarding musical content quoted at the beginning of this chapter.

These two sources provide an essentially congruent set of practice aims, approaching from qualitative and quantitative perspectives. While they offer a starting point for a systematic and applied set of technical strategies, they do little justice to, in fact significantly underplay, the dynamic between musicality and technique that was the bedrock of Uhl’s compositional praxis. The current study offers a direction towards that end and has aimed to offer musical performances and interpretations that capture Uhl at his aesthetic best.

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2.4 Practice in Action

Peter Miksza’s proposed model of an instructional theory for practicing aims at highlighting a process that supports effective practice rather than simply improving performance competence. As such it offers a template of sorts through which to resolve the issue identified above. Miksza observes that:

The essential components of the proposed theory are intended to represent the primary variables that are most directly relevant to learning efficient and effective approaches to practice, and include: choice, intentionality, action, achievement outcome, and rest and recovery.  

Miksza offers a schematic model to that end:

![Figural model of an instructional theory of practicing](image)

Figure 3 - Figural model of an instructional theory of practicing.

Miksza defines some of the key terms used in the model:

- **Choice** refers to the decision to practice
- **Intentionality** refers to the degree of purpose of deliberate formal practice
- **Action** [is] what takes place, influenced by ‘repertoire’ of available practice strategies
- **Achievement outcome** relate[s] directly to action undertaken, often resulting in evaluation impacting on self-perception

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Miksza adds that the model should be seen to operate on a developmental continuum with the expectation that over time practice methods will become more sophisticated.95 The model forms the basis of the pedagogical approach undertaken in the current study. It should be noted that this model does not differentiate between practice objectives or a mechanism to evaluate the value of them e.g. technical vs. musical.

2.5 Motivation

Lehmann reminds us motivation may be categorised in two ways: intrinsic and extrinsic.96 The activity of music making, including practising, can be rewarding in itself but Lehmann suggests that to overcome the difficulties, through time and effort, of achieving musical skill, extrinsic factors become important. Understanding how extrinsic motivation works in our musical endeavours helps shape the content and design of our practice.

A better understanding of motivation may cause musicians to alter practice routines to make them more personally rewarding and to find ways to sustain the needed effort in the unavoidably unpleasant activities.97

Research has shown that an important predictor of performance achievement is self-efficacy. Strongly linked to competency, self-efficacy also pertains to ‘the ability to organise and execute courses of action’.98 One might then be persuaded to investigate models of motivation that provide, as Ramlall describes, ‘a desire to act, an ability to act and an objective’.99

Motivational theories can be grouped into three categories,

Content theories – argues that people act in certain ways based on their needs.

Consolidation theories – emphasize the connection between individual’s behaviour and certain specific results.

Process theories – attempt to explain how motivation occurs, what factors influence it and what the relations between these factors are.100

Victor Vroom’s Expectancy Theory, a process theory, tries to ‘explain motivated behaviour as goal orientated’. Suciu et al continues:

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97 Lehmann, Psychology for Musicians Understanding and Acquiring the Skills, 45.
98 Lehmann, Psychology for Musicians Understanding and Acquiring the Skills, 54.
...expectancy theory argues that the strength of a tendency to act in a certain way depends on the strength of an expectation that the act will be followed by a given outcome and on the attractiveness of that outcome to the individual ... so [that] people choose among alternatives in a conscious manner and the choices are systematically related to psychological processes, particularly perception and the formulation of beliefs and attitudes.

In his 1964 *Work and Motivation*, Vroom contends motivation is determined by the following terms:

- **Expectancy** is a person's perception of the probability that effort will lead to a successful performance.
- **Instrumentality** is the perceived correlation between the successful completion of a task and the attainment of an outcome.
- **Valence** defined as affective orientations toward particular outcomes.

These terms have the mathematical relationship of:

$$ E = A \times \sum_{j=1}^{n}(I_{ij} \times V_j) $$

- $E$ is the effort/the intensity of the effort.
- $A$ is the expectancy that effort will lead to performance.
- $I_{ij}$ is the instrumentality of the performance $i$ to achieve a second level result $j$.
- $V_j$ is the valence of the second level result.
- $n$ is the number of second level results.

Through personal experience the current author has gained insight as to what promotes effort towards a particular goal and has found Vroom's Expectancy Theory to be both valid and useful in determining practice design. In the task of practice, the theory operates through a process of trial and error in that both expectancy and instrumentality increase through the implementation of a self-directed process feedback model. For different goals various pedagogical paths are taken. Technical mastery will be best achieved through practice design that aligns expectancy and instrumentality with the (unachievable) goal of technical perfection whilst questions of musicality will follow paths through the examination of cultural history, musical context and style, and musical architecture.

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2.6 Deliberate Practice

There are principally two forms of practice; formal and informal. One of the obvious characteristics of the 48 Etüden is that they lend themselves to both forms of learning. Folkestad summarises these styles of learning thus:

In the formal learning situation, the activity is sequenced beforehand. That is, it is arranged and put into order by a ‘teacher’, who also leads and carries out the activity. However, that person does not necessarily have to be a teacher in the formal sense, but a person who takes on the task of organising and leading the learning activity, as, for example, one of the musicians in a musical ensemble. Moreover, this position does not have to be static, although this is commonly the case. The informal learning situation is not sequenced beforehand; the activity steers the way of working/playing/composing, and the process proceeds by the interaction of the participants in the activity. It is also described as ‘self-chosen and voluntary learning’.

Uhl valued greatly the experience of a player would gain from the ‘musical content’ of the Etudes. The intrinsic rewards and motivation derived from the informal learning a clarinettist might undertake of the 48 Etüden can be attributed, as Wehle describes, their ‘rhythmic variety, exuberant melodic ideas, and thorough technical craftsmanship’. However if Lehmann’s comments above are to be taken seriously, then it is within the framework of formal learning that specific learning goals must realised. Wehle confirms this in his comment that,

When preparing one of these studies one should begin by considering the practice purpose it serves and then proceed to analyse the piece carefully to find out where precisely its particular problems lie.

To honour Uhl’s aesthetic, the comment needs to be applied equally to both technical and interpretative ‘problems’.

This study focuses on the well-documented form of formal learning, developed by Ericsson, termed ‘Deliberate Practice’. Ericsson summarizes a number of conditions that impact on optimal learning and improvement in performance as being related to:  
  - Motivation, to attend to the task and exert effort to improve performance
  - Task design should take into account the preexisting knowledge of the learners so that the task can be correctly understood.
  - Learners should receive informative feedback.
  - Learners should repeatedly perform the same or similar tasks.

Ericsson’s research on deliberate practice has been cited by many and is seemingly accepted by the music profession as the most effective way to achieve expert performance. Meinz and Hambrick question however whether two individuals

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103 Wehle, ed., Alfred Uhl, 48 Etüden für Klarinette, preface.
practising at the same intensity for the same time will achieve the same skill level.\textsuperscript{106} Their research investigated the impact basic individual capacities had on learning outcomes such as working memory capacity and suggested that,

...deliberate practice - although necessary for acquiring expertise - will not be sufficient to overcome limitations due to basic abilities.\textsuperscript{107}

Hambrick et al found that:

On average across studies, deliberate practice explained about 30\% of the reliable variance in music performance, leaving about 70\% unexplained and potentially explainable by other factors. ...that deliberate practice is not sufficient to account for individual differences in music performance.\textsuperscript{108}

\begin{figure}[h]
\centering
\includegraphics[width=0.5\textwidth]{figure4.png}
\caption{Variance in music performance accounted for by deliberate practice\textsuperscript{109}}
\end{figure}

Furthermore, in other research, Hambrick et al. reviewed the evidence concerning the origins of expertise and summarised thus:

1. Though undeniably important from a statistical and practical perspective, deliberate practice does not account for all, nearly all, or even the majority of the variance in expertise.
2. Basic abilities predict expertise in some domains and sometimes even in highly skilled performers.
3. Personality factors predict expertise indirectly through deliberate practice, but may also predict expertise directly.
4. Forms of domain-relevant experience other than deliberate practice (e.g., work) positively and meaningfully predict expertise.
5. Genetically influenced factors account for individual differences in expertise, both indirectly through training and directly.

\textsuperscript{106} Elizabeth J. Meinz and David Z. Hambrick, ‘Deliberate Practice is Necessary but Not Sufficient to Explain Individual Differences in Piano Sight-Reading Skill: The Role of Working Memory Capacity’, \textit{Psychological science} 21.7 (2010), 914.

\textsuperscript{107} Meinz and Hambrick, ‘Deliberate Practice is Necessary’, 918.

\textsuperscript{108} David Z. Hambrick, Frederick L. Oswald, Erik M. Altmann, Elizabeth J. Meinz, Fernand Gobet, Guillermo Campitelli, ‘Deliberate Practice: Is That All It Takes to Become an Expert?’, \textit{Intelligence} (2013), 40.

\textsuperscript{109} Hambrick et al, ‘Deliberate practice: Is that all it takes to become an expert?’, 40.
6. Models of expertise that only take into account deliberate practice will never adequately account for the major facts of expertise.\textsuperscript{110}

Notwithstanding the questions above and deliberate practice’s partial role in the acquisition of expertise, deliberate practice will, according to Expectancy Theory, offer a process that, through structured practice, will promote higher levels of expectancy in skill acquisition. As a consequence expectancy theory predicts improved motivation levels to achieve valued outcomes. Focussing, therefore, on what can improve levels of expectancy; a pedagogical approach can be generated integrating targeted practice exercises conforming to the principles of deliberate practice. Examples of these follow in Chapter 3.4. These exercises, based on selected technical issues, might form models for clarinettists to modify and develop according to their own specific requirements. Where useful, acoustical and biomechanical principles are incorporated into the exercises to help inform the player of the physical basis and justification of the approaches taken.

Given then the limitations of our basic abilities, optimising the outcomes of deliberate practice can be enhanced, at least, through what is within our control. In contrast to the constraints of our inherent abilities, the effective design and application of deliberate practice principles offers fertile ground for performative improvement. Practice design is a crucial planning factor within the performer’s control.

2.7 Practice Design

A key consideration of practice design is how repetition, often termed ‘drilling’ is managed in practice. Menahem Pressler describes part of his practice design:

\begin{quote}
I would take a place and would practice it until I found some kind of a solution of technique. Let’s say I’m practicing the Préludes of Chopin. I will take the difficult ones first and practice them technically, conscientious of fingerings, arm weight, wrist, knowing what to do at which place, drilling again and again, especially the places where the jump makes it difficult or the fourth finger buckles under or whatever the difficulty is, yes? That is the way I will practice, incorporating all passages into an overall feeling of control…\textsuperscript{111}
\end{quote}

Combining the effective application of deliberate practice in the context of expectancy theory, questions can be asked regarding the design proposed above by Pressler. In particular, the potentially inane act of ‘drilling again and again’ requires careful consideration. As soon as the player begins repeating a passage there will be various options as to the design of those repeats, with, one might assume, differing potential benefits.

In a review on practicing by Peter Miksza, researchers, in testing the relative effectiveness of practice strategies, have focused on modelling and mental practice. Results by various researchers point to the benefits in using a practice model rather than free practice. Practice models have also been found to increase practice times. Furthermore researchers have found that self-evaluation added to modelling significantly improved outcomes. Mental practice has been found to be less effective than physical practice but is beneficial where physical constraints limit practice time.

Stambaugh investigated the effects of blocked and random practice schedules on the performance accuracy, speed, temporal evenness, and attitude of beginning band students in a group instructional setting. Given more than one practice task in any particular practice session, three possible options for ordering these tasks are available:

1. Blocked practice - completing all practice on one task before moving to next
2. Random practice - practicing each task an equal number of times in a constantly switching order, and,
3. Serial practice – using a defined order whereby no successive trial are of the same task.

The frequency at which different practice tasks are undertaken is termed contextual interference. Various researchers have suggested higher levels of contextual interference may show superior retention or transfer of learning. It has also been shown that more complex tasks benefit from higher levels of contextual interference than less complex tasks. Other findings summarised by Stambaugh et al. include that physical practice alternating with mental practice was as effective as physical practice alone.

Aligning practice design with Uhl’s preference of content over technical detail in an approach to the 48 Etüden will, according Tagg’s question ‘why and how is who communicating what to whom and with what effect?’, maximise the understanding of Alfred Uhl, his aesthetic, his Etudes and how they might impact on unlocking the pedagogical potential of the Etudes for the clarinettist. Fundamental to maximising this outcome is the assumption that understanding ‘why what is’ will instil higher levels of motivation. In turn, this amplified level of motivation will generate superior qualitative and quantitative outcomes.

PART III. How and to Whom

Chapter 3 Practical Application

3.1 Tagg’s Communication Model

Written language is a human invention, a construction of lines and curves on a contrasting background. The shapes are meaningless in themselves; only through a process of signification do they release their potential power of communication. Likewise, sound is only the compression and rarefaction of air molecules. Music, a special case of ‘sound’ communication, is derived from an extensive, cultural-dependent process of signification. In Cartesian terms, music exists only in the collective minds of its participants: its composer, performer and listener. This existence is bound together by agreements of signification, over time, within a particular culture. Music is a sociological act and hence one approach to unlocking its potential value is through the description and explanation of the connections between these participants.

Traditional musicological analysis typically focuses on the musical text. Structural elements and their constellations that comprise a work’s form are considered independently of contextual considerations of composer, performer and audience. Tagg’s pragmatic semiotic approach considers the connections, holistically, between composer, text, performer and audience as fundamentally necessary. The importance to Uhl of this concept is exemplified in how he connects his experience with the performer in a number of practical ways.

Uhl’s sympathetic pedagogical approach reveals his interest in the playing circumstances of the player. As Lurie stated, ‘Alfred Uhl was on our (the player’s) side’.117 Uhl’s holistic conception of the Etudes is sensitive to the practical and musical needs of the player. It is this strategic approach that appears to have driven the enduring success of the Etudes. Witeschnik writes,

His [Uhl's] artistic goal is the ideal fusion of thoughts and emotions unit to a clear personal imprint. Therefore, it seems every one-sided emphasis on the mental or emotional as a "tumor on the body work" as a "distortion of the message." . . . What comes from the realm of the sensual is spiritualized and refined so meaning to be cleaned of all excess. However, the spiritual should be derived from the physical sense of heartbeat, warmth and colour. The work’s form is then ‘shaped and ordered with wise economy in mind’. 118

Uhl’s artistic goal was to create a personal imprint from a balanced unity of thought and emotion, without preference, so as not to be distorted. His 48 Etüden therefore form a collection of ‘signs’ that he believed was an interpretation of real world senses, refined through a spiritualisation, economically shaped and ordered in an artistic form. This process can be defined as signification, or semiosis. That is, the process of ‘signifying’: meaning-making behaviors in which people engage, following

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118 Witeschnik, Alfred Uhl, 68. [Current author’s translation].
particular conventions or rules of construction and interpretation.\textsuperscript{119} The Etudes, therefore present themselves not only as an approach towards technical perfection, but as a means to revealing a rich musical tapestry comprised of Uhl's synthesised connotations, or messages, distilled from his real world senses. Tagg's pragmatic semiotics provides a key to unlocking these associations.

Tagg's communication model (Figure 5) conceptualises the process and reception of signification; how messages are transmitted within a codal (store of symbols) and cultural (sociocultural norms) field\textsuperscript{120}. The intended message or sign may be the smallest musical element that can convey significance, a ‘museme’ as Tagg calls it, a sequence of musemes (phrase) or a whole musical structure. Tagg has developed a semiotic method that categorises in a typology (Table 2) various musical signs that may be understood in either ‘intersubjective’ or ‘interobjective’ ways.

An intended message of a particular ‘type’ can be tested by two analytical approaches. Tagg defines them thus:

\textbf{Intersubjectivity} establishes consistency of \textit{response} to the \textit{same} piece of music.

\textbf{Interobjectivity} establishes consistency of \textit{structure} between \textit{different} pieces of music.\textsuperscript{121}

In validating the operative significance of a particular museme or set of musemes, commutation or hypothetical substitution can be employed to test assumptions. For example, if a passage is altered by articulation, volume, interval or major/minor etc. and if this particular change makes no difference then that particular parameter is likely to be connotatively unimportant.

\begin{flushright}
\textsuperscript{120} Tagg, \textit{Music’s Meanings}, 174.
\textsuperscript{121} Tagg, \textit{Music’s Meanings}, 196, 229.
\end{flushright}
Tagg suggests that ‘most problems of musical communication are attributable to
codal incompetence and /or interference.

*Codal incompetence* in music arises when transmitter and receiver do not share the
same vocabulary of musical symbols.

*Codal interference* arises when transmitter and receiver share the same basic store of
musical symbols but totally different sociocultural norms and expectations."122

He continues and claims that ‘Codal incompetence and interference are ... vital to
change the music of any culture’. In referring to the model above, this evolution of
music can be explained in that the store of symbols interact with sociocultural norms
producing new (reinterpreted) signifiers or symbols for old, which then fall out of
usage or are interpreted as being ‘archaic’. In contrast to the represented fixed box in
the model above, sociocultural norms and the store of symbols are actually in a state
of constant change. This point is important as it recognises that Uhl’s *48 Etüden* have
and continue to change according to paramusical factors; social, cultural, etc.
However, in referring back to Uhl’s credo, this does not limit the opportunity for the
clarinettist to find ‘his own voice’ in the *48 Etüden*. Tagg’s sociologically informed
semiotic approach, which champions the connections between composer, text,

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performer and audience, can be implemented to unlock the pedagogical and expressive potential of the 48 Etüden that reflect Uhl, his musical context, and, the performer and his or her musical context.

Such outcomes can be applied to Uhl’s other works, as they will share a similar store of symbols and sociocultural norms. The enclosed CDs no 3 and no 4 represent examples of this application. More generally, this approach provides the clarinettist with an informed understanding of Uhl’s contemporary and inherited musical world that provide invaluable benefits to the comprehension and appreciation, in a more universal sense, of music today, whenever that might be! As Chandler reminds us: ‘...we live in a world of signs and we have no way of understanding anything except through signs and the codes into which they are organised’.

3.2 Musical structure

Musical structure can be examined from the perspective of the composer and clarinettist. ‘Composers...’ says Tagg, ‘take great care in getting the right sounds in the right order at the right time’. The building blocks of musical production can be discerned by observing how composers change what they do with the sounds and how they refer to the sounds they are composing. These elements can then be seen as structures within the composer’s music culture.

As for the understanding music from the clarinettist’s perspective, intersubjectivity must be established. Tagg suggests asking ‘what in the music (structure) causes which response’. He concludes:

...definitions of musical structure must, in a semiotic context, be based on information both from the transmitting and receiving ends of musical communication process, but ... structural elements identified on the transmitting side are not necessarily musical signifiers [to the receiver].

Tagg’s ‘sign typology of music’ allows a discussion of how these structures can act as signifiers: ‘To discern how they relate to their signifieds’.

123 Chandler, Semiotics: the basics, 11.
125 Glossary in: Chandler, Semiotics: the basics - defines the following terms:
Semiotics: The study of signs
Signified: The mental concept represented by the signifier (e.g. Viennese music tradition)
Signifier: The form which a sign takes (e.g. ternary form)
Tagg defines anaphone as analogous to ‘analogy’, but rather than imitation of existing models in the formation of words, meaning the use of existing models in the formation of musical sounds.

- **Sonic anaphones**: can be thought of as quasi-programmatic stylisation of ‘non-musical’ sound, e.g. Schubert’s babbling brooks, William Byrd’s bells
- **Kinetic anaphones**: are to do with the relation ship of the human body to time and space or of animals e.g. marches, dances, fights of bumble bees etc.
- **Tactile anaphones**: are to do with ‘touch’ sensations that are typically represented as textures e.g. soft and velvety, lush, smooth, prickly, etc.
- **Genre synecdoche**: a set of musical structures inside a given musical structure that refer to another musical style by citing one or two elements seen as typical of that other style. e.g. ternary form as referring to classical aria form, and the complete context of Classical music
- **Episodic marker**: act as lead-ins, pointing the musical narrative in the direction of something new, be it a new theme or section, or even the final note as this is always new since it can only happen once.
- **Style indicator**: refer to the ‘compositional norms’ of a given style. e.g. certain classical phrasings, harmonic treatment or whole tone scales etc.\(^\text{128}\)

These sign ‘types’ and an understanding of their function in the context of Tagg’s communication model, can be thus used as a means for identifying operative elements in the musical text that in an appropriate performance context may generate transferable musical expression. Identifying and describing these elements allow them to be integrated into the musical fabric of the performer’s interpretation of the Etudes and by extension to other musical works.

3.3 An Application of Tagg’s Sign Typology

The following musical extracts from Uhl’s 48 Etüden no. 2 can be categorised according to Tagg’s ‘sign typology of music’.

*Genre synecdoche*

![Figure 6 - Uhl’s chimes](image)

In the example above (Figure 6) the surface articulation and written out appoggiatura are removed to derive the underlying musical structure. In the first bar Uhl uses the first four tones of the Westminster chime, ubiquitously known as a door chime. The door chime was coincidently mass marketed by Rittenhouse in 1935 in the form of the first electric door chime. It seems difficult to believe that Uhl’s use of the chime theme was unintentional but as to why he used the musical quote, as a ‘genre synecdoche’ is unknown. Did Wlach’s ringing of Uhl’s newly installed doorbell in 1938 inspire Uhl to compose this structural anaphone in Etude no. 2? Whatever the circumstances, an interpretation of its use, albeit fanciful, might run along the lines of Uhl making an ironic statement about ‘everyday objects as art’ in reflecting the aesthetic of the Dadaists in Zurich earlier in the century (1916-1922).

*Style indicator*

In developing the first bar, Uhl uses what Tagg terms a ‘style indicator’. This can be interpreted as a compositional norm in a particular musical style. In this example the material of the first bar is the basis for subsequent variation and development throughout the whole etude. This treatment alludes to an important nineteenth century compositional device used to great effect, amongst others, by Brahms.

*Episodic marker*

The final bars of Etude no 2 (Figure 7) use two complementary ‘episodic markers’. The first, a progressive ascending scalic variation of the original appoggiatura motive, capriciously soft and high, and secondly; in offering a resolution, a fortissimo, syncopated retort clearly determining the etude’s conclusion.

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3.4 Practical Examples

Uhl’s concern with musical content is central in how the clarinettist connects with the Etudes. Expressive potential in performance relies on the clarinettist’s ability to execute with consistency and reliability the accurate rendering and differentiation of particular musical elements. Referring back to Tagg’s Communication Model, this relates to reducing ‘codal incompetence’ and ‘codal interference’. As such a pedagogical analysis of general performance skills (Appendix D) and a detailed discussion with examples of a selection of the 48 Etüden (following) may strengthen the clarinettist’s overall expressive potentiality in both the current material and other musical challenges.

3.4.1 Etude no. 1

The first study of the 48 Etüden provides an excellent opportunity to build on a number of important technical skills for clarinet that are required for all playing. The development of musical expression is dependant on notions of what is to be expressed and the means by which this is achieved.

Figure 8 shows the first seven notes of the Etude. Within these 6 beats is a treasure-trove of pedagogical potential waiting to be unlocked. As a cabinet maker requires a flat and square piece of timber to build fine furniture, so too the clarinettist requires, before any musical construction can be created, the raw ‘unmodified’ musical materials that can subsequently provide consistent and multifarious vehicles of expression. Although the composer predetermines many of the elements of music, the execution of the written score is planned, managed and assessed by the performer in real time whilst executing a performance outcome. The difficulties associated with this task cannot be overestimated and thus the strenuous training of both the hardwiring of mechanical physical movements and developing expressive flexibility as inspired by the moment are critical to performative excellence. Important musical elements to be analysed and trained: intonation, timbre and legato.
The first two notes of the first Etude immediately pose two fundamental difficulties in the execution of high-level legato as required by Uhl’s writing. Firstly, as illustrated in Figure 9, the finger changes required by the first four notes are essentially at a maximum. Apart from the first LH finger requiring a special rolling technique to enable a legato transition from depressing the A key to covering the first hole, all of the fingers need to simultaneously cover and depress keys to establish the fingering for B4. This initial problem can be, however, significantly mitigated through preparing fingers for the B4 whilst playing A4. As it turns out almost all fingers, depending on the individual clarinet can be depressed whilst playing A4 thus requiring the minimum movement and coordination.
Figure 10 - Etude no.1 annotations

Figure 10 above annotates the use of extra fingers to improve the transition between A4 and B4. The suggestion for G4 below the notated bracket is the following fingering (Figure 11).

Figure 11 - Alternative G4

Secondly, the three registers of the clarinet, as illustrated in Figure 12, display varying ‘characteristics in relation to their spectral construction and thus their timbre’.\textsuperscript{130}

In his discussion of the acoustics of the clarinet, Wolfe comments on the various acoustical characteristics of the clarinet registers.

The predominant presence of odd harmonics in the lowest or **chalumeau register** gives this register its characteristic 'hollow' timbre. From E4 to A#4 the even harmonics become more important. Once the speaker key is used, the systematic difference between odd and even harmonics almost disappears, and the timbre becomes bright and clear. ...This difference in timbre is one awkwardness associated with the 'break' between A#4 and B4; the other is the fingering difficulty 'to cross the break'—moving several fingers and a thumb simultaneously.

The difficulties that arise from the simultaneous depression of keys are exacerbated by the acoustic characteristic of the note on each side of the 'break'. A common difficulty in achieving a good legato between these notes is caused by the ergonomic balance of the instrument that is different for each note as the number of fingers and their respective pressure points change from one note to the next. Given the number of fingers involved in the note change the problem is compounded to a point where there is a physical movement of the instrument that effects the embouchure and can result in an irregular bump in the sound due to a jolt in the embouchure. Additionally there is a sensation of a pressure differential between the 'short' A#4 and the 'long' B4 fingerings. Unless the player exerts a constant and equal diaphragmatic pressure there will also be a bump created by differing blowing pressures across the break. The third difficulty is one pertaining to matching the timbre of each note given that they are acoustical different in terms of their harmonic make up. Wolfe describes these differences:

[B4] is the first note in the clarino register, ie the first note above the break. The break is not only awkward for the fingers .. but it creates another problem facing every clarinettist. In the first register the first and third harmonics are strong, and the second is weak. This preponderance of odd harmonics gives the clarinet in its low range the characteristic 'hollow' sound. As one ascends in the clarino register and above, however, the even harmonics begin to lose their systematic weakness. Consequently the sound is brighter, fuller and, unless one is careful, louder. Playing a passage across the break, one tries to hide this difference in timbre and loudness.

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The spectra of most of the notes in the clarino register have both odd and even harmonics and the associated bright, full tone rather than just the odd harmonics and 'hollow' sound of the chalumeau register. In the chalumeau register, there are impedance peaks near the third, fifth and seventh harmonics, whereas there are 'valleys' corresponding to the second, fourth and sixth. Beyond that, the peaks are no longer in accurate, harmonic ratios and the effect disappears. For the low notes in the chalumeau register, this high frequency inharmonicity is due to the, for higher notes it is due to the effects of open tone holes.

In the clarino register, even the third and fifth harmonics of the note played (which would be the ninth and fifteenth harmonics of the corresponding note in the chalumeau register) are up in the frequency ratio where the bore is inharmonic, because of the bell and tone hole effects.132

As Wolfe suggests, the practicing clarinettist attempts to find ways of hiding differences in timbre and loudness. A systematic approach following principles of Deliberate Practice can be employed to isolate particular difficulties. Solutions can be derived through the use of exercises that delimit a learning task through comparison and contrast. Many problems can go unrecognised due to the idiomatic characteristics of the instrument, such as playing over the break. After many attempts the inadequacy can become normalised. As an illustration of a possible remedy: learning Db major on the clarinet one might first play C major observing and analysing the tonal connections between the notes, observing finger coordination and clarity of execution. If one attempts to reproduce the same tonal outcome in the key of Db any inadequacies of one’s technique becomes quickly apparent. It is difficult to achieve a relatively good sonic result without first having a clear sonic image in one’s mind to aspire to. Rendering a similar yet simpler tonal connection in a different key or different part of the scale allows for such conceptions to be formed. As an example the performative difference in difficulty between executing the tonic and supertonic in the two keys is stark. In the key of C major a simple movement of raising the fourth finger achieves the next note d whereas in Db major in the left and need to simultaneously raise the 3rd and 4th fingers whilst at the same time the right hand 2nd finger must depress the first side key (Figure 13). The difficulty in C major is restricted to the timely raising of the finger and ensuring the fleshy pad of the finger that has sealed the hole is removed evenly and quickly. In the case of Db major three movements need to coincide, all at the same digital velocity and temporal synchronicity.

Figure 13 - Ab5 and Bb5 fingerings

Figure 14 below notates an exercise than can be utilised to observe, train and strengthen the required technique in rendering effective oral tract fluctuations that accompany the transition between pitches. The oral cavity can be successfully used to modify both intonation and timbre to allow correct intonation and timbral uniformity. One might argue that the following musical parameters determine the legato-ness of a change in pitch. Assuming that legato refers to a ‘connectedness’ of adjoining notes, any factor that diminishes the similarity between the tones will pose a legato problem. Any discrepancy or unevenness in these parameters will as a consequence create a disjunction between neighbouring notes that will cause the listener to observe a change in musical quality apart from pitch.

1. Pitch
2. Timbre
3. Volume
4. Articulation\textsuperscript{133} (caused inevitably from finger/technical facilitations of pitch change)

Therefore, listening to the exchanges and evaluating by ear or better, through a visual evaluation using an oscilloscope and Fourier analysis, one can perform the following exercise to generate improved quantitative results.

Figure 14 - Interval legato exercise

\textsuperscript{133} Defn: ‘The separation of successive notes from one another, individually or in groups, esp. regarded as an aspect of a performer’s technique or interpretation; the manner in which this is done. Also: the capacity of an instrument to produce this effect’. ‘articulation’, n. OED Online. Oxford University Press. http://www.oed.com/view/Entry/11196?redirectedFrom=articulation (accessed 31 December 2016).
3.4.2  Etude no. 2

The example exercises given below (Table 3 and Figure 15) follow a notated rationale that begins in exercise (a.) with a simplified version of the original that has stripped back the musical texture and structure to its core structure. The exercises then follow a process of increasing complexity and difficulty. Important points:

1. The exercises should all begin at a tempo that allows complete control of the learning aims
2. As one progresses from one exercise to the next the previous learnt aims should be used as a base for the next level
3. The exercise template is to be duplicated throughout the study

Table 3 - Exercise Goals

<table>
<thead>
<tr>
<th>Musical parameters</th>
<th>Learning aims</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Harmony, legato,</td>
<td>Learn harmonic structure, practice air support of phrase, maintain accurate intonation</td>
<td>Metronome, tuner, dB meter, frequency analyser</td>
</tr>
<tr>
<td>b. Medium length staccato, dynamic, timbre</td>
<td>Maintain accurate articulation of staccato that is both light and precise</td>
<td>Metronome, dB meter</td>
</tr>
<tr>
<td>c. Discrete short staccato</td>
<td>As above but ensuring duration of tone is half</td>
<td>Metronome, dB meter</td>
</tr>
<tr>
<td>d. Repeated staccato</td>
<td>As above ensuring even articulation and rhythm</td>
<td>Metronome, dB meter</td>
</tr>
<tr>
<td>e. Finger technique</td>
<td>Ensuring consistent phrasing and regulated fingers</td>
<td>Metronome</td>
</tr>
<tr>
<td>f. Finger technique</td>
<td>As for (e.) but quicker</td>
<td>Metronome</td>
</tr>
<tr>
<td>g. Staccato</td>
<td>Maintain accuracy in articulation and rhythm</td>
<td>Metronome</td>
</tr>
</tbody>
</table>
no.2 from 48 Etüden

Original

Allegro \( \frac{d}{4}=116 \)

Exercises

a.

b.

c.

d.

e.

f.

g.

Figure 15 - Etude no. 2
3.4.3 Etude no. 3

Mitchell Lurie regards this study as his ‘bible of slow and even playing – the moderato 96 to the quarter is almost easy’. He continues, ‘It’s much easier to get that legato line going when you play faster, much harder when it’s slow’. It is difficult to rationalise this comment other than that there may well be a sense of technical ‘momentum’ that the clarinettist might achieve with faster tempos. If the player is concerned with aiming for some notion of perfection then there is no doubt that legato playing is for many reasons very challenging. Its difficulties can only be examined, analysed, corrected and re-examined at a tempo slow enough to hear the individual notes and their connections to each other. Many teachers remind us of the importance of slow technical practice. Wehle gives the general advice that technical exercises require their ‘own appropriate tempo, not too fast to start with so the movement sequences can be monitored clearly’. Stein’s comments agree: ‘The French are great technicians and much can be learned by imitating their meticulous slow repetition until automatic response takes place between every possible scale and chord member’. As discussed earlier, legato relies on the homogeneity of successive tones. An approach to this is to match extremes in the musical phrase then progressively fill in intermediary tones.

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134 Laubacher, ‘Mitchell Lurie’s Approach’, 36.
The practice aims of Figure 17 centre on maintaining constant volume and timbre across all notes. Minimal or no embouchure movement facilitates evenness allowing the reed to maintain its vibration and uniform air flow through the mouthpiece. Subtle corrections to the oral cavity by means of tongue movements allows for better tone control and consistent intonation.

A significant difficulty in this Etude is mastering the finger regulation required for successive tones that often require differing numbers of active fingers and changes in the directions of those fingers. Critical to developing a regulated result is to maintain equal speeds of finger movements, similar travel distances and similar technique in how holes are covered with a fingertip. A comparison to notes that are keyed is useful in formulating a model for the fingertip to emulate. Utilising various rhythmic combinations and moving stress points helps the clarinettist in listening to unevenness and helps to locate and identify the responsible technical weaknesses. The following (Figure 18) provides some examples of practice exercises utilising displaced stresses and changed rhythm.
A particular difficulty exists in bar 3 where the clarinettist is required to produce a number of descending octave leaps. This technical challenge of descending larger intervals over the break is highlighted in various other of Uhl’s Etüden but most thoroughly in Etude no. 30. The problem lies in ‘resetting’ the vibrations of the reed to a lower fundamental from an overblown note in the second register. Though many teachers advocate lightly tonguing the lower note to achieve this, the current author has found creating radical oral cavity dilation at the moment of changing fingering to the lower note a very satisfactory result can be practiced that maximises the legato requirements of this phrase. No other change (e.g. embouchure pressure) is required, however for the first attempts it will help to release the mouthpiece out from the mouth very slightly for each lower tone. The following exercise (Figure 19) can be used to slowly practice this passage.
Any good scale method will also include all scales in diatonic intervals, which will also provide adequate resources for improving this technique. The volumes by Baermann, Kovács and Jettel are particularly useful in this regard.\textsuperscript{137}

Another common exercise advocated by many teachers is the following (Figure 20). This exercise essentially overblows a twelfth then returns to the fundamental, descending chromatically as far as is practicable. The second overtone can also be included to produce a three-note legato phrase. Note that the overblown notes are out of tune. The object is to produce the 'best quality' out-of-tune note to practice the legato goals of this exercise.

Special care and evaluation is required in passages that require the fingers to move in an opposite direction to the music creating a counterintuitive contrary motion. On the fourth beat of bar 8 (Figure 21) there is an awkward combination of fingerings where the RH first finger is depressed for a higher note that in the flow of finger exchanges feels contrary to the melodic direction. Increasing the difficulty of this passage is also the required coordination of two hands and the double usage of the LH third finger that for most players will be the weakest and sluggish finger.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure19.png}
\caption{Slurred octaves}
\end{figure}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure20.png}
\caption{Overtone exercise}
\end{figure}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure21.png}
\caption{Contrary finger motions}
\end{figure}

Etude no. 4

Figure 22 - Etude no. 4

Etude no. 4 is a study focused on rhythmic articulation. The major difficulty revolves around maintaining an accurate dotted rhythm in tempo for the duration of the study. Both speed of tonguing and endurance is important. Although the fast repetitions require only two articulations they do however equate to a semiquaver tonguing speed of M.M. 168 which lies at the upper end of most clarinettist’s single tonguing for two repetitions.

Figure 23 - Rhythmic tonguing

Figure 23 above gives a means to securing an accurate dotted rhythm by filling the dotted crotchets with semiquavers. Exercise 1a. should be commenced very slowly and proceed to the fastest tempo possible. If a tempo of 168 cannot be reached the alternative exercise 1b. may be utilised to increase the tempo which allows some time for the tongue to recuperate.

An excellent exercise in tonguing for speed and endurance can be found in Jettel’s Klarinetten-Schule. Jettel maintains that a virtuoso staccato is ‘to a high degree’ dependant on the player’s natural constitution. However he predicts that:

At least an average quality staccato can be achieved by exactly following the subsequent staccato exercises. Initial fatigue of the tongue is no reason for abandoning the matter as one having no prospect of success, progress being observable only when the staccato is exercised for one hour every day.

Jettel's Virtuoso Staccato Exercises

To be played as shortly and strongly as possible at a slow tempo until tongue is tired.

Particular attention should be paid to the distinct production of the 32nd notes, by very short and strong tongue action.

To be learnt with extreme care.

To be played twenty times in succession, without any reduction in the strength of the 32nd notes.

Finally, the student should exercise all scales in the following manner over the entire range of the instrument.

Figure 24 - Jettel's staccato exercises\textsuperscript{139}

\textsuperscript{139} Jettel, \textit{Klarinetten-Schule}, 84-85.
Etude no. 5 poses a number of significant difficulties that revolve around the key of Db. The finger exchanges between Db4 and Eb4, and the corresponding fingerings in the clarion register Ab5 and Bb5 are awkward and difficult to coordinate at this etude's tempo marking. Also difficult are the exchanges between the throat tones Ab4 and Bb4 that often occur in quick succession or interpolated with notes above the break (B4) as in the first bar. A facile left-hand technique is required to achieve accurate and legato transitions.

As mentioned above, if one becomes accustomed to a particular technical problem the inadequate technique often becomes habitualised and normalised to an extent that the player no longer hears the fault. An effective way to overcome this ‘deafness’ is to practice transposed sequences on other notes. Difficult note combinations are transposed to easier ones that afford the opportunity to re-hear the passage in a more fluent way, thus preparing a better mental model for the difficult sequence. In this way, diatonic sequences of short motives offer a way forward. The following exercise (Figure 26) can be practised in various articulations and rhythms. Slow, decisive finger movements in a very strong rhythm will aid in training and regulating the fingers.

It is also critical in this study to find continuance in the 4 bar phrases. Establishing a staccato approach to the quavers that finds a horizontal direction rather than a static ‘vertical’ sense is vital to achieving a well-constructed phrase. Maintaining a constant air pressure with diaphragm and intercostal muscles, using the tongue only and simply as a ‘valve’ to allow a parcel of air to form the note will help create a sense of bonding between separated notes that can be moulded into a phrase.

The utilisation of an oscilloscope can provide visual learning cues that help develop an accurate and even separation between notes whilst maintaining a constant dynamic, or when required a graduated change in dynamic (see Appendix D.7)
3.4.6 Repertoire Case Study

The discussion above of the Etudes has addressed the pedagogical implications embedded in those etudes. It remains to consider in some detail another aspect of Uhl’s compositional praxis, as it relates to the dynamic between tradition and innovation in his works. It also provides a case study in the application the pedagogical impact exemplified in the above discussions.

*Improvisation über altdeutsche Volksweisen für Viola d’amore, Bassetthorn und doppelchörgige Laute*

Uhl fostered numerous musical relationships with his colleagues during his long working relationship at the Vienna Music Academy and Vienna Philharmonic Orchestra. In composing this work he revisited an early compositional period in his life. In the 1930s Uhl invested considerable energy in writing for the guitar, of which the earlier part of that decade was termed by Witeschnik as his *Gitarren-Periode*.140

There were two important guitarists in Uhl’s musical life. Karl Scheit (1909-1993) was Uhl’s contemporary and they taught together at the Vienna Music Academy. Uhl composed a number of works premiered by Schreit including a Sonate (1937 actually

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written for André Segovia) and 10 Kleine Stücke (1939). The 10 Kleine Stücke gained considerable international acclaim.\footnote{Witeschnik, Alfred Uhl, 24.} Karl Scheit was one of the most important figures in the twentieth century for the guitar in Austria. As a teacher, he founded a new school of playing, built on Melodiespiel in contrast to the guitar’s previous role as primarily an instrument of accompaniment\footnote{Stefan Hackl, ‘Karl Scheit’, Gitarre-Archiv Österreich, \url{http://www.gitarre-archiv.at/personen/karl-scheit/} [accessed 27 April 2015].} In a Hommage à Karl Scheit, Würdinger writes: ‘He [Scheit] had a sweeping influence on the development and popularization of modern guitar playing and is one of the most renowned personalities of guitar playing this century’.\footnote{Walter Würdinger, ‘Hommage à Karl Scheit’, Universität für Musik und darstellende Kunst Wien, \url{http://www.mdw.ac.at/gitarrenwettbewerb/hommage_e.htm} [accessed 27 April 2015].}

Scheit was also a lute player and with his knowledge of that instrument transcribed many lute works from tablature to the modern guitar. In these transcriptions he took advantage of the modern instrument’s strengths, writing, ‘With our modern guitar, it is possible to take advantage of the instrument fully: harmonically, horizontally with our longer fingerboard, and tonally with its expanded timbre’.\footnote{Terrence Farrell, ‘Interview with Karl Scheit’ \textit{The Carmel Classic Guitar Society Journal} 15 (2005), \url{http://archive.is/JZxDV} [accessed 5 January 2017].}

\begin{figure}[h]
\centering
\includegraphics[width=0.5\textwidth]{karl-scheit-lute.png}
\caption{Karl Scheit with lute \footnote{Source: \url{http://www.gitarre-archiv.at/bildarchiv/diverse-bilder/} [accessed 27 April 2015]}}
\end{figure}
As a young man, Alfred Uhl took cello lessons from his uncle who lived close by. In his uncle's house a young guitar student named Carl Dobrauz (1900-1963) sub-let a room with whom Alfred became acquainted. In 1928 Uhl wrote a 4-movement chamber work for his student colleague of the Music Academy, Carl Dobrauz and his guitar ensemble. The work met with considerable success being broadcast on national radio and published by Doblinger.

In his latter years, Dobrauz worked intensively with the doppelchorige Laute. He not only helped rejuvenate interest in the historical works for the instrument but showed great interest in its use in new music. From a list of contemporary chamber music works from 1953/54, it appears Dobrauz may have commissioned a number of contemporary chamber works utilising doppelchorige Laute (Figure 30). And as a consequence it appears likely that this interest created a link with Alfred Uhl and the composing of the Improvisations über altdeutsche Volksweisen. Ferdinand Rebay composed a work similar in name to Uhl's composition titled Kleines Rondo über alfranzösische Volkslieder für Viola d'amore und Laute

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147 Witeschnik, Alfred Uhl, 17
148 Witeschnik, Alfred Uhl, 17
Figure 29 - Carl Dobrauz\textsuperscript{150}

\textsuperscript{150} Source: \url{http://www.gitarre-archiv.at/personen/carl-dobrauz/} [accessed 27 April 2015]
Paul Hindemith revitalised interest in the Viola d’amour and premiered Kammermusik no. 6 Op.46 No.1 (Concerto for viola d’amour and orchestra(s)) in 1927. Hindemith also composed Kleine Sonate for viola d’amore and piano (1923)

Karl Stumpf (1907-1988), born in Vienna, was a violist in the Vienna Philharmonic and the Vienna State Opera, as well as a professor of viola d’amore in the famous Vienna Akademie für Musik (now Hochschule). Given his position and Uhl’s good relations with his colleagues it is likely Stumpf was the envisaged viola player for this work. The viola d’amore, of the viol family, has seven playing strings and a series of resonant or sympathetic strings. It was developed at the beginning of the seventeenth century in this way as a means of augmenting the instruments sonority. Stumpf performed chamber music, made recordings, contributed scholarly articles to ten

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professional publications in four different countries, edited many early viola d'amore pieces, and wrote several compositions himself. His many editions have added immeasurably to the available viola d'amore repertory and his fine recordings brought many unknown viola d'amore works to the general public on a large scale.\textsuperscript{152}

![Viola d'amore](image)

Figure 31 - Viola d' amore \textsuperscript{153}

The \textit{Improvisations} was identified in a ‘List of Works of Alfred Uhl’ compiled by the researcher Hermann Sulzerberger completed in 1996 as a research project on behalf of the Institut für Österreichische Musikdokumentation (IÖM).\textsuperscript{154} Sulzerberger’s list can be relied upon as the most complete list of works by Alfred Uhl, as assured by his son Peter Uhl in an email correspondence to the current author.\textsuperscript{155} The works listed have details of composition date, title, publisher if applicable and the date of the works premiere performance. The entry in this list is:

1953 Improvisation über altdeutsche Volksweisen für Viola d'amore, Bassetthorn und doppelchörige Laute [Manuskript]

The majority of works including those denoted as manuscripts have premiere performance dates. This work does not have any recorded performance from any known source. Of particular interest is that the manuscript is not from Uhl’s hand. The title page was signed with the following signature that appears to resemble the signature on the photo of Carl Dobraz from 1928.


\textsuperscript{153} Source: \url{http://blog.metmuseum.org/guitarheroes/viola-damore-ca-1780/} [accessed 27 April 2015]

\textsuperscript{154} Hermann Sulzerberger, \textit{Alfred Uhl Werkverzeichnis}. \url{http://members.aon.at/sulzberger/infodat/a-uhl-wv.htm} [accessed 27 April 2015]

\textsuperscript{155} Peter Uhl, email correspondence with the current author, 31 May 2014.
Alfred Uhl's *Improvisation über altdeutsche Volksweisen für Viola d'amore, Bassetthorn und doppelhörige Laute* composed in 1953 offers various insights into his character and interests as well as those of his contemporaries and cultural environment. The incongruous constellation of instruments married with the descriptive title can be analysed using Tagg's semiotic approach.

The three instruments used by Uhl in this work are in today's musical environment relatively rare. Although all three instruments are frequently played in their specific repertoire there appears to be no other work written for this specific combination. It would appear that Uhl had the opportunity to bring together colleagues who played these unusual and peculiar instruments coupled with a music aesthetic that revelled in unconventional delivery yet remained historically reverential. This is very characteristic of Uhl's musical aesthetic.

Unconventional, in that the combination of timbres and three distinct modes of sound production these instruments make can be understood as kinetic anaphones, i.e. blowing, pulling/dragging and plucking. The choice of instruments creates an ambiguous 'style indicator'. We are connected to the instruments separately and are defined by their repertoire and historical context. In juxtaposing them Uhl has provided an opportunity to both appreciate their historical context but challenge the rules or assumptions. We measure music by particular norms and readily talk of 'un-stylistic', but if music can be made with three disparate instruments that meets some aesthetic goal then, to the right audience, it is still artistically valuable. Uhl heightens our awareness of cultural norms and their meanings and challenges them allowing for a broader conception of music's place in our lives.

Referring back to Uhl's comments (p.11), same forms (instruments) yet different people different times, different contexts, improvisations on old German melodies...Asking important aesthetic questions through conventional means, in this case old and in a contemporary sense unusual instruments. All three instruments command our attention according to Tagg as genre synecdoches that connote paramusical semantic fields – another place, another time in history, another culture, and other sorts of people. As such, the work provides an ideal denouement for this dissertation, in the sense that is demonstrates the pedagogical potential of an application of Tagg's pragmatic semiotics.

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Given, however, the difficulties in procuring both quality instruments and players, the current author has transcribed the parts to guitar, viola and Bb clarinet. Every attempt was made to maintain the original character of the instruments in the current edition.
Conclusion

The creation of art is nothing other than to go along old paths again for the first time and to fill old forms again with new spirit. Therefore, in music, the tone system or form can never be what is primarily ‘new’. What is ‘new’ is the human and what he has to say.¹⁵⁷

The research undertaken here has culminated in the recording of Alfred Uhl’s 48 Etüden für Klarinette and a majority of his other chamber and solo works for clarinet. The project has drawn a personal perspective, and generated a set of conditions that have added something ‘new’ to ‘old’ forms through a reconstruction of the text into an aesthetic expression of what was described by way of introduction as a fluid dynamic between past, present and future. A key outcome of the research has been the development and extension of performance skills that more accurately and artistically realise the sonic representations of the texts and their related musical content.

The project began with the germinating question: ‘why have these studies, above all others, quenched more satisfactorily the avid desire for a personal musical voice, one not restrained by technique nor imagination?’ In confronting the current author with difficulties to be resolved, both practical and emotional, the recordings are part of an ongoing answer to that question. It has, as Kronman suggests, clearly ‘force[d] an engagement with intimate questions of meaning and touches on matters of identity and ultimate concern’.¹⁵⁸ In this respect, the project has further strengthened an interdependent and pre-existing relationship between the Etudes and the current author. Evidenced by the performances on CD 3 and CD4 the Etudes have helped reveal the technical, interpretative and expressive potential of the works these discs contain. The Etudes have provided both a means to announcing a personal ‘musical’ voice, and strengthening a corporate connection to shared cultural traditions whilst providing ongoing technical nourishment, a cyclic, interdependent process that will continue to foster a more coherent ‘musical’ voice and stronger cultural connections.

Chapter One laid the foundations of who the man Uhl was and what he stood for as a composer compressed between the oppressive forces of Social Nationalism and the counter-traditional doctrines of Modernism, both of which Uhl found untenable. A historical survey of his life, works and words convinces us that in his mind music superseded all that is political or fashionable and that it is the specifically individual response to the world that makes true art. Taking Tagg’s model as a point of departure, Chapter Two outlined a rationale and method for extracting from the Etudes pedagogical benefits that did greater justice to Uhl's aesthetic. Drawing on motivational theory, deliberate practice and its design, a clearer sense of what the Etudes might be able to offer in terms of unlocking their pedagogical potential was offered. Chapter Three presented Tagg’s communication model and his sign typography in order to address, through worked examples, his question: 'Why and how is who

¹⁵⁷ Heinz Kratochwil, ‘Der Komponist’, 13. [current author’s translation]
¹⁵⁸ Kronman, Education's End, 69.
communicating what to whom and with what effect?". Following these practical models, a number of annotated exercises and explanations were offered drawing on the reflections of the first two chapters.

The appendices round out what has been shown to be a necessarily holistic view of Uhl's Etudes. The transcribed editions of unpublished manuscripts (see appendix E) were made from autographs of selected works located in the Austrian National Library. The invaluable opportunity of working with these primary sources enabled the current author to correlate the musical scores with historical details, establishing a closer relationship to the composer through the scores. Although a time consuming and detailed enterprise, transcribing and editing these works has given the current author an unusually privileged position of ‘feeling’ the composer’s artistic intention through the ink on each page. It is clear from many of the autographs, their annotations and revisions that Uhl collaborated with the musicians for whom he wrote and sought to activate their voices in his music. Uhl’s music is both innovative and respectful of his classical ‘Wiener’ heritage, evidenced in his quirky rhythmic figurations and well-planned musical architecture. His effective instrumentation pays testament to his musical imagination and the potential of each instrument’s unique voice. Uhl’s sympathetic and lively music quickly distinguishes him from his pensive contemporaries and his turbulent times.

Any investigation into the pedagogical potential of the Etudes is by its very nature open-ended, in that the process could be repeated ad infinitum, with each iteration unlocking greater performative accuracy and musical understanding. The substantive results of the project do not centre on a specific, finite end, but rather an ongoing pedagogical journey that, have now achieved greater structure and clarity, can be shared with others in more effective ways. As such, the study has transcended the hitherto arguably superficial narrative that lies at the heart of the orally delivered rote learning typical of instrumental performance tuition. The dissertation constitutes, therefore, a documentation in both sound and text of what is hoped will be more rigorous and durable approach to the study of a given body of musical work.

In the final analysis it is an affinity and desire for Uhl’s joie de vie that has attracted and continues to sustain the current author’s delight in, and admiration for, his 48 Etüden!

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159 Tagg, 'Introductory Notes', 1.
## Appendix A  CD Recordings Track Listings

<table>
<thead>
<tr>
<th>CD 1 Etüden 1-24</th>
<th>CD 2 Etüden 25-48</th>
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<tbody>
<tr>
<td>1 Etude 1 02:29</td>
<td>1 Etude 25 01:08</td>
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<td>2 Etude 2 01:08</td>
<td>2 Etude 26 01:12</td>
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<td>3 Etude 3 01:33</td>
<td>3 Etude 27 01:31</td>
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<td>4 Etude 4 01:14</td>
<td>4 Etude 28 01:09</td>
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<td>5 Etude 5 01:34</td>
<td>5 Etude 29 02:28</td>
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<td>6 Etude 6 01:30</td>
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<td>7 Etude 7 01:50</td>
<td>7 Etude 31 01:03</td>
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<td>8 Etude 8 01:35</td>
<td>8 Etude 32 01:35</td>
</tr>
<tr>
<td>9 Etude 9 02:59</td>
<td>9 Etude 33 01:32</td>
</tr>
<tr>
<td>10 Etude 10 01:44</td>
<td>10 Etude 34 01:16</td>
</tr>
<tr>
<td>11 Etude 11 01:50</td>
<td>11 Etude 35 02:14</td>
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<tr>
<td>12 Etude 12 02:25</td>
<td>12 Etude 36 01:25</td>
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<td>13 Etude 37 00:50</td>
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<td>14 Etude 14 01:37</td>
<td>14 Etude 38 01:17</td>
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<td>15 Etude 15 01:57</td>
<td>15 Etude 39 01:18</td>
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<td>16 Etude 16 01:40</td>
<td>16 Etude 40 01:33</td>
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<td>17 Etude 17 01:35</td>
<td>17 Etude 41 02:10</td>
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<td>18 Etude 18 03:18</td>
<td>18 Etude 42 01:47</td>
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<td>19 Etude 19 01:50</td>
<td>19 Etude 43 01:57</td>
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<td>20 Etude 20 01:31</td>
<td>20 Etude 44 02:10</td>
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<td>21 Etude 21 01:30</td>
<td>21 Etude 45 02:17</td>
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<tr>
<td>22 Etude 22 01:34</td>
<td>22 Etude 46 01:45</td>
</tr>
<tr>
<td>23 Etude 23 01:28</td>
<td>23 Etude 47 01:59</td>
</tr>
<tr>
<td>24 Etude 24 01:24</td>
<td>24 Etude 48 01:06</td>
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</tbody>
</table>
CD 3 Schott and Current Author’s Editions

   Schott Music [KLB 39]
   Clarinet, Peter Handsworth
   Piano, Gabriella Smart

   Schott Music [ED 4437]
   Pilgrim Church, Adelaide, 2 November 2011.
   I. Allegro 03:46
   II. Andante sostenuto 03:26
   III. Allegro con brio 04:32
   Clarinet, Amanda Lovelock
   Clarinet, Charise Altman
   Clarinet, Daniel Burgess
   Bass Clarinet, Peter Handsworth

   Manuscript: ÖNB F112.Uhl.87 Mus
   Concordia College, Adelaide, 12 December 2014.
   no.2 Kinderlied 01:52
   no.3 Hirtenmusik 02:12
   1st Clarinet, Peter Handsworth with
   Adelaide Wind Orchestra

   Manuscript: ÖNB F112.Uhl.79/1-2 Mus
   Elder Hall, University of Adelaide, 8 August 2012.
   Flute, Lisa Osmialowski
   Oboe, Celia Craig,
   Horn, Sarah Barrett,
   Bassoon, Jackie Hansen
   Clarinet, Peter Handsworth
**Improvisation über altdeutsche Volksweisen** für Viola d’amore, Bassetthorn und doppelchörige Laute (1953).
Manuscript: ÖNB F112.Uhl.97/1-2 Mus
Elder Hall, University of Adelaide, 6 November 2015.

Guitar, Oliver Fartach-Naini
Viola, Keith Crellin
Clarinet, Peter Handsworth

**Serenade** für 12 Blasinstrumente und Kontrabaß (1953).
Manuscript: ÖNB F112.Uhl.64/1-2 Mus
Concordia College, Adelaide 1 March 2013.

1st Clarinet, Peter Handsworth with Adelaide Wind Orchestra

**Septett in C# min** für 3 Geigen, 2 Bratsche, Cello und Klarinette (1930).
Manuscript: ÖNB F112.Uhl.88/1-2 Mus
Urrbrae House, Adelaide, 18 May 2015

I. Ziemlich bewegt 08:43
II. Ballade 06:48
III. Rasches Tempo 08:49

Clarinet, Peter Handsworth
Violin, Minas Berberyan
Violin, Erna Berberyan
Violin, Shirin Lim
Viola, Linda Garrett
Viola, Martin Butler
Cello, Janis Laurs
CD 4  Doblinger and Universal Edition

1 – 3 Kleines Konzert für Klarinette, Viola und Klavier (1937)
Doblinger [07 301]
Elder Hall, University of Adelaide, 11 May 2012.
I. Allegro con brio 06:44
II. Grave 05:09
III. Vivo 04:31

Clarinet, Peter Handsworth
Viola, Keith Crellin
Piano, Jamie Cock

4 – 6 Drei Tanz Stücke für Wind Oktett (1985)
Doblinger [06 593]
Concordia College, Adelaide, 1 March 2013.
I. Sostenuto 03:05
II. Tempo di Valse musette 04:50
III. Giusto 04:48

1st Clarinet, Peter Handsworth with
Adelaide Wind Orchestra

7 Scherzo capriccioso für Bassklarinette und Klavier (1986)
Doblinger [DOBL 5405] 03:51
Hartley Concert Room, University of Adelaide, 29 September 2012.

Bass Clarinet, Peter Handsworth
Piano, Patrick Keith

8 – 10 Vier Stücke für Bläserquintett (1990)
Doblinger [06 479]
Elder Hall, University of Adelaide, 8 August 2012.
I. Zahnräder 02:00
II. Dudelsack 01:24
III. Walzer 03:29
IV. Trepak 01:47

Flute, Lisa Osmialowski
Oboe, Celia Craig,
Horn, Sarah Barrett,
Bassoon, Jackie Hansen
Clarinet, Peter Handsworth
**Konzertante Symphonie** für Klarinette und Orchester (1943)
Universal Edition [UE13584]
Adelaide Town Hall, 8 September 2013.

I. Allegro giocoso 08:33
II. Molto tranquillo 06:23
III. Presto 05:24

Solo Clarinet, Peter Handsworth
Australian Doctors’ Orchestra
Conductor Warwick Stengards

**Eine vergnügliche Musik** für 8 Bläser (1944)
Universal Edition [UE 3954]
Concordia College, Adelaide, 12 December 2014.

I. Ouverture 4:23
II. Lustiger Marsch 3:31
III. Dudelsack 1:27
IV. Trepak 2:15

1st Clarinet, Peter Handsworth with
Adelaide Wind Orchestra
Appendix B    General Playing Issues

Common to all the 48 Etüden are a number of important playing issues deserving specific considerations. The following discussion has been derived through the work of this project and to the many years of teaching and performance undertaken by the current author. Invaluable input from a great many fine teachers and musician colleagues has formed the current author’s knowledge and skill base, and over time have been exercised through the challenges of solving personal and student playing difficulties.

Difficulties are first only resolved when their solutions or outcomes are easily derived: that is to say technique is only once mastered once it has become easy. The current author has assumed aligning pedagogical strategies with the natural tendencies of the individual’s unique mind and body will produce the quickest and most enduring results. The foregoing discussion of the Etudes and the current author’s pedagogical application of selected performance issues is not aimed to be a final statement of fact, but rather a documented analysis of the current author’s pedagogical discovery and application of the 48 Etüden.

Furthermore, much of the knowledge and techniques espoused have been collected and assimilated over many years of study, performance and teaching. The current author makes no original claim to many of its ideas. Rather, it is a distinctly personal and rationalised distillation of often-conflicting ideas and training received from numerous teachers, colleagues and students.

The outcomes of this study are related primarily though not exclusively to the 48 Etüden, but, it must be stressed that Uhl’s set of studies and the playing issues they deal with is not exhaustive of technical issues. Those performance techniques not included by Uhl’s 48 Etüden that the contemporary clarinettist requires can be gained from other sources. Rehfeldt’s New Directions for Clarinet\textsuperscript{160} provides excellent resources, as does Studien zum Spielen Neuer Musik.\textsuperscript{161} The following are some of the issues that are not covered by Uhl’s 48 Etüden:

- Specialised articulation; flutter tongue, slap tongue
- Multiple metres and free metres
- Altissimo playing
- Multiphonics
- Glissandos and tremolos

\textsuperscript{160} Phillip Rehfeldt, New Directions for Clarinet, 5th ed. (Berkeley: University of California Press, 1994).
\textsuperscript{161} Beate Zelinsky and David Smeyers, eds. Studien Zum Spielen Neuer Musik (Wiesbaden: Breitkopf & Härtel, 1996).
B.1 Finger Biomechanics and Regulation

Finger technique and its efficient use form a critical part of clarinet training. Aside from individual differences between players’ inherent finger characteristics and function the clarinet poses its own challenges. In particular, the clarinet overblowing at a twelfth rather than an octave incurs two problems. Firstly that the fingering for any given note name changes from register to register that interrupts the logic of similarity between octaves that occurs on other wind instrument that overblow at the octave. Secondly, there are 17 semitones to be played before the change of register occurs rather than 11 in the case of an instrument overblowing at an octave. This necessitates various extra keys (duplicate keys for left and right hand little fingers and extra keys for left-hand index finger) that complicate fingerings at each end of the registers. Technical problems on the clarinet often occur around these notes.

The current author’s term for the study of equalising and training of individual and combination fingers is ‘finger regulation’. The primary goal of this pedagogical ideal is: within a range of finger velocities to maximise the equality between finger movements up and down and between fingers in both velocity, tone hole sealing and ergonomic stability. Finger shape and hand position are important considerations in developing efficient finger movement. The hand and forearm should be as straight as possible minimising any kink that will impede severely the light movement of the fingers. Fingers should be relatively square to the instrument to facilitate ‘little finger’ accessibility to the keys and each finger should be lightly rounded, in an arch shape, to maximise the strength and stability of the fingertips. Wehle recommends maintaining the ‘loose curvature’ of the fingers as when the arm is dangling at one’s side.¹⁶²

Research conducted by Almeida et al. has highlighted a number of important facts about the execution of finger movements by flute players that are critical in developing high levels of ‘finger regulation’. These findings can be equally applied to clarinet performance. The three findings listed below indicate that:

1. finger movements for a given note-change down are generally faster than corresponding movements up
2. finger speed in both directions changes from finger to finger. Movements are typically slower in both directions by the third and fourth fingers.
3. fingers on the left-hand are typically slower than right hand fingers.¹⁶³

The reasons for these discrepancies are varied and less important than their solutions. In planning to produce even legato, that is notes joined evenly through consistent dynamic, timbre, intonation, intensity etc., the intermediary time or ‘finger articulations’ require regulation. That is movements up and down are to be equalised, as should movements between fingers. Evenness is seen as a signifier of expert

performance and should be a primary point of reflection when practising. The following figure highlights how finger execution varies the articulation between notes.\textsuperscript{164}

![Figure 33 - Fingering and note transitions on the flute\textsuperscript{165}](image)

From the same research, the following information (Table 4) documents the durations of different key movements, highlighting the differences found between different fingers of the same hand and between fingers of different hands.

Table 4 - Key movement durations\textsuperscript{166}

<table>
<thead>
<tr>
<th>Key</th>
<th>Finger</th>
<th>Press time (ms)</th>
<th>Release time (ms)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>L index</td>
<td>11.3 ± 4.8 (100)</td>
<td>15.9 ± 4.9 (100)</td>
</tr>
<tr>
<td>4</td>
<td>L thumb</td>
<td>8.7 ± 1.1 (204)</td>
<td>9.2 ± 2.1 (205)</td>
</tr>
<tr>
<td>6</td>
<td>L medium</td>
<td>15.2 ± 6.0 (101)</td>
<td>16.9 ± 3.7 (304)</td>
</tr>
<tr>
<td>7</td>
<td>L ring</td>
<td>17.0 ± 9.5 (273)</td>
<td>22.2 ± 9.4 (480)</td>
</tr>
<tr>
<td>11</td>
<td>R index</td>
<td>11.2 ± 5.1 (160)</td>
<td>15.6 ± 3.3 (185)</td>
</tr>
<tr>
<td>12</td>
<td>R medium</td>
<td>8.9 ± 1.1 (160)</td>
<td>15.3 ± 3.1 (181)</td>
</tr>
<tr>
<td>13</td>
<td>R ring</td>
<td>8.3 ± 2.5 (532)</td>
<td>16.7 ± 9.4 (524)</td>
</tr>
<tr>
<td>14</td>
<td>R little</td>
<td>12.1 ± 2.6 (179)</td>
<td>12.9 ± 9.3 (172)</td>
</tr>
</tbody>
</table>

\textsuperscript{164} Articulation used here in its broader sense, that is in what way two notes are joined, whereby the normative musical definition relating to degrees of detachment being a subset of this more general meaning.

\textsuperscript{165} Almeida, et al., 'The Kinetics and Acoustics of Fingering', 1525.

\textsuperscript{166} Almeida, et al., ‘The Kinetics and Acoustics of Fingering’, 1525.
Deliberate practice can be applied to the correction of these differences in finger speeds in designing practice tasks that specifically drill weaker fingers to decrease transition times. Most clarinettists attest to light pressure and close fingers to facilitate difficult passages. Hofmann & Goebl hypothesized that musical situations (dynamics, tempo, and register) have an influence on the finger forces applied to the tone holes.\textsuperscript{167} The researchers found that:

even though clarinettists could only apply the minimal finger forces required to close the tone holes for pitch change, there are effects of the dynamics (more force in loud passages), the tempo (more force with slower tempi) and the register (more force in the high registers) when playing actual music.

The following (Figure 34) shows that finger pressure decreases with playing experience. Assuming this is not due to age-related muscle weakness, the conclusion might be drawn that clarinettists choose low force because of some benefit. Many teachers infer that higher levels of performance can be attained through better body use, including lower tension levels.\textsuperscript{168}

![Figure 34 - Mean finger forces in comparison to experience in clarinet playing.\textsuperscript{169}](image)

Finger height also plays a significant role in tuning and timbre in the same way pad heights require height regulation to ensure accurate pitch and tone clarity. Heights need to be balanced between tone quality, and distance. Mastering finger proximities to open holes greatly increases the expressive potential of the player through the possibility of subtle changes of timbre and pitch. Dynamic extremes also cause large

\textsuperscript{169} Hofmann and Goebl, ‘Finger Forces’, 6.
variance in tuning and finger distances can be used, in especially soft passages, to flatten certain notes to maintain even intonation.

B.2 Fingering Choices

Not withstanding the previous discussion and the aims of finger regulation, inherent differences in fingers require compromise and optimisation when applying fingering choices to musical passages. Any sequence of tones will require careful management, as these movements are from a practical sense unequal in dexterity and complexity.

Pino’s principles of clarinet fingering can be summarised as:\textsuperscript{170}

1. Choose the easiest fingering within a given context.
2. Avoid sliding fingers
3. Avoid exchanging fingers when instead addition or subtraction of fingers can be made
4. Move as few fingers as possible

In performance the clarinettist will constantly make compromises as to sound, technical ease, phrasing, dynamic and so forth. This set of principles privileges technical ease. Preferences are both personal and cultural. In terms of the former, a player may have a set of fingerings and technical capabilities that suggest a certain solution to a problem, and these may differ from other players. With regard to cultural considerations, different schools of playing, both historically and geographically will preference certain musical outcomes, such as dexterity, tone, legato, and articulation. Each one of the choices made and in combination forms a performance profile or identity that can be incorporated in the notion of the ‘Sonic Self’ as Naomi Cummings termed it.\textsuperscript{171}

Musical gesture, as Kivy points out, is not in itself expressive but rather expressive of certain musical features that resemble, in their sound, certain bodily movements or gestures.\textsuperscript{172} According to Kivy, while one may doubt the transferability of ‘sense modalities’, one might argue, for example, that the physical and musical gestures of say a melancholic passage can imitate in some sense the bodily movements of a melancholic person.\textsuperscript{173}

Davidson discusses how expressive intentions and social codes influence the production of a musical performance.\textsuperscript{174} Drawing on the work of Lehmann and Ericsson, Davidson explains that:

\textsuperscript{170} Pino, The Clarinet and Clarinet Playing, 69-70.
\textsuperscript{171} Naomi Cumming, The Sonic Self: Musical Subjectivity and Signification, Advances in Semiotics (Bloomington: Indiana University Press, 2000), 129.
\textsuperscript{172} Peter Kivy, Introduction to a Philosophy of Music, Philosophy of Music (Oxford: Clarendon, 2002), 38.
\textsuperscript{173} Peter Kivy, Introduction to a Philosophy of Music, 46.
the bodily engagement of the performer ... as being the consequence of performance goals (technical and expressive aims) and the self-monitoring that goes on during the course of a performance. All of these processes are co-dependent, combining intellectual/conceptual understanding and motor skill.\textsuperscript{175}

The body and its gestures form an important part of musical expression and as such can be designed to exhibit or bring about certain musical outcomes and not simply that gestures are the result of particular momentary musical aspirations. The technical and musical aspects of performance become intertwined in the ‘generation and execution of the work’.\textsuperscript{176} Davidson also warns of unnecessary and damaging physical approaches. This promotes the consideration that gestures might or even should be planned not only for musical and technical reasons but also, importantly, in planning ergonomic and ‘safe’ body use. Choices of fingerings and how fingers move can form part of this planning. The current author’s principle of fingering choice is based as follows:

![Diagram of fingering decision-making process]

Figure 35 - Process Model for fingering decision-making.

The pedagogical process described above in

Figure 35 can be summarised as follows: For any potential musical outcome an associated imaginary gesture can be conceived that has dimensions of movement, velocity, intention and tactile nature. Certain ‘signs’ point to or elicit a particular feeling or gesture. Certain technical choices will best represent those signs through a process loop that trials, analyses and refines best compromises in fingering, tone, flexibility and so on.

\textsuperscript{175} Davidson, ‘Bodily Communication in Musical Performance’, 217.

\textsuperscript{176} Davidson, ‘Bodily Communication in Musical Performance’, 232.
B.3 Alternative Fingerings

As alluded to above, the clarinet has a number of ‘short fingerings’ or ‘throat notes’ that bridge the chalumeau and clarion registers. These are written G#4, A4 and Bb4. Crossing ‘the break’ smoothly and quickly are difficult when involving these tones and especially challenging when a Bb4 is included. This note is not only awkward to finger but has an inferior sound due to the acoustic properties of the small tone holes the required keys use. It might be noted that the Oehler system clarinets generally have larger tone holes, which mitigates much of this note’s weakness on the Boehm clarinet. It can however be improved by using one of a variety of alternative fingerings. The current author’s preference is shown below in Figure 36. 177

![Figure 36 - Alternative fingering for Bb4](image)

To practice this somewhat unusual fingering, the following exercise (Figure 37) is suggested, heard by the current author in 1990 during a clarinet masterclass given by Professor Hans Rudolf Stalder at the Basel Conservatorium.

![Figure 37 - Study for the alternative fingering of Bb4](image)

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177 The preferred fingering is dependant on the individual’s style of ‘blowing’ and on the tuning characteristics of clarinet, reed, and mouthpiece combination. For this project the current author used a Buffet Crampon Tosca Bb clarinet, a stock Hans Zinner mouthpiece (marketed as Reeds Australia D2) and self-made reeds previously produced as Passion reeds by Reeds Australia Pty Ltd.

B.4 Legato

Chew defines legato (It.: ‘bound’) and its place on the continuum of connection/separation.

Of successive notes in performance, connected without any intervening silence of articulation. In practice, the connection or separation of notes is relative, and achieved through the presence or absence of emphasis, accent and attack, as much as silences of articulation; degrees of connection and separation vary from legatissimo (representing the closest degree of connection), tenuto, portamento, legato, portato, non legato, mezzo-staccato, staccato (the natural antonym of legato), to staccatissimo, and some of these terms have connotations going beyond simple degrees of connection or separation.179

Perfect legato is, by this definition, an impossibility for a wind instrument i.e. absence of emphasis/weakness. The foregoing discussion in Appendix D.1 highlights the inevitable discontinuity in the sound during note changes. Given finger speed is not limitless some momentary ‘between time’ will always exist forming either some emphasis or weakness in the sound (see Figure 27).

Given this reality, the musical line or phrase becomes the means by which these small disconnections can be bridged. The player creates a sleight of hand by drawing to the listener’s attention something in the music that will infer connection such as changing dynamic or timbre. The acoustic space will help whereby the ‘drier’ the acoustic the less the sounds will overlap progressively limiting the perception of connectedness.

The vast majority of an instrumentalist’s practice is done alone. Performances and lessons with teachers are vital feedback mechanisms, yet the detailed analysis and corrective practice is within the purview of the individual. Notwithstanding the inevitable smudges in tonal evenness during finger movements as discussed above, habitual error is easily assimilated to the ear as ‘normal’ even when listening back to recordings of one’s own playing. In fact, many tonal errors are often innocuously labelled idiosyncrasies, such as the changing timbral quality over the range of the instrument especially transitioning the registers. These idiosyncrasies may well be used in their own right as expressive ‘flavours’, but they will often not serve the needs of the music. The clarinettist must, to the best of their ability, overcome habitual listening and find ways to objectively listen to the evenness of notes and their transitions.

The current author has found the use of an oscilloscope very valuable. In the same way metronomes regulate pulse and rhythms, an oscilloscope can highlight very useful information regarding volume, duration, articulation and attack. Legato between notes can be systematically viewed in real time along the screen trace. See example following in Articulation D.7.

B.5 Oral Tract Fluctuations

It is possible to use the tongue in many ways simultaneously. One important synchronous set of movements is that required by the tongue to both form an efficient and effective oral cavity to support a particular tone and desired intonation and timbre whilst simultaneously applying the tip of the tongue to the reed for purposes of articulations.

The utilisation and application of oral tract fluctuations differs dramatically between players given their individual anatomical variations. To give universal advice regarding this area of playing is folly, suffice to say that different shapes do create differences in timbre and pitch and each player needs to systematically study the effect this has over the range of the instrument in all dynamics and articulations. Some teachers talk about vowel shapes but the current author's experience points to many difficulties in attempting to emulate language-inspired oral tract shapes. The acoustics of speaking and playing a clarinet with a reed and mouthpiece inside the mouth are vastly different. Using vowel shapes from language is useful in helping understand the variety of shapes the player can generate, but a totally new and very foreign ‘language’ needs to be learned to fully master its use on the clarinet.

B.6 Intonation

The clarinet is inherently out of tune and numerous corrections are required to minimise the discrepancies. Both oral tract fluctuations and/or altered fingerings are required to make subtle instantaneous corrections. A delicate balance and a great deal of refinement need to be applied to any compromise as timbre and tonal intensity are altered when applying these corrections. In the current author's experience when compromise needed to be made, German-system clarinettists would typically maximise tonal quality at the expense of intonation in contrast to Boehm-system players. The reason for this may well be historical, as the design history of the German clarinet has attempted to maximise positive tonal characteristics. The choice a performer takes becomes a personal and cultural characteristic evidenced in his or her playing as an individual marker of their playing style. Rudolf Jettel composed a number of clarinet trios in part for this purpose that provide excellent training in intonation development.\(^{180}\)

A concise and informative account of tuning chords by Boldin suggests corrections of -14 cents for major thirds and +16 cents for minor thirds.\(^{181}\) Michael LoPresto used


a set of tuning fork to demonstrate supposition of sound waves and their Fourier analysis. Mather explains this notion of ‘missing fundamental’ in the following way:

Complex tones usually contain a fundamental and a series of evenly spaced harmonics ... however if the fundamental frequency of a complex tone is removed, its pitch is still heard at a frequency corresponding to the fundamental.182

This phenomenon verges on the bizarre, and the causal neurological process is still debated as to how the brain perceives this missing fundamental.183 However, an everyday example of this can be heard in the reproduction of male voices through small speakers such as telephones that can only generate frequencies down to ca. 300Hz where as a typical male voice lies around 150Hz. If then two different complex tones are played on two different instruments it is possible for the two separate tones to combine and act as two partials of a lower, ‘missing fundamental’.

The follow table shows the mathematical derivation of expected fundamentals of a number of selected pitch intervals and the actual measured pitch.184

Table 5 - Frequency ratios and expected virtual pitches of selected intervals185

<table>
<thead>
<tr>
<th>Musical notes</th>
<th>Frequency ratio (harmonics in spectrum)</th>
<th>Musical interval</th>
<th>Missing fundamental (expected virtual pitch) (Hz)</th>
<th>Missing fundamental (measured virtual pitch) (Hz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C–E</td>
<td>320/256 = 5/4</td>
<td>M3</td>
<td>320/5 = 256/4 = 64</td>
<td>64.1</td>
</tr>
<tr>
<td>C–G</td>
<td>384/256 = 3/2</td>
<td>P5</td>
<td>384/3 = 256/2 = 128</td>
<td>128.4</td>
</tr>
<tr>
<td>C–C’</td>
<td>512/256 = 2/1</td>
<td>Octave (P8)</td>
<td>512/2 = 256/1 = 256</td>
<td>256.7</td>
</tr>
<tr>
<td>E–G</td>
<td>384/320 = 6/5</td>
<td>m3</td>
<td>384/6 = 320/5 = 64</td>
<td>64.0</td>
</tr>
<tr>
<td>E–C’</td>
<td>512/320 = 8/5</td>
<td>m6</td>
<td>512/8 = 320/5 = 64</td>
<td>64.2</td>
</tr>
<tr>
<td>G–C’</td>
<td>512/384 = 4/3</td>
<td>P4</td>
<td>512/4 = 384/3 = 128</td>
<td>128.4</td>
</tr>
</tbody>
</table>

Using LoPresto's table above the following exercise for two clarinets (Figure 32) can be utilised to practice tuning for just intervals. Although such an exercise is not problem specific in relation to any given etude, it does however highlight the magnitude of deviation required and the sensitivity of such micro tunings. The following exercise using two clarinets in upper register highlights the need for just tunings especially when sub-tones are audible. This register produces particularly strong sub-tones and will create serious intonation issues in any ensemble if micro-tuning adjustments are not applied. The intervals chosen maximise the virtual (or ‘inferred’) missing fundamental.

185 LoPresto, 'Using Musical Intervals to Demonstrate Superposition', 643.
B.7 Articulation

According to Geoffrey Chew:

the term ‘articulation’ refers primarily to the degree to which a performer detaches individual notes from one another in practice (e.g. in staccato and legato).\(^{186}\)

A more expressive interpretation might be one that highlights articulation as a means of expressive connection between tones. As with consonants in language, articulation provides clarification and punctuation between sounds. In music the delivery of this articulation becomes an art form in itself providing vital signification of expressive intent. As Hoeprich explains articulation became a primary consideration in the eighteenth century and its execution detailed in contemporaneous methods and treatises. Xavier Lefervre (1763-1829) commented that;

only the tongue can put expression into melody and into virtuosic passages. Without tonguing, such passages would sound cold, thin and monotonous.\(^{187}\)

Figure 39 - A Chart of wind articulations\(^{188}\)


Therefore, if one considers articulation to deal with the connective relationship between notes then, apart from the art of initiating and stopping a tone, matters of intonation, dynamic and timbre also become vital elements in the inter-relationship between tones. Blatter’s articulation chart details how various articulations relate to each other (Figure 39).

The following oscilloscope traces (Figure 40) of their corresponding notation highlight in an objective how the current author has interpreted two styles of staccato. The software enables endless opportunity to test, analyse and correct parameters of duration, articulation attack and volume.

![Oscilloscope staccato traces](image)

Figure 40 - Oscilloscope staccato traces

In order to practice the subtle difference between these articulations and maintain a level of stability in intonation, dynamic and timbre the following exercise (Figure 35) given to the current author during his postgraduate studies (1989-1994) with Professor Wolfgang Meyer. In practising this study full benefit can be gained from this exercise by playing it in various tempos, keys and registers over the instrument.

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188 Blatter, *Orchestration*, 79.

189 Traces produced using *Oscope* Ver. 1.3, developed by Alexander Wiltschko.
Figure 41 - Staccato exercise
Appendix C  Editions

The following edited transcriptions were taken from copies of autographs located in the Austrian National Library. Every care has been taken in accurately transcribing the composer’s notation. Only occasionally have minor changes been made esp. missing accidentals and inconsistent articulations. Cross-referencing parts (where they exist) with the score has been undertaken to maintain consistency in both. Sulzberger’s repertoire list designates *Humoreske* for Wind Quintet as being published by Doblinger. However, no evidence of an available score was found and as such the autograph has been transcribed below.

Composition dates and autograph sources:

C.1  von *Fünf frohe Weisen für den Wiener Weihnachtsmarkt*, No. 2 Kinderlied
    Composed 1939, first performance 14/12/1941.
    Source: ÖNB F112.Uhl.87 Mus

C.2  von *Fünf frohe Weisen für den Wiener Weihnachtsmarkt*, No. 3 Hirtenmusik
    (Weinachtspastorale)
    Composed 1939, first performance 14/12/1941.
    Source: ÖNB F112.Uhl.87 Mus

C.3  *Humoreske*
    Composed 1965, first performance unknown.
    Source: ÖNB F112.Uhl.79/1-2 Mus

C.4  *Improvisation über altdeutsche Volksweisen*
    Composed 1953, first performance unknown.
    Source: ÖNB F112.Uhl.97/1-2 Mus

C.5  *Serenade* für 12 Blasinstrumente und Kontrabaß
    Composed 1953, first performance unknown.
    Source: ÖNB F112.Uhl.64/1-2 Mus

C.6  *Septet* in cis moll
    Source: ÖNB F112.Uhl.88/1-2 Mus

190 Österreichischen Nationalbibliothek (https://www.onb.ac.at/en/)
C.2  von Fünf frohe Weisen für den Wiener Weihnachtsmarkt, No. 3 Hirtenmusik (Weiachtpastorale)
C.3 Humoreske

Humoreske

Vivace – 100

Alfred Uhl

aus F.Waldbreitel

Flute
Oboe
Clarinet in B♭
Horn in F
Bassoon

Violin I
Violin II
Cello
Double Bass

mm. 1-10

mm. 11-20

mm. 21-30

mm. 31-40

mm. 41-50

mm. 51-60

mm. 61-70

mm. 71-80

mm. 81-90

mm. 91-100

87
C.4 Improvisation über altdeutsche Volksweisen

Improvisation über altdeutsche Volksweisen

für

Viola d'amore, Bassethorn u. doppelchörige Lauten

(September 1933)

Ruhig \( \approx \) 84

Gitarre

Nicht schleppen!

Vla

Cl

B. Hn

Nicht schleppen!

Gitarre

etwas fließender (\( \approx \) 112)

Vla

Cl

B. Hn

etwas fließender (\( \approx \) 112)

Vla

Cl

B. Hn

etwas rascher (\( \approx \) 126)

Vla

Cl

B. Hn

etwas rascher (\( \approx \) 126)
C.5 *Serenade* für 12 Blasinstrumente und Kontrabass
C.6  \textit{Septett} in cis moll

\textit{Septett in cis moll}

für

3 Geigen, 2 Bratschen, Cello und Klarinette

\begin{equation}
\text{Ziemlich bewegt} \quad \text{ff} \quad \text{fortissimo}
\end{equation}
II
Ballade

Sehr langsam, mit viel Ausdruck
ganz frei
Zeit lassen!
allmählich belebter

etw. accel.
III

Rasches Tempo, sehr rhythmisch. 288

Cl.
Vln. 1
Vln. 2
Vln. 3
Vla. 2
Vla. 1
Vc.

 senza sord. pizz.

Cl.
Vln. 1
Vln. 2
Vln. 3
Vla. 1
Vla. 2
Vc.

Cl.
Vln. 1
Vln. 2
Vln. 3
Vla. 1
Vla. 2
Vc.

Cl.
Vln. 1
Vln. 2
Vln. 3
Vla. 1
Vla. 2
Vc.

Cl.
Vln. 1
Vln. 2
Vln. 3
Vla. 1
Vla. 2
Vc.

148
Bibliography


Antonicek, Theophil, Derek Beales, Leon Botstein, Rudolf Klein, and Harald Goertz. ‘Vienna.’ Grove Music Online.


David, Ossenkop. ‘Schubart, Christian Friedrich Daniel.’ Grove Music Online.


Gassner, Ferdinand Simon. Partiturkenntniss : Ein Leitfaden Zum Selbstunterrichte für


— *Portfolio of Compositions and the Music of Viennese Composer Alfred Uhl. (with Original Compositions)*. Ph.D., University of California, Santa Barbara, 1991.


Mayrhofer, Bernadette. ‘Impeding Expulsion of the "Closely Related" (Versippte), "Half-Breeds" (Mischlinge), and Foreigners Lacking a "Certificate of Aryan Descent" (Ariernachweis).’ (2014).

Meinz, Elizabeth J., and David Z. Hambrick. ‘Deliberate Practice is Necessary but Not Sufficient to Explain Individual Differences in Piano Sight-Reading Skill: The Role of Working Memory Capacity.’ Psychological science 21.7 (2010), 914-919.


Ross, David. ‘Ridinger’s "Youth Playing the Clarinet."’ Clarinet 7.1 (1979), 34-36.


Wetzel, Tim. ‘Door Chime History: A.E. Rittenhouse Chimes.’

