

CHAPTER TWO

THE MUSICAL CATALYST PROCESS

In Chapter One, it was evidenced that there is a growing sense of value attached to the concept of style in Irish traditional music but that given its largely implicit nature,¹ in some contexts, particularly the university environment, difficulty has been experienced in attempting to manage, transfer and assess stylistic knowledge.² It was contended that since implicit knowledge is by its very nature difficult to manage, it is likely that in this case the difficulty expressed arises from the lack of an archive of explicit stylistic data.

At this point, it should be noted that there is more than one type of explicit stylistic data. For instance, analyses often produce explicit information on style³ but unless it can be used in a practical way, it would not act as a solution to the issues named in the previous chapter. Therefore, the concept of the catalyst⁴ is central to this study in that any explicit elements of style identified must have a catalytic function: it must be possible for a musician to use this information for the purposes of bringing about the qualities it entails in another tune. Consequently, if a piece of stylistic information cannot be realised in performance, then it is not suitable for use within this study.

Therefore, what I have termed the *musical catalyst process*, is an umbrella term to describe a two-component solution to the research objectives as outlined in Chapter One.⁵ Its first aspect, the *musical catalyst framework* (MCF), is designed as a set of practices with which to construct an archive of explicit stylistic information. While it is evidently beyond the scope of this thesis to map everything, it is possible to construct,

¹ See Chapter One, Section 1.2.3.

² See Chapter One, Section 1.3.2.2.

³ See: Cowdery, James R.: *The Melodic Tradition of Ireland*, (Kent, Ohio: The Kent State University Press, 1990), 45, 57, 64, 67 for a demonstration of explicit stylistic data that, although interesting, would not be practical to abstract and use in performance.

⁴ *Oxford Dictionary and Thesaurus*, ed. Maurice Waite, 2nd ed., (Oxford University Press, 2007). Aside from how the term is understood in the field of chemistry, it is defined in the Oxford English Dictionary as ‘a person or thing that causes something to happen: *his speech had acted as a catalyst for debate*’.

⁵ See: Chapter One, 50.

test, and refine the process to a point where it becomes feasible to evaluate its potential for further application on a greater scale.⁶ The *musical catalyst approach* (MCA) sets out how this resource may be used in practice, particularly in terms of transmission and creativity. The following overview describes how the musical catalyst process originated, before presenting it in the form into which it has evolved to suit the purposes of this study.

The original basis for the MCF was conceived while completing an undergraduate dissertation on a collection of late-nineteenth-century manuscripts, entitled *The James Tourish Collection*.⁷ In order to gain a clearer understanding of the musical style of this collection, an attempt was made to categorise the tune-types found in it.

The term ‘tune-type’ is used in traditional music to categorise various tunes into groupings of similar compositional and/ or performance characteristics, which for the most part concern metre, tempo, form and rhythmic features.⁸ Well-known tune-types include for example the double jig, reel, and hornpipe. Initially, it was my intention to determine the number of tune-types found in the collection but on further examination, tune-types were found that are now virtually unknown, such as the *cotillion*, *galop* and *versavianna*. Furthermore, the collection contains tunes with rhythmic features that do not conform to those found in any of the tune-types known today and this resulted in difficulties in assigning certain tunes to specific categories. In order to communicate the full variety of material found in the collection, new tune-type models were required. Once these had been defined, to facilitate comparison, a version of each example was created that was based on the same melody.

An unintended consequence of this was that it established that firstly, the tune was recognisable despite the differences in metre, rhythm and tempo,⁹ and secondly, that

⁶ See: Stuble, Eleanor V: ‘Philosophical Foundations’, *Handbook of Research on Music Teaching and Learning*, ed., Richard Colwell, (New York; Toronto; New York: Schirmer Books; Maxwell Macmillan Canada; Maxwell Macmillan International, 1992), 3. Here it is stated that a body of knowledge is the first of three elements necessary in an educational model.

⁷ Owing to the frequency of the name ‘James Tourish’ in the manuscripts, I have proposed the title ‘The James Tourish Collection’. The collection is now held in the Irish Traditional Music Archive.

⁸ See Chapter Three, 70-71.

⁹ Form was not addressed in this particular study.

stylistic features associated with one tune-type could be abstracted, and applied to other tunes thereby creatively transforming them.¹⁰ Indeed, in addition to the observations of Aloys Fleischmann and Nicholas Carolan, this phenomenon had already been described by George Petrie and Patrick Weston Joyce amongst others.¹¹ One well-known performance that demonstrates this approach can be found on the album *The Star of Donegal* where the traditional fiddler John Doherty (1900–1980) took the march tune ‘Welcome Home Gráinne’ and transformed it into both a reel and a jig, albeit with quite a degree of variation.¹²

Upon completing the earlier study on *The James Tourish Collection* and considering the issues surrounding the implicit nature of stylistic knowledge in the oral tradition, the idea occurred to me that perhaps this same principle could be applied to other stylistic features relevant to Irish traditional instrumental music. In doing so, I thought that it would be valuable to create an explicit body of stylistic knowledge that would not rely on implicit transmission that could be used as a resource with regard to creativity and the development of a musician’s stylistic repertoire. While it is evident that quite a degree of adaptation is required to move from studying tune-types to style in Irish traditional instrumental music as a whole, the following framework is proposed as a means for achieving this wider objective.

2.1 The Musical Catalyst Framework

The MCF is an approach to constructing an archive of explicit stylistic data, the content of which is derived from:

1. A historiographical study based on relevant texts

¹⁰ Carolan, Nicholas: *What is Irish Traditional Music?* (Dublin: Irish Traditional Music Archive, 1996), n.p. This short document can be accessed at: http://www.itma.ie/images/uploads/leaflet1_1.pdf (Accessed 3 February 2013). Also see: Fleischmann, Aloys: *Sources of Irish Traditional Music*, (New York; London: Garland, 1998), xxiv-xxv. Both Fleischmann and Carolan note that this type of transformation is not uncommon.

¹¹ See: Petrie, George: *The Ancient Music of Ireland*, Vol. 1, (Dublin: M.H. Gill, 1855), xv. Also see: Joyce, Patrick Weston: *Old Irish Folk Music and Songs*, (London; New York: Longmans, Green, and Co.; [etc.], 1909), xiii.

¹² Doherty, John: *The Star of Donegal*, (Gloucester: Folktrax, [n.d.]), track 8. It can also be found on: Byrne, Dermot: *Dermot Byrne*, (Dublin: Hummingbird Records, 1995).

2. Analyses of audio (or audio-visual) recordings
3. The use of variation or formula-based permutation¹³
4. Interviews and observation during practice-based research.

Before exploring these sources, the framework itself needs to be explained. The first stage in constructing the archive involves determining what basic areas of style authors from the eighteenth century to the present day have considered to be of importance. As is evident from Section 1.1, these areas of style have been referred to as ‘parameters’,¹⁴ ‘variables’¹⁵ or ‘improvisatory aspects of the music’.¹⁶ Evidently, authors do not always agree on the same term to describe what is ostensibly the same phenomenon.

‘Parameter’ tends to suggest ‘a limit or boundary that defines the scope of a process or activity’.¹⁷ However, in relation to aspects of style, the boundaries are not always known: for instance, while it is possible to know how many keys exist, it is not possible to know how many ornaments there are because musicians can continue to invent new examples. Both ‘variables’ and ‘improvisatory aspects’ tend to suggest a collection of aspects of style as opposed to a thematically coherent set of such. For example, modality itself is neither a variable nor an improvisatory aspect, but rather, it is a constant because a tune must be in some mode. On the other hand, G Ionian, for example, is a variable within modality.¹⁸ In this context, these terms are not considered suitable.

In an effort to bypass this difficulty, I use the term *conceptual field*, which can be understood as an umbrella term that comprises a set of stylistic features, here described as ‘stylistic elements’.¹⁹ The stylistic elements that are associated with a particular conceptual field must be related by a common theme and be mutually exclusive,

¹³ See p.60-61 where a distinction is made between variation and formula-based permutation.

¹⁴ See: Keegan, Niall: ‘The Parameters of Style in Irish Traditional Music’, *Inbhear*, Vol. 1, Issue 1 (2010), 63- 96.

¹⁵ McCullough, Lawrence E.: ‘Style in Traditional Irish Music’, *Ethnomusicology*, Vol. 21, No.1 (University of Illinois Press, 1977), 91.

¹⁶ Ó Súilleabháin, Mícheál: *Innovation and Tradition in the Music of Tommie Potts*, (PhD Diss., Queen’s University Belfast, 1987).

¹⁷ <http://oxforddictionaries.com/definition/english/parameter?q=parameter> (Accessed 16 February 2013).

¹⁸ Refer to Chapter Five, 176, 186-189 for a description of the modes.

¹⁹ A third term, conceptual resolution, is also required in relation to these terms. It is defined on page 58-59.

meaning that while more than one may be present in a particular tune, they cannot occur at the same time. For example, within the conceptual field of ornaments, the stylistic element, a roll, cannot occur at the same time as a treble. Similarly, within the conceptual field of modality, a tune cannot simultaneously be in E Dorian and B Mixolydian.

The term *conceptual field* is required because it is important to acknowledge the subjectivity that is very often a characteristic of conceptualising aspects of style as abstract information. One person’s idea of what stylistic elements the conceptual field of ‘ornaments’ should include is not necessarily the same as that of another musician, yet this does not always preclude its usefulness.²⁰ Well-known conceptual fields in Irish traditional instrumental music include ‘tune-types’ and ‘modes’ whilst more unusual examples include ‘rhythmic cadences’, a term borrowed from Saker and Benward’s *Music: In Theory and Practice*²¹ and ‘melodic structural relationships’, a term I created myself.²²

The first step in the study involves treating Irish traditional instrumental music as a whole as a conceptual field and finding what elements of style are discussed. To this extent, the Historiographical Overview and Literature Review of Chapter One serves as a source from which the following table has been devised.

Table 2.1 Overview of areas of style dealt with in Section 1.1.

Conceptual Field:	Irish traditional instrumental music
Conceptual Resolution:	Main areas of style
	<ol style="list-style-type: none"> 1. Accentuation 2. Articulation 3. Compass/ Range

²⁰ See Chapter Nine, 404. As will be explained in Chapter Nine, the term ‘ornaments’ is used in place of ‘ornamentation’ since the latter appears to describe the process or art of applying ornaments to a piece rather than the ‘ornaments themselves.

²¹ Saker, Marilyn; Benward, Bruce: *Music: In Theory and Practice*, 7th ed., Vol. 1, (New York: McGraw-Hill College, 2003), 91.

²² See Chapter Seven, 288.

4. Dynamics
5. Emotion/ Feel
6. Form
7. Harmony
8. Individual Style
9. Instrument Specific Techniques
10. Instrument Timbre
11. Inflection
12. Melodic Variation
13. Melodic Structural Relationships
14. Metre
15. Microtonality/ Temperament
16. Modality
17. Modulation
18. Ornamentation
19. Phrasing
20. Phrasing Shape
21. Regional Style
22. Rhythm
23. Structural Variation
24. Tempo
25. Texture

Based on the above general table of stylistic elements, the contents of the list found below in Table 2.2 have been selected to be studied as conceptual fields in their own right. The column on the left details the chapter headings under which the various topics on the right will be explored and these will be further broken down into more specific conceptual fields in their relevant chapters. This process of making a stylistic element a conceptual field in its own right allows for an increasingly nuanced exploration of the subtleties of an area.

Table 2.2 Areas of style selected for further study.

Conceptual Field	Basic Conceptual Fields
Conceptual Resolution	For the purpose of this study
1. Tune-Types (Chapter Three)	<ul style="list-style-type: none"> • Tune-types • Tempo
2. Rhythm (Chapter Four)	<ul style="list-style-type: none"> • Swing • Tune-rhythms • Accompaniment Rhythms • Accentuation
3. Modality (Chapter Five)	<ul style="list-style-type: none"> • Heptatonic Modes • Hexatonic Modes • Pentatonic Modes • Inflection • Modulation
4. Melodic Variation (Chapter Six)	<ul style="list-style-type: none"> • Structural Tones • Implied Harmony • Styles of Harmony • Motivic Development and Variation • Compass/ Range
5. Melodic Structural Relationships (Chapter Seven)	<ul style="list-style-type: none"> • Part Structures • Motivic Structures • Travelling Material
6. Phrasing (Chapter Eight)	<ul style="list-style-type: none"> • Phrasing • Phrasing Shape: Dynamics • Phrasing Shape: Temporal Dynamics • Phrasing Shape: Rests • Phrasing Shape: Rhythmic Cadences

	<ul style="list-style-type: none"> • Phrasing Shape: Articulation • Phrasing Shape: Accentuation
7. Ornamentation (Chapter Nine)	

As noted earlier, these areas of style have all been dealt with to a greater or lesser degree by authors over a period spanning about two and a half centuries. Each chapter will open with a definition of the area followed by an historiographical overview to contextualise how writers have dealt with particular aspects of the area in question. From this, it is intended that a significantly greater number of conceptual fields can be found.

Once the conceptual fields have been decided, the second stage involves identifying their respective stylistic elements. In practice, it becomes clear that some conceptual fields, such as phrasing, contain a very large number of options that may be overwhelming and difficult to navigate. In Chapter One, it was discussed how Meyer had emphasised the importance of constraints and so I have coined the term *conceptual resolution* to specify the particular area or aspect of a conceptual field that is being addressed.²³ For instance, the conceptual field of *phrasing* could generate a very significant number of examples if taken at face value because it has a wide meaning. Therefore, if the conceptual resolution of two phrases within an eight-bar part is selected, the number of stylistic elements becomes more manageable.

Furthermore, since conceptual resolution demands that a conceptual field is viewed through as many angles as possible, in some cases, what is a stylistic element within an existing conceptual field can become a conceptual field in its own right. For example, the conceptual field ‘ornaments’ may contain stylistic elements such as the roll, treble and cut.²⁴ Then in certain cases, for example the roll (and cut), since the interval

²³ Meyer, Leonard B.: *Style and Music: Theory, History and Ideology*, (Philadelphia: University of Pennsylvania Press, 1989), 3.

²⁴ For definitions of each of the ornaments listed, see: Doherty, Liz; Vallely, Fintan: ‘Ornamentation’,

between the grace note and ornamented note is variable, it is possible for the roll to become a conceptual field in its own right, containing its own set of stylistic elements. It is the function of conceptual resolution to ensure that everything is not included in one unmanageable list but rather, that where possible, various levels such as this are utilised.

This is not only important for making the navigation of the archive easier, but by clearly demonstrating what is being dealt with, it illuminates aspects that have yet to be explored. In each of the following seven ‘archival’ chapters, an effort is made to focus on what might be considered to be the more relevant conceptual resolutions but also, where possible, to highlight those facets of a conceptual field that may merit future study. It should be noted that the conceptual fields listed are only sourced from the literature as referred to in Chapter One and that the selections made are guided by what I consider to be the most relevant areas. While this is by no means a comprehensive list, it should suffice to investigate the potential of the MCF and hopefully, will be of benefit in discovering previously unexplored conceptual fields.

In surveying the literature, it becomes clear that what authors discuss in relation to particular areas of style tends to differ depending on both the period and the writer in question. In many cases this is a natural reflection of the evolution of the genre where, for instance, particular tune-types and ornaments that were current in the nineteenth century have either faded from popular use or had not entered the tradition until the following century.²⁵ Similarly, it is not unusual to find timbral effects or rhythmic variation classed as ornaments or terms that possess no specific musical meaning denoted as tune-types.²⁶ This observation underpins the importance of beginning each study with an authoritative definition and following it with a historiographical discussion aimed at finding the scope of the material and any inconsistencies in the use of terms. Conversely, this provides an opportunity where as a natural result of the various authors listing different stylistic elements under the same conceptual field, it is possible to compile a series of stylistic elements that is larger than anything previously

The Companion to Irish Traditional Music, ed. Fintan Vallely, 2nd ed., (Cork: Cork University Press, 2011), 530-533.

²⁵ See Chapter Three, Section 3.1 and Chapter Nine, 9.1.

²⁶ *Ibid.*

described.

After the literary sources have been exhausted, three outcomes are possible where all, some, or none of the stylistic elements of a proposed conceptual field will have been found. Sometimes, the stylistic data is very obvious and unquestionable: e.g. if using equal temperament,²⁷ there must be twelve keys in which to play. Regarding the second outcome, it is sometimes difficult to know if either all or just some of the stylistic data has been found. Through systematically compiling what is known from the literature, a set of explicit stylistic elements should exist. In order to find implicit material, the three other approaches (audio analysis, variation/ formula-based permutation, practice-based research) are used.

In such cases where relevant material cannot be found in the literature, the analysis of audio recordings of suitable performers may provide a suitable alternative option.²⁸ While due to the time-consuming nature of audio analysis, this approach is unlikely to result in a complete set of stylistic elements, it is helpful in considering what might be the full scope of a conceptual field and how this information could be represented as explicit knowledge. Moreover, it can illuminate stylistic characteristics for which no evidence can be found in printed sources and it is in this context that implicit knowledge can be codified into explicit stylistic data.

In such instances where the information to be gleaned from literature and audio analysis is insufficient, either variation or formula-based permutation is required. In the context of this study, variation is understood in the musical sense and involves the creation of a series of subtle variants on a stylistic element whereas permutation incorporates the use of a mathematical formula to achieve the results. The first step entails determining if variations can be made on the existing material that are likely to occur in practice but which may not have been described previously. In some cases, such as the conceptual field 'ornaments' (Chapter Nine), this is adequate. In other areas, such as melodic

²⁷ See: Apel, Willi: 'Equal Temperament', *Harvard Dictionary of Music*, 2nd ed., (Cambridge, Mass: The Belknap Press of Harvard University, 1972), 835-836. Equal temperament is the standard tuning in Western music, the principle of which is to divide the octave into twelve equal semitones.

²⁸ In the context of this study, a suitable performer is understood as one who is highly regarded by the traditional music community.

variation and melodic structure (Chapters Six and Seven respectively), variation would never be sufficient to determine the full range of possible rhythms that are idiomatic of the tradition. In a context such as this, the use of permutation, using a mathematical formula, is considered to be more efficient and accurate.

In order to do this, existing stylistic elements are given a unique code that then functions as a term. By assigning codes to stylistic elements, it becomes possible to use a permutation formula to see how many ways the variables in the code can be arranged in a set.²⁹ While the area of ‘ornaments’ has tended to be one of the better-described conceptual fields, neither melodic structure nor phrasing possesses any specific terminology.³⁰ In these cases, codes based upon numbers and letters respectively are used to create unique terms from which particular stylistic elements can be identified, communicated and expressed. Through assigning codes that can concisely and succinctly express a particular stylistic element, again, gaps in the knowledge can be more easily identified. Rather than focussing on the various types of codes here, as each type is specific to the conceptual field being described, this aspect is discussed under the methodology section of the relevant chapters.³¹ Finally, in order to avoid confusion, in the comparatively rare cases where specific stylistic elements tend to be described by more than one term, I have elected to opt for what is usually the best-known term.

The advantage of using codes is that permutations can then be used to make every implicit possibility explicit. The disadvantage however is that in contrast to the other approaches, there is no contextual information associated with the stylistic element: it cannot be said that it was found in the playing of a particular musician, nor can it be cited in a previous source. However, it is thought that while this type of situation-related information may evolve over time, it must be acknowledged that this in itself would not be possible without the feature first having been codified.

²⁹ <https://oxforddictionaries.com/definition/english/permutation> (Accessed 21 March 2013). See Chapter Seven, Section 7.2 and Chapter Eight, Section 8.2 for details of the permutations formula used.

³⁰ See Chapter Seven, Section 7.2, and Chapter Eight, Section 8.2 where some minor exceptions to both areas will be discussed in addition to solutions for codification being suggested.

³¹ See Chapter Four, Section 4.2; Chapter Five, Section 5.2; Chapter Six, Section 6.2; Chapter Seven, Section 7.2; and Chapter Eight, Section 8.2; and Chapter Nine, Section 9.2.

Once the first three methods have been exhausted and a body of material exists, a practice-based approach may be employed to further expand its contents. While in the context of this study, this process will be documented in Chapter Ten, it can be seen to function on two levels: in a large archive, musicians tend to want to contribute stylistic elements from their own knowledge that they have noted missing in the collection; furthermore, because of what Ó Súilleabháin had observed as a lack of a developed theoretical terminology and verbalised concepts,³² it is known that the same term does not always result in the same stylistic element.³³ For instance, it is possible to realise what traditional musicians call ‘the roll’ (a commonly-found ornament) in a number of different ways.³⁴ Moreover, it is my experience that when a term does not exist for an ornament, the term of the closest-sounding ornament is often used. As will be discussed in Chapter Ten, the performer is usually unaware that they are playing a stylistic element such as an ornament in anything other than the typical way and it is in this manner that implicit knowledge can be codified.³⁵

Through using these approaches, it is hoped that it will be possible to expand significantly on what has been described in the literature to date. If successful, this should result in what will be the first dedicated archive of explicit stylistic data. Moreover, it should be transferrable without recourse to the traditional avenues of transmission as outlined in Section 1.3.2.1.³⁶ The stylistic data presented over the following seven ‘archival’ chapters contains 13,314 stylistic elements across 211 conceptual fields. Evidently, it is not possible to memorise all of this information but in the majority of cases, what emerges is a language through which it is possible to both access and explore this repository of stylistic data.

³² Ó Súilleabháin, Mícheál: ‘The Creative Process in Irish Traditional Dance Music’, *Irish Musical Studies 1: Musicology in Ireland*, eds. Gerard Gillen, Harry White, (Dublin: Irish Academic Press, 1990), 117.

³³ See: Keegan: ‘The Parameters of Style in Irish Traditional Music’, 67, 71.

³⁴ Breathnach, Breandán: *Folk Music and Dances of Ireland*, Revised Ed. 1977, (Dublin; Cork: Mercier Press, 1993), 96.

³⁵ See Chapter Ten, Section 10.4.7, 660-693. This is specifically true of the study in ornamentation.

³⁶ See Chapter One, Sections 1.3.2.1 and 1.3.2.2.

2.2 The Musical Catalyst Approach

Using the sources as listed above, an archive of explicit stylistic data will exist that can be used to transmit stylistic data without recourse to the master-apprentice model. This is not intended as a criticism of the traditional avenues of transmission, but rather, being specifically aimed towards the high-level musician, offers a new approach to stylistic development. Moreover, the range of new terminology that results from the MCF may be significant in illustrating what is being transmitted in these contexts. Furthermore, this explicit avenue of transmission is intended for musicians who would be considered as having reached a high level of expertise. In the case of this study, a high-level musician is considered as one who is working at a professional or semi-professional level, studying music at a third-level institute,³⁷ or who could be considered to be on a similar par to the aforementioned. At this juncture, the musician's performance style should be relatively well developed.

As outlined in Chapter One, the issue for musicians of this level is that aside from continuing to learn tunes and listen to recordings, currently there is no *other* known approach through which further stylistic development can occur. It is against this backdrop that the MCA is intended to act as a means of facilitating the development of a musician's stylistic potential.

Depending on their function, I have found that it is possible to categorise the various stylistic elements into three distinct types of catalyst. These are:

1. A *basic catalyst*, the outcome of which will be specific in each case. An example of this is the use of modes. If a musician elects to play a tune that is usually in G Ionian, in D Mixolydian, then unquestionably, it will be in D Mixolydian. However, the extent to which the original melody is altered in order to bring about the desired change is contingent on the performer's musicality. As will be seen in Chapter Ten, even if two or more musicians are performing the same task, the degree to which the tune is changed tends to vary.

³⁷ In the context of this study, this refers to musicians who are at least halfway through a degree program.

2. While the basic catalyst has one clear function, a *composite catalyst* is a piece of information that is relevant to more than one, albeit related, conceptual field. An example might be the numerical codes found in Chapter Four, which can be used to detail information on a tune's rhythm, accompaniment rhythm or placement of accents, respectively.
3. The *hybrid catalyst* then requires specific combinations of stylistic elements from more than one conceptual field. An example of this is tune-types, which require a specific tempo, metre, form and rhythmic features to achieve realisation. This is the only known hybrid catalyst being dealt with in this study.

Evidently, this approach departs from the objective of replicating a master performer. Instead, it has more in common with the values of constructivist philosophy.³⁸ The following explanation of the constructivist philosophy is taken from Eleanor Stublely's *Handbook of Research on Music Teaching and Learning*.

[...] the world as we know it is a construction of the human mind. Unlike animals, humans transform their experiences of the natural world through the creation and imposition of forms and images that embody its salient features and shape it for recognition and memory. There being no experience of the natural world independent of such transformations, what humans make of the natural world is a significantly more important question than descriptions of what reality actually is in the objectivist sense.³⁹

Building on the idea that individuals construct their own reality, the MCA is designed with the view that, at least at a high level, it is the individual musician who should determine their own style, rather than the teacher or institution. This involves musicians acquiring the knowledge to understand what is happening at a stylistic level and being

³⁸ See: Hua Liu, Charlotte; Matthews, Robert: *International Education Journal*, 'Vygotsky's Philosophy: Constructivism and its criticisms examined', (Adelaide: Shannon Research Press, 2005), 386-399. This paper may be found online at: <http://files.eric.ed.gov/fulltext/EJ854992.pdf> (Accessed 12 August 2013). Constructivist philosophy emerged in the 1970s as a 'buzzword' in relation to pedagogy in general but as Stublely's article suggests, it also has applications in the field of music education.

³⁹ Stublely, Eleanor V.: 'Philosophical Foundations', *Handbook of Research on Music Teaching and Learning*, ed. Richard Colwell, (New York: Schirmer Books, 1992), 6.

able to control it to suit their own wishes. Therefore, the ultimate objective of the MCA is to act as a resource in broadening a musician's stylistic potential so that they might construct their own musical realities with a more conscious agency. How such an approach might act as a possible solution to the issues outlined in Section 1.3.2.2 will now be discussed in terms of how it addresses both stylistic development and the notion of creativity through the concept of stylistic potential.

2.3.1 Stylistic Development / Assessment

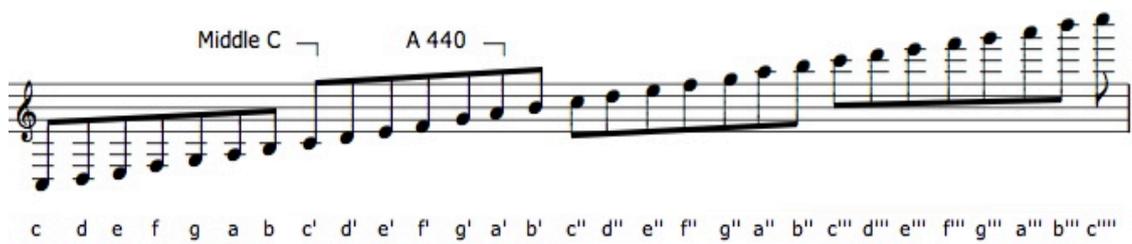
The advantage of working with explicit knowledge is that it is possible to take stock of what under a particular conceptual field is either known or unknown by a musician at any point in time. This provides a very clear, musician-specific approach to stylistic development. For example, not including subtle variations on a particular type of ornament, it is my experience that both authors and musicians alike rarely name more than about fifteen examples.⁴⁰ In this case, the 536 variants of the sixty-seven basic types of ornaments listed in Chapter Nine provide a very clear way to use explicit stylistic data as a means for accelerating and broadening the process of stylistic development: the musician can find the nearest variations of the ornaments they know and also attempt ornaments that they may not have previously heard. Hence, the musician's learning of ornaments they did not know previously can be understood as stylistic development, specifically within the conceptual field being studied. Since so little stylistic data is explicitly known, the possibility for development is considerable. Using this approach, specific sections of unknown material can be selected to work on and as new knowledge is accumulated, stylistic development can be monitored. It is also worth noting at this point that stylistic knowledge and performance practice, while related, are different in that stylistic development gives rise to an increased number of choices, which may or may not be used in performance. Given the fact that the style that is Irish music is constantly evolving, the intended outcome of stylistic development is that a greater stylistic vocabulary would better enable the performer to negotiate this fundamental constant of change.

⁴⁰ See Chapter Ten, Section 10.4.7, 660-693. These tend to be the cut, roll, triplet etc.

As the contents of the archive are communicated using music notation it is possible for a musician to acquire the information without the aid of another person. However, in some cases, such as when the musician is not entirely comfortable reading music, it may be preferable to have a facilitator on hand to demonstrate particular stylistic elements. While this would bring it closer to a master-apprentice type model, the difference still remains that the material being used is explicit.

It should also be noted that in the descriptions of pitches used here, as is standard-practice in academic writing, the Helmholtz pitch notation system is used to indicate the precise register within which a particular pitch is located. The following guide was adapted to only show the octaves relevant to traditional music.⁴¹

Ex. 2.1 Diagram showing the relationship between notes on the staff and their notation using the Helmholtz approach.



While in the third-level environment the MCA has potential uses in terms of music education as well as analysis and performance, it remains to be seen how this could be enacted. In the context of this study, it is not possible to ascertain to what extent it can be shown to be effective as a tool for increasing a musician's stylistic potential. Primarily, this is because it is not methodologically sound for an idea to be tested entirely and objectively by the person who is responsible for its creation and development. Furthermore, the sessions are highly time-consuming for both the facilitator and other musicians and so a considerable amount of time would need to be set aside, and ideally in a formal environment, to test the long-term effectiveness of the approach. Instead, the practical element of this study is intended to explore how an

⁴¹ See: <http://www.theoreticallycorrect.com/Helmholtz-Pitch-Numbering/Helmholtz-Pitch-Naming-And-Octave-Numbering-BassANDTreble-Clef.jpg> (Accessed 14 June 2013). Here the full version of the diagram may be found.

archive of explicit stylistic data may be used with regard to stylistic development and creativity amongst high-level performers, and to outline what the opportunities and challenges might be in this regard. It is hoped that this will provide the necessary starting point for both the future use of the music catalyst process and for subsequent studies.

For this study, seven musicians, who represent seven of the most popular instruments in the tradition, have been selected and who over time will be introduced to the contents of the archive. On introducing each new conceptual field, what the musician does and does not know of a topic will be loosely noted so what will have been learned can be mapped.⁴² While the extent of how much is learned by each musician cannot be discussed because it would say more of the particular individual than of the approach, the aim is to evaluate what happens when competent musicians are asked to work with explicit rather than implicit stylistic data. Specifically, it is aimed to evaluate how both the musical background of the performer and the idiosyncrasies of their instrument affect their interpretation of the stylistic data held in the archive. This will be documented in Chapter Ten.

2.3.2 The Creative Outcome

In Section 1.3.2.2, creativity was discussed as an issue, primarily in relation to the concern over stylistic homogenisation resulting from the over-influence of one teacher or a situation where ‘the institute starts to dictate a style’.⁴³ Ironically, this localised level is probably that at which regional style most authentically exists. While commentary on stylistic homogenisation is often in the form of a criticism against too many individuals sounding similar, even on this individual level, an aspect of homogenisation is required from each individual musician in order for their style to be considered as an identifiable part of the genre. Furthermore, although homogenisation

⁴² It is noted *loosely* in the sense that it is not feasible to note precisely what each performer knows in an archive of over ten thousand stylistic elements although over time, the musician may attempt this by way of personal notes.

⁴³ Doherty, Liz: *A Needs Analysis of the Training and Transmission of Traditional Music in University and Professional Level Education Throughout Europe*, Summary Edition, (European Network of Traditional Music and Dance Education Working Group, 2002), 11.

may be seen as a negative stylistic trait, it may also be the case that one style is simply relevant or attractive to more than one person.

While the concerns regarding stylistic homogenisation as mentioned in the Doherty report are valid, they are also somewhat simplistic. Creativity can be present at many levels. If at one level there may not appear to be much stylistic difference between a number of performers, at a more nuanced level it is almost certainly the case that creativity exists in terms of ornamentation, tempo and melodic variation within the tune. Furthermore, both conservative/ homogenous and modern/ innovative styles are required within the genre and not simply one or the other: it is best viewed as a spectrum rather than a dichotomy.

Notwithstanding the fact that the MCA facilitates the acquisition of an expanded lexicon of style, it does not necessarily guarantee stylistic change, nor should it be assumed that change is always for the best. Aside from the fact that change is not always relevant or required, by the time a musician is able to use the MCF and MCA, their style should be reasonably well developed. At this point, a musician's style may stay relatively fixed if they do not wish to develop it and in this sense, stylistic development or change will not occur unless it is accompanied by the motivation to do so.

Rather than promoting one style over another, the idea is to present, as objectively as possible, and to encourage a knowledge of the components of style so that the musician has a larger repertoire of explicit stylistic knowledge. It is thought that this should better enable the musician to use their stylistic vocabulary to adapt to the various scenarios in which they find themselves. In this sense, increased stylistic potential should correspond to a greater ability to interact with the change that is a guaranteed characteristic of the genre. Therefore, rather than espouse stylistic homogenisation or innovation/creativity as the ideal, the idea of facilitating an increased stylistic potential is the objective. From this, performers can decide how they wish to be positioned along the conservative / innovative spectrum or indeed, if they wish to inhabit both. This process and the creativity generated will be documented and discussed in detail in Chapter Ten.

In conclusion, through a historiographical review, an initial list of conceptual fields to be dealt with has been identified. These will be explored using the MCF from Chapters Three to Nine, following which, an archive of explicit stylistic data will exist. As stated, this will give an indication of the scope of what can be known through using this approach.

Chapter Ten will then document and demonstrate how this material can be used as part of the MCA by presenting recordings of the musicians and discussing the issues that arise, resulting in an exploration of the strengths, weaknesses and future opportunities of the study.