VARIOUS MEANINGS OF THE TERM 'MUSICAL PHRASE'

Neta Spiro
Cognitive Science Center, University of Amsterdam, Netherlands

ABSTRACT

The term 'musical phrase' is often used in music theory, the discussion of music performance, analysis and psychology. The term is usually used without an explicit definition thus indicating a general acceptance of its meaning. In this paper, I present and discuss a number of examples of approaches to the term 'musical phrase' from the domains of music theory and analysis, from different eras, and both theoretical and experimental psychology of music in order to highlight some of the similarities and differences of its meaning and usage between these domains. This is done with the aim of identifying both the elements that can form part of a comprehensive definition of the term that is applicable to music perception, and the remaining gaps and disagreements.

The basic characteristics of a musical phrase, as identified by music theory, include tonal motion and conclusion by a cadence. These are supported by empirical evidence on a local scale though global harmonic relations are not. The definition of a level of the phrase and its relation to other "grouping" structures poses difficulties in all domains discussed, while the possibility of deliberate musical ambiguity is often excluded from discussions. The results of this study could be used as a first step in the formalisation of the definition of the term phrase. This, in turn, will affect the procedures used in the analysis and description of the processes involved in our perception of musical phrases.

1. INTRODUCTION

Broadly, the term musical phrase seems to imply a unit of music that has an identifiable beginning and end, is self contained but that can, among other functions, resolve a previous unit and lead to the next one. The term is almost always connected with its 'linguistic roots', bringing to mind both 'grammatical' characteristics associated with construction and structure, and 'practical' concerns associated with breath and expression.

The term is used in discussions in many domains with different emphases and importance depending on its context, with the result that there does not seem to be a consistent definition of the term. However, it seems that there are common characteristics to the different definitions. Therefore, the term's wide-ranging applications and implications provide a way of exploring the different features and processes (both musical and psychological) that are part of the perception of music. In this paper, I concentrate on the discussions of the term musical phrase in music theory (of composition and analysis) music psychology and experimental psychology.

The musical phrase seems to rely on subdivision according to 'the whole musical sound' rather than being limited solely to specific elements of the musical surface. It therefore refers to musical segments that can have a wide range of musical characteristics. One of the elements of music that is often among the most important in relation to phrasing (and music perception or analysis in general) is that of harmony. I base the discussion on the closely related elements of harmony and tonal motion while touching on temporal aspects.

2. EARLY DISCUSSIONS OF THE PHRASE

One of the first authors to discuss phrasing in a detailed and organised way is Koch (1749-1816) whose work influenced many contemporary and later theorists. The main purpose of Koch's *Versuch einer Anleitung zur composition* (1782-1793/1983) was to instruct the student composer in the art of composition. Koch drew on contemporary repertoire (including symphonies by Franz Joseph Haydn and clavier sonatas by Carl Philipp Emmanuel Bach, as well has his own compositions) to formulate his theories and illustrate his treatise.

Koch often refers to phrases (*Satzen*), and in large compositions to the principal period (*Hauptperiode*), which contains many phrases. The period may either contain incomplete (*incise*), complete, closing (*Schlusssatz*), or incomplete (*Absatz*) phrases which are distinguished by their endings.

The two main characteristics of these periods as divisions of the whole are: firstly, the type of their endings, or the characteristics of their resting points and secondly, the length (in terms of bars) of, and proportions between, those sections, once they are reduced to their essential components, which he calls 'rhythm'. The musical elements by which Koch characterises the phrase are on the one hand local (while being related to global) harmony, and on the other, 'rhythm' or temporal proportions (Koch, 1983, $78).

Koch identifies three types of phrase: the 'basic phrase' (*engersatz*), the extended phrase (*erweitertersatz*) and the compound phrase (*zusammengechobenersatz*). These terms, especially the first, are commonly used in later literature. The basic phrase is the smallest complete segment which can contain smaller, incomplete segments (*incises*) (Koch, 1983, $80-84). According to Koch, punctuation formulas of phrases and incises create interruptions to the continuity of the melody in the strong part of the bar using a tone of an essential triad basic for the key of the melody, or for that to which the melody is modulating (Koch, 1983, $94).

Koch uses more detailed harmonic criteria to identify three types of phrases each classified by its harmonic ending (cadence) in relation to the following phrase: 1) If the caesura note[1] of a phrase or incise calls for a triad on the keynote, the phrase is called a

[1] The caesura note is a resting point in the melody, where one section of the melody can be separated from the following i.e. the phrase boundary.

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I–phrase (*Grubdabsatz*). 2) If it requires a triad on the fifth degree, it is called a V–phrase (*Quintabsatz*). 3) If a piece, which is followed by another, is closed with a V–phrase, with or without the help of a fermata, then this V–phrase is called a half cadence. Phrase endings are seldom formed on triads on the fourth degree, as such triads do not seem to give a quality of completeness. Yet phrases can appear also in this triad which our feeling judges to be fairly complete (Koch, 1983, $100).

Within the phrase endings, the root of the triad is usually in the bass of the caesura. Less often, there are some cases in which the third is in the bass. At the caesuras of incises, on the other hand, the third of the chord is in the bass nearly as often as the root (Koch, 1983, $101). It seems from this that the bass is the element that distinguishes between the phrase and the incise. However, it is not always clear how in practice it would be possible to distinguish between them.

The second main component of Koch's definition (described above) of the characteristics that distinguish divisions, is the 'rhythm' or temporal nature of the segments which, in its basic exposition, is discussed separately from the harmony and melodic structure. For Koch, the relation between the phrase and bar structure is very important and the length of the basic phrase (and the incise) is one of the most clearly described elements. The most common, useful and pleasing are four-bar basic phrases (*Vierer*). Koch here refers to both four bars in simple meters (i.e. 2/4, 3/4 and 3/8 for Koch), and two bars in compound meters (by which he means 4/4, 6/4 and 6/8). The presence of upbeats and other features mean that units longer than four bars are still considered four-bar units (Koch, 1983, $87). The most common incises of four-bar units are those complete incises which consist of 2-bars dividing the phrase into two segments of equal length (Koch, 1983, $88).

Longer basic phrases can be as long as seven bars but these should not be confused with extended phrases. There are rules for the formation of such phrases. For example, a five-bar phrase (*Fünfer*) can arise in three ways: 1) An extension of two metrical units to two bars in a four-bar phrase, 2) Joining of two unequal segments, each one of which is incomplete in itself and has no extension, 3) Continuing the motive from one bar of a four-bar phrase to the subsequent bar (Koch, 1983, $89). Koch's detailed description of phrase length, independent of harmony, does not occur in later work, such as that by Rothstein, whose theories are discussed below.

3. THE PHRASE IN LATER MUSIC THEORY

> "a phrase should be understood as, among other things, a directed motion in time from one tonal entity to another; these entities may be harmonies, melodic tones (in any voice or voices) or some combination of the two. If there is no tonal motion, there is no phrase" (Rothstein, 1989, p. 5).

Rothstein is a music theorist/analyst, who based his work on general music theory, Koch's detailed description and more specific approaches, such as Schenkerian analysis. He gives an in-depth exploration of phrasing in *Phrase Rhythm in Tonal Music* (1989) which, as can be seen above, is based on the phrase having directed motion from one tonal entity to another. He assumes some of the following basic harmonic cues to be used in phrasing: The most common type of tonal motion is the move of [I–V] – [V–I]. This is the basic form underlying the 'Antecedent' [I–V] and 'Consequent' [V–I] phrase pairs with the antecedent ending on a half-cadence and the consequent beginning in the same way as the antecedent did, but ending on a full-cadence. According to Schachter (1987, p. 205), the antecedent and consequent phrases should be of equal length and make up a period (or a larger phrase). A half cadence does not create a close that is as strong as a full cadence, but it is sufficient to create the impression of a minimally complete musical thought. Indeed, it is common for a considerable section of a piece to end with a half cadence.

As the need for an antecedent and consequent pair of phrases shows, a single phrase can rarely be taken alone. For its structure to be understood from a music theorists' standpoint, a phrase usually needs a context. This is one of the main difficulties in the experimental domain. The usual methods of experimentation are difficult to apply when searching for the balance between a reflection of context and the ability to study specific aspects of the phrase. Moreover, as will be discussed later, the importance of context is put into doubt by experiments.

A further problem is highlighted by Lerdahl and Jackendoff (1983). The V-I progression, one of the main traditional characteristics of the end of a phrase, does not always delineate the end of a phrase. It can also occur at the beginning or in the middle of a 'group'[2] in which case it is not heard as a cadence. If the progression does occur at the end of a group, it can be either a 'feminine' or a 'masculine' cadence depending on whether the V or the I is metrically more accented. If a group boundary intervenes between the two chords, the V ends a group and is heard as a half cadence, and the I is heard as launching a new phrase (Lerdahl and Jackendoff, 1983, p. 29). A variation on the antecedent–consequent phrase structure is what Rothstein terms the 'fore-phrase' and the 'after-phrase' (Rothstein, 1989, p. 18). The fore-phrase is the same as the antecedent phrase but the after-phrase will begin more or less as the fore-phrase and then will either proceed to a full cadence in the same key or end with a half cadence or full cadence in a different key.

One of the differences between Rothstein's theory and much of the other literature (that of Koch and for example, Sulzer, 1771-4) lies in the phrase-length resulting from his theory. For tonal motion to have occurred, the phrases described are generally longer than in other discussions and the harmonic relation between phrases is assumed to be known.

For Rothstein, the relationship between phrasing and bars (or hypermeter) is more of an interaction whereby hypermeter and phrasing can support or contradict each other rather than one of subscribed phrase lengths and harmonic patterns. However, there is a preference for duple phrase lengths which are viewed as the 'best' or 'most natural' (Rothstein, 1989, p. 33). Although phrases

[2] 'Group' is a category that, as used by Lerdahl and Jackendoff, includes phrases. This is further discussed in section 5.

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of other lengths may also be used, these are often produced by modifying duple phrases. A preference for duple organisation is innate to human beings for physiological and psychological reasons (Schenker, 1979, pp. 118-127). This innateness, according to Schenker, leads to a powerful normative influence to duple structure which is one reason why so many non-duple phrases can be understood as modified duple ones. However, the norm is not all-pervasive; some non-duple structures do not depend on duple models but must be understood in other ways (Schenker, 1979, pp. 33-4).

Non-duple phrases are often constructed on a different basis. For example, one of the most significant ways of construction of such a phrase, is on the basis of a number of principal tones contained in that phrase (Schenker, 1979, pp. 120-125). In Schubert's 'Wanderers Nachtlied' D. 768, for example, a phrase of five half-bars corresponds to the five principal tones in the melody. In this way, tonal motion controls the length of the phrase (Schachter, 1987).

4. EXPERIMENTAL EVIDENCE

Experiments by Tillmann et al. (1998) show that the perception of the harmonic relationships may not be as clear as described by the music theorists. In these experiments, subjects were given two eight-bar phrases from a minuet. The first section ended with either a half cadence in the main key, an authentic cadence in the dominant key or an authentic cadence in the main key. The second section always ended with an authentic cadence in the main key. These endings would be acceptable phrase endings for music theorists with a preference for the second phrase to end in the same key as the first. The task was, in some experiments, to join the two sections in each minuet in the 'most coherent order' or, in the rest of the experiments, to judge the completion of each section. When the first section of the minuets ended with an authentic cadence in the dominant key, the participants often inverted the order of the phrases. Completion judgements indicated that the authentic cadences (regardless of key) were perceived as marking a definitive ending. These results suggest that local processing of harmonic cadences prevails over global processing. The well-accepted case described by Rothstein is, therefore, questionable.

This is further supported by the experiments carried out by Delige et al. (1996) which show that local features are more useful than global tonal ones for non-musicians in exercises of cue abstraction, temporal location and segment ordering. They also showed that trained musicians used both surface features and global tonal relations in their perception of the music highlighting the importance of training and experience.

Bigand and Parncutt (1999) investigated the influence of global as opposed to local harmonic structure on the perception of musical tension in long chord sequences. In all of their experiments, musical tension was only weakly influenced by global harmonic structure. Instead, it mainly seemed to be determined locally, by harmonic cadences. They conclude that the musical events were perceived through a short perceptual window, sliding from cadence to cadence along a sequence. Although not referred to as such, 'from cadence to cadence' could refer to phrases. As long as there is tonal motion between the cadences (which is the case in the phrases in their examples), these experimental results agree with Rothstein's (and others) meaning of the term phrase.

It may be that these results are related to our ability to remember. Our memory, and our ability to include information in 'the musical present', is still being explored and tested and is, in my view, crucial to any definition of the term 'phrase' that is to take into account perceptual ability (Crowder, 1993).

Hierarchical representations of heard tonal music are demonstrated by Smith and Cuddy (1997) who showed that listeners' perceptions of tension are best interpreted as including both local information about the dissonance associated with individual events, as well as information about how the individual events are organised in terms of phrase structure.

It seems from the experimental evidence discussed here that, at least on a harmonic level, the phrase is identified by relatively local cues, more reliant on progression towards cadences, than on the chords in relation to the home key of the piece. The cadence, which is harmonically the most important part of the phrase, indicates the end and the type of the phrase.

5. COMMON PROBLEMS: HIERARCHY AND AMBIGUITY

In all the examples from the literature discussed so far the phrase is described as being a result of segmentation into groups. Often, however, phrases can be combined to create larger units resulting in several levels of phrases. This means that sometimes phrasing is seen as being hierarchical. Lerdahl and Jackendoff (1983) discuss phrasing within a comprehensive structural description of tonal music from the standpoint of an idealised educated listener. Phrasing is included with motives, themes, periods, theme-groups and the piece as a whole. All these entities are *groups* and treated, to a certain extent, in the same way. Lerdahl and Jackendoff acknowledge that phrase structure is not strictly hierarchical, although they treat both meter and grouping as such, with grouping overlaps and elisions given special treatment. For them, once the listener has constructed a grouping structure for a piece, he knows what the units are, which units belong together and which do not. 'Grouping can be viewed as the most basic component of musical understanding' (Lerdahl and Jackendoff, 1983, p. 13) but it remains unclear at which level the grouping becomes one of phrasing. The same can be said of Rothstein who says that 'Larger phrases are often known by other names: periods, sections and ultimately whole movements or pieces, all represent levels of phrase structure' (Rothstein, 1989, p. 13).

There are then, different sized phrases and phrases at different levels. There are also different terms being used which could help to elucidate the differences between the levels and help narrow the definition of the term phrase (such as periods, phrases, motives, etc.). However, although discussions of the term phrase often begin with a description of different levels, in practice, it does not seem to refer clearly to specific levels.

So far, results from experimental musicology do not help solve this problem. The musical segments commonly used for testing are usually very short and within them, the phrases, or groupings, in many cases have already been chosen by the experimenter so that different possible levels of phrasing, or preference for one or another are not tested.

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This leaves us with at least two possibilities. Either, the definition of the term phrase encompasses several different levels of phrasing, or the definition is yet to be narrowed down clearly to one level. If the first is the case, this would have repercussions even on the very basic definitions that were explored in the first sections of this paper. For example, if phrasing is reliant on tonal motion, or on cadences, what is the relation between these and the different phrase levels? If the second is the case, then a clearer distinction between the levels would be necessary and a more rigid use of terminology would be essential.

Koch, Rothstein, Lerdahl and Jackendoff all describe different ways in which the basic phrase can be extended or overlap. In this way, basic phrases are modified, breaking our expectations and creating interest in the music. This again, is an aspect of phrasing that is yet to be thoroughly explored in experimental approaches. There are cases, however, where ambiguity remains, where different phrase boundaries could be identified. This is another interest-generating element of musical structure. A more thorough investigation of the term and the elements we use to identify phrases is necessary before the ambiguity aspect of phrasing can be incorporated into the definition of the term.

6. SUMMARY

A phrase seems to be a basic and important musical entity discussed here on the basis of three examples of eighteenth and twentieth century musicological and late twentieth century experimental studies. These reveal the diversity and complexity of the criteria for the identification of phrases in eighteenth and nineteenth century music.

The term phrase, when based on harmonic criteria, seems to refer to a segment of music that concludes with a type of cadence and contains tonal motion. This is with the caveat that tonal motion associated with the cadence, that of the dominant to the tonic, is not an unmistakable indicator of a phrase boundary. Each phrase is based on this type of harmonic structure and each can be modified by, for example, expansion or elision. Local structural relations assumed in music theory, such as cadences, seem to be supported by empirical evidence while more global relations of phrases to the whole piece assumed in music theory are contradicted by experimental results.

The length of a basic phrase is rigidly constrained in Koch's compositional theory but this is not so much the case in later work. Instead the limiting factors on phrase length seem to be associated with memory capabilities while the preferred structure seems to be a binary one.

In all the domains discussed here, music theory, analysis, psychology, and experimental psychology, there is difficulty in defining the 'level' of the phrase and its relation to other 'grouping' structures. Initial experiments are now exploring this gap in the current definition of the term. Moreover, at present, the possibility of deliberate musical phrase ambiguity is not discussed.

Only limited elements of music have been discussed and the number of domains of research has been limited. This preliminary study is part of a larger exploration of the definition of the term phrase with the aim of understanding the elements and processes used in identifying phrase structure.

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