MUSEMATIC AND DISCURSIVE REPETITION

A Study of Repetition in Popular Music Analysis

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Tiivistelmä - Abstract

Työn keskeinen tavoite on tarkastella musiikillista toistoa. Lähtökohtana ovat Richard Middletonin käsitteet musemaattinen ja diskursiivinen toisto. Musemaattinen toisto tarkoittaa lyhyen, varioimattoman, useimmiten säestykseen kuuluvien yksikköjen toistoa. Diskursiivinen toisto on pitemmistä, varioivista tai kontrastoivista yksiköistä muodostuvaa toistoa. Työn tarkoituksena on tarkentaa ja kontekstualisoida näiden käsitteiden merkityksiä sekä teoreettisesti että käytännön analyysien avulla. Analyysiesimerkit edustavat populaarimusiikkia.

Toistolla on merkittävä rooli musiikillisissa rakenteissa. Lähes kaikki musiikki sisältää toistoa jossain määrin. Middletonin käsitteet antavat mahdollisuuden paitsi laajempien, myös mikrotason rakenteiden analyysiin.

Musemaattisen ja diskursiivisen toiston käsitteiden analyysin keskeisiä tutkimusongelmia ovat:
1) tutkia käsitteiden alkuperiä,
2) tutkia niiden syntaktisia funktioita ja ominaispiirteitä,
3) tutkia niiden eroja ja rajoja.

Aluksi edetään teoreettisesti toiston merkityksestä ja sen syntaktisesta roolista erityisesti musemaattisen ja diskursiivisen toiston käsittelyyn. Analyysiosa sisältää käsitteiden testaamisen hypoteettisen substituution avulla sekä kuuden esimerkki kappaleen analyysin. Loppukeskustelussa otetaan kantaa musemaattisen ja diskursiivisen toiston ongelmiin. Työn perusteella voidaan todeta, että käsitteet eivät sovellu sellaisenaan analyysissä käytettäviksi metodeiksi, vaan ne vaativat tarkennusta, mahdollisesti lisä- tai alakäsitteitä. Lopuksi esitellään 'fokaalinen, formaalinen ja teksturaalinen toisto' mahdollisina tulevaisuuden jatkotutkimusaiheina.

Asiasanat
Musemaattinen, diskursiivinen, toisto, analyysi, populaarimusiikki.

Säilytyspaikka
Jyväskylän yliopiston kirjasto ja musiikkitieteen laitoksen kirjasto

Muita tietoja

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1. INTRODUCTION

Repetition is a natural characteristic of our everyday lives. Often the things which are repeated are so obvious that we don't pay any attention to them. This type of occurrences include, for instance, habits, biological cycles, different cyclic recurrences in religions and beliefs. Repetition can be seen and studied from many perspectives. Besides repetition in everyday life, it can also have a more specific role in life and culture. Its importance in music has been acknowledged by many scholars, for instance Nicholas Ruwet and Richard Middleton. Repetition is a typical characteristic of music, playing a great role in musical structure, especially, but not solely, in popular music (Ruwet 1987:16, Middleton 1990:268). Raymond Monelle points out how in music repetition seems very natural: "music, unlike language, often repeats phrases syntagmatically in a very simple and regular way" (1992:66). In the following passage some examples of repetition will be presented in order to indicate the several possibilities it provides for the study of culture, art and music.

1.1. Introduction to Roles of Repetition

Clement Harris[1] (1963) regards repetition as a natural characteristic of arts, but also a characteristic which has two specific purposes for human beings. The first of these is "the utilitarian purpose", i.e., that repetition can be used to gain various goals, benefits or profits. This applies to the immediate repetition of whole work or piece of music. On the other hand the purpose of repetition is to satisfy the artistic sense of humans, provide balance, proportion and symmetry. This applies only to parts or units of a larger work.

James A. Snead[2] views repetition as a necessity for the survival of any culture. According to him it is impossible for a culture to be a never ending

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[1] "The element of repetition in nature and the arts", *Musical Quarterly* no 12/1963.
[2] "Repetition as a figure of black culture", *Black literature and literary theory* 1984, p. 59-79. In this article Snead criticises the Western view of "white", European culture as historical, individual and developmental, and black African culture as primitive, repetitive culture with no history.

reservoir of new inventions and developments. Instead, it is dependent on repetition and built on repetition. He contests the idea of Western culture as non-repetitive and inventory on the grounds that it "repeats continuously in precisely the belief that there is no repetition in culture, but only a difference, defined as progress and growth" (Snead 1984: 60).

Hroar Klempe discusses repetition in commercials, both in visual images and music[3]. Advertisements have become more fragmented, and as an example of this he examines Coca Cola's 'First time' advertisement campaign. The increased fragmentation in these commercials is explained by the increasing amount of repetition that is used in them in a structural way. Music plays a special role in delivering this effect, and the purpose of studying music in commercials is "to show how central the musical way of using repetitions is to an understanding of the commercials" (1992:401).

Rosalie Bandt's dissertation "Models and processes in repetitive music, 1960-83" (1983) looks at repetition from the view point of a composer's tool or a composing technique. She describes 'repetitive music' as the kind of music which

> "uses principles of repetition in one or more of its parameters to a significant extent. -- repetition as central idea or driving force. All music which relies first and foremost on repetition as its modus operandi could be called repetitive music". (ibid:4).

This would, according to the definition, also include popular music. But, Bandt continues further. She points out that "repetitive music" in her thesis denotes music created since the 1960s, and the term has also been widely used to refer to the works of especially four composers, Terry Riley, Philip Glass, Steve Reich and La Monte Young. Then, she admits, that also the words 'experimental' and 'minimal' have been used to describe repetitive music. In her opinion what is understood by 'experimental' in music does not in this case describe the same as repetitive'. (Ibid:5-6.) Actually 'repetitive music' does not here cover all the possible styles suggested by the first description, but the term is limited to the music of these four composers. In the dissertation Bandt examines the kind of models and processes that can

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3 "On mythical repetitions in music, text and image in the coca-cola commercials", *Secondo convegno europeo di analisi musicale*, Trento 1992.

be used as tools for the creation of repetitive music[4], and she examines some of the works by Glass, Reich and La Monte Young.

Information theory[5], which has been applied to music by Abraham Moles (1966), also recognizes the effects of repetition on information. In his discussion of 'semantic' and 'esthetic' information and its macro structures, Moles presents a "law of repetition"[6]. According to this law, the greater number of repetitions that occur, the less information is conveyed.

Repetition has also been used as a criterion in music analysis. Nicholas Ruwet's paradigmatic method of analysis[7] involves a technique for the "procedures of division" based on the principle of repetition (Ruwet 1987:15). The piece of music subject to analysis is seen as a syntagmatic chain of units repeated or not repeated, and it is segmented into units by way of identifying them on the grounds of equivalence and difference; every fragment repeated is considered as a unit. Ruwet's starting point in this theory is "the empirical appreciation of the enormous role played in music, at all levels, by repetition" (ibid:16). He wants to carry further an idea proposed by Gilbert Rouget:

> " certain fragments are repeated, others are not; it is on repetition - or absence of repetition - that our segmentation is based. When one sequence of notes appears two or more times, with or without variation, it is considered a unit. As a corollary, a sequence of notes which appears only once is also considered a unit, what ever its length and the apparent number of its articulations (especially silences)."[8]

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4 These models are:
    1. Mental models;
    2. Self image and interpersonal relationships as models;
    3. Biological models;
    4. Physical models;
    5. Written models (not for oral music).
5 Abraham Moles: Information theory and esthetic perception, 1966:153-66.
6 *"The law of repetition"*: when a perception (a group of symbols, sonic objects, cells) is repeated n times, the rate of information yielded per unit of time decreases as the binary logarithm of the number of repetitions increases:
$$\Delta R = - K \log2 n$$
This law governs the organization of the sequences forming the musical message; it governs *repetition*, one of the essential procedures of composition. Moles 1966:154.
7 "Methods of analysis in musicology" *Music analysis* 6:1-2, 1987.
8 Rouget, "Un chromatisme africain", *L'homme: revue française d'antropologie*, vol.1, no. 3, September-December 1961:41, quoted in Ruwet 1987:16-17.

This is also the basic idea of paradigmatic analysis. Ruwet's method was further adapted by Nattiez as the basis of his theory of the neutral level of music.

The Canadian musicologist David Lidov has also studied the role of repetition in music[9]. According to him there is correlation between the structures repeated and the functions of repetition. In this correlation both the form and meaning of music interact. His aim is "to indicate the scope and variety of musical phenomena which a systematic repetition theory might help us to take more thoroughly into account" (Lidov 1978:1). At the outset he presents what he considers the grammatical roles of repetition. Lidov points out the extensive and specific way repetition is used in music compared to other artistic and communicative media. With variations in amount and degree repetition is found in all types of music. Importantly, music unlike other arts allows and even requires literal repetition. As it is so widely used within music it can be said that repetition is a concrete fact of music "holding a privileged status among formal devices on the basis of its at least relative, if not absolute concreteness", as opposed to social facts like harmony and tonality (ibid:3). Repetition is a useful starting point when studying musical hierarchy, segmentation or identification of musical ideas. Lidov makes remarks on repetition as it has been used in analysis by Ruwet (1966) in his method of paradigmatic analysis, which was developed on the basis of Ruwet's theory by Nattiez (1975). An analysis which is based on repetition studies the individual, factors specific of each piece of music and by those means avoids making generalizations. Furthermore, repetition is a useful tool for discovering stylistic distinctions and procedures of new, unfamiliar styles. Apart from its grammatical functions, repetition can also be seen as an affective element of music. Depending on the ways it is used repetition creates different effects and meanings. Important factors are the function and the structure of repetition as well as how much is repeated how many times. (Ibid:1-7.)

In the study of repetition Lidov positions himself within structural semiotics.

"A study of repetition brings us to a junction, where questions of musical structure meet questions of value and content. -- . The problem of relating communicated content to communicative structure is the central problem of

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9 "Structure and function in musical repetition", *Journal of the Canadian association of university school of music*. 1978.

semiotics, the formal and generalised study of signs and symbolic relations".
(Ibid:7)

He considers repetitive structures and all formal and material elements of music as signs, in a sense that "anything which refers to something else is a sign, and 'refer' may be taken in the sense of 'stands for' or 'directs attention to'" (ibid). Based on linguistic concepts of reference Lidov introduces three structural-functional categories of repetition, which may be considered as signs. Firstly, *formative repetition*, which refers to itself, in other words, to what is repeated. This is based on the famous Prague School concept of the self-referential sign. Secondly, there is *focal repetition*, which draws attention to the repetition itself: a "self-referential type that focuses attention on the fact of repetition, *per se*, thereby taking on an expressive, connotative or symbolic value" (ibid:8, authors italics). By this Lidov refers to Morris' term 'formator', which means "sign which control the interpretation of other signs" (ibid). The third type of repetition is *textural repetition*, which "points away from the repeated material to other musical signs while influencing their quality" (ibid). This is related to Peirce's term 'index', which is a sign which refers to other signs.

1.2. The Syntagmatic Roles of Repetition

There are many ways to see the role of repetition in music and art. In this particular study repetition is seen as a structural element, as the idea on which the identification of the segmented units is based on. In musicology the concept of repetition has been separated from the concepts of 'reprise' or 'return'. 'Repetition' means immediate occurrence of the same. 'Reprise' and 'return' are used when the same e.g. unit or formation is repeated but with contrast or delay. Despite this division these meanings are not separated in this study. Repetition is to be understood in the broadest sense meaning any repeated elements of music.

Richard Middleton (1990) discusses on several occasions the many different ways in which repetition is involved with popular music. He mentions Jacques Attali's theory of the political economy of music (repetition and mass production, Middleton 1990:97), Theodor W. Adorno's theory of standardisation (musical form on the level of style, ibid:54-5),

Ruwet's paradigmatic analysis (ibid:183-9), and the views of mass culture theorists, who use repetition as a "weapon" to attack and criticise popular music (as a phenomenon of the mass culture era), and to put it down with comments such as "it's monotonous; it's all the same; it's predictable" (ibid:268); they regard repetition as a negative feature. But Middleton holds on to a broader perspective.

> "All music contains repetition - but in different amounts and of an enormous variety of types. We need to see the extended and nature of repetition in a given music as produced by and located at the point where several sets of determinations intersect: the political economy of production; the 'psychic economy' of individuals; the musico-technological media of production and reproduction --; and the weight of the syntactic conventions of music-historical traditions." (ibid)

The task he lays out is enormous. Towards the end of the book, he connects repetition and the results of his study more closely to Freudian psychoanalytical ideas of repetition and pleasure, and the psychic economy of individuals (ibid:287f). This goes beyond the limits the frame laid out in this thesis, and the concentration will be focused on the repetition as a syntactic feature of music. Repetition provides a guideline to distinguish the major units of formation, the syntactic units of music.

> "different syntactic processes are mixed up together; and, in mixing, they do not remain wholly themselves; they are articulated together, each mediating the other -- since music is a temporal system, different syntactic processes can operate simultaneously on different structural levels -- Within a particular musical system, or individual song, the existence, role and nature of repetition is a major distinguishing tool for analysis, helping to indicate synchronically existing differences, in relation to other systems and songs, and also helping to mark out historical changes in musical styles. The significance of repetition is closely bound up with its role in the total syntactic structure, that is, first, with the nature of what is repeated, and second, with the relationship of the repetition to other processes that are present. (Middleton 1990:268-9.)

Recently[10] (1995) he has again emphasized the importance of the role of repetition in music and called for semiology to pay attention to the various types of repetition, that is, to the syntactic structure of music.

The concepts of equivalence and difference are very fundamental in music and in connection to repetition. They seem to appear whatever aspect of music is under consideration. Middleton suggests some other concepts in order to discuss equivalence and difference: he speaks of the 'epic', 'narrative' and 'lyric' modes of construction of musical syntax. The narrative mode indicates qualities of difference; it is both goal-directed linear and self-confirming, marked by closure. It is a story that begins, proceeds and ends. Opposite to that is the epic mode, which privileges repetition and varied repetition; it implies repeating the same information. In between the epic and the narrative modes comes the lyric mode; it privileges open/closed, binary structures, but uses the narrative in a holistic, circular way. (Middleton 1990:216-7.)

The relationship of these modes to the real structures of music is described by Middleton (ibid:239) as follows:

"Some examples of 'obvious' connections have already been mentioned: archlike and centripetal melodic shapes and open/close structures (bourgeoisie); cumulative, riff-based melodic structures (tribal societies); variative melodic structures (proletarian cultures); the narrative/lyric/epic triad and its social connotations".

Pure examples of the epic mode are not usually found in popular music, and therefore Middleton takes his example from tribal music. In some types or genres of music, such as rap or techno, as well as in rare individual pieces (e.g. James Brown: Sex machine[11]) examples may be found, in which the structure comes very close to the pure epic/circular. In these examples the vocal melodic line is often completely absent or is structured in an epic way.

In most cases the narrative mode is present in music at some level (usually goal-directed melodic/harmonic process). The lyrical mode, as being a combination of both the epic and the narrative modes, is the most dominant mode in Western tonal music, rather than the purely narrative (nothing is repeated) or epic (unvaried repetition) modes. In the case of

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10 "Repeat performance" Richard Middleton paper presented at the IASPM conference in Glasgow 1995.
11 The structure of this song is discussed and analysed in section 3.2.1.

popular music this is supported by the fact, that popular music privileges symmetrical structures and strophic disposition[12], which are characteristics of the lyrical mode, and that popular pieces always contain repetition on some level.

1.3. The plan of the Thesis

The purpose of the present undertaking is to examine and develop the study of musical structures. Richard Middleton (1983, 1986, 1990) has introduced two concepts; *musematic and discursive reptition*. Musematic means repetition of a short, unvaried accompanimental unit, and discursive repetition of a long, varied or contrasted, processual unit. The study focuses on these concepts in order to specify their meanings and to test their use in practice by analysing songs. The examples used are from main stream popular music[13].

Repetition has not been used as a tool of analysis in this extent in the previous analysis of musical structures. Middleton's concepts seem to open a new way of analysing the musical syntax. I am especially interested in the repetition in popular music, since repetition is such a determining factor in its structural patterns. Concepts of musematic and discursive repetition provide tools to analyse not only the macro structures (form) but also the micro structures of music.

In order to make a complete study of the uses and possibilities of these concepts of repetition the study enters two levels, theoretical and analytical. In order to develop and analyse the definitions of these concepts the main issues and questions are:

1)*to study the origins of these concepts,*
2)*to study their syntactic functions and characteristics,*
3)*to study the differences and limits of these concepts.*

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12 Symmetrical structures: "larger units being constructed by binary combination of smaller units", Strophic disposition: "repetition of small number of well demarcated sections" Björnberg 1994:56
13 My acknowledgements to Alf Björnberg who was my supervisor and tutor during 1995-96 in Gothenburg University, Sweden.

The first chapter included a *presentation of some of the roles of repetition in music* and specially *syntagmatic roles of repetition in music*. In chapter two *musematic and discursive repetition* are discussed by their *definitions, syntactic roles, origins of the concepts and temporal aspects*. In chapter three the *concepts are discussed in terms of hypothetical substitution and symmetry*, and then *applied in the analysis* of six Western contemporary popular pieces. The examples illustrate the ways the repetition types are found in actual pieces of music and what are their characteristics. The last chapter includes a *conclusive discussion* of the study and its implications. It *summarizes the results of the concepts musematic and discursive repetition* and *problematizes the use of these concepts*. In order to give some *direction, new ideas and suggestions for future research* there is also a presentation of interesting and possibly fruitful concepts of 'formative, focal and textural repetition' by David Lidov.

2. MUSEMATIC AND DISCURSIVE REPETITION

Richard Middleton distinguishes two techniques of repetition; musematic and discursive. They are originally presented in his article "'Play it again, Sam': Some notes on the productivity of repetition in popular music" (Popular Music 3, 1983), again in article "In groove, or blowing your mind? The pleasures of musical repetition" (Popular Culture and social relations, 1986) and rewritten in his book "Studying popular music" (1990). In this thesis the latter is mainly quoted since the differences between these articles are rather small.

2.1. Musematic and Discursive Repetition Defined by Middleton

Middleton gives a brief definition of 'musematic' in musematic repetition. It's origin is in a concept of 'museme' as it has been used by Philip Tagg (Middleton 1990:189). He does not mention the origin of the term 'discursive'. He gives, however, definitions to these concepts:

> "Musematic repetition is, of course, the repetition of musemes; the most immediately familiar examples - riffs- are found in Afro-American musics and in rock. Discursive repetition is the repetition of longer units, at the level of the phrase, the sentence or even the complete section. The effects of the two types are usually very different, largely because the units differ widely in the amount of information and the amount of self-contained 'sense' they contain, and in their degree of involvement with other syntactic processes. Moreover, musematic repetition is far more likely to be prolonged and unvaried, discursive repetition to be mixed in with contrasting units of various types (as in AABA structure of the classic Tin Pan Alley ballad form). The former, therefore, tends towards a one-levelled structural effect, the latter to a hierarchically ordered discourse. Musematically recursive frameworks are often combined with a 'surface' characterized by complex, minutely inflected (--), perhaps improvised variation; while discursive processes tend to result in 'developmental' structures, most strikingly worked out in the European art tradition, in which the underlying form is often a 'one-off' while the 'surface' in many ways relatively crude and impoverished."(Middleton 1990:269)

Discursive repetition can be in different ways hierarchically ordered; immediate (two phrases repeated immediately 'a a'), delayed (two phrases 'a' repeated in sequence with phrase 'b' in the middle = 'a b a') or combined discursive repetition (both combined 'a b b a'). These techniques take place in phrase repetition, sequence, symmetrical parallelism and phrase-structure repetition. (Ibid:270.) According to Middleton a sequence, when repeated in binary tonic-subdominant or tonic-dominant juxtapositions, may be musematic repetition, because its non-process character (Ibid: 276). Further Middleton recognizes that defining precisely term musematic is difficult, and so 'the nature and size of the museme need to be regarded flexibly" (Ibid: 189).

2.2. Musematic and Discursive Repetition as Structural Elements

Musematic and discursive repetition are clearly concepts of syntactic structure of music. The following passages will present their position within the syntagmatic categories and present their specific roles in musical structure.

2.2.1. The Syntagmatic Categories

Middleton introduces musematic and discursive repetition in the context of syntagmatic categories of 'narrative-lyric' and 'epic-lyric'[14].

> "The variety of ways in which repetition can be used is potentially infinite. We can, however, distinguish certain basic models. Recalling the three 'ideal' syntagmatic categories described earlier - 'narrative', 'epic' and 'lyrical' - one can consider the two types that predominate in nineteenth- and twentieth-century popular music - 'narrative-lyric' and 'epic-lyric' as marked by contrasting modes of repetition, which I shall call *discursive* and *musematic*, respectively." (Middleton 1990:269, author's italics)

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14 Already introduced in section 1.2. p. 5.

As quoted above, most of Western music uses the lyrical mode of construction of musical syntax. The reason why Middleton introduces the new concepts of epic-lyric and narrative-lyric is that in his view only 'lyric' is no longer sufficient to cover even a generalized account of styles within popular music, and some elaboration is needed. Further, these new categories emphasize the specific characters of specific genres of popular music, more precisely the historical changes found between 19th and 20th century styles, which Middleton aims to point out in his study.

Musematic and discursive repetition relate to these modes of syntax as their characteristics. Musematic repetition is a typical characteristic of the epic/circular mode, discursive repetition one of the narrative mode. However, as Middleton says, in practice the epic, lyrical and narrative modes appear in mixtures. Therefore also these repetition types are used simultaneously within a syntactical mode. Most nineteenth-century popular songs display varying proportions of the lyrical and narrative modes, and thus they utilize a narrative-lyric mode; similarly post rock'n'roll songs adhere to an epic-lyric mode[15] (ibid:217).

> "It is important to stress again that these two types are historically not *entirely* mutually exclusive; indeed, they interact to form a variety of sub-types - hence the emergence of the 'narrative-lyric' and 'epic-lyric' types". (Ibid:270)

From the point of view of repetition techniques the question is only about the *amount* of musematic or discursive repetition used in a particular music: which one of them has the more dominating role. 19th century popular music is more 'narrative', uses the technique of discursive repetition more, even exclusively, while on the other hand 20th century popular music is more epic, privileges musematic repetition, but also uses discursive repetition. (Middleton 1990:269.)

Both repetition techniques can be used simultaneously in different parameters, and at different syntactic and structural levels (Middleton 1983:237). The number of repetitions is infinite in the epic mode, nil in the narrative, but 'suitable' in the lyrical. Because of the elliptical form repetition is an obvious characteristic of the lyrical mode, but because it also includes narrativity, the number of repetitions cannot be as high as in the epic mode. The length of the repeated units has to be quite short, these are

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15 In the article in *Popular Music 3* this was called "epic-recursive" (1983:238)

units of musematic repetition when used extensively, but on the other hand long enough to facilitate the creation of narrative process through discursive units. It has to be kept in mind that musematic and discursive repetition are only one type of characteristics of narrative, epic, and lyrical, and there are various other factors that have formative functions. Yet our aim here is not to define these syntagmatic categories but to study the possible uses of musematic and discursive repetition in the analysis of music.

2.2.2. The Syntactic Roles of Musematic and Discursive Repetition

The main textural layers that can be separated in popular music are melody and accompaniment, the former tendentially using more of discursive and the latter more of musematic repetition. Even though the layers can be generalized like this, the resulting character, continuity and construction of the whole song is not dependent on them as separate layers of texture, but on how they articulate together. The type of repetition used in each parameter outline the overall structure and the form of the piece. Both repetition types can occur simultaneously in different parameters. If the same technique is used at the same time in many parameters, it reinforces the effect of that type of repetition.

> "The effects of these two types are usually very different, largely because the units differ widely in *the amount of information* and *the amount of self-contained 'sense'* they contain, and in their degree of involvement with other syntactic processes." (Middleton 1990:269, my italics)

'Information' and 'self-contained sense' do not have the same meaning. Units of discursive repetition can be argued to be more informative because of their linearity and processual character, which is usually realized by the melodic line combined with verbal lyrics. Musematic repetition, on the other hand, is not informative in this sense, because it includes a great number of repetitions of the unit. It is quite obvious that the more repetitions there are, the less attention is paid to what is repeated, and the less information is delivered. This has already been introduced as Moles (1966) 'law of repetition' (section 1.1). However, the term 'information' can be understood in a different sense. In popular music both musematic and

discursive repetition deliver information but on different levels and through different techniques than that understood in terms of information theory. Musematic repetition is often used in such way, that it informs and prepares the listener for the following. All the changes in musematic repetition, e.g. those carried by accompaniment, are usually markers of change in the structure. In this sense it can be very informative.

The amount of 'self-contained sense' does not depend on the amount of the information the repeated unit contains. The units of musematic repetition may have a lot of self-contained sense, in the sense that their 'meaning' does not depend on other syntactic processes or other kinds of syntactic units. For musematic repetition to exist, it is sufficient enough that the unit of musematic repetition is repeated a (great) number of times. The units of discursive repetition, on the contrary, do not have a lot of self-contained sense. In order to create a discursive structure, a contrast, variation or process is always needed. Units of discursive repetition depend on each other in order to create a discursive syntactic structure.

2.3. The Origins of the Terms 'Musematic' and 'Discursive'

In order to gain deeper knowledge of the concepts one should consider their origins. The term 'musematic' is derived from 'museme', which was first used by Charles Seeger (1960) and later by Philip Tagg (1979). They used it in different ways; Seeger as a unit of music-logic and Tagg as a semantic meaningful unit. Middleton acknowledges both of these uses. The term 'discursive' is obviously derived from 'discourse' as the linguistic discourse analysis. This is not explicitly recognized by Middleton, even though he mentions the term 'discourse' when defining discursive repetition[16].

2.3.1. From 'Museme' to 'Musematic'

'Museme' is a concept invented by the musicologist Charles Seeger. For him 'museme' is a unit of music-logic applicable to occidental (Western) music. Philip Tagg adopted the term 'museme' and considered it as a universally applicable concept, a semantic, meaningful unit. For Middleton 'museme' is

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[16] See quote on p.10.

a small, syntactic unit. He directs it explicitly towards popular music. All these different uses of 'museme' vary. It also has to be considered that the definitions given to 'museme' influence 'musematic', and therefore, in order to examine 'musematic', its origin needs to be explained. There are three main problems involved in the examination of museme; 1) What does a museme signify; 2) On what basis it is segmented and 3) On what level the meaning is considered.

The concept of museme was used for the first time as a musical term by Charles Seeger in his article: "On the moods of logic"[17]. In this theory a 'museme' is a unit of music-logic. As the name of the article suggests, he concentrates on the construction of *musical moods*[18] based on logic. Technically, moods are series of possible theoretical patterns which are composed of tone beats[19], the components of music-logic form segmented by rules of logic. A form of a mood indicates the function of its elements, tone beats. Seeger recognizes three different kinds of musical units of the moods. The smallest possible unit is that of a single component, a single tone beat, a 'protomorphic'. The next logical possibility is the unit of two tone beats, a 'mesomorphic'. Neither of these two can include the requirements that he has posited for the complete mood or unit of music-logical form[20]. The smallest unit that is able to fulfil these possibilities is a 'museme', the unit of three tone beats:

"a unit of three components - three tone beats - can constitute two progressions and meet the requirements for a complete, independent unit of music-logical form or mood in both direction and extension. Both variance and invariance can be exhibited in each of the four simple functions. It can be regarded as

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17 The article "On the Moods of a Music Logic" was first published in the *Journal of the American Musicological society*, XIII (1960), and rewritten "On the Moods of Logic" in *Studies in musicology* 1935-75 (1977)

18 "Mood" here is a parallel concept to linguistic mode, Seeger 1977:77, author's italics

19 A tone beat means a note, which has qualities of pitch and duration. Seeger also calls it "a musical phoneme" (1960:229)

20 These requirements are direction and extension, and their variance/invariance. (Seeger 1977:76). "Variance of direction" allows the progression in one direction or its opposite (rising/falling of pitch, the fastening/slowing down of tempo etc). Only the possible change and its direction is recognised, not its quantity. "Variance of extent" measures quantities or degrees in the change affecting the parameter in question, and their relation to one another in a particular context (state or rate of a factor, for instance dynamics, tempo and timbre, and the change and variation of it).

binary and holomorphic - *a music morpheme* or *musems.*" [21] (Seeger 1977:76, author's italics)

He defines the size of the museme quite precisely in relation to tone beats; the minimum is three tone beats, but it may also be constructed from four tone beats (a ternary museme), or even five tone beats[22].

For Seeger 'museme' is a unit of music-logic. He constructs an abstract theory of the logical possibilities of musical thought. The segmentation, or rather the composing of musemes relies on the rule of three tone beats. This is not problematic since the question is about abstract ideas. Technically the theoretical 'musemes' fill their function.

Seeger acknowledges the difference between language and music, and the danger of drawing false conclusions of using the same terminology in both speech-logic and music-logic. The semantic meanings are not the same in language and in music, because in music it is connected to the function of the logic.

"Although a sentence in linguistically a chain of morphemes, logically it is a chain of sememes - a sememe being the meaning of a morpheme. Speech-logic lies entirely in the message of a signal-message complex, not at all in its signal. A music-logic, on the other hand, certainly lies in the signal of a signal-message complex... A music-logical cursus cannot be *translated* into another music employing different sounds in the signal without distortion." (Seeger 1960:229-30, quoted in Monelle 1992:75)

Seeger's theory becomes problematic when applied to real music. This problem was confronted by Philip Tagg. He adopted 'museme' from Seeger and used it in the analysis of music for the first time in the analysis of "Kojak - 50 seconds of television music" (1979). His aim was to isolate the units that carry musical meaning, further to analyse and to interpret them. For this purpose he changed the meaning of the concept. Tagg refers to semantics in the definition of 'museme'; he abandons the abstract logical definition, and 'museme' becomes the *basic unit of musical expression*, a meaningful unit. Musemes may be broken down into smaller elements, but

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21 In Seeger's book there is a misspelling: "musems" is used only in this passage. On all other appearances the word is spelled "museme ", which is assumed to be the correct form
22 It is stated by Seeger that this is rare: "Moods of five or more components (four or more progressions) can usually be considered compounds of two and three progression units, but occasionally can be formulated to advantage as separate units" (1977:76).

not without the destruction of meaning (Ibid:71). By this Tagg means that a "museme is a whole, complete unit carrying musical meaning", and if any of its elements is removed or replaced, the museme is not the same as before[23].

Tagg draws a clear analogy with linguistics. He places 'museme' on the same level as 'morpheme'[24] and the tone beat on a level with 'phoneme'[25]. Just as a morpheme is composed of a number of phonemes, a museme can be broken down into basic elements, which may be tone beats; Tagg, however, calls them 'musical phonemes' (Tagg 1979:71). The analogy between 'museme' and linguistics is also implied by Seeger, by his placing of the concept of museme on the same level as 'a music morpheme'. A morpheme is defined as a meaningful unit, and therefore after drawing this parallel 'museme' may also be regarded as a meaningful unit.

Tagg wants to create an exact theoretical model for identifying musemes. He tries to perform the segmentation by Seeger's principle, three tone beats. This, however, is supplemented by a modification:

> "the progression from silence to musical sound at the start of a musical piece or movement must also be considered as a museme component (so that from silence |∅| to tone beat 1 |tb1| to tone beat 2 |tb2| may be considered as constituting a museme, - -, according to Seeger, elision of the final component of one museme into the first component of the next one does not constitute the cancellation of the museme status of either of two units of musical expression".
> (Tagg 1979:71)

The segmentation by the rule of three tone beats is not practical and cannot be carried out by Tagg in his analysis. It can be applied to segmentation of the melody, but difficulties occur when the accompaniment is segmented. Tagg, however, seems to have adopted Seeger's rule in a flexible way three tone beats being the *minimal requirement* of the unit of logic i.e. that of meaning[26]. Even this is not flexible enough and exceptions have to be

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23 To test the validity of the segmentation into musemes he uses four methods: 1)*hermeneutic intuition*, 2)*intersubjective comparison*, 3)*interobjective comparison*, 4)*hypothetical substitution*. See chapter 3.

24 "a minimal unit of speech that is recurrent and meaningful" or " a linguistic form that is not further divisible without destruction of meaning and is the minimal meaningful unit" (Pei 1966, quoted in Tagg 1979:71)

25 "minimal units of speech distinguishing one utterance from another" (Tagg 1979:71)

26 The size of a museme was defined by Seeger as three to five tone beats.

made[27]. Applying the segmentation rule in practise leads into the extension of the size of museme.

The meanings of 'musemes' are passed through codes and communication, which are bound to culture. There is a "correspondence between elements of musical and extramusical expression within any one uniform system of musical code" (Tagg 1979:66) and that "the musical elements are contained within a musical language which the same listener is competent at decoding"(ibid:65). Therefore the meanings cannot be universal. Tagg's method could be applied to music of any culture when interpreted from the culture in question. When studying meaning on this level the segmentation rule cannot be determined from outside, nor can it be known beforehand which parameters are pertinent and meaningful. The measurement of destruction of the meaning is difficult and has various degrees[28].

Middleton acknowledges that 'museme' was used used by Seeger, even though he adapted it from Tagg. For Middleton the term 'museme' is an origin to the term 'musematic', which represents a type of repetition (paired with a term discursive repetition). The units of musematic repetition are identified by repetition. Monelle has also remarked that in music segmentation can be carried out on the basis of repetition, at least to some degree, because music often repeats its units regularly, in a syntactic way (Monelle 1992:65-66)[29]. When repetition is used as the basis of segmentation the problems related to the segmentation of 'musemes' disappear. The units are determined by the structure of music, not by the theory.

The aim of the segmentation is different in case of musematic repetition. Middleton does not try to segment logical or meaningful units in the same sense as Seeger and Tagg did. For him 'musematic' is a structural element and the meaning is on a different level. He indicates that denotation in music, the apprehension of musical meaning, is tied up with the structure of music: "there is a direct and immediate semantic correlation

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27 See Tagg 1977:99,100, 1982:34-5.

28 As an example of this see Tagg 1979:76-7, also 1982:51-3, where he uses the technique of hypothetical substitution on the Swedish national anthem "Du gamla du fria", further Middleton 1990:180-2, where the same technique is used to the Beatles song " A day in the life"

29 An illustration of this is the way segmentation is done in Nicholas Ruwet's paradigmatic method of analysis. He has developed explicit segmentation criteria based on repetition, i.e., systematic identification of equivalence and difference.

to musical structures, which can be conceptualised in various ways"(ibid:220), and so *meaning can be analysed by studying the structure* [30].

What actually is the same in 'museme' and musematic repetition? They both are small units but contradictions on the other hand are many. Tagg was able to segment the melody of 'Kojak' and 'Fernando' into three tone beat musemes to some extent, but problems occurred when application of this rule to accompaniment was attempted. However, Middleton's musematic units are characteristically found precisely in accompaniment structures, and they are identified by recurrence. Also the characteristics of the 'musemes' and the units of musematic repetition are very different. The 'museme' is a segment of, for instance, the melody, and it is dependent on the other melodic musemes. It does not have self-contained sense as the units of musematic repetition have.

The examination of the concept of 'museme' does not actually give much information of the concept of musematic repetition. The term is derived from 'museme', but does not have the same conceptual meaning. If the units of musematic repetition were also to be named 'musemes', it would cause more confusion. The concept of musematic repetition has created meanings of its own and should be considered separate from 'musemes'. It has a different purpose, function, characteristics, nature and it is identified on different basis.

2.3.2. The Origin of 'Discursive'

A term discursive has many different meanings. According to the "Oxford English Dictionary" (1989) *discursive* is defined in a following way:

> (1) running hither and thither; passing rapidly irregularly from one locality to another (*rare* in *lit.* sense); (2) passing rapidly or irregularly from one subject to another, rambling, degressive; extending over or dealing with a wide range of subjects; (3) passing from premises to conclusions; proceeding by reasoning or argument (often opp. to *intuitive*).

The definitions 1-2 are not probable sources of the term 'discursive' used by Middleton. Irregularity and rapidness are not characteristics of discursive

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30 Middleton present theories of Frances (1958) and Imberty (1979), Jakobson (1960), Eco (1979) and Stefani (1973) to support the view of structural semantics. It was also stressed by Lidov, chapter 1, p.4.

repetition as described before. The definition number three, however, seems to describe better the meaning of the term 'discursive' we are dealing with.

Discursive repetition is derived from the concept of discourse. It has following meanings:

> (1) Onward course; process or succession of time, events, actions etc. (=course). (2) 'The act of the understanding by which it passes from premises to consequences'. (3) Communication of thought by speech (a talk, a conversation; a common talk, report, rumour). (4) Narration, a narrative, tale, account. (5) A spoken or written treatment of a subject in which it is handled or discussed at length (a dissertation, treatise, homily, sermon, or the like). - Now the prevailing sense. (6) Familiar intercourse, familiarity with subject, conversancy. (7) Comb. (=osana eri yhdyssanoja). (8) Special comb.: *discourse analysis*, linguistics, method of analysing the structure of texts or utterances longer than one sentence, taking into account both their linguistic content and their sociolinguistic context; analysis performed using this method. (Ibid. My italics)

Middleton's use of the term 'discursive' seems to include all these explanations, especially from 1-4, and 8. It is obvious that the source of the term 'discursive' is 'discourse'.

Particularly, the last definition of the term 'discourse' is interesting. 'Discourse' as the origin of the term 'discursive' connects the discussion to linguistics, as in case of 'musemes' and 'musematic'. Emile Benveniste describes linguistic analysis in his book "Problems in general linguistics" (1966). The first condition for any linguistic unit to exist is that is must be part of a higher unit. A phoneme is a part of a sign (morpheme) here regarded extensively as a word. 'Word' he describes as intermediary, because it can be broken down to the lower level into phonemes, but also "as a unit of meaning and together with other units of meaning; it enters into a unit of the level above" (Benveniste 1966:104). This level is a sentence.

> "The sentence, - -, is the very life of human speech in action. -- [W]ith the sentence we leave the domain of language as a system of signs and enter into another universe, that of language as an instrument of communication, whose expression is dicourse. --. The sentence belongs to discourse. It is even by discourse that it can be defined; *the sentence is the unit of discourse*" (Ibid:110, my italics)

A discourse includes a number of sentences[31]. Benveniste expanded later his theory by making a distinction between 'semiotics' and 'semantics'. By the former he means that the sign is the unit of meaning. In semantics the unit of meaning is a sentence.

Benveniste considered 'meaning' as separate from 'reference'. For him the meaning is implicitly inherited in the linguistic system. This equals to primary signification. The reference is made outside, to the world of objects. This is the secondary signification. Both meanings can be covered only in a level of sentence, i.e. in discourse, which makes its role in the analysis so significant.

Teun A. van Dijk (1977:2) has emphasized the importance of the concept of 'discourse' in the analysis of language. He wants strictly separate compound sentences from sequences of sentences:

"utterances should be reconstructed in terms of a larger unit, viz that of TEXT. This term will here be used to denote the abstract theoretical construct underlying what is usually called a discourse.--. [D]iscourse is -- taken as a sequence, *ie* as a linearly ordered *n*-tuple of sentences." (Ibid:3,5)

A sentence is not large enough unit to be considered as the highest unit of analysis and the meaning can not be analysed based on compound sentence, because

"meaning of sentences may depend on the meaning of other sentences of the same utterance although not always in the same way as the meaning of clauses in compound or complex sentences." (Ibid:3)

To use Benveniste's definition of reference this could be interpreted that the reference is not made solely outside to the world, but also to the other sentences, within the discourse (sequence of sentences).

How does the discourse analysis relate to the understanding of discursive repetition? Middleton defined that discursive repetition is found at the level of phrase, *sentence*, or even complete section, including variety of materials, different length of units and form[32]. How can a sentence be related to music? Structurally it could be the level on which smaller unit create a relationship or organize a higher level unit. In terms of harmony it could be a completed sequence of chords, a vamp. On the basis of the

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31 Benveniste is quoted by Ricoeur, 1978:67f.
32 See section 3.1.2.

definition of the term 'discourse' in discourse analysis, discursive repetition includes also the relationships between the units of discursive repetition ('sentences'). This level may appear problematic since such large structures of music are difficult to define by these terms.

Based on these views of the origins of 'musemes' and 'discourse' it seems as Middleton had an idea borrowed from linguistics when he paired the terms 'musematic' and 'discursive' together. Musematic seems to carry the connection to the morpheme. In discourse analysis it is used as the unit of meaning but, which combines to a larger unit of meaning, to a sentence. A discourse, of which the term 'discursive' is derived from, is composed of sentences. With this pair of concepts Middleton attempts to cover more tightly the study of structure to that of meaning, as it is done in linguistic analysis. A study of 'musemes' would be a study of only morphemes, which is not adequate in analysis of meaning.

2.6. The Temporal Aspects of Musematic and Discursive Repetition

As may be concluded from the discussion above, the effects of musematic and discursive repetition differ much. This is also the case with respect to their regarding temporal effects. Musematic repetition marks time, makes the time circulate by repeating the same, while discursive repetition produces a sense of forwardness and processuality, it composes time (Middleton 1990:272, 275). These differences can be discussed in terms of different *temporalities*.

Jonathan Kramer discusses temporalities in a book "The Time of music" (1988). His basic concepts are *linearity* and *nonlinearity*, and these serve as the basic concepts in his analyses of music. Different temporalities create different kinds of effects and meanings in music.

> "The meanings of music are temporal owing to music's unique ability to create different kinds of time, often simultaneously, which resonate with the nonlinearity (and linearity) of our inner thought process as well as with the linearity (and nonlinearity) of our eternal lives in society. Through time, music's meanings become both internal (syntactical) and external (symbolic)." (Ibid:15)

Kramer describes *linearity* as "the determination of some characteristic(s) of music in accordance with implications that arise from earlier events of the piece" (ibid:20). It is a progression in time, in which the things that have already occurred determine the things that are yet to come. The movement of linearity never stops. Opposite to this is *nonlinearity*, described as "the determination of some characteristic(s) of music in accordance with implications that arise from principles or tendencies governing an entire piece or section" (ibid). Two of its main aspects are textural consistency and durational proportions. In order to explain linearity and nonlinearity further, Kramer presents a table of dichotomies which can be associated with the concepts:

Linearity	Nonlinearity
teleological listening	cumulative listening
horizontal	vertical
motion	stasis
change	persistence
progression	consistence
becoming	being
left brain	right brain
temporal	atemporal[33]

TABLE 1. Linearity and nonlinearity (Kramer 1988:63)

Linearity is seen as a characteristic of tonal (classical) music and nonlinearity as one of atonal music. Popular music cannot be directly attributed to either of them: depending on the popular style concerned, characteristics from both columns in the table may be suitable to describe it. Few pieces of music are consistently characterised by either linearity or nonlinearity; they regularly co-exist on different hierarchical levels in music.

Kramer proposes five temporalities which are created through interaction between linearity and nonlinearity: directed linear time, nondirected linear time, multiply-directed linear time, moment time and vertical time. Of these five, the most interesting ones in the present context are the concepts of *directed linearity* and *nondirected linearity*. The former

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33 For this last pair of terms Kramer gives further explanation: "When a certain aspects of a piece exist for their own sake, not because of some larger progression, they are atemporal. Their presence in the composition is more important than their temporal position in it. Their impact is not dependent on their position along a time continuum, but they nonetheless contribute to overall temporal coherence." Kramer 1988:63

refers to a goal-oriented progression, while in the latter the goal is missing but the continuity remains. Allan Moore (1992) has summarized the meanings of these concepts clearly in relation to popular music. Moore starts from Kramer's

"idea of 'directed linearity', likening it to the experience of rail travel: such travel is experienced as directed motion from an initial point, along a clear path, to a final point. This analogy is used to explore the role of 'functional harmony' in much pre-twentieth-century Western tonal music,–. Kramer then introduces the idea of 'non-directed linearity'. Here, the sense of motion remains, but the goal is equivocal. This seems to me to describe quite well the time sense of a great deal of conventional rock, wherein a sense of motion is normally ensured by three features: melody, harmony and rhythm. The singing voice approximates to a line rather than a series of discrete sounds, by analogy with spoken phrases. Harmonic successions give a sense of motion from one harmony to the next, although the motion tends only to be very local, arriving back at the original harmony for a repeat of the succession." (Moore 1992:87, my italics)

Moore points out how post rock'n'roll music differs from traditional Western tonal music in regard to linearity. In Western tonal music the directed linearity is accomplished by both harmonical and melodical tonal processes, but in popular music it is the melodic process which usually is more directional than the harmony. The sense of motion remains in the harmony, but it may vary; it becomes nondirectional. A vamp, a fully completed harmonic cycle, creates a stronger sense of progression than just an alternation of two chords[34].

Musematic and discursive repetition are not exact parallels to Kramer's concepts nonlinearity and linearity, but the kinds of temporality that can be created by these types of repetition can be described in terms of directed and nondirected linearity. The following discussion is carried out in terms of musematic and discursive repetition and their temporal effects in contemporary Western pop/rock/dance music, of which the objects of musical analysis, presented in chapter 4, are taken.

The effect of pure musematic repetition is nondirectional. Unvaried, continuous repetition has no goal, nor is it progressive. Yet it is in motion, circulating and creating 'present' time sense. In the quote above Moore connects nondirectionality to conventional rock, which typically uses

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34 The difference between "vamp" and "two chord alternation" is demonstrated in section 3.1.

musematic repetition of small rhythmic and melodic units, as well as short harmonic patterns[35], which create a sense of motion. The linearity which it contains, and tonal music is linear, is not clearly goal directed, or better to say, the goal is not clear. We perceive a strong sense of continuity and movement, but they are not heading towards a specific goal; the available choices of the routes and consequences are many. If there is direction involved, it is a very short term phenomenon and the goal is never set far away from the starting point, nor is it tonic directed. This is the kind of experience resulting from structures constructed of musematic units.

A textural layer of directed linearity, for instance, a melodic line supported by a harmonic progression, which has a starting point at the beginning of and a finishing point at the end of the piece, is not a characteristic of mainstream contemporary popular music. Even though, there are processes which can be described in terms of directed linearity, but these processes are created by different techniques and structural factors, described in terms of discursive repetition, which are further discussed in the next section.

The best examples of directional processes are those provided by functional harmony, as pointed out by Moore. A typical functional harmonic progression starts from tonic chord, takes a route through some other chords, and then possibly returns to I again (often through V). It moves from one point to another having a goal at the end of the progression; tonal motion is always goal-directed (Kramer 1988:25). There are also other ways of creating directional linearity. As mentioned earlier, in popular music directional processes extending throughout the whole piece occur rarely. The directionality is created by techniques of discursive repetition, such as alternation of constrasting units (usually melodical and harmonical) within and between the sections (verse/chorus), which are marked by many structural factors[36].

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35 Musematic and discursive repetition are discussed in Moore 1993:35-6.
36 Philip Tagg has discussed temporalities from a different point of view in his article: "Understanding musical 'time sense' - concepts, sketches and consequences" (1984), also in Tagg "Kojak" (1979:184-6)

3. MUSICAL EXAMPLES

The chapter 3 included a theoretical overview of the role of repetition, particularly musematic and discursive repetition, in music. It is possible to take the concepts so far only in theoretical terms. The following chapter takes musematic and discursive repetition into practical level by means of hypothetical substitution and analysis of two songs. The analysis of these songs will test the limits and boundaries of these terms.

3.1. Hypothetical Substitution - Exploring the Boundaries between Musematic and Discursive Repetition

Philip Tagg used four techniques in order to test the validity and change of the musemes. They are: 1)*hermeneutic intuition:* the analyst's subjective introspective process on grounds of his/hers own experiences; 2)*intersubjective comparison:* comparing the reactions of many individuals to the same piece of music; 3)*interobjective comparison:* comparing the correspondence and communication of similar musical and extramusical codes (musemes or PMCs or SMCs) between different pieces of music; and 4)*hypothetical substitution:* testing the changes of musical meaning resulting from the replacement of musical elements with different elements, in order to verify or falsify hypotheses on this meaning (ibid:73-76). The latter is especially interesting in relation to musematic and discursive repetition. Even though musematic repetition is distant from 'musemes' hypothetical substitution appears to be a useful tool also for testing the borderlines of musematic and discursive repetition. When the identification of these repetition types is no longer unambiguous they need to be considered and examined carefully. Hypothetical substitution is a good technique for this purpose. Yet these limit cases, though they are complex, are the ones that truly help to understand the nature and the role of the repetition types.

One of the most interesting problems is the number of repetitions involved in each type of repetition. Musematic repetition usually consists of a greater number of repetitions of small units in micro levels, when discursive longer units are not depended on the number of repetitions,

even though it is possible that they are repeated (e.g. sections/choruses may be repeated many times). There are cases where these generalisations need some extension. Another problem concerns the identification, which has to made considering the previous and following units. None of the elements in question can be taken out of the whole structural context. Interesting are also the cases when the structural levels of musematic and discursive repetition intersect, or even cross the levels.

A useful concept in this discussion is *symmetry*. We do have pre-existing expectations of the patterns of structure in popular music. They are due to our experience of the possible modes of construction of this type of music. Such conventionalisations or generalisations can be found on the level of song group, style, culture, or musical system. They help us to construct some kind of symmetrical frame structure in case of each song. The different types of repetition can be considered within these frames. This can be illustrated by taking a hypothetical example.

A piece of music which has a symmetrical structure. The frame of this structure is built on two bar-units, which group into four and eight bars (2+2+2+2). The song begins with a unit a (= 2). This melodic unit a is repeated unvaried => a a. In popular music this is a common combination, whatever the length of the units is. The choices of what kind of unit can follow are either a repeated a or new material b. If b occurs => a a b, no attention is paid, because the result is a typical discursive structure. If the choice is an unvaried a => a a a, the listener is alerted to pay attention to what follows. The expectation of a different unit was not fulfilled. The next unit is crucial. The assumption is, that the unit a has been repeated three times => a a a. Again, it can be followed by an a or an b. At this point there is a big difference whether the previous unit was repeated unvaried or with variation. If all three units a have been repeated unvaried, especially the last one, there is good reason to believe, that the following unit is another a. If there has been variation in the unit a (a'), possibly implicating tonal change, it gives a reason to expect new material b => a a a' b. Even if there is no variation in the unit a, it is possible that a unit b follows. At this situation contrast is expected to occur.

Another assumption is that the three unvaried repeated units a are followed by another a resulting in the structure of => a a a a. In this case no contrast or variation is used, and the effect of this is circular. The repetition has crossed the limit and is obviously already 'too much' to be categorised as discursive repetition; the same unit has been repeated four times, unvaried,

throughout the section. Structure is clearly built on musematic repetition. This analysed section should now be related to following material. If the next set of four units begins with an unit a again, the expectation is, that the whole $a\ a\ a\ a$ will be repeated again (creating a macro structure A A). If something different follows, there is a reason to expect a contrasting section to follow (A B).

3.1.1. Elvis Presley: Love Me Tender

In practice this can be illustrated first by a song that is assumed to be familiar to most readers; Elvis Presley's evergreen "Love me tender". This song is originally an old Irish folksong "Aura Lee", which was introduced to the public by Presley. This is a typical ballad form even though usually it is performed in a 32 bar structure; in this case the length is the half of it, 16 bars.
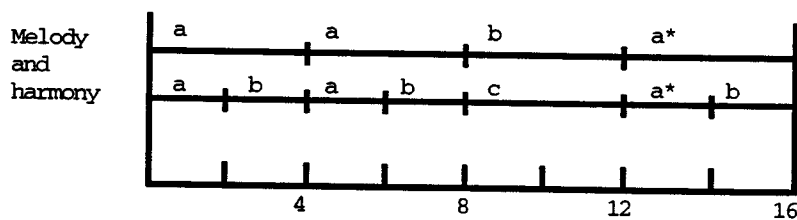

FIGURE 1. Elvis Presley: Love me tender (1956)

The four bar phrases a can be divided into smaller units which may help the identification of the structure. Yet they are not recognized as own level of form through listening experience.

The symmetrical frame works in groups of four bars. The song begins with a four bar melodic and harmonic (I/II/V/I) phrase a, which is repeated unvaried with different lyrics (4+4) $a\ a$. This is followed by a new melodic four bar phrase, and the last phrase is a variation of the first phrase => $a\ a\ b$ a'.

EXAMPLE 1. Elvis Presley: Love me tender

As the song is so well known within its tradition, its structure is also recognized. One knows that after the first phrase is repeated, a new phrase is introduced. What happens if this is changed? In the next example the structure of the song is altered, so that the phrase *b* which is the contrasting section, is replaced by another melodical *a*.

EXAMPLE 2. Substituted version of "Love me tender"

The effect is crucially different. The old discursive contrasting, directional structure is now just simply a repetition of unvaried 4 + 4 + 4 + 4 bars, each four bars being melodically identical to one another. The discursiveness, the goal or aim of where the structure previously was heading is absent. The song has become just a circular 16-bar carousel, which could be repeated 'forever'.

In this example the repetition occurs in the level of phrase, which is usually the level for discursive processes. Still there is nor much 'discursiveness' here. This structure is identified as musematic repetition, as the repeated unit is not varied or contrasted by another unit or material. The number of repetition is crucial, because the listener has to be convinced, that no contrast or variation follows on this level. These four times of repetition of this phrase is enough to create musematic circulating effect. From this example one can draw a conclusion that some of the characteristics of musematic repetition are more elementary than others. The length of the unit does not seem to be crucial after all, and 'musematic' can be found in many levels.

3.1.2. John Lennon: Imagine

The same kind of hypothetical substitution can be done with a different song. The second example is John Lennon's "Imagine". The form of the song is a typical popular music form *A A B A B*. As can be seen from the figure the verse *A* and the chorus *B* consist small size and number of different elements.
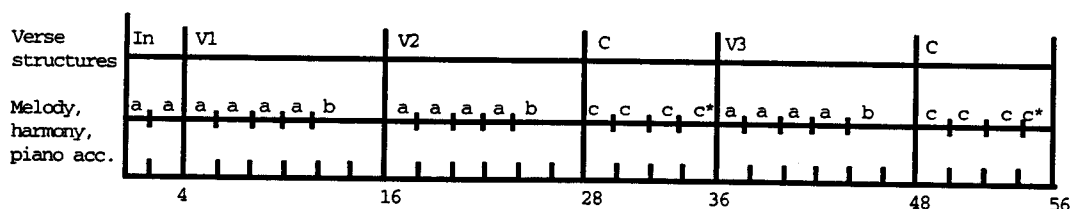

FIGURE 2. John Lennon: Imagine

In previous example "Love me tender" the repeated four-bar structure featured a full cadential harmonic pattern I/II/V/I. The case is quite different when dealing with a two-bar structure, like in "Imagine", wherein the harmonic structure is constructed from the binary switching of two chords, not a full harmonic cycle.

EXAMPLE 3. John Lennon: Imagine (1971)

The following substitutions will be made to the first 12 bars of the song, which represents the section A. As can be seen in Example 3, the two-bar harmonic and melodic unit is built on the alternation of two chords I(-^{7})/IV. This is repeated four times. After this follows a four-bar harmonic progression IV-VI/II^7-IV/V-I/V^7. An interesting substitution here would be to alter the number of the repetitions of the two-bar structure and then study the possible effects of the changed structure. The altered parameters are melody and harmony.

In the first substituted case (Example 4) the two bar chord progression is repeated six times instead of the original four. This is presented without text because there are additional bars in the structure.

32

EXAMPLE 4. First substituted version of John Lennon: Imagine (1971)

As can be noticed by singing or playing the song, adding these two two-bar units before the final four-bar progression does not disturb the structure very much. The effect is weak, even though the original frame structure is changed. This change is noticed, due to the fact that the song is familiar to the listener, because the switching to the four-bar progression is expected already after the first eight bars. Since the expected change does not take place there, after four bars, the next place where the change could be expected would be after the four additional bars (altogether 12 bars from the beginning). If it does take place there, the listener's expectation is satisfied.

Until now both the two-bar structures have been dividable by four; the original song structure is constructed of 8 + 4 bars, and the first altered version of 12 + 4 bars. A greater effect can be achieved by changing the structure so that it is no longer possible to divide it by four. In the next example the structure is constructed of three from these two-bar units (2+2+2 = 6 bars) which are followed by the original four bars.

EXAMPLE 5. Second substituted version of John Lennon: Imagine (1971)

In this case the ending four bars come quite unexpectedly after the six bars. The symmetry is set for a four bar structure, even though the first unit four bars long does not appear until the end of the section. The effect is stronger than in the first altered version, but still not very strong.

This phenomenon is described by Alf Björnberg (1994) in terms of *symmetry* as follows:

> " Symmetrical binary construction being the implicit norm of popular music, asymmetrical structures will be perceived precisely as deviations from a norm, that is, occurrences of asymmetry are perceptually marked as 'events'. In general, the experiential effect of a deviation from symmetry is inversely related to its size; deviations 'below bar-level' not only disturb period and phrase structure but also regular metre" (Björnberg 1994:59)

In each piece the symmetry is a 'rule' which is followed by bar-constructions and by metre. Allan Moore (1993) discusses a hypermetre of the rhythmic organization of music. This is also a kind of implicit existing norm or assumption within popular music:

> "Metre is organized hierarchically. Just as groups of beats (normally four) are grouped to yield metre, groups of bars (normally four) are grouped yield hypermetre." (Ibid 1993:39).

If these norms of the structural symmetry are broken, as was done in the case above (Ex.5), is the attention of the listener immediately attracted.

The first two altered versions of "Imagine" have been testing the symmetry in discursive structures. Finally, in this last hypothetical substitution performed the structure is changed so that it is constituted only by the repetition of the same melodic two-bar unit.

EXAMPLE 6. Third substituted version of John Lennon: Imagine (1971)

The effect is of the same kind as in "Love me tender" (Example 1), even though here it is, if possible, even more 'musematic', since the repeated unit is shorter and the number of repetitions is doubled. This kind of cycle is not contrasted with other units and not supported by a harmonic goal-directed progression; it is repeated for its 'own sake'.

Another possible case, even though there is no musical example of it here, should be discussed. This involves a large structure repetition, it could be a phrase group, or even a whole song. Assumption is that there is a melodic discursive phrase structure *a a b* where one phrase equals 4 bars (=12 bars). This constitutes the section A. The section A is repeated unvaried 12 times, after which the song is over. How can these structures be defined in terms of these repetition types? The structure *a a b* is clearly discursive repetition, but the repetition of *A*, which is formulated of *a a b*, is more difficult to define. Is it possible that the discursive phrase structure forms a

structure of musematic repetition on a larger level? As stated before it has to be remembered, that the length of the repeated units may not be so crucial factor. It is certain that there is a need to identify the repetition at the level of large structures as musematic repetition. Repetition of an unvaried unit, whatever its length, creates a circulating effect when repeated a number of times. The shorter the unit, the stronger the effect. Musematic repetition in large levels, macro structures may be difficult to find in contemporary popular music, but there are examples found in many present styles and genres of marginal music, i.e. in techno and hip hop styles. Therefore extending these concepts into their limits is necessary and useful.

The previous examples are quite easy to present and judge because only melody and harmony are discussed, but the more parameters there are to be considered, the more difficult it can be to analyse these repetition types. On the other hand if all the parameters support the same type of repetition, it can be marked even clearer. Judging from the two experiments of hypothetical substitution performed in this chapter it is my impression that the effects of repeated four- and two-bar structures are quite different. A four-bar unit that contains a harmonic vamp is a lot more sensitive to changes than a two-bar unit, in which two chords alternate. In both examples the way these units are used and combined with other units, i.e. the way the whole structure is constructed, determines the consequences and effects. The sense of direction is stronger in a four-bar unit which features a full vamp, in which the harmony is tonic directed. This type of unit is usually used to built larger discursive structures where it is combined with other units of the same length. The effect of a repeated two-bar unit with a I-IV harmonic switch is nondirected. A 'musematic', circular effect can be created already by a quite small number of repetitions.

Disregarding the length of the units used the perception of popular music structures is affected by the presence of expectations of symmetry. Antoine Hennion describes popular music form in his article "The production of success; an anti-musicology of the pop-song" (1983). The sense of symmetry is created during the first bars of the song, in the introduction.

"In a few bars, this serves both as a signal to the listener, enabling him to recognise the song immediately, and as a foretaste, making him want to listen to the rest. The 'intro' reveals enough to suggest the mood: sound, rhythm, type, etc. -- . The object is to use fragments which characterise the rest of the song: a

few bars of the tune, a chord, a mixture of timbres, a rhythmic pattern"
(Hennion 1983:165)

Symmetrical structures are familiar to the listener and the makes the listening process easier. The symmetry gives us the frame within the actual music is constructed. It also functions as a determining factor of the length of the repeated units, though not the type of repetition used.

These examples of hypothetical substitution and the discussion in terms of symmetry helps us to place the limits of musematic and discursive repetition. The identification of the repetition types can not take place without taking the song structure, symmetry and the level of analysis into consideration.

3.2. About Analysis

Six songs have been chosen to be analysed in order to gain more insight to musematic and discursive repetition, the benefits as well as the problems concerning an analysis based on repetition types. They represent various amounts of musematic and discursive repetition, from purely musematic "Sex machine" to different mixtures of the uses of both repetition types. The analysis is based on the recorded performances. A significant role is played by the analyst's pertinence criteria, i.e. my observations, conclusions and decisions as to which are the pertinent parameters and events in the music. The emphasis is not laid on the analysis itself, but on what can be gained by analysing these songs and thus what can be said about the use, nature and limits of musematic and discursive repetition.

The purpose of these analysis is to present how musematic and discursive repetition work in practice, in which parameters they operate, and what can be said about their role compared to the theoretical discussion in chapter 2. These examples can be said to be quite typical examples of the use of these repetition types in contemporary popular music. Interesting is not only which type of repetition is used and where, but how it is used, what are the factors used to create each type.

3.2.1. James Brown: Sex Machine

To show how musematic repetition can work in a real piece of music, we proceed with the analysis of the song "Sex machine" by James Brown. This is an example of African-American funk-music; it typically uses a great deal of musematic repetition in all parameters, almost in an extreme way. Therefore it serves the purpose of examining musematic repetition very well.

The song is built on a strong musematic effect. Guitar and bass use only two kinds of riffs throughout the whole song, one is repeated unvaried through section A, and the other through section B. This is possible because of the stable tonal structure of the piece; in the whole section A there is no harmonic progression at all, it is based on a prolonged I chord, while the bridge remains on the V chord. Rhythmic riffs are repeated in the same way throughout the piece; they don't have a tonal function.

	A							B		
Structure	A							B		
Melody	c/r	vocal	c/r	piano solo	c/r	vocal	c/r	voc.	Vocal	
Accomp. structure	I-								V-	I... from the beginning, fade out
Chords										

12 20 23 31 35 45 50 54   70
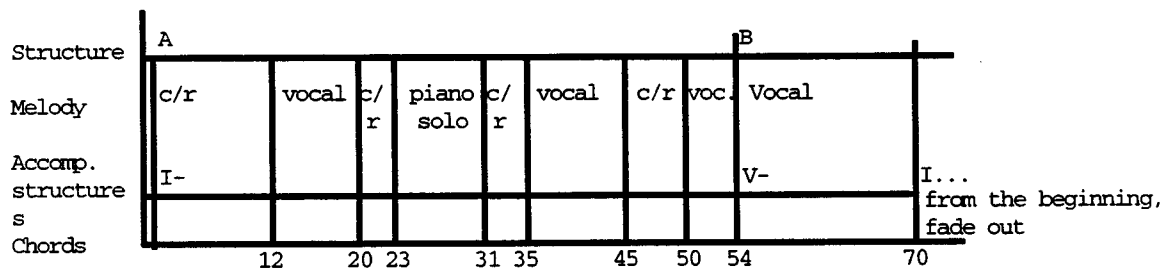
Figure 3. James Brown: "Sex machine" (1966)

The form of the song is not symmetrical as in most popular songs, but it has only two sections; A (bars 1-54), which is the verse, and B (bars 55-75, fade out), which Brown calls a bridge. The piece is not built on open/closed structures, as the majority of popular songs, but on a closed/open structure (the first section A ends on a I chord = closed / the second section B ends on a V chord = open) (Moore 1993:53). The whole piece is like an endless cycle; it gives an impression that it could go on forever repeating itself. Even though in the end it does not return to the I chord, it can be heard that the song starts again from the beginning. First James Brown shouts: "do you want to hear like I did on the top?", referring to the beginning, and that is followed by the intro, the first bar of the song just before it is faded out. There is no sense of symmetry created by the accompaniment due to the lack

of contrasting or variating elements. The only units can be identified by the phrases repeated in the lyrics. Even they are not repeated symmetrically, sometimes they are dividable by even numbers, some times not.

The whole section *A* is built on a steady guitar and bass riff repeated in a nearly hypnotic manner.
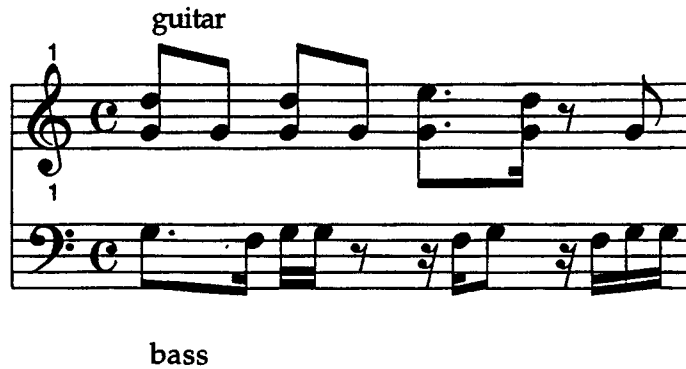
EXAMPLE 7. Guitar and bass riffs from section *A*, "Sex machine" by James Brown

The riff like units of musematic repetition are repeated above a steady backbeat. On the top of this accompaniment comes the vocal line. It is also very musematic in character, characterised by a call/response structure (Get up / get on up). When there is no discursive repetition, it is difficult to know when the change occurs. It can be sensed by symmetry, which is easier to perceive in the *B* section than in the *A* section.

"Sex machine" is a good example of the use of musematic repetition. It is also an extreme example: songs are rarely built solely on musematic repetition. This is a question of stylistic character, too. Popular music is based on riffs to a variable degree:

> " the riffs can be more or less the whole piece, -- . They can be continuous, or worked into an antiphonal call-and-response -- pattern. --. They can be melodically memorable, or chiefly rhythmic in impact (a method leading to funk and disco styles). Their effect, to a greater or lesser extent, is always to level out the temporal flow, to challenge any 'narrative' functionality attaching to chord patterns and verse sequences, and to 'open up' the syntactic field for rhythmic elements -- to dominate --. The shorter and more insistently repeated the riffs, the more powerful these effects." (Middleton 1990:280-1)

Yet riffs can function in different ways. Some of them have a more specific character than others, and they work at the foreground, while some of them

can be characterised as being just in the background, creating the 'motorial flow', as it is named by Björnberg (1994:58). This accompanimental 'motorial continuum' is "effected by drums, bass and chordal instruments" (ibid). As long as riffs are part of motorial flow, they don't attract specific attention, on the contrary; they are expected to function that way. In case of "Sex machine" this idea is taken to an extreme. The accompaniment is a flow on top of which the lyrics are sung.

3.2.2. Procol Harum: Whiter Shade of Pale

An example of the use of sequence in popular music can be found in the song "Whiter shade of pale" (1967) by Procol Harum. In this song the sequence is used within the context of an imitation or pastiche of another style, Baroque; the harmonic progression is taken from cantata by J.S.Bach. Still there is no contradiction, sequences are used also in popular music. In this particular case the sequence is used to built the whole basic harmonic structure of the song. Indeed the sequential technique is the key to the whole structure; both verse and chorus are built on it. There is no other harmonic pattern in the song.
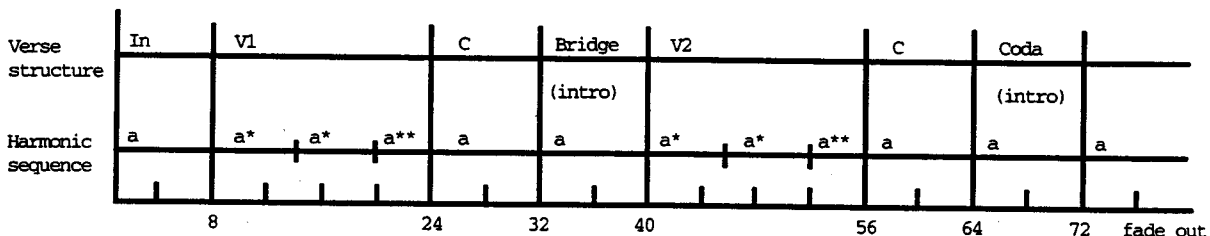
FIGURE 4. Procol Harum: Whiter shade of pale (1967)

From this illustration the harmonic patterns can easily be seen. The sequence is eight bars long but during the verse it is shortened first into 6 bar version and in the end 4 bar version.

EXAMPLE 8. The harmonic sequence of the "Whiter shade of pale"

Even though a sequence is a characteristics of discursive repetition the case here is problematic. The discursive structure can be identified within a verse, section, since there the harmonic progression is strong. The melody and the whole accompaniment section supports the harmonical progression and there are no repeated short units which could be identified as units of musematic repetition. Yet there is no contrast or variation at all between the sections, since both, verse A and chorus B are based on the same harmonic material. The chorus B can be identified only because of the melodic line is different and the same lyrics are repeated in every chorus. Also that is the only section where the sequence is fully carried out. On the verse it is shorter and shortens towards the coming chorus.

Middleton stated that a repeated sequence can be characterised as musematic-like repetition, quasi-musematic. This is in the cases of sequences in tonic-subdominant (I-IV) or tonic-dominant (I-V) juxtapositions, as binary switching between these positions. This kind of sequential technique is still occasionally found, for instance, in blues, where the beginning of the harmonic cycle (I-IV-I) provides a place for a unit of musematic repetition to be repeated in tonic-subdominant position. Usually it is a melodic motif or phrase which is repeated in these tonal positions,

like in "Mustang Sally" by Wilson Picket[37]. In these cases the sequence does not create a progressive, goal-directed effect. (Middleton 1990:276). In case of "Whiter shade of pale" the sequence is not repeated in either of the mentioned positions and yet it becomes musematic like because the sequence is the only repeated material within the song. There is a contradiction in the definition and use of the concept of discursive repetition.

3.2.3. Midnight Oil: Beds Are Burning

The song "Beds are burning" is by Midnight Oil, and recorded in 1987. It can be described as a mainstream rock-pop style song. Popular songs often feature symmetrical constructions in which well-demarcated sections are combined in binary structures. Formally, this piece is built on the alternation of verse and chorus: V1, C1, V2, C2, C3 (or *A B A B' B'*), which in themselves are built on binary material, as can be seen in figure 4.

Verse structures	In	V1			C1			V2			C2				C3		c
Vocal structures		a vocal	b choir	b* ch	c ch	c* ch	d v	a* v	b ch	b* ch	c ch	c* ch	d v	d v	c* ch	c** instr.	
Accomp. structures		I I I ...						I I I ...									
	r	x	x'	y	y	z	x	x'	r	y	y	z	y	y	r	
	4		28		50				78			104			120 124	
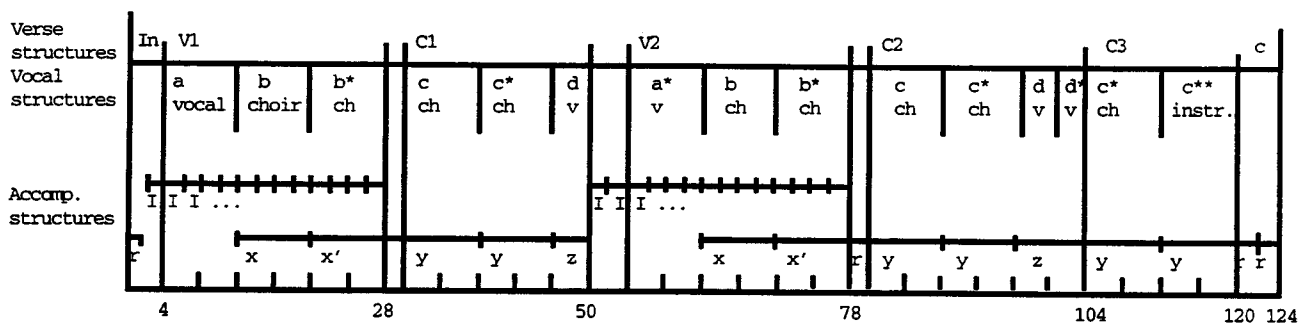
FIGURE 5. Midnight Oil: Beds are burning (1987)

The accompaniment is built on units of musematic repetition and it functions as a motorial, rhythmic background. In the verse bass and drums repeat a short 2-bar rhythmic and melodic riff *(x)*. The guitar is still silent. Here the riff has a very steady and circular effect, due to the bass riff remaining on the same tonal level: the bass repeats the riff in the same tonal position. At bar 13 a synthesiser enters and starts an 8-bar harmonic cycle (same length as *b, b'*), which is repeated twice. It adds a processual feeling of continuity to the piece. In the chorus the harmonic cycle also lasts for 8 bars, but the amount of directionality increases due to a more frequent

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37 The song is analysed in section 3.2.6.

change of chords and the bass which starts moving and plays the root notes of the chords. The progression is supported by all accompaniment instruments (bass, drums and guitar). Nothing surprising occurs in the accompaniment. It fulfils its function and acts in the expected way.

The units of discursive repetition are found in the melody, which is, in both verse and chorus, characterised by two different types of binary combination which support each other. Firstly, there are two different kinds of melodic units used, and secondly they are sung by two different combinations of voices. In the verse the melodic material *a* is always performed by the lead singer; the *b* material (repeated) is sung by a group of people, a small choir. In the chorus the *c* material (repeated) is sung by the choir, and part *d* by the lead singer, i.e. the opposite construction to the verse. The discursiveness in the melody is created by these contrasts between the smaller units within the verse and chorus, as well as between the materials of verse and chorus, which are melodically and characteristically fairly different.

The 'discursiveness' of the structure and the continuity of the piece is created also by other factors than melody. The demarcation of the sections and the closures are important factors distinguishing transitions between different sections. The demarcation in "Beds are burning" is clear but simple. Since there are quite a small number of variations of the units, and since in this case they are not repeated a great number of times in immediate succession, the demarcation is easily effected by introducing new material, yet, often prepared beforehand. In this song the effect is created by a 'delay' in the harmonic progression at the end of *b'* in bars 26-28 before moving to the chorus; the first *b* lands on the I chord, where it started, but when repeated as *b'* it ends on II, and therefore creates an expectation of what follows. Specific details can also be used in order to mark or inform of a certain continuation. In this song there is a riff (r) functioning as a kind of 'warning signal'. It occurs in two interludes bars 28-30 and 78-80 after both verses, informing of the following chorus. The riff is introduced already in the very beginning of the piece (bars 1-2).

What is specific and in some ways even comfortable for the listener in this particular song is its symmetry and 'roundness', which simply allows and invites the listener to take part in its world. In this piece it can be seen that the technique of musematic repetition is strongly dominant in the accompaniment, creating the motorial flow to the piece. Thus, discursive

repetition is worked out at the melodic surface and in the harmonic progressions, supported and demarcated by details in the accompaniment.

3.2.4. Blur: Repetition

This song is from the English pop group Blur's record "Leisure" (1991). This quite slow piece of popular music is interesting, not only because of its name, but because of its strongly musematic structure.

At the level of overall form the song is conventionally constructed of binary material; $A\ A\ B\ A\ B'\ B'$ (or In, V1, V2, C1, V3, C2, I1, C3). Section A (verse) and B (chorus) are constructed of two types of smaller units $A = a, b$ and $B = c, d$.
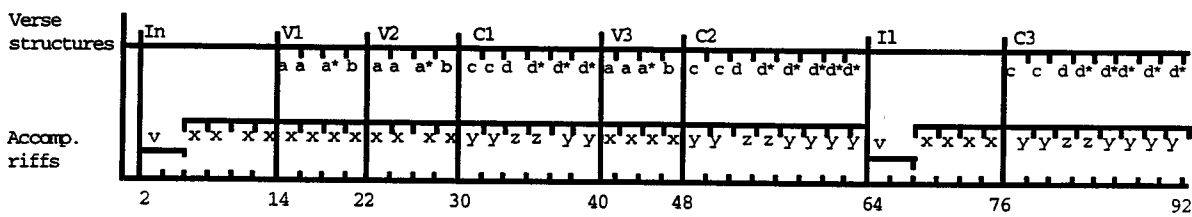
FIGURE 6. Blur: Repetition (1991)

The accompaniment is built on units of musematic repetition. In the introduction (at bar 6) a synthesiser and a bass start a cyclic repetition of a two bar riff which remains tonally and rhythmically the same until the chorus begins. It is very simple and plain, not a lot of anything else, but repetition of the same. From the beginning of verse 2 the guitar plays a I chord on the downbeat of every second bar, at the beginning of the riff. The steady circulating riff during the verses has an independent role and it is separate from the basic motorial flow accompaniment.

Synthesiser

Bass

EXAMPLE 9. Bass and synthesiser riffs from "Repetition"

The attention is attracted precisely because the same, clear, melodic riff is repeated 'too many' times. It comes to the foreground also because the only other accompaniment instrument is the drum kit, so the background is very plain. This riff circulation is intensive and effective. The musematic riff has a strong self-contained sense. It seems to go on and on and it is doing its own thing despite what happens in the other parameters of the song. The focus of attention, though, is diverted from it as soon as a new textural layer, the melody, enters the piece, the attention then being focused on the melody. Yet the riff continues circulating until the end of the verse.

An interesting accompanimental detail in the piece is the appearance of the interlude in bars 66-78, and specifically, what follows after it. It is almost precisely the same as the introduction is bars 2-14. The difference is that, at the first time it was followed by the first verse, but here at the second time it functions as a bridge, which takes us from chorus to another chorus. Listening to the song, how do we know, if it is followed by a verse or a chorus? This is implicated by a mere, thus clear, detail. At the end of interlude the last riff, marked by x' (bars 76-78), is not repeated in the same way as the last riff marked by x in the end of introduction (bars 12-14), but as in the end of verses (bars 28-30 and 48-50). When this small change is heard at the end of interlude, it directly implies the chorus, not the beginning of a new verse. Therefore the listeners are prepared for the material.

Melodically the material is used in a manner that it is on the edge of becoming musematic. In the verse the repeated units are short, only 2 bars long. The accompaniment and melody function together, and usually use the same kind of structural constructions. In this song in the accompaniment the strong, circular, fore grounding musematic riff-repetition is introduced first, and therefore as the pattern is laid out the phrases of the melody follow the same pattern of repeated units. Concerning the melodical material itself the A is built on a and b units. The unit a is

repeated three times (*a a a'*), and in the end followed by another unit (*b*) at the end of the verse. The point in the case of the song 'Repetition' is, that the melodical structure or the way it is constructed, is close to creating the effect of a musematic circle. If the unit *b* in the structure *a a a b* was changed in to an *a* (*a a a a*)[38] the discursiveness in the melody would disappear, and any discursiveness would have to be created by other layers. Yet the discursiveness is needed and there must be its elements found in order to create the difference and form, even though this is done by minimal way.

The structure and symmetry are clearly indicated in "Repetition". The first two bars of the song introduce the rhythm and the meter. The following four bars bring in the tonality, as the guitar repeats the dominant note of the key. Then the two bar riff (Example 8) begins and is repeated four times (= 8 bars) which is also the length of the verse. All the elements that we need to get the hang of the symmetry of the piece have been introduced in the first 14 bars (2 + 4 + 8). Even the length of these units grows symmetrically, the last is always doubled. The basic unit is a four bar cycle, in the verse it is repeated twice, in the chorus three times. After each section, verse or chorus, there is room for a change, not in the middle of that four, eight or 12- bar cycle.

The interaction between verse and chorus is usually built on melodical and harmonical changes. In popular music pieces the verse is traditionally the linear, on going part of the song, while the chorus, being more circular in effect, repeats the same melodic and verbal material. Interesting fact is, that the harmonic progression in this song functions in an opposite way; in the verse the harmonic cycle is produced by minimal effects, it is sparse and there is only one short harmonic pattern which is repeated throughout the verse. Then, in the chorus, the harmonic progression is brought into the foreground by all the accompaniment instruments and the binary switching of two harmonic cycles. The discursive effect during the verse seem to operate on a minimal level, the responsibility for discursivity is left to the melody alone, while the accompaniment leaves space for the melody to fulfil its function.

Antoine Hennion (1983), on the basis that "the construction of the songs has become somewhat formalised", goes into explaining the nature and function of the elements of popular music; introduction, verse and

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[38] Discussion about hypothetical substitution, 3.1.

chorus, verse progression and conclusion. About *"the alternation between verse and chorus"* he writes:

> " In the verses, which are in a fluid, recitative-like style, the music subordinates itself to the lyrics, so that the story can unfold. The chorus, on the other hand, is more musical and etches the tune in the memory, a tune whose regular repetition right through the song is expected and gives all the more pleasure because it is eagerly awaited during the somewhat dull verses. *The arrangement underlines this opposition by enriching the chorus in a number of ways: the addition of instruments absent during the verses, denser harmonic progressions, the pointing up of a climax whose resolution makes one ready for the calm of the following verse.*
>
> As far as musical construction is concerned, *a song typically opposes -- the verse (- -), and -- the chorus. -- the opposition can also be achieved through a variety of means"*. (Hennion 1983:165-6, my italics)

The verse and chorus are strongly contrasted in this way in "Repetition". That is so mainly because the stable harmony in verses changes in the chorus into a cyclic harmonic progression and a switching between two different types of harmonic units. The harmonic progression is sparse in the verse, dense in the chorus; there are only few instruments used repeating the same 2-bar riff in the verse, contrasting against a four-bar harmonic progression arranged for all accompaniment instruments in the chorus. Much more 'happens' in the chorus compared to the verse. The accompaniment is strongly characterised by musematic repetition in the verse, while the melody is able to create discursiveness with quite minimal effects. The cyclic chorus, on the other hand, needs the backup from the accompaniment.

The structural symmetry in music - the length of the units identified by recurrence and their balance - creates an experience of time sense. When, for instance, the same unit or section is repeated, it is expected to be repeated in same length in order to fill in the same 'amount' of time. The time is absolute if measured in seconds and minutes, but relative when experienced by the listener.

3.2.5. Eric Clapton: Wonderful Tonight

Eric Clapton's ballad "Wonderful tonight" (1977) is a proper example to examine structure built on stronger discursive repetition. As it is typical for ballads, the form of this song is *A A B A* (Figure 6). This kind of structure is usually discursively structured as regards both melody and harmony.
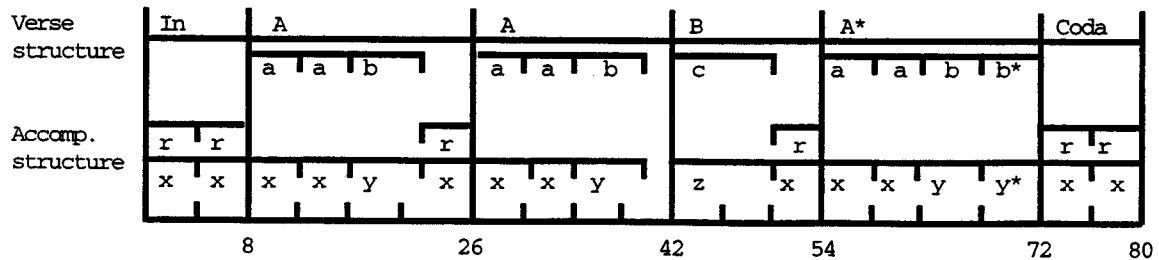
FIGURE 7. Eric Clapton: "Wonderful tonight" (1977)

A A B A as in 32-bar form was widely used in the beginning of the century[39]. Then its techniques where very much discursive, and though it has lost its great popularity, it is still used in today's music. Here it is used in varied form.

The harmonic cycle in the *A* section is: I-V-IV-V/ I-V-IV-V/ IV-V-I-V-VI-IV-V-I . Each *A* is constructed from two melodic and harmonic sections of which the first is repeated; *a a b* (4+4+8 bars). To the listener the structure is arguably rather heard in two sections, the first one being the repeated I-V-IV-V progression, and the second one the rest of the verse (8+8 bars) (not including the instrumental interlude). During the entire verse there is a sense of directed linearity and progression from the beginning of the verse until its end. The chord progression in the *B* section is IV-V-I-V-VI-IV-V-IV-V-I-(I-V-IV-V) (8+4 [interlude] bars). In the contrast with *A*, the whole section *B* is one long progression and there is no sense of repeated cycle in the harmony.

In this song the melody and the accompaniment work together towards a discursive structure. Not even the accompaniment contains musematically repeated units, despite the basic rhythmic pulse of the song. The guitar and the bass follow the harmonic cycle without playing any specific riff or musematic pattern. The accompaniment only supplies the motorial flow of the piece. The only noticeable accompanimental melodic

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39 For example in Tin Pan Alley-style, Middleton 1990:46

figure or phrase is played by the guitar in the introduction as well as before each verse.

EXAMPLE 10. Melodic and harmonic figure from "Wonderful tonight"

It is built on the same harmonic cycle that appears in the verse; I-V-IV-V. Between the second *A* and the *B* there is only a two chord delay on a I accord creating expectation and marking the beginning of new material. Altogether this phrase functions as a demarcator of the sections. Every time it appears a verse begins. At the end of the last verse, the last few bars of the verse plus the instrumental phrase are repeated to prepare the end.

The discursiveness in the song is created by a harmonic progression and the melodic structure, which together create a sense of forward-directness, as well as the contrast within *A* = *a* and *b*, and between *A* and *B* (*A A B A*). The music is directed towards the end of the whole chord progression which is situated at the end of the verse. Then the circle has come to an end, and another one can begin. It seems to be typical of clearly discursive structures, on different levels, to repeat the same thing once (*a a*), but never twice (*a a a*). That is a way to ensure the discursiveness and avoid even hinting at musematic repetition. In this song there is hardly any repetition that could be called musematic. The motorial flow created by the accompaniment is not taken into account, and it is not independent of the other syntactical processes, but a part of the discursive structure. The instrumental phrase has a characteristic of musematic repetition because of its self-contained sense, even though it is not short or repeated many times, and in spite of its being supported by a full chord progression.

What changes should be done in order to include musematic repetition in this song? The first immediate idea was that the tempo should be faster and a steady beat placed on every quarter note, instead of every second one. This doesn't add any actual units of musematic repetition into the piece, but it provides the ground for them, changes the meter and pulse so that it's easier to built a riff-based repetition. If the melody and the harmonic progression was to remain untouched, it is the accompaniment

structures that would have to be modified. A circular, musematic repetition could be effected by adding a two-bar, short but effective, riff structure to the guitar. The same could be done with the bass, and then the accompanimental structure would be very musematic in character, except for the harmonic progression.

A totally different option would be to change the melodic and harmonic structure of the verse. As already presented in Figure 6 and discussed in page 64 the A section can be regarded as constructed of two sections (8+8), of which the first eight bars can be divided into two (4+4), because it is built on repetition of an unvaried four-bar unit. The structure could be changed so that these first eight bars of the verse would be doubled, after which it would be followed by the eight-bar progression which ends the verse (4+4[8]+4+4[8]+[8]). On the level of form I would just repeat the section B at the end of the piece, in order to break the traditional A A B A structure, and to give a stronger sense of recursiveness even on this level. There is also a small but quite important detail that could be changed, resulting in a more musematic structure. The melodic and harmonic phrase which is played before every verse would be replaced by a short rhythmic pattern. Previously this functioned as a bridge leading to the verse because of its directional harmonic progression. If it is replaced by a plain rhythmic one-bar riff which is repeated four times, it has no tonal function or direction; only the motion remains.

By increasing the number of repetitions of the shortest unit, which has already been repeated in the original version, it is easy to change the structure and the effect that it creates. The more repetitions occur, the stronger the musematic and circulating effect will be. Even if the accompaniment would be left as it is in the original version, still a musematic effect could be accomplished. But if the accompaniment was changed: riffs added to guitar and bass, as well as a steady accent on every beat, and the structure and form altered as described above, the song could be changed into a disco hit.

3.2.6. Wilson Picket: Mustang Sally

This song is stylistically a typical blues song, built on a 24-bar harmonic cycle (I-IV-I-V-IV-I), which is the standard 12-bar blues formula[40] in extended form. Variations in the number of bars are usually effected by a reduction or expansion by a factor of 2, and the same chord progression can be fulfilled especially in this case where the number of bars is doubled.
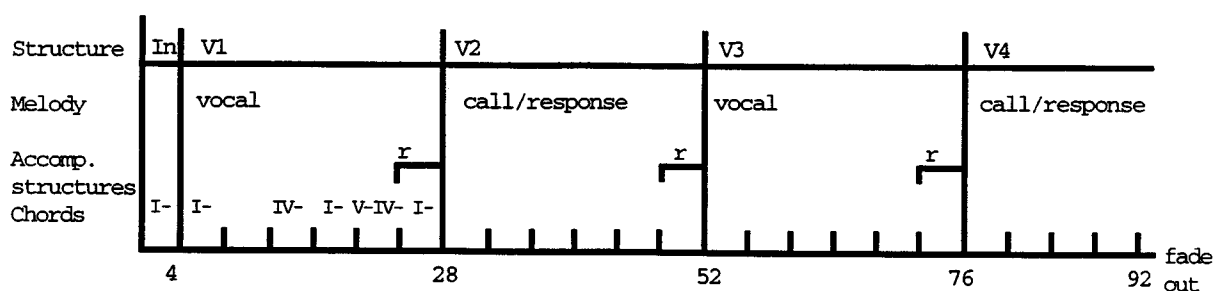

FIGURE 8. Wilson Picket: Mustang Sally (1967)

In "Mustang Sally" the blues formula is repeated in almost four full cycles with the exception that the last one is faded. The blues formula does not have any separate refrain or chorus. The lyrics in V1 and V3 are different, but the V2 and V4 have the same lyrics. Both V2 and V4 are both also built on a call-response structure. They are similar to a chorus in the respect that they repeat the same melodic and lyrical material, as a chorus does when it is repeated, but they are not different from the V1 or V3 as regards harmony, while a chorus is usually a section contrasting to the verse. The effect of this is not that of a verse/refrain type, rather just plain binary switching between two different kinds of texture, vocal and call-response structure.

In the accompaniment the bass and the guitar repeat a one-bar rhythmic riff throughout the 24-bar harmonic cycle. There are also other instruments used, such as a keyboard instrument, and horns, which play some short patterns during the cycle. The horns have a four bar riff at the end of each verse reinforcing the demarcation. Altogether the accompaniment functions as a harmonic and rhythmic background supplying the motorial flow of the piece. Therefore it does not attract any specific attention. The singer is quite free to express himself with the melody above the background of the harmonic cycle. Vocal improvisation is an

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40 This is defined for instance in Moore, 1993:53

important characteristic of the song. The twelve bar blues, even when varied as in this case, is a well established popular music form. Its symmetrical structure is expected and obvious for those who are familiar with it. When it follows the conventional pattern it is easy even to 'hop into the cycle and take a ride with it'.

"Mustang Sally" is based on a quite long, progressive, goal-directed and tonic directional harmonic progression. The entire harmonic structure supports the climax which is reached at the point where the dominant appears for the first time (bar 17). Yet harmonically the effect of directionality is only perceptible throughout each the verse, because there the goal at which the progression is aimed is reached. Then the same formula is repeated unvaried. The contrast and variation between the verses is accomplished by textural means. This is the already mentioned alternation of solo vocal and call-response structures.

The strong discursive directionality which lasts through the 24 bars is created by an effect which Tagg calls 'Ready, Steady, Go!'. He describes it in Kojak as follows:

"musical motifs can be played *syntactically* in the foreground when preceded by at least one repetition, preparing the listener for the material which will break the repetition sequence. In other words, one way in which individual musemes making up a melodic phrase may be distinguished from each other and given varying degrees of emphasis is through 'propulsive repetition'." (Tagg 1979:132-3, author's italics)

The concept is easier to understand with the help of simple examples. Tagg compares this series of action with traffic lights, where the red colour refers to ready, yellow to steady, and the green one means go. It is a count in at the beginning of a structure or a piece, like starting the motor a few times before it really gets going. Also in music it works as a three-step progression. Tagg gives examples from classical music for instance the beginning of Mozart's "Eine Kleine Nachtmusik", but it is also used a lot in popular music and examples are easily found. Ideal cases are found within rock'n'roll, for instance, "Blue suede shoes" and "Rock around the clock", of which the former is notated in example 19.

READY -   STEADY -

GO !

EXAMPLE 11. Carl Lee Perkins: Blue suede shoes (1956)

Here the effect is created by rhythmic and melodic patterning, even though it remains in the same tonal position harmonically. The same leap of a third from F to A is repeated three times in each stage of the 'ready, steady, go!', but the continuation does not follow until after the last repetition.

The idea can be applied to the structure of "Mustang Sally", as well as to the 12-bar blues in general. The harmonic cycle is 24 bars long, and each one of the three stages of 'ready, steady, go!' is of equal length, 8+8+8 bars. Harmonically 'ready' remains the whole time on the I chord; its motto is 'home sweet home'. The 'steady' stage begins on the IV chord, giving a promising start; "now we are on the way, let's get rid of the tonic, this is fun", but then somewhat disappointingly returns to I again, saying "oh, that was too daring, I'd like to stay on the safe tonic yet a little bit longer" (IV/I). The 'go!' jumps right up to the V chord taking the progression to its climax, but again returns to the tonic this time through the IV; "great, finally the precious dominant is reached, now there is nowhere else to go, I'd better take the familiar way home through the IV to get there safely" (V/IV/I).

The difference between, for instance, "Blue suede shoes" and "Mustang Sally" is that in the blues, by the time it has passed the 'ready' and 'steady' stages and reaches the 'go!', the song does not proceed further; that is the end of it and then it starts the 'ready, steady, go!'-structure again. The sections are longer and repeated circularly. In "Blue suede shoes" and other rock'n'roll examples the actual song begins after short "ready, steady, go!" introduction. The small units of 'ready', 'steady' and 'go!' Tagg refers to as musematic, 'propulsive' repetition. As the length of the structure is a lot longer in "Mustang Sally" (it takes 16 bars even to get to the 'go!' stage), it can be discussed if the elements inside the structure could be called musemes? For example 'ready' includes quite short vocal line, but it is not repeated. Therefore, even if it was to be called 'museme' in Tagg's sense, it

does not fill the criterion of musematic repetition; it is not repeated. The effect of repetition is interesting on another level. The structure, whether it is called simply blues-formula or 'ready, steady, go!'-pattern, repeats itself. The more times it is repeated, as here almost four, the more circulating effect it creates. It is somewhat problematic to talk about this repetition as musematic, though the effect implies that direction. This is the problem of classification of repeated large structures into the concepts of musematic and discursive repetition, which has already been discussed in the section of hypothetical substitution.

4. DISCUSSION

4.1. The Insufficiency of the Concepts

The borderlines between musematic and discursive repetition are problematic. The examples of hypothetical substitution and analysis show that musematic repetition is usually found in micro structures when discursive repetition works on larger structures. Still there are cases when the limits are crossed. An unvaried repetition of a whole section does not appear as discursive repetition, nor exactly musematic, even though it is musematic in character. The more times it is repeated, the more musematic is the effect because the amount of self contained sense increases. The number of repetition that creates musematic effect depends also of the symmetry of the piece, which provides the "basic unit length" and the structural frame, and thus so quite far determines the length of the repeated units, too. What happens within a piece of music must be placed in the whole picture, i.e. the whole structure or form.

Another considerable factor is the involvement of analysed units with other syntactical processes. Even a short unit which is built on the alternation of two chords can be defined as a discursive unit if it is used as a contrast to other units or if it is developed into variative or larger developmental structures. The same two-bar unit can be defined as musematic, if it is not dependent on other syntactical processes taking place and if it is repeated more than a certain number of times. Furthermore, the longer the unit, and the more complete harmonic progression it contains, the greater the number of repetitions required in order to create a musematic effect will be. Conversely the shorter the unit, and the less harmonic movement it contains (usually the alternation of two chords, or no alternation at all), the smaller the number of repetitions needed. When determining whether a repeated unit can be defined as either musematic or discursive, other syntactical processes have to be taken into account. There are certainly various degrees and levels of dependence as well as independence among these units, they act differently and create different effects. But they cannot be judged by themselves. When and if using the concepts there are three main things that should be kept in mind when analysing musematic and discursive repetition. These are symmetry (the

number of repetitions), self-contained sense versus involvement with other syntactic processes, and temporal effects, including the amount of directionality created by repetition.

Musematic and discursive repetition seem to be inadequate terms to be used in analysis of musical repetitions as the only tools. As has been shown earlier, there are cases of repetition that are difficult to place in either category. Such is e.g. the unvaried repetition of larger structures. The concepts work best on the level of phrase or section, not on larger levels. Also the discursive techniques used in contemporary popular music have changed and they should be more closely examined and identified. It could be also interesting to separate repetition and return from each other based on their functions in music. That would also require additions to terminology.

About the origins of the concepts few words could be mentioned. Middleton's idea of 'musematic' derived from the 'museme' does not seem a very good idea. They do not have same definitions and the meanings are different. There is the vague connection through the idea that both represent the linguistic morpheme, but it is not convincing. In addition to that the only common feature is that they both are typically short units, but as it is shown, there are some large structures which tend to fall in to the category of musematic repetition or then require some other kind of identification. Repetition, as the units of musematic repetition are usually repeated a large number of times, also separates it from 'musemes', which identification was not dependent on repetition.

The term 'discursive' as understood in terms of sentence or discourse is a quite good analogy. Studying discourse analysis helped to clear the point of combining the terms 'musematic' and 'discursive' together yet to understand meaning of 'discursive'. Middleton's terminology does not seem to cover the larger structures, that is where the problems of analysis occur.

Another reason for the problems in terminology is perhaps the change in musical styles. Middleton used musematic and discursive repetition mainly in the songs of the beginning of the century. He also used them in demonstrative way, to point out single features of each types of repetition. When used as a tool of analysis of a whole song or larger material the lackings are seen. If using these concepts further, they would need subclasses or additional terms to fulfil the gaps. Rather than trying to define musematic and discursive repetition more flexibly and struggling

with the same problems, or trying to create completely new terminology, it could be more constructing to approach syntactic analysis of music based on repetition by trying other existing concepts. This is implicated in the last section.

On the basis the theoretical discussion and the analysis the definitions of musematic and discursive repetition should be reviewed again. There are some general notions that can be made about the uses of these concepts. First of all identifying units of musematic and discursive repetition in analysis requires the identification of form and symmetry of the song. That is because the repetition types and equivalence and difference (contrast, variation) are identified within and between the sections, e.g. verse and chorus. Secondly they are always dependent on the other syntactical elements. The object of analysis must be considered to form a whole.

4.2. Redefining Musematic Repetition

Musematic repetition is typically repetition of a short unit, often riffs, which are found in the accompaniment. It functions regularly in accompanying textural layers of popular music, which is the "proper" place for it. There it functions as the motor of the piece creating a flow and it is not specially paid attention to. Musematic units are also found in vocal backgrounds as in call/response structures, and occasionally and rarely even in lead melody. Musematic units create often larger patterns, which are formed according to the structural symmetry of the piece. Since musematic repetition does not include change the same unit is often repeated unvaried throughout a section or a phrase. In this sense what is musematic on one level, e.g. within a phrase, could create discursive repetition, contrast or variation, on the next level between the phrases, depending on the other structural elements.

The number of repetition is many, though it depends on the length of the unit. There are different effects created by different length units. The shorter the unit repeated more dominant is the role of musematic repetition. This is the case in epic-lyric mode of syntax. Musematic repetition is dominant, there is not much of discursive repetition or it is created by minimal changes. Often musematic repetition is dominant within verse and chorus and the section is very epic. Lyric is the repetition of verses and choruses, the larger units. This type is typical in popular music. In the narrative-lyric the repeated units are rather long and no short units of musematic repetition take place.

Accompaniment is often a determining factor when defining the mode. If accompaniment based on long developmental harmony like often in ballads, it typically would be the narrative lyric mode, which does not include a lot or nil of musematic repetition. Yet as said the epic-lyric mode seems to be dominant and the importance of musematic repetition as part of today's popular music is great.

4.3. Redefining Discursive Repetition

Discursive repetition typically functions as rather long and complete harmonic progressions. The length of the units varies from few bars, i.e. a phrase to sections, i.e. verse and chorus. Units of discursive repetition are longer than units of musematic repetition.

The techniques of discursive repetition cannot be discussed entirely in the same terms as they were discussed by Middleton in the context of late 19th early 20th-century popular music. The characteristics of discursive repetition, directionality, progression, dependence on other syntactical processes are quite the same but, in contemporary popular music they are created by very small changes. The long sequences and throughout verses lasting harmonic progressions are often replaced by shorter, repeated harmonic units. The conventional functional harmony is not used in popular music, exception is made by few ballads. It is even possible that there is no harmonic progression whatsoever in the accompaniment; the harmony may remain in the same tonal position, while the melodic line repeats short units musematically. Discursiveness is much more built on creating contrasts between verses and choruses, than on using variation. Discursive repetition is directed in one way or the other, if not directly within a discursive unit itself, then in the interaction of this and other discursive units involved in the process.

The contrasting discursive techniques are e.g. open/closed contrasting relationships of the units (Middleton 1990:270). A simple example of this is a question/answer structure, where the first unit does not end in a tonic position but "leaves the question open", creates an expectation of the following, while the next unit "gives the answer", returns to the tonic, makes a closure (Moore 1994:52-53). The markers of discursive repetition would be interesting to study but requires another forum.

Discursive repetition does not include a large number of units. Sometimes the discursive units are not actually repeated at all, if they are used as contrast to another unit. Discursive repetition has moved in a musematic direction meaning that the units are relatively short and the techniques have changed, and the two can be difficult to separate. There are also some cases of repetition on larger structures, which do not fit well in either category.

4.4. Formative, Focal and Textural Repetition[41]

In view of the confusion and inadequacy of the concepts of musematic and discursive repetition I suggest that David Lidov's terms 'focal, formative and textural repetition'[42] should be studied in order to discover if they are suitable terms to be used in analysis. The main ideas of these concepts are shortly presented.

Formative repetition is the kind of repetition which does not evoke listeners' attention. It is geared to the construction of musical structure, the grammatical features of music. It segments the piece of music into, for instance, sections, phrases and motifs.

> "it defines the units of a musical work, and establishes their position in a hierarchy of longer and shorter segments. Secondarily, when varied, formative repetition establishes equivalencies and oppositions between different features of the material. Thus it serves to identify significant differences, as well as concrete units." (Lidov 1979:9)

These segments, which are identified by recurrence, formulate usually symmetrical constructions, as in the structures of the four popular songs presented in chapter 4. For instance, in the 32-bar ballad structure *A A B A* these repeated sections are units of formative repetition. Each of the sections *A* and *B* are eight bars long. These sections may in most cases be divided into two four-bar phrases, which possibly may be divided into two-bar motifs. This structure does not attract our attention, it is 'obvious', the way it is expected to be[43]. Because formative repetition is "hierarchically conformal, its necessity and sufficiency neutralise its interest. Interest passes to the material" (ibid:11). The focus of the listener is directed to what is repeated, not to repetition itself. This kind of repetition is a common characteristic of music, including popular music. Usually it can be applied to the melodical and harmonical textures of music, which constitute the structure and form of the piece. Formative repetition is not paid attention to, as Lidov says: "the absence of formative repetition has a more striking effect than its presence" (ibid:11).

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41 These concepts by Lidov were already mentioned in section 1.1.
42 Published in the article "Structure and function in musical repetition" (1978).
43 See also the previous discussion in section 3.1.

"The normal structures for this type are single immediate repetition, or single and multiple delayed repetitions. -- . Formative repetition is conventional and necessary, and does not attract attention. That is just the point: if it did attract attention, it would belong in the second category [focal repetition]" (Ibid:9)

In *focal repetition* the focus is on repetition itself. The fact that something is repeated attracts the attention, and the material that is repeated becomes secondary. According to Lidov the most typical examples of focal repetition are the two or three times repeated musical unit. It is repeated either immediately, or it may occur the first time before and the second time after a longer unit (ibid:15). Lidov points out, that focal repetition does have a symbolic meaning: it creates connotations and extramusical associations, and evokes feelings. Therefore the effect created by it is very different than that of formative repetition.

The third of Lidov's categories is *textural repetition*. It is marked by the number of repetitions.

"The structure associated with textural repetition is the continuing repetition of an idea more than three or four times. It cancels out its own claim on our attention and, thereby, refers our focus elsewhere (to another voice or to a changing aspect). The figure maintains, nevertheless, a transcendental influence on our musical consciousness. -- . Textural repetition is familiar in Baroque, Classical and Romantic accompaniments and developments, and it is the guiding principle of contemporary pattern music." (Ibid:21)

The idea is repeated so many times, actually, 'too many times', it cannot hold the attention any longer. Therefore, it cannot be classified to be focal repetition, but it may overlap with the definition of formative repetition. This can be exemplified in terms of popular music by, for instance, the metre and rhythmic organization of a piece. Textural repetition is found on the accompaniment, and it creates the motorial flow of the piece. Textural repetition can also become so called 'hypnotic repetition', as in rituals. The study of the effect of this type of repetition would have to also take into account physical and psychological aspects.

On the basis of this brief presentation of the concepts, I would like to make some connections to the discussion of musematic and discursive repetition presented above. Formative repetition seems to describe the structural constructions of popular music well. It is true, that the form has

implicit norms of symmetry, and when they are actualised as such, they do not attract attention. The structure is the way it is expected to be, and no attention is paid to it. The formative structures are usually realized by melodic and harmonic processes. These are correspondent to the effects of discursive repetition.

Focal repetition does not cover the description given to musematic repetition above, but it represents some of the same ideas. The units of focal repetition could be, for instance, riffs or short motifs, which are independent in character and played in the foreground texture. They attract attention, and are separate from the motorial flow of the piece. These are units with a self contained sense. Yet they are not exclusively musematic, because not all musematic repetition attracts attention. Musematic repetition found e.g. in the accompaniment would not be classified as focal repetition, some foreground motifs again would.

Textural repetition in popular music could be understood as musematic repetition in accompanimental structures. As said, it does not attract attention when functioning as the provider of motorial flow. The units in the accompaniment are repeated continuously throughout the sections. Textural repetition could also be repeated discursive structures in a level of phrase.

Lidov reminds that it must be kept in mind that these concepts are not mutually exclusive, and that there must be some space for interpretation and personal experiences.

"The boundary between formative and focal repetition can be complicated by the effects of variation but, in principle, it is precisely defined in accordance with musical structure. The distinction itself between focal and textural repetition is one which allows an ambiguous threshold, subject to expressive exploitation." (Ibid:22)

The types of repetition have to be investigated carefully and with caution, bearing in mind their functional and structural roles. What can be analysed as focal repetition on one level, can constitute formative repetition on the next level. Focal and textural repetition may in some cases be difficult to separate, and the conclusions may possibly be based on subjective matters. Yet analysis based on the function of repetition seems an interesting and reasonable task.

Since the definitions of the concepts of formative, focal and textural repetition are based on the functions, their identification is easier. The problems involved with the terms 'musematic' and 'discursive' on the conceptual and practical levels do not seem to apply to Lidov's terms. However, in order to locate potential problems concerning the use of the concepts of focal, formative and textural repetition, it appears necessary to apply them in practical analysis. Even more interesting than finding the possible problems that may occur, it is to find out what can be explored and learned by using these concepts.

A suggestion based on the results of the present study would be to search further the possibilities offered by the use of the concepts of formative, focal and textural repetition in music analysis. A study with a broader material from different styles and genres of popular music, as well as classical music, may reveal some new aspects of music and its structural functions in terms of repetition. I believe that the potential of the study of repetition in music may cross many boundaries, possibly even cultural ones.

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