

# FREE RHYTHM: ETHNOMUSICOLOGY AND THE STUDY OF MUSIC WITHOUT METRE

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Like many other rhythmic terms, 'free rhythm' is widely enough used to be recognized as part of the vocabulary of musicology, without ever having been convincingly studied or even defined. In general, this term and its various synonyms refer to music without metrical organization. 'Free rhythm' is an important musical phenomenon which has been largely neglected by the field of ethnomusicology. This paper discusses the deeper theoretical and methodological problems underlying this neglect.

## 1. *Introduction*

Western musicology tends to assume the presence of metre as a precondition for musical rhythm,<sup>1</sup> not surprisingly in view of the fact that Western music is almost entirely metred—art music, rock, pop, jazz and other musical genres equally so.<sup>2</sup> The few unmetred forms that exist in the West are labelled 'free rhythm' and beyond this, their rhythmic dimension is barely considered. From a global perspective, however, such unmetred or free rhythm is a widespread and important phenomenon to which insufficient attention has been paid by ethnomusicologists. Both the relatively unimportant role free rhythm plays in Western music, and the apparent lack of indigenous theories on free rhythm in the cultures where it is prominent, have contributed to this neglect.

Very few writers have attempted any kind of analysis of music in free rhythm, although many have been obliged to draw attention to the phenomenon. Some, perhaps conscious of the vagueness of the term 'free rhythm', prefer to talk of unmetred, unmeasured, ametrical or amensural music, of 'flowing rhythm' (Frigyesi, 1993), or even of 'free meter'<sup>3</sup> (e.g. Tolbert, 1988). Perhaps many ethnomusicologists tacitly share Kartomi's belief that 'minutely detailed rhythmic analyses of songs which feature a very small degree of rhythmic regularity or repetition would seem to be pointless' (1973: 109). Scholars are now beginning to understand that such analyses would be far from pointless, and indeed can contribute to research that will greatly enrich our understanding of many aspects of music.

## 2. *A brief survey of free rhythm styles*

A significant number of musical forms around the world do not use anything which could be described as musical metre, or indeed any other form of periodic organization.<sup>4</sup> These 'free rhythm' forms can be found in virtually all parts of the world: a preliminary survey of ethnomusicological literature

<sup>1</sup> Although there is a tradition in Western musicology of making a conceptual distinction between rhythm and metre, thereby allowing for the possibility of rhythm without metre, this distinction is not always observed. See for example Childs, '... there cannot be *rhythm* without the steady pulse (meter) against which it may operate' (1981: 38). This is evidently not the case: it is worth noting, however, that the idea is still given credence by some musicologists.

<sup>2</sup> There are important exceptions to this generalization, such as operatic recitative. However, the importance of metre and of its indication in time signatures is such that even essentially unmetred music is usually written with time signatures, in effect *as if it were metred*. (See e.g. Sachs, 1953: 346 on Wagner's 'Tristan'.)

<sup>3</sup> This is a puzzling formulation, however, since metre is generally understood as a temporal framework or structure and therefore, in a sense, the antithesis of freedom.

<sup>4</sup> These terms will be discussed in more detail below.

has produced a list of around 70 genres,<sup>5</sup> distributed over all the continents (but with around half in Asia). It is likely that there are many more free rhythm forms that are not as yet described in the literature. Free rhythm musical forms exist in a wide variety of contexts, in religious ritual, in art music (these two categories predominantly in Asia), and in a wide variety of secular 'folk' forms (the latter with a worldwide distribution). However we distinguish 'art' and 'folk' musics, free rhythm occurs in both categories.

Free rhythm recitation of religious texts is a feature common to the Christian, Jewish, Islamic, Hindu, Buddhist and Shinto traditions, and is also found in some shaman ceremonies (for instance in Korea). In art music, we must consider both vocal and instrumental forms right across the Arab and Arab-influenced world from North Africa and the Balkans, through the Middle East and Turkey into Central Asia (the most common names for free rhythm forms being *taksim* in Turkey and the Arab world, and *avaz* in Persia).<sup>6</sup> We must also consider the related Indian *alap*, some traditions of Chinese *qin* playing and Japanese solo *shakuhachi* music, and recitative sections of various opera styles, particularly in China.

Other secular forms noted in the literature range from the so called 'long songs' of Rumania, Mongolia and elsewhere,<sup>7</sup> to laments (in parts of Europe and Asia), praise songs (such as the Zulu *izibongo*), sung poetry (such as the Javanese *macapat*), dirges, banquet songs and several other types of song. The categories mentioned here overlap, and in some cases influence each other (see for instance Tolbert (1990) on the relationship between laments and shamanism, and Reinhard (1980: 273) on the influence of the Muslim call to prayer *tajwid* on the Turkish long song, *uzun hava*). It is also noteworthy that several of these genres are in fact related to ritual or semi-ritual contexts.

There exists a wide variety not only in the context and function of free rhythm genres but also in their rhythmic style and form. They range (in some cases within a single genre) from those apparently without pulse of any kind, to those with a clear pulse but no higher level periodicity. The range of rhythmic density and perceived tempo is also wide, as is the use of rhythmically significant features such as melisma and ornamentation. Free rhythm forms show a preference for solo performance—yet there are the significant exceptions of one or two genres performed in unison, several polyphonic song styles (especially in eastern Europe), and the Javanese *pathetan* (introduction to the *pathet* or mode), which features a rather different type of heterophony (see Brinner, 1985). There is also a preponderance of vocal music over instrumental, with the important exceptions of many of the Asian art-music genres. In many but not all of these traditions, free rhythm forms are regarded as introductions leading to metred forms (see Rowell, 1981).

The text and its meaning are considered to be of paramount importance in many of the vocal forms, and the musical rhythm appears to be strongly influenced by the speech rhythm and poetic metres of the language used. This

<sup>5</sup> This survey was undertaken as part of a pilot project on 'free rhythm' funded by SOAS, carried out from November 1993 to January 1994. I would like to acknowledge the assistance and advice of Dr. D. R. Widdess, who was responsible for setting up the project and commented on a draft version of this paper. Numerous other colleagues have also provided useful information in their areas of specialization: in particular my thanks are due to Professor O. Wright, Drs. D. W. Hughes, K. Howard, J. Topp Fargion, S. A. Reily and J. P. J. Stock. I also acknowledge the helpful comments of Dr. Simha Arom on an earlier version of this paper. Any faults, needless to say, remain my own.

<sup>6</sup> Diacritical marks have been omitted from this article, except in citations and titles. Although desirable in principle, they would create as many problems as they would solve in an article of this nature, since the various applicable transliteration systems would not be mutually compatible.

<sup>7</sup> Named '*hora lunga*' in Rumania, '*uzun hava*' in Turkey, '*urtiin duu*' in Mongolia, etc.

is true for a wide variety of genres, and has been noted by many writers.<sup>8</sup> Once again, however, there are exceptions in which either no meaningful text is used, or it is considered relatively unimportant, or it is even deliberately concealed. Posnett for instance observes that in Javanese *bawa* (a solo vocal introduction to a *gamelan* composition) 'musical requirements will often overrule speech-pattern considerations' (1985: 23), while Tolbert states that in Karelian laments, 'musical means are used to obscure the text' (1990: 51).

Therefore we cannot make generalizations at this stage about the range and type of musical forms described as free rhythm, although the tendencies noted above suggest that it ought to be possible to develop a typology of free rhythm styles. What is clearly apparent is that free rhythm occurs in a wide variety of forms and contexts around the world. As Sachs pointed out, 'As long as singers stand alone ... the urge for strictness in rhythm and tempo is very weak' (1953: 35). What Sachs did not do, and what no subsequent writer has done, is to go beyond recognition of this fact and produce a detailed study of free rhythm in practice.

### 3. *Free rhythm in ethnomusicology*

Very few musicologists have attempted analyses of free rhythm forms. The exceptions for text-based music are Tsuge (1974, on the Persian *avaz*), Reckford (1987, on Persian religious chant), and to a lesser extent Frigyesi (e.g., 1993 on the Jewish *nusah*) and Arps (1992, on the Javanese *tembang*); and for textless music, Brinner (1985, on Javanese *pathetan*) and Widdess (1994, on Indian *alap*). Useful as each of these works is within its field, none of these authors has produced a generally applicable theoretical model for the study of free rhythm. Frigyesi advocates the study of free (or 'flowing') rhythm, and clearly states many of the issues and problems to be overcome, but she does not suggest a specific methodology.

An equally small number of writers have, without studying free rhythm in any depth, produced insights that may be of value to future studies. Nettl (1987: 33) tentatively approaches the typology of different varieties of free rhythm in Persian music, while Wichmann reports that Beijing opera names three varieties of free rhythm, distinguished on the basis of tempo (1991: 67ff.). List wrote an important paper on the distinction between speech and song (1960), although he limited his approach to melodic factors; this theme is taken up by Yung (1989: 150ff., on Cantonese opera). Rowell makes the point that musical forms in many cultures progress from free to strict rhythmic structures (1981), citing several examples.

Overall, however, the majority of writers have neglected to discuss the temporal aspects of free rhythm forms in any depth. Sachs, for instance, waxes lyrical about the importance of free rhythm, but adds little analysis (1953: 20ff.).<sup>9</sup> Nketia notes the large number of free rhythm forms in Africa (1963: 64, 1974: 168), but he, too, goes no further. A large bibliography could be composed of the works of ethnomusicologists who refer to free rhythm without further discussion.

The reasons for the neglect of this subject are several. First, the absence of adaptable concepts and methods in conventional (Western) musicology, where rhythmic analysis generally presumes the existence of metre, appears to have

<sup>8</sup> See for example Szirmai (1967), Qureshi (1969), Liu (1974), Tsuge (1974), Nelson (1985), al Faruqi (1987), Reckford (1987), Arps (1992), and Frigyesi (1993).

<sup>9</sup> 'Rhythmic freedom must ... not be looked upon as law breaking with a judge's contemptuous eye ... Nor could you or would you lift your baton to the song of a lark, although you sense its perfect, lawful orderliness, irrational as it may be ... Free rhythm, a precious heirloom from our animal ancestry, is doubtless the earlier quality. Strictness comes with man' (Sachs, 1953: 20-21).

inhibited the development of ethnomusicological methods. In addition, it must be noted that most non-Western cultures, too, appear to lack theories of free rhythm, and the fact that ethnomusicologists have in general found no such indigenous theories to report has also stood as a barrier to this study. The fact that a general approach to free rhythm implies a comparative approach, which has not always been fashionable in ethnomusicology, must also have contributed to this neglect.

A factor of possibly crucial importance is the difficulty of representing free rhythm in writing. There are obvious difficulties with the use of Western staff notation, since this system implies the existence of a pulse in music and, in most Western usage, of metre. We are faced by a dilemma, in that anything resembling conventional rhythmic notation is likely not to reflect the true organization of the rhythm,<sup>10</sup> whereas anything which diverges too far from it, while it may come closer to this representation, will not easily convey this information intelligibly. Indigenous notational systems offer little relief from this dilemma; they are either not used at all or, like the Indian *sargam*, the Javanese and Balinese cipher systems or Chinese *qin* tablature, do not specify more than the simplest rhythmic structures with any precision.

Most transcriptions of free rhythm forms have been made in staff notation, usually without indications of time signature or bar lines. Some older transcriptions attempt to indicate rhythm with great precision (see e.g., Bartok, 1967: II, 613a, as cited by Frigyesi and Laki, 1979–80), although most ethnomusicologists would now be more cautious about the use of such a ‘phonetic’ approach. In some cases musicologists have attempted to overcome the unwanted implication of pulse and metre in staff notation—indicating duration not by different note types, but by the horizontal distribution of note-heads, or in some cases, by the length of lines placed at the appropriate pitch level (see Rycroft, 1960; Touma, 1971). Brinner avoids problems with staff notation by using Javanese cipher notation in his work on *pathetan* (1985), although this cannot help greatly with detailed rhythmic analysis. More imaginatively, Posnett adapts a Javanese notation system, employing a 13-line stave with note-heads plotted according to time on the horizontal axis (1985). While such initiative is to be applauded, it does place a burden of explanation on the author.

The problem of the representation of free rhythm is inseparable from the problem of analysis, as Frigyesi points out (1993: 60–2). We aim in transcription to ‘reveal the essential background structure of the temporal experience’ (ibid: 62),<sup>11</sup> and our difficulty lies not only in the limitations of our notation system but in the fact that we have little understanding of the underlying structure of free rhythm, if indeed such a structure can be said to exist. The phenomenon of rhythm, as Handel points out, is largely subjective (1989: 383 ff.), and this can create serious problems in the rhythmic analysis of music, even that which clearly exhibits periodic organization. These difficulties are magnified many times when we deal with music which appears to exhibit no such organization.

Musicologists have for a long time based analysis largely on visual representations of music, be they original scores or transcriptions. Free rhythm presents a problem because it is so difficult to produce a transcription on which to base an analysis. Transcription implies subjective interpretation of rhythm and thereby constrains and pre-empts analysis, and therefore analysis must

<sup>10</sup> As Yeston notes, ‘Our notational system exhibits a genius for specifying virtually any conceivable free rhythmic design, but the notation of music is not necessarily its analysis’ (1976: 32).

<sup>11</sup> One could ask for further clarification here, as to whose experience we wish to reveal, since the same sound may be experienced differently by different listeners. Frigyesi’s comments remain useful however.

somehow reach an advanced stage before meaningful representation becomes possible—yet this is contrary to the habits of many music analysts. This problem is a manifestation of a deeper difficulty, which lies, in Frigyesi's words, in 'the fact that our musical perception and analytical thinking developed largely through the study of metric musics' (ibid: 62). It will take a great deal of clear and creative thinking for us to escape this apparent impasse.

In approaching the study of free rhythm it seems that we have no existing Western theories to test in other cultural contexts, that we don't know of any non-Western theories which might be similarly adaptable, and moreover that we cannot rely on transcriptions made without understanding of rhythmic structures in order to clarify those rhythmic structures. The neglect of this field by our colleagues begins to look more understandable, at least—although one hopes that we have not abandoned hope of overcoming these obvious difficulties.

#### 4. *What is free rhythm?*

The first step to be taken towards the study of free rhythm is the definition of the term. The definition usually implicit in the usage of 'free rhythm' is *the rhythm of music without metre*, although some writers imply a narrower definition, such as *the rhythm of music without pulse*. In order either to choose one of these definitions or perhaps to construct a third, it is necessary firstly to clarify the terms 'metre' and 'pulse' amongst others.

By pulse we mean a regular beat perceived by the listener to fall at equal intervals of time—we can call these intervals 'categorically equivalent' since they need not be exactly equal in practice.<sup>12</sup> Metre, however, is more problematic to define. This has been attempted in many ways, but two approaches recur in musicological literature. According to one view, put simply and convincingly by Kolinski, metre is defined as 'organized pulsation functioning as a framework for rhythmic design' (1973: 499). Another view put by a succession of musicologists, is that metre is 'measurement of the number of pulses between more or less regularly recurring accents' (Cooper and Meyer, 1960: 4). These authors continue, 'When pulses are . . . counted within a metric context, they are referred to as *beats*. Beats which are accented are called "strong"; those which are unaccented are called "weak".'

These two approaches, implying, on the one hand, the organization of a pulse to provide a framework for rhythmic design, and on the other, a hierarchy of stronger and weaker (more or less accented) pulses, are distinct but complementary. Yeston synthesizes the two approaches in writing that 'the theorists of the last three hundred years have universally understood meter to be . . . a context of regularly recurring structural accents and weak beats with which, or against which, freer rhythmic design may play' (1976: 32–3). This view is put even more succinctly by Lerdahl and Jackendoff, who define metre as a

<sup>12</sup> See Cooper and Meyer (1960: 3), and Arom (1991: 192, 202). The time intervals between pulses are in practice very unlikely to be exactly equal, unless generated by a machine, yet it is well known that listeners have a degree of tolerance in this respect—auditory perception being in many respects categorical, time intervals which are roughly equal will be perceived as equal, and deviations are likely to be perceived as accents or as simply giving 'life' to a performance. Sloboda writes 'fine differences in timing are more often experienced not as such, but as differences in the quality (the "life" or "swing") of a performance' (1985: 30). Similarly, the pulse rate may accelerate or decelerate without the perception of its continuity being impaired—see Clynes and Walker (1982: 176) for a study of stability of tapping rates. We therefore suggest a slight deviation from Cooper and Meyer's and Arom's insistence on absolute equality of pulses.

'regular pattern of strong and weak beats to which [the listener] relates the actual musical sounds' (1983: 12).<sup>13</sup>

We may think of metre as a temporal framework based on the differentiation between individual pulses in a sequence, in a regular and therefore predictable manner. A metre is conceived as a repeating pattern of 'strong' and 'weak' beats—although these terms may be misleading in that this relative strength is not necessarily marked by dynamic accenting or de-accenting, but may be a quality inferred on the basis of perceived structural functions. It is helpful to think of metre as a cognitive representation rather than an objective quality of the music itself, although it is a representation which must be inferred by the listener *from* the music. The surface rhythmic patterns of the music may be interpreted cognitively by reference to this representation.

This view of metre is consistent with what we know of several metrical musics, in particular of the Western tonal music analysed by Lerdahl and Jackendoff, and the metred forms of North Indian art music (see Clayton, 1993). It would seem at first sight to be applicable to the many-layered rhythmic structures of Indonesian *gamelan* music, and to genres of Middle-Eastern art-musics accompanied by percussion instruments. However, it is by no means certain that it would apply to all the musics we think of as being organized by a periodic temporal scheme, at least without considerable modifications to make it less culture-specific.

Music may be periodically organized yet fail to fulfil either the explicit conditions for 'metre' (e.g., the categorical equivalence of time intervals between pulses, the accenting of certain pulses), or other more implicit expectations (e.g., that a metric pattern has a definable beginning and end). A truly general theory of metre would have to account for metrical structures in which one beat is noticeably longer than the others, as in the slow 4-beat 'metres' of the Japanese court music *gagaku*; for 'metres' which appear to be entirely unrelated to elements of the rhythm they 'organize';<sup>14</sup> and for the multi-dimensional complexities of African polyrhythm. The terms 'strong' and 'weak' beats will almost certainly prove inappropriate to many musics; we cannot assume the temporal equality of pulses; neither can we assume that a periodic pattern necessarily begins or ends at any particular point (that there is a 'beat one'). What all these 'metrical' systems do have in common, however, is that they depend on pulsation, that such 'metres' repeat and therefore determine periodicity, and that they can be regarded as a framework for rhythmic design (even if, paradoxically, they are inferred largely on the basis of that very rhythmic design).

We must acknowledge a discrepancy between our 'common sense' usage of the term *metre*, which would include all these and other forms of periodic pulse-based temporal organization, and our scholarly definition of the term, which excludes several of them. Our 'common sense' usage of the term free rhythm complements metre in this looser sense.<sup>15</sup> In more scholarly terms, a

<sup>13</sup> This consistency among scholars is not, however, universal; minority views include that of Sachs, who refuses to define metre or to distinguish metre from rhythm itself (see Sachs, 1953: 27).

<sup>14</sup> As described by Sachs (1953: 43–5). Sachs's assumption, influenced by Frances Densmore, has been challenged on more than one occasion, e.g., by Pantaleoni (1987). The status of such 'non-adaptation' is therefore somewhat unclear, although its existence cannot be ruled out.

<sup>15</sup> It is for this reason that the earlier discussion of free rhythm forms does not include the many African polyrhythmic styles, despite the view that their periodic temporal organization cannot be described as metre. Arom notes for example that 'there are no regular accentual matrices in Central African music' (1991: 211). These polyrhythmic styles cannot be described as 'free rhythm', even if they are *unmetred* according to a narrow definition of metre. It may be necessary ultimately either to expand our concept of metre to accommodate such forms of organization, or at least to name a parallel and closely related concept—Arom's '(iso-)periodicity', perhaps.

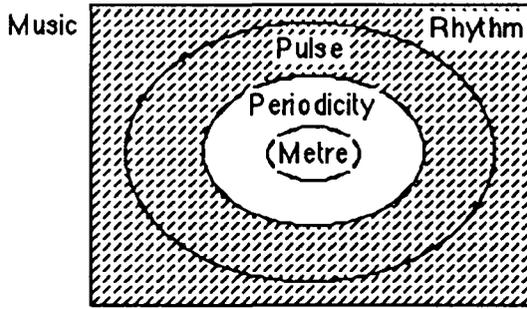


FIG. 1 The organization of rhythm in music: the shaded area is referred to as 'free rhythm'.

common-sense definition of 'free rhythm' as 'the rhythm of music without metre' would translate as *the rhythm of music without pulse-based periodic organization*—in other words, free rhythm may or may not have a simple pulse, but where this pulse is organized periodically, free rhythm cannot be said to exist.

This definition of free rhythm may be clarified with reference to the graphic illustration above. All music has 'rhythm'; some, but not all, has a perceived pulse; of this 'pulsed' music some but not all has this pulse organized periodically; and some, but not all forms of periodic organization may be described as 'metre'.<sup>16</sup> According to our definition, the term 'free rhythm' applies to the area shaded in the fig. 1.

The simplicity of this illustration of course obscures many more complex rhythmic phenomena. First, the boundaries between each category and the next cannot be assumed to be clear—music may have a pulse which is perceived by some, but not all listeners, or which is very uneven or discontinuous. Similar overlap would be found on the outer boundaries of the area marked 'periodicity', while the boundaries of metre have to be better explored in a variety of music cultures. Secondly, within the area marked 'periodicity' it may prove useful to distinguish several sub-areas, overlapping or distinct, one of which would be recognized as our concept of 'metre': this, too, requires further investigation, and is in any case beyond the scope of this paper.

We should also clarify why we have opted for a definition of free rhythm which allows for pulsation, when some might assume free rhythm would be free of even this. This decision is informed by a doubt as to how much music (if any) is completely free of pulsation, even if this pulsation is often indistinct or discontinuous, or only perceived by a proportion of listeners. The boundary between metre and periodicity, on the one hand, and free rhythm on the other, may be somewhat indistinct,<sup>17</sup> but the boundary between pulsed and unpulsed music appears even more uncertain. So strong is the urge to perceive pulse in music (and, perhaps, to generate a pulse in performance), that there may be very little music which at no point suggests pulsation. Even in the case of one of the classic examples of so-called unpulsed music, the North Indian *alap*, recent work throws doubt on the assumption that it is unpulsed (see Widdess, 1994).

<sup>16</sup> Since almost nothing is known about the temporal organization of music without consistent pulse, it cannot be ruled out that some form of periodicity may be detected in such music. In this event, all subsequent references to 'periodicity' in this paper should be read as 'pulse-based periodicity'.

<sup>17</sup> As Frigyesi claims 'although most of the so-called free rhythms are not entirely metric, they are not entirely free either' (1993: 64).

What seems to vary is the consistency and the continuity of the pulse, the relationship of surface rhythm to that pulse, and the degree to which pulse may be consciously perceived by the listener. The continuity of pulsation may be disrupted by a pause in the music, before being taken up again, the speed of the pulse may change dramatically, or the performed rhythm may be so highly contrametrically accented<sup>18</sup> with respect to an unarticulated pulse that the pulse itself is impossible to perceive directly. This latter case may apply to some Indian *alap* at least.

Free rhythm then, may be defined at present as the rhythm of music without perceived periodic organization. The lack of such organization need not be seen as a negative characteristic, even if this definition is framed in negative terms. It does, however, imply that such music lacks sufficient motivation for local groupings to be turned into consistent periodic patterns. The organization of pulsation may be demanded by a requirement for different performers to synchronize in some types of ensemble performance, by the need for predictability (as in dance music for example), or perhaps by a philosophical belief in the importance of time-measurement (as in Indian art-music). This in turn suggests that in the case of free rhythm the principal motivation behind the performance is non-rhythmic (e.g., text transmission, melodic exposition), and that the music is unlikely to be performed by an ensemble (at least not in a manner demanding strict synchronization), or to be danced to. All these conditions seem to apply to most free rhythm music.

Music may lack periodicity because of a conscious policy of inhibiting its development (see below), or more commonly perhaps, because there is no conscious organization of the rhythm and hence other elements determine the rhythmic surface of the music, elements which do not impose a strict periodic framework. This latter case is suggested by the many writers who have stressed the basis of free rhythm in speech rhythm and poetic metre, in some cases suggesting that it is clearly derived from speech rhythm by processes such as the lengthening of accented or final syllables, extending pauses between phrases, introducing melismas on certain syllables and so on (see e.g. Reckford, 1987: 160–64, Tsuge, 1974: 153, 171ff.). These changes appear designed to enhance reception of the text, or at least to enhance the melodic content of the performance without diminishing the reception of the text. Even in the relatively few cases where the opposite situation obtains, of texts being deliberately obscured, the treatment of text appears to be recognized as a major factor. It is perhaps not surprising that where the transmission of text is paramount, musical metre is inhibited (even, perhaps, where poetic metre is a feature of the texts). This is recognized explicitly by authorities on the *tajwid*, the recitation of the Qur'ān, who state that the regulation of rhythm is more likely to obstruct transmission of the text than is the adoption of melodic formulae.<sup>19</sup>

In free rhythm genres in which no meaningful text is employed, an analogous situation may obtain. In the case of *alap* for instance, it appears that melodic processes—the presentation, expansion and permutation of material—are paramount, and the absence of metre in a music culture with a highly developed metric system suggests a deliberate decision not to obstruct the natural or innate rhythm of the melody. We do not of course know what an innate rhythm is or how it might be determined, but it may be that in these cases the performed rhythm is felt to optimize the reception of melodic informa-

<sup>18</sup> 'Contrametric accent' is a term coined by Kolinski (1973: 499).

<sup>19</sup> See Nelson, 'Sayx al Huṣarī makes clear that it is the rhythmic patterns and not the pitch patterns (*maqāmāt*) which distort *tajwid*' (1985: 178).

tion and cognition of melodic structure. These are the sorts of problems ethnomusicology must face in the future study of free rhythm.

### 5. Conclusion

This paper set out to establish that 'free rhythm' is an area that has suffered neglect at the hands of ethnomusicology, and to review the reasons for the lack of serious study of music without metre. Since the main reason for this neglect is the lack of suitable analytical techniques, to accept it would be to accept that the limits of our field of study should be determined by the prior availability of suitable methodologies, which is surely not a proposition we would wish to accept. Before we can develop suitable methodologies, however, it is important to understand fully the reasons why they have not yet been developed. In this case, the reasons include the lack of adaptable methodologies in related academic fields such as Western musicology; the lack of (or perhaps our lack of awareness of) generally applicable ideas in other cultures; and the difficulties inherent in graphically representing free rhythm.

It might be argued that since a factor common to most free rhythm forms is that there appears to be no conscious organization of rhythm, there is little to be gained from the study of such rhythm. In the face of severe methodological difficulties, why should we make the effort to proceed? This paper argues, however, that the fact that in most music cultures, free rhythm theory appears to be either limited or non-existent suggests that factors other than rhythmic regulation may determine the temporal organization of such forms, but not that this organization is unimportant. The potential benefits of the study of such organization are too valuable for us to submit to its formidable difficulties.

### REFERENCES

- al Faruqi, Lois Ibsen. 1987. 'The cantillation of the Qur'an', *Asian Music*, 19/1: 2–25.
- Arom, Simha. 1991. *African polyphony and polyrhythm* (transl. M. Thom, B. Tuckett, R. Boyd). Cambridge: Cambridge University Press.
- Arps, Bernard. 1992. *Tembang in two traditions*. London: SOAS.
- Bartok, Bela. 1967. *Rumanian folk music* (vol. 2). The Hague: Martinus Nijhoff.
- Brunner, Benjamin Elon. 1985. 'Competence and interaction in the performance of 'pathetan' in Central Java.' (Ph.D.: University of California, Berkeley.) Ann Arbor: UMI (1987).
- Childs, Barney. 1981. 'Poetic and musical rhythm: one more time', in R. Browne (ed.), *Music theory: special topics*. New York: Academic Press.
- Clayton, Martin R. L. 1993. 'The rhythmic organisation of North Indian classical music: tāl, lay and laykāri.' (Unpublished Ph.D. Thesis, SOAS, University of London.)
- Clayton, Martin R. L. 1993. 'Two gat forms for the sitār: a case study in the rhythmic analysis of North Indian music', *British Journal of Ethnomusicology*, 2: 75–98.
- Clynes, Manfred and Janice Walker. 1982. 'Neurobiologic functions of rhythm, time and pulse in music', in Clynes, M (ed.), *Music, mind and brain*. New York: Plenum Press: 171–216.
- Cooper, Grosvenor and Leonard B. Meyer. 1960. *The rhythmic structure of music*. Chicago: University of Chicago Press.
- Dürr, Walther and Gerstenberg, Walter. 1980. 'Rhythm' in *The New Grove dictionary of music and musicians* (ed. S. Sadie). London: Macmillan.
- Feldman, Walter. 1993. 'Ottoman sources on the development of the taksīm', *Yearbook for Traditional Music*, 25: 1–28.
- Frigyesi, Judit. 1993. 'Preliminary thoughts toward the study of music without clear beat: the example of the "flowing rhythm" in Jewish nusah', *Asian Music*, 24/2: 59–88.
- Frigyesi, Judit and Peter Laki. 1979–80. 'Free-form recitative and strophic structure in the Hallel Psalms', *Orbis Musicae*, 7: 43–80.
- Handel, Stephen. 1989. *Listening: an introduction to the perception of auditory events*. Cambridge, Mass.: MIT Press.
- Hatch, Martin. 1976. 'The song is ended: changes in the use of macapat in Central Java', *Asian Music*, 7/2: 59–71.
- Kartomi, Margaret. 1973. *Matjapat songs in Central and West Java*. Canberra: Australian National University Press.
- Kolinski, Mieczyslaw. 1973. 'A cross-cultural approach to metro-rhythmic patterns', *Ethnomusicology*, 17/3: 494–506.
- Lerdahl, Fred and Ray Jackendoff. 1983. *A generative theory of tonal music*. Cambridge, Mass.: MIT Press.

- List, George. 1960. 'The boundaries of speech and song', *Ethnomusicology*, 7/1: 1–10.
- Liu, Marjory. 1974. 'The influence of tonal speech on K'unch'ü Opera style', *Selected Reports in Ethnomusicology*, 11/1: 62–86.
- Moisala, Pirkko. 1991. *Cultural cognition in music*. Jyväskylä: Gummerus Kirjapaino Oy.
- Nelson, Kristina. 1985. *The art of reciting the Qur'an*. Austin: University of Texas Press.
- Nettl, Bruno. 1987. *The radif of Persian music*. Champaign, Ill.: Elephant and Cat.
- Nketia, J. H. Kwabena. 1963. *African music in Ghana*. (Northwestern University African Studies, II.) Evanston, Ill: Northwestern University Press.
- Nketia, J. H. Kwabena. 1974. *The music of Africa*. London: Gollancz.
- Pantaleoni, Hewitt. 1987. 'One of Densmore's Dakota rhythms reconsidered', *Ethnomusicology* 31/1: 35–55.
- Posnett, David. 1985. 'Bawa sekar macapat dhandhanggula padhasih: an introduction to one example of Javanese vocal music', *Indonesia Circle*, 37: 15–33.
- Qureshi, Regula. 1969. 'Tarannum: the chanting of Urdu poetry', *Ethnomusicology* 13/3: 425–68.
- Reckford, Thomas M. 1987. 'Chant in popular Iranian Shi'ism'. (Ph.D.: University of California, Los Angeles.) Ann Arbor: UMI.
- Reinhard, Kurt. 1980. 'Turkey', in *The New Grove dictionary of music and musicians* (ed. S. Sadie). London: Macmillan.
- Rowell, Lewis. 1981. 'The creation of audible time', in J. T. Fraser *et al.* (ed.), *The study of time, iv*. New York: Springer Verlag: 198–210.
- Rycroft, David. 1960. 'Melodic features in Zulu eulogistic recitation', *African Language Studies*, 1: 60–78.
- Sachs, Curt. 1953. *Rhythm and tempo*. London: Dent.
- Sloboda, John A. 1985. *The musical mind: the cognitive psychology of music*. Oxford: Clarendon.
- Szirmai, Palma. 1967. 'A Csángó-Hungarian lament', *Ethnomusicology*, 11/3: 310–25.
- Tolbert, Elizabeth. 1988. 'The musical means of sorrow: the Karelian lament tradition.' (Ph.D.: University of California, Los Angeles.) Ann Arbor: UMI.
- Tolbert, Elizabeth. 1990. 'Magico-religious power and gender in the Karelian lament', in M. Herndon and S. Ziegler (ed.), *Music, gender and culture*. Wilhelmshaven: Noetzel.
- Touma, Habib Hassan. 1971. 'The maqam phenomenon', *Ethnomusicology*, 15/1: 38–48.
- Tsuge, Gen'ichi. 1970. 'Rhythmic aspects of the avaz in Persian music', *Ethnomusicology*, 14/2: 205–27.
- Tsuge, Gen'ichi. 1974. 'Avaz: a study of the rhythmic aspects of classical Iranian music'. (Ph.D.: Wesleyan University.) Ann Arbor: UMI (1991).
- Wichmann, Elizabeth, 1991. *Listening to theatre: the aural dimension of Beijing opera*. Honolulu: University of Hawaii Press.
- Widdess, Richard. 1994. 'Involving the performers in transcription and analysis: a collaborative approach to dhrupad', *Ethnomusicology*, 38/1: 59–80.
- Yeston, Maury. 1976. *The stratification of musical rhythm*. New Haven, Conn.: Yale University Press.
- Yung, Bell. 1989. *Cantonese opera: performance as creative process*. Cambridge: Cambridge University Press.