

Fluctuant grouping in a Silk-and-Bamboo melody John Roeder

Many of world's enduring musical traditions consist of a corpus of fixed melodies, each a succession of scale degrees in a rhythm governed by an underlying periodicity. In describing these repertoires, scholars seek to classify the melodies in terms of paradigmatic features—scale, mode, meter, range, and large-scale grouping structure—that are abstracted from one's temporal experience of them. While such analysis often helps correlate the music with its social functions, it deemphasizes unique features, making it hard to understand why some melodies are valued over others.

For instance, consider Example 1, the old Chinese melody "Lao Liuban" that is a foundation of the rich "Silk-and-Bamboo" music of the lower Yangtse region (*Jiangnan sizhu*; see Jones 1995, Witzleben 1995, and Thrasher 2008). Some of its global characteristics are readily apparent: an anhemitonic pentatonic collection, a duple meter, a range limited to a perfect eleventh. By variegating its motives, focal pitches, and local contours, it projects an equanimity—an eschewal of strong climax and cadence, and of large-scale linear directedness—that is valued in its culture. But many other melodies could possess the same general properties; what is so special about this one?

I propose to highlight some of the singular qualities of "Liuban" by analyzing it as a temporal process that exposes and repeats a small set of basic scale-degree, rhythmic, and contour entities. As it does, it establishes expectations of grouping structure which it then continuously and cleverly subverts, achieving a sense of rhythmic weightlessness, akin to that of contour and pitch, that is remarkable, considering its restricted palette. This effect derives from the particular way that repetition is deployed. In much music, immediate, continual repetitions (explicit or implicit) organize time cyclically, and impart functions of beginning, ending, and continuation, to musical events according to when they occur with respect to the cycle. The slow tempo and very simple but varying rhythm of "Liuban" militate against a cyclic hearing, so that sensations of beginning, ending, continuation, and protension are constructed more contextually from the sequencing of scale degrees, contours, and durations.

My analytical method draws from theories of grouping formulated for Western music (e.g., Lerdahl and Jackendoff 1983), but that express perceptual principles cited informally by many analysts of non-Western music (e.g., Stock 2006). However, I reinterpret them processively (Rescher 1996), in the sense that I understand the nature of any musical "thing" (scale degree, motive, contour, rhythm) in terms of how it organizes a listener's real-time-varying perception of grouping symmetry and parallelism. The concept of recontextualization—in which the recombination of materials affects their associations and musical form—plays an important role in this method, and draws upon a rich analytical practice in Western music theory, formalized lately by Lewin (1986) and Hanninen (2003). The method provides a dynamically, processively-oriented supplement to standard accounts of the grouping structure of this melody (notably Thrasher 1989).

The concise way that "Liuban" establishes then subverts protensions of grouping structure is sketched in Example 2. At first, repeated complexes of duration series, contours, and scale-step intervals create a strongly closed 3+2+3 beat grouping structure, each group with a distinctive

metrical profile. By repeating the exact rhythm of beats 1-8, beats 9-16 reinforce the $8 = 3+2+3$ structure, and suggest a 16-beat parallel construction, indicated by the two consecutive solid boxes on the top system. The expectations grow so strong as one listens through this group that the sense of closure is satisfied even with the new, striking, aggregate-spanning descent during beats 14-16.

Just after the $16 = 8+8 = (3+2+3) + (3+ 2+3)$ forms at beat 16, an alternative grouping begins, as an 8-beat group unfolds as a symmetric (but not parallel) 4+4. One can still hear beats 17-32 as a 16-beat group, because its ending parallels beats 12-16, but since its two 8-beat subgroups differ in their internal structure, this large group lacks the parallel construction of the first one.

Even more disruptive of grouping expectations are the next 16 beats. They begin with an $8=3+2+3$ grouping, but the first and third short groups are unprecedentedly identical. An even bigger surprise follows, when the $3+2+3$ is not followed by a parallel group, but by a 4+4. Beats 45-48 are especially interesting, since they recontextualize the 2- and 3-beat scale-degree succession of beats 4-8 within the established 4-beat rhythmic motive. Since those beats cadenced the opening 8-beat group, the recontextualization of their content here effectively banishes any sense of 16. The melody then proceeds to erase the 8-beat boundary as well, by exactly repeating the contents of beats 41-44 as 49-52, then exactly repeating the contents of beats 9-16! The previous context of this gesture strongly implies that beat 53 is an 8-beat boundary, but it is only 4 beats after what one has been led to hear a 8- or 16-beat boundary. Thus the melody closes, by repeating its strongest closure gesture, after only 60 beats—not a multiple of 8 or 16. This last $3+2+3$ even subverts the 4-beat group length.

According to this processive hearing, the melody deploys its materials elegantly to suggest but then to subvert group parallelism and symmetry, creating a fluctuant, unpredictable formal rhythm analogous to its gentle varying contour and pitch focus. In conclusion I will consider how such fluctuant grouping operates in a closely related melody, "Baban," which pervades the rest of south China, and in a common "flowered" (embellished) version of "Liuban".

Example 1: "Lao Liuban" (from the Guofeng collection) in cipher notation adapted from Witzleben 1995, 73.

$\underline{3\ 3}\ \underline{6\ 2}\ 1\ \underline{5\ 6}\ 1\ \underline{6\ 1}\ \underline{1\ 3}\ 2\ \underline{3\ 3}\ \underline{6\ 2}\ 1\ \underline{5\ 6}\ 1\ \underline{3\ 2}\ \underline{1\ 6}\ 5$
 $\quad \bullet \quad \bullet\ \bullet \quad \bullet \quad \bullet \quad \bullet \quad \bullet\ \bullet \quad \bullet\ \bullet \quad \bullet\ \bullet$
 $\underline{5\ 5}\ \underline{3\ 3}\ \underline{5\ 5}\ 2\ \underline{3\ 2}\ \underline{1\ 1}\ \underline{6\ 1}\ 2\ \underline{3\ 2}\ \underline{2\ 3}\ 5\ \underline{5\ 6}\ 1\ \underline{6\ 1}\ \underline{1\ 6}\ 5$
 $\quad \bullet \quad \bullet\ \bullet \quad \bullet\ \bullet \quad \bullet\ \bullet \quad \bullet\ \bullet \quad \bullet\ \bullet \quad \bullet\ \bullet \quad \bullet\ \bullet \quad \bullet\ \bullet$
 $\underline{5\ 6}\ \underline{5\ 3}\ 2\ \underline{2\ 3}\ 5\ \underline{5\ 6}\ \underline{5\ 3}\ 2\ \underline{2\ 5}\ \underline{5\ 2}\ \underline{3\ 2}\ 1\ \underline{6\ 1}\ \underline{5\ 6}\ \underline{1\ 3}\ 2$
 $\quad \bullet \quad \bullet\ \bullet \quad \bullet\ \bullet \quad \bullet\ \bullet \quad \bullet\ \bullet \quad \bullet\ \bullet \quad \bullet\ \bullet \quad \bullet\ \bullet \quad \bullet\ \bullet$
 $\underline{2\ 5}\ \underline{5\ 2}\ \underline{3\ 2}\ 1\ \underline{3\ 3}\ \underline{6\ 2}\ 1\ \underline{5\ 6}\ 1\ \underline{3\ 2}\ \underline{1\ 6}\ 5$
 $\quad \bullet \quad \bullet\ \bullet \quad \bullet\ \bullet \quad \bullet\ \bullet \quad \bullet\ \bullet \quad \bullet\ \bullet \quad \bullet\ \bullet \quad \bullet\ \bullet \quad \bullet\ \bullet$

[As used in *Jiangnan sizhu*, cipher notation uses the numerals one through seven to represent the seven degrees of (approximately) a major scale... A dot above or below a numeral indicates, respectively, a higher or lower octave. The duration of a numeral standing by itself is a quarter note [chosen conventionally as the duration of the tactus]. A single line beneath a numeral makes it an eighth note ... (Witzleben 1995, 145)]

Example 2: Repetitions and fluctuant grouping structure (boxed numbers indicate beats)

1 4 6 ! 9 12 14

(contours) step step step

3 3 6 2 1 5 6 1 6 1 1 3 2 3 3 6 2 1 5 6 1 3 2 1 6 5 3 2 3

Δ Δ Δ Δ Δ Δ Δ

17 21 25 28 30

5 5 3 3 5 5 2 3 2 1 1 6 1 2 3 2 2 3 5 5 6 1 6 1 1 6 5 4 4 3 2 3

33 36 38 41 45

5 6 5 3 2 2 3 5 5 6 5 3 2 2 5 5 2 3 2 1 6 1 5 6 1 3 2 4 4

Δ Δ Δ

49 ? ! 53 56 58

2 5 5 2 3 2 1 3 3 6 2 1 5 6 1 3 2 1 6 5 4 ??? 3 2 3

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