

Analysis of the Simultaneity, Voice/layer Balance and Rhythmic Phrasing in Works for Guitar by Rodrigo, Brouwer, and Villa-Lobos

3. VOICING CONTROL IN BROUWER'S ÉTUDE II (1973)

Jim Ferguson, in the preface to Tanenbaum's book [16] on Brouwer's studies, says, "Brouwer's 20 'simple studies' have come to enjoy an important position in the guitar repertoire for a number of reasons. Since they concentrate on the lower position fingerboard region, they are accessible to students. At the same time, their high degree of musicality has made them suitable for concert programming. And because they comprise an extraordinary array of contemporary compositional practices—including pop rhythmic and tonal elements—they are as relevant as they are ingenious." As indicated by the subtitle, second study (Figure 4) is conceived as a choir, and one of the main concerns of the players must be to bring out the individual voices. Bass and tenor voices are played by the thumb (*p*), alto by the index (*i*) and soprano by the medium finger (*m*). Figure 5 shows the amplitude curves for each voice.



Figure 4. Brouwer's *Étude II*, from *Études Simples pour guitar* (1ere Série), Max Eschig, 1973. Note the lack of a bar line between measures 8 and 9.

For this study, the LB1 rendition shows the less nuanced amplitude curves. The soprano line is the most prominent throughout the performance, whereas the remaining voices present very similar amplitude curves. In LB2, the dynamic curves are more accentuated, following the marks in the score. In bars 8-11, the bass line exhibits a more independent curve, playing a crescendo till the indication *p meno sonoro*. LB3 also reveals accentuated curves, but they are more independent than those in LB2. Also here, the soprano is the most detached voice.

Tempo is also a concern here. Tanenbaum [16] comments on the duration given in this score, stating "in his Berkeley master class, Brouwer demonstrated a relatively fast tempo for this study, and he said that the timings for the set are generally wrong." The total duration and mean BPM value of each rendition is given in Table 3. Additional data concerning spread intervals and patterns for the 3-note block chords are also shown in this table. In the present case, the block chords are played with three fingers, and the to-

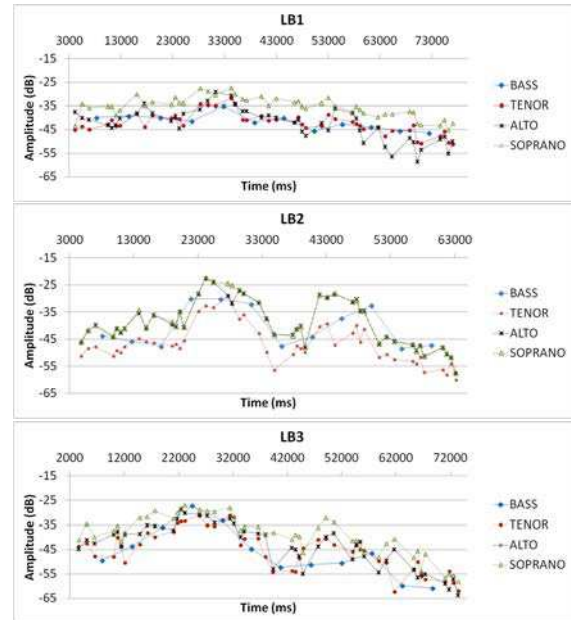


Figure 5. Amplitude curves for each voice in examples (a) LB1, (b) LB2 and (c) LB3.

tal number of possible combinations is 13. The player of LB3 seems to perform the chords in a very consistent and planned way. A prominent spread pattern is present, with the largest spread interval of the group and a low number of simultaneous notes. The more prominent soprano line is correlated with the spread pattern, being the first to be attacked in more than 80% of the chords. Rendition LB1, the longest one, also has a quite consistent spread pattern, with the thumb preferred as the last finger to attack in each chord. LB2 shows no prominent pattern, but there is a considerable proportion of simultaneous notes.

Rendition	LB1	LB2	LB3
Total duration (s)	78.5	59	73.5
Pulse (BPM)	41	51	43
Spread interval (ms)	9 ± 4	5 ± 3	11 ± 6
Prominent patterns	<i>i, m, p</i> (41%) <i>m, i, p</i> (35%)	none	<i>m, i, p</i> (83%)
Chords with 2 sync. notes (%)	9	33	6.5

Table 3. Data extracted from three renditions of Brouwer's *Étude II*. Pulse and spread interval are mean values.

The control of dynamic levels is usually closely connected with the control of timbre. Although this feature is one of the most important in the expressive intentions of the performers, we have not yet developed tools for this task. The mixing of the individual tracks sounds quite different from the global acoustical impression owing to the lack of resonance from the guitar body. The use of the centroid/f0 ratio may be helpful in determining the relative brightness of the notes, but the overall sound quality analysis continues to remain an open issue.

In this Brouwer excerpt, we did not discuss the gap be-

tween chords because of the bass line, which is attacked in different moments and remains sounding over the chords, thus helping the legato expression. Another feature that contribute to the overall sound quality of the choral texture on the guitar is the chord offset. Extinguishing a note can be accomplished several ways on the guitar. Besides the natural decay of the vibrations, actions of the right or left hand can be involved, sometimes in combination. The right hand preparation for a new attack has already been discussed in the last section. In addition to that, the preparation of a new note (by the stopping or releasing of one string with a left-hand finger) may cause the offset, sometimes with an undesirable, though hardly avoidable, transient. Commonly, the simultaneous extinguishment of multiple notes does not happen exactly at the same instant, being highly dependent on the fingering of both hands. The possible combinations of all these factors provide a set of typical sonorities to the offset of chords, which, in its turn, poses additional technical challenges for a balanced voice leading.

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