

DEVELOPING VELOCITY: A SYSTEMATIC APPROACH

by Frank Koonce

Arpeggios

In the preceding two installments of this column, Alison Bert and Richard Provost provided us with their insights into the right-hand "Planting Principle." As discussed, benefits to be gained from this technique include increased accuracy, a greater awareness of articulation (with resulting effects on tone and dynamics), and the reduction of extraneous noises otherwise caused by undisciplined fingers. Additionally, one of the foremost benefits of planting is the potential for increased playing velocity and endurance. Most people have the ability to move their fingers quickly, but it is the time needed (1) to release tension after plucking a string and (2) to reposition the fingers for plucking again that limits one's ability for sustained speed without fatigue. Planting enables the guitarist to position two or more fingers together ("simultaneous plant") or to position one finger while another finger is playing ("sequential plant"); therefore, less time is needed for preparation and more time is gained for muscle relaxation. Pepe Romero has compared this controlled synchronization of the fingers to the firing of pistons in a finely tuned engine. The hand functions as a machine operating at peak efficiency. The reader is referred back to the two articles by Ms. Bert and Mr. Provost for specific applications of the planting principle with various combinations of the fingers.¹

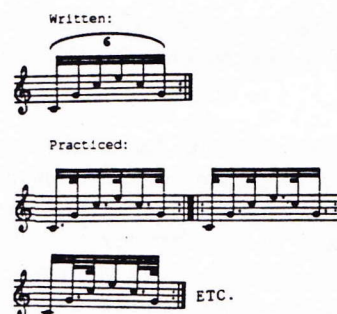
Any guitarist unfamiliar with *Studio per la Chitarra*, Opus 1, by Mauro Giuliani would then be well advised to purchase a copy of this important work since it contains one hundred and twenty useful arpeggio patterns for practice.² According to Andrés Segovia, "These exercises for the right hand by Giuliani, while

they do not exhaust all possibilities, do very skillfully make use of the greater part of the arpeggios which might occur in compositions written for the guitar. They are enormously helpful, and they should therefore be practiced every day."³

Dotted rhythms in arpeggios

One of the most useful procedures to develop velocity in arpeggios is to practice dotted rhythms. This permits the guitarist to experience the sensation of high velocity playing on selected subdivisions of the beat, thereby exposing possible weaknesses of individual fingers. It also aids in sharpening muscular impulses by highlighting the sensations of exertion and relaxation (Example 1).

Example 1

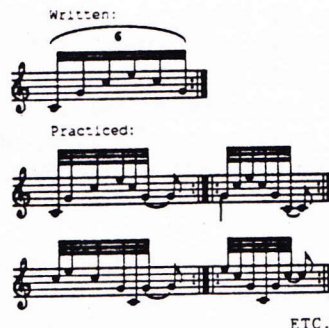


Short bursts in arpeggios

The next step is to practice small groups of notes in speed bursts. The number of notes in each group

should then be increased gradually to develop endurance. By changing the starting points and accents of an arpeggio pattern, weaknesses in individual fingers can again be determined and overcome (Example 2).

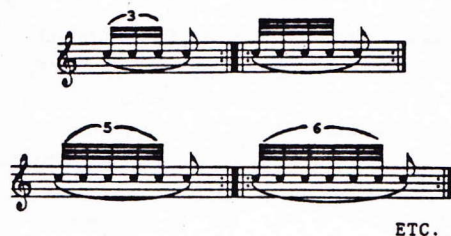
Example 2



Notes on a single string

Similarly, repeated notes on the same string may be practiced in dotted rhythms and in short speed bursts. Use all right-hand finger combinations with both rest stroke (*apoyando*) and free stroke (*tirando*). As before, gradually increase the number of notes in each group (Example 3).

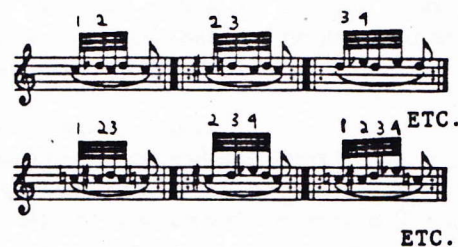
Example 3



An excellent opportunity to practice single-string bursts in a musical setting is through *Leçon XIX* [Opus 31, No. 19] by Fernando Sor (the piece will be found at the conclusion of this article).⁴ The right-hand fingerings and the number of repetitions may be varied as in Example 3 above for study.

Coordination between the hands may be developed by practicing short bursts on the same string while changing pitches of the individual notes with the left hand. As before, use both rest and free stroke, use all possible right-hand finger combinations (as well as left-hand combinations), and progressively increase the speed of the note groupings (Example 4).

Example 4



Staccato articulations

When practicing Example 4 above, the guitarist will likely find that peak velocity is significantly slower than was possible in Example 3. The problem lies in coordinating the left-hand finger placement prior to plucking the strings with the right hand. The solution to the problem is again through right-hand preparation (previously discussed as part of the planting principle in arpeggios), this time as applied to consecutive notes occurring on the same string. Unlike planting on alternate strings, planting on the same string will produce a degree of silence before each note (Example 5).

Example 5



Consider Charles Duncan's comments on how these "staccato articulations" may be used to coordinate the two hands:

You may have noted...that the preparation of the right-hand finger coincides with the fall and placement of the left-hand finger. This is one of the clearest instances of what "coordination" means in guitar playing. Remember, it takes two impulses to play any given note with full right-hand control: a *prepare* impulse, and an *execute* impulse. By phasing the left-hand attack to coincide with the

right-hand preparation impulse, we coordinate the hands by overlapping the impulses:

Impulse 1:	Impulse 2:
Right hand prepares	Right hand executes
Left hand finds note	

Any discrepancy in timing will confuse the clarity of this pattern by splitting the first impulse. The consequent "flutter" between impulses hastens the breakdown of accuracy at high speeds, where we can no longer consciously coordinate the movements of the hands.⁵

To sharpen the tactile sensations of the two impulses, begin with a very slow tempo; however, do not associate the tempo with the speed of attack. A fast and fluid finger movement should be utilized regardless of whether the tempo is *adagio* or *presto*. At a slow tempo, however, the length of the staccato articulation increases relative to the length of the note, thereby giving the left hand more time to prepare. As coordination improves, the tempo can gradually be increased and the staccato effect will become less significant.

It should be noted here that improper application of this technique can result in muscular tension of the right hand through restricted freedom of movement. This will not happen, however, if the preparation impulse is perceived as a release of tension from the play impulse. After plucking the string, the natural recoil of the finger should bring the fingertip back to its optimal position, just in front of the string, so that it may prepare again.

String crossings

String crossings should also be practiced with short bursts using all finger combinations. As in Example 3 above, progressively increase the number of notes in each group. Begin with open strings or with the left hand in a fixed position (Example 6).

Example 6



Because of the hand's configuration, *im*, *ma*, and *ia* combinations are more natural for ascending string crossings whereas *mi*, *am*, and *ai* are better suited for descending crossings. Nevertheless, the so-called "inverted" crossings cannot be avoided entirely in performance and must therefore be practiced as much as the preferred combinations.

Short bursts in scales

When practicing scales in short bursts, the guitarist is confronted with yet another problem, left-hand shifts. Again, slow staccato practice will help to coordinate the two hands by synchronizing the shift with the right-hand preparation impulse. Attention should also be given to developing the most efficient movement possible through the utilization of guide fingers and proper alignment of the hand. As control is gained, the tempo and the number of notes in each group should gradually be increased (Example 7).

Example 7



An opportunity to play scales in short bursts is provided by Dionisio Aguado in his study No. 16 from the *New Guitar Method* (the complete piece will be found as it appears in the Tecla edition at the conclusion of this article).⁶ Aguado apparently was very much aware of the value in practicing short bursts as indicated by his example in thirty-second notes at the end of his study. (Regrettably, Aguado's useful suggestion is often omitted in other modern publications of this study.)

Rhythmic patterns in scales

Extended scales may be practiced in different rhythmic patterns so that selected sequences of notes are played at high velocity within a manageable tempo. Begin with quarter notes and progressively subdivide the beat while keeping the tempo constant. The patterns may also include scale tones that are repeated in various combinations to develop greater physical and mental flexibility. Benefits to be gained include a refined sense of timing through the development of physical and mental flexibility (Example 8).⁷

Example 8



Concluding remarks

While speed for its own sake has no musical value, a certain level of velocity is required to gain access to the more difficult repertoire. For some, the ability to play fast is a natural phenomenon; for others, it is gained only through diligent and methodical practice. Nevertheless, the potential for improvement is available to everyone. The steps listed above provide a systematic approach through the development of mental control, articulation refinement, and hand coordination. A variety of other techniques exist, of course, some of which may be explored in future Pedagogy Forum articles. Your input is most welcome.⁸

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Endnotes

¹ Alison Bert, "Mechanics of Right-Hand Techniques: The Planting Principle," *Soundboard* XIV, No. 4 (Winter 1987-88): 265, and Richard Provost "The Planting Principle Revisited," *Soundboard* XV, No. 1 (Spring 1988): 33.

² Mauro Giuliani, *Studio per la Chitarra*, Opus 1, facsimile edition ed. by Brian Jeffery (London: Tecla Editions, 1984).

³ As quoted in *120 Daily Guitar Studies for the Right Hand* by Mauro Giuliani, revised and edited by Vladimir Bobri (New York: Celesta, 1949).

⁴ Facsimile reproduction by Brian Jeffery, ed., *Fernando Sor, Complete Works for Guitar*, 9 volumes (London: Tecla Editions, 1982), volume 4. The editors of *Soundboard* gratefully acknowledge Dr. Jeffery's kind permission to reproduce this study.

⁵ Charles Duncan "Staccato Articulations in Scales," *Soundboard* IV, No. 3 (August 1977): 66.

⁶ *Aguado. New Guitar Method*, edited by Brian Jeffery (London: Tecla, Editions 1981): 129. Reproduced with permission of Dr. Jeffery.

⁷ For additional patterns, see the lesson by David Grimes in *Guitar Master Class*, compiled and edited by Ronald J. Sherrod (New York: Belwin Mills, 1980): 37ff.

⁸ I would like to acknowledge Randolph Tucker and Robert Reberger, graduates of the ASU guitar program, for contributing to the present article.



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