

There are two sides to mastering "Damping" or the deliberate stopping of a string's vibrations.

- One is damping that is required in the music notation - indicated by a staccato mark or a rest
- The other is damping that is necessary to ensure the music is clean and pleasing

### Damping that notation calls up

Whenever the notation includes a staccato mark (a . on the note-head) or an explicit rest, we need to silence the string or strings necessary. There are 5 basic ways to achieve this...

1. Lifting the left hand finger (no good for open strings!)
2. Touching the string(s) with the left hand finger (hard to do if the hand is playing other notes too)
3. Touching the string(s) with "the other" right hand finger (great for really short notes)
4. Touching the string(s) with the same right hand finger (great for chords)
5. Touching all the strings with the side of the right hand (be careful not to make a clonking sound!)

Sometimes a "belt and braces" approach is the best - if the music has an extended staccato passage, for example, it's good to release the left hand and replace the right hand at the same time.

*Note - when lifting the left hand finger, lift it just enough to let the string rise off the fret...*

*If you lift the finger right off the string, the open string will sound.*

*Conversely, if you don't lift it enough, the string will rattle on the fret till it's damped*

### Playable example

Here's a simple example to bring together some of these techniques.

The staccato is best effected using methods 1 and 4 together.

The rest at the end of the bass note is best effected by method 4.



### Damping to improve the music

Damping is an important part of solo and ensemble technique, and a lot of it isn't indicated in the music.

Orchestral instruments (strings, brass & woodwind) have sustain and the player maintains each note throughout its life; the guitar is bit of a maverick - a note continues (but decays) with a life of its own. Stopped (fingered) notes cease when the finger is lifted, but open strings ring on.

Damping is needed when notes we don't want ring on through notes we do. The music won't tell us when, but our ears will! Let's look in more detail...

### The problem

Here's the end of Brouwer's Un Dia de Noviembre, simplified just a little. It's all first position - no tricks!



When you play the As, the open E & B of the previous bar both ring on. (The G is killed by the A, of course). As they were played earlier, they're not as loud as the As, but they definitely ring on.

If you touch the E & B strings immediately before sounding the As, your ear will notice the gap or silence. But...

### The solution (1)

Touch the E & B strings immediately after sounding the As, your ear won't notice the discord for the brief time it exists.

### The solution (2)

There are other subtle ways that the guitar sings on... Sympathetic vibration means a string stopped at the fifth fret can make the open string of the same pitch burst into life, so be careful using 5th fret notes to replace open strings - they may bite back. What you thought was a way to control when the (fingered) note stops (instead of using an open string) may leave you with the open string ringing on just the same!

Just as an open string can vibrate in sympathy with another string of the same pitch, so a harmonic in an open string can be excited by another string of a much higher pitch. Try the following experiment - be sure your guitar is accurately tuned first.

- Play just the open B - the first note of the incipit. Now place a right hand finger on it and leave it there. The B apparently rings on - actually, it has excited the 3rd harmonic on the bottom E string, which is now vibrating.

If you have a nice guitar, it will bite back even harder. Try this scenario - you need to be quick ...

- Just play the open B loudly and then stop it with your right hand
  - Take the right hand away and now stop the bottom E string whose harmonic is vibrating in sympathy
  - Now listen. The B is still sounding.
  - Why? The open B has started back up, excited (yes, that's the proper word) by the bottom E string's harmonic
- So to stop these spurious vibrations, we have to get'em all at the same time.

### **Yet another caution!**

Most ensemble music is single line so it's not too hard to tidy up these ghost notes as you go along. Except...

- Your guitar will also vibrate in sympathy with your neighbour's, so you may find a totally unexpected note spilling from your soundhole!