Guitar players, and perhaps also piano players, like to look at their fingers to develop visual images of their favourite chord fingerings. There is nothing particularly wrong with that as long as you are also aware of what notes are being played. Keeping this in mind, if you begin with the Maj7 chord as a starting point, it is easy to produce the Dominant 7th chord by just flatting the 7th degree. If in some or most cases, these chords begin to resemble parts of your favourite campfire chords, don't be too surprised. There is a basic arithmetical formula for most things in music.

"The Transformers"

Lower the Maj7th by a half tone to form the Dominant 7th chord.

Lower the b7th by another half tone to produce a Maj6 chord.

The Root of the Dominant 7th chord is the most neutral note in the chord.

Raise the Root of the Dominant 7th chord by a half tone to produce the Dominant 7b9 chord. The bass player will handle the Root Department.

Raise the Root of the Dominant 7th chord by a whole tone to produce the Dominant 9th chord. (Dominant 7\#9 chords=raise the 9th another $1 / 2$ tone)

7b5 chords=lower the 5th of the Dom7 by a half tone.
m 7 chords=lower the 3rd of the Dom7 by a half tone.
m7b5 chords=lower the 5th of the m7 chord by a half tone.

Although the above discourse does not follow good a good theoretical process, it is still the easiest thought process. It will be easier to think of the various chord types as being alterations of something that you already know. Over a course of time, and it does not happen quickly unless you work at it, the chord fingerings become a part of rote memory. In the heat of battle, it is unlikely that you will be able to formulate chord fingerings unless your fingers have been there many times in the past.

Incidentally, all kinds of doubly altered chords can be produced such as C7b9+5 or C7b5b9 etc. Undoubtedly. some inversions will be difficult to finger and may also be so discordant that you may never find a good use for them. The science of music gives us these chords but we do not have to use all of them. Believe your ears.

