The New Virtuosity

In the second half of the 20th Century, composers pushed back traditional limits of technical virtuosity even farther than before in a number of ways:

- **pitch**: extend ranges to extremes; play or sing previously forbidden intervals (e.g. wide on voice); microtones, multiphonics
- **rhythm**: reading and performing complex rhythms (e.g. Babbitt’s score to Phonemena)
- **dynamics**: control extremes, use dynamics as structural element of piece
- **timbre**: structurally altering instrument (e.g. prepared piano), new playing techniques like clicking keys, stopping or plucking strings, singing into instrument
- **articulation**: refinement of tonguing, bowing, vibrato
- **notation**: reading graphic and proportional scores in addition to traditional notation

Some Examples:

- George Crumb, *Ancient Voices of Children* contains extended vocal techniques such as flutter-tonguing, tongue clicks, extremely wide intervals executed quickly. There are also extended techniques in the harp part (multiphonics)
- Vinko Globokar, Slovenian trombonist incorporated many extended techniques that can be executed on trombone including blowing air through instrument without buzzing lips, tapping on instrument, making sounds with triggers, etc.