Spirali

A.
Sound Gestalt
Particular way to "orchestrate" that divides a single sound across several instruments or instrumental gestures, although the "sound idea" remains unique.
Hence, in Spirali, although almost all the instruments play all the times, this does not mean that the music is always polyphonic.
Typical ex: the "orchestration" of a single pizz (open E string), m. 137

B.
Definition of 3 spaces:

Points ➔ one instrument = one loudspeaker = punctual sound source, direct sound radiation, very clear and narrow perception of a direction.
Sound projection: control of the level of the direct sound (P in the score).

Surfaces ➔ one instrument = one main loudspeaker + two neighbouring LSp= perception of a fuzzy direction (sound is coming from a region [surface] rather than from a single point.
Sound projection:
Sends to this space + Cl and W1/2.
Cl = time of the "cluster" (early echoes, that is what is between the first reflections and the diffused reverb), in msec.
W1/2 = Width, spread of the sound between the main LSp and the neighbouring ones for V1/2 and Vla/Vc (in degrees, 0 = same as points, all the sound is coming from the main LSp, but, of course, with a fuzzier temporal image given by the value of the Cluster, 90=the sound comes only from the neighbouring LSp, 45=balance between main and neighbouring LSp).

Diffused ➔ no perception of direction, the sound is coming from everywhere, two setups (because of the filters, V1/2 and Vla/Vc).
Sound projection
Sends to this space + T1/2.
T1/2 = reverb time (sec)

Note to the sound projection: in the final version of the score, the values of the parameters to move during the concert will be expressed according to a 5-degree scale (Very High, High, Medium, Low, Very Low). The actual numeric values will have to be adapted to the acoustics of the hall.
The patch consists of 2 BCF2000 (16 faders + 2 rotary knobs)

C / D
Hidden Choral and Harmonic Fields / VPS
Original idea: work with the idea of a hidden, invented choral (see Beethoven op. 132 for the concept of invented, modal choral).
Process:

1) write a choral melody according to some very precise algorithms matching letters with pitches (that is, the melody is "saying" something.
2) write the 2 bass lines, one rather "dissonant" (D, using a mixture of perceptual and musical approach), one rather "consonant" (C).
3) harmonise the melody+bass, in 4 kinds (this harmonisation was done purely intuitively, observing the two characters, D/C, and trying to keep the same harmonic colour when changing from "l" to "s":
    a. Dl = dissonant, large
    b. Ds = dissonant narrow (the bass is one octave higher, so that there is less space between the melody and the bass for the chords; the challenge was to keep the same harmonic colour, even if all the notes could not be maintained)
    c. Cl/s = same as dissonant, but with the "consonant" version

Hidden:
See 1st formal spiral: the pulse of the choral moves from 6 1/16th notes to 1 1/16th note (the "choral" is repeated 6 times, interrupted by "spatial" inserts), but the main tempo does not change.
When the pulse is slow, the "choral" is broken across the instruments, so that is it not very clearly perceptible (although all the instruments are together at the moment of changing a chord). When the pulse is fast, the choral is full, but the speed makes it hard to recognise, because of the speed.

Harmonic Fields:
Because of the intuitive approach to the harmony (based on my experience in harmonising Bach's Chorals, but without any wish to use similar chords), there was no way to find a "rule" (= algorithm) that would account for the chords and give them a structure.

Hence, a phenomenological approach was used.

a.) All the chords were placed in a “data base” and indexed by a name.

b.) Some characteristic features (see: **VPS.pdf**,for a detailed account of them) were extracted from them

c.) Then, they several orders were used, that is the chords were sorted according to a leading (and, sometimes, a secondary) criterion (ex: from the most to the least dense).