



ill. 1: Fra Angelico: *Annunciation*, 1440, San Marco Florence



ill. 2: Fra Angelico: *Annunciation*, 1433/34, Cortona

The prelude is all. Sketches on the how and what of intonation

Intonation to the unheard-of

An intonation, often improvised, sets the tone, prepares modes and affects of chants to follow, by turns motivic and (voluntarily) actualizes a system of classification – in the sense, for instance, of its tuning structure. In the San Marco convent in Florence (ill. 1), in the northern corridor, the *how* of this musical practice is given stunning visual expression. It was painted around 1440. Mary sits on a wooden stool and is receiving intonation of something unheard-of. An angel reveals what is to come, what will enter her life. The scenery is modest and the application of colour restrained, with subcutaneous tension; the colonnade as partly open auditorium nearly fills the fresco; on the left, a *hortus conclusus* may be suggested, with woods behind it, seen once again through a small window. Nothing else distracts from the annunciation. The inflection of this promise is private in character. Fra Angelico shows the intimacy of a *way* of speaking, but at the same time suspends narration. There seems to be no “outside” for the *how* of what is being said, almost as in a dream that addresses the dreamer completely – we are not free to immediately reject what is being experienced, to form an opinion, to turn away; we believe in it completely; its *Werkmeister*¹ render a picture-perfect weaving, introducing heterogeneous things to one another. Here, a singular moment is performed alone; something unprecedented shown. Strikingly so, exactly because of this missing *anamnesis*. A communication that, if you will, exists pure, apart from any existing experience. *If you come before the figure of the untouched virgin, be sure in passing that you do not forget to speak the Ave*² is written at the lower edge of the picture.

1 “Foremen” of dream work, according to Freud: condensation and displacement.

2 VIRGINIS INTACTE CUM VENERIS ANTE FIGURAM PRETEREUNDO CAVE NE SILEATUR AVE.

Intonation as showing

The Annunciation in Cortona (ill. 2) was painted earlier. The *what* of intonation – intonation as a type of musical form or composition³, as an adjustment of an instrument's sound, fine-tuning it to the acoustics of a particular space – is introduced, apparently unbounded on several sides, and also upwardly. The expulsion from Paradise – beyond good and evil – in this case, shown, provides the anamnesis: a loss handed down, following from the consciousness of differences. A loss with intermediate stations. Isaiah – hewn in stone *in front of* the scene – prophesies the Annunciation. Mary has a book open on her lap. She is sitting on a golden throne, above her the Holy Dove. The angel appeals to an informed thee: the spoken is also shown (*deixis*). Mary seems poised, as if she were prepared; the message seems comprehensible in the sense that one thing meaningfully follows from another, or at least as a transparent polyphony of dense references and symbolism. The Mother of God as listener induces an amendment; she makes good the loss of Paradise. Here, the colours of paint – Florence is a fresco, Cortona is not – are clear, opulent, set off against one another. A *sequence* in baroque music, *playing* with the principle of recognition, where colours result from transposing a motive through different registers, each appearance made new by the changing intervals of an unequal temperament.

The scenes in Fra Angelico's visual renderings of the Annuntiatio Domini can be read as fields of action where intonation comes to bear. "Read" also in the sense of defining more precisely the full meaning of the word. In San Marco: something unheard-of – the biologically disconcerting moment of immaculate conception to come, an incarnation of God – out of the blue, a psychological provocation, a destabilisation. Poetic, intimate, tender. Mary and the angel – two sides in a listening *relation* – do not leer at a Before nor an After: their Now is all.⁴ Nuances are the desiderata of this listening. In Cortona: a story of unfolding motivic variation, the preparation of a covenant in stages. The auditive space of Cortona is more familiar, handed down, that of a shared apperception.

3 An entry in the Wernigerode Charter of 1330 indirectly (since the organ remains silent during Lent) confirms this practice for intoning organ and liturgical singing (of the priest). *Sunder in der vasten unde in allen vasteldagen, denne scal he rede syn unde scal ansigen swenne men myddeme organ* [...] Particularly during Lent and on each day of fasting, he should speak and sing as if it were together with the organ [...]

4 Schoenberg: "I said to Webern: For my music one must have time. It is not for people who have something else to do." Citation in H. H. Stuckenschmidt: *Schoenberg. Leben, Umwelt, Werk*. München/Mainz: Piper/Schott 1989, S. 145.

In pieces I explore both of these ways of parsing intonation into several aspects. Two examples: one addresses the tuning-up, fine adjustment and tonal regulation of instruments; a second operates with symbolic relationships, figures of similarity and, here and there, speculatively, with music-historical constants of tuning, setting things that are per se silent (book and image) within the sound.

MZ 104/4

Ill. 3: From *Licht, Steg*

Licht, Steg (ill. 3) is an intonation-music for string quartet about the subtle *magic of beginnings*⁵, which overextends the praxis of intonation, erasing its role as the preparation – *for what is to follow* – by drawing it over the entire dimensions of the piece. The intervals and figurations at the beginning are derived from a universal technique employed on stringed instruments. A finger divides the string in two: finger to bridge, and finger to nut. This affects not only the two resulting pitches A and A'; the sound on the other side of the stopping finger is fundamentally different; there is no direct connection to the sounding body of the instrument by means of the bridge. The bridge transmits the frequency-proportions, forges sound and its partials; the bridge marks and raises the strings. Moreover, the space occupied by the stopping finger measures out a remainder. A small cluster. This (Pythagorean) comma, this cultural difference describes a dilemma; a second player has to step

5 “Und jedem Anfang wohnt ein Zauber inne” is a line from the poem *Steps (Stufen)* by Hermann Hesse: “A magic dwells in each beginning”.

in if the demands of this dual presence are to be exactly realised. Temperaments mostly operate using differences that they conceal (distribute) or heighten. In *Licht, Steg*, the comma of the not-identical is notated; the interpreters play passages *before* the comma of this “semantics”, and in other places following *after* it. This doubling is made apparent by means of repetition. A returning figure is, initially,⁶ manifested through contrapuntal techniques, proposing an ongoing opening (of the closed garden) and the question, how may *a relation* be brought about between two distinct sound-images.

MZ 180/B Finalstad Schach_König/Bauer_Hyernerotomachia ohne feste Zeit (Altsegment, Applikation Triumphwagen)_kaum Gewicht, frei, spielerisch den Formen entlang, ephemere

The score is for a chamber ensemble and includes parts for Piccolo, Flute, Bassoon in B, Contrabass Clarinet in B, Flute/Piccolo, Clarinet, Violin, Viola/Cello, and Contrabass. The score is in G major and 4/4 time. It features complex rhythmic patterns, dynamic markings (ppp, mp, p), and articulation marks. A specific passage in the Violin part is highlighted with a red box and a line pointing to a detail view of that passage.

Ill 4: From *Fonds, Schach, Basar*

Fonds, Schach, Basar (ill. 4) also plays upon plateaus of intonation. Quite differently, however. With an eye on colours (Giovanni Bellini, Basaiti, Caravaggio) and drawing in an casual way upon the contingencies of cultural history. For example, a chess match from 1972 between Bobby Fischer and Boris Spassky is sketched into the piece and its final position is interwoven with two passages from Francesco Colonna’s *Hypnerotomachia Poliphili* from 1499. The defeated player’s pawn is identified with an altar segment and the winner’s king with the decoration of a triumphal

6 See score example, *Licht, Steg*.

chariot; they are figuratively similar. Spatial measurements are thus transcribed as intervallic relationships and are associated with four different models of intonation:

- 1) architectural measurements as described in Colonna's book;⁷
- 2) meantone temperament⁸ with 19 pitches to the octave – an exposure with tonal light;
- 3) 12 semitones per octave (tuned according to the harmonic series up to the 19th partial tone above C and with respect to its untempered under- and over-fifths)⁹;
- 4) finally, a quarter-tone series (also in steps of unequal size, selected from the overtones 33 to 63 above C), an accurate realisation of which turned out to be difficult, sometimes utopian, for the woodwinds. This piece for small ensemble and record player pursues – nowadays over the hill, and as a gesture from disparate references – a music historical trajectory back to meantone temperament, enquiring about characteristics qualities of carrying sound (Tonträger), and resuming, as soon as the match played is seen from one side as loss, the other as gain, with a tuning dreamed up with Colonna.¹⁰

7 Altar segment and decoration of a triumphal chariot (in millimetres or cents):

2 1/2 piedi (feet) = 740.88
 3 palmi (hands) = 222.264
 1/2 palmo = 37.044
 piede e 3 palmi = 518.616
 2 1/2 palmi = 185.22
 1/4 di piede = 74.088
 1 1/2 piedi = 444.529 = cubito (cubit)

- 8 According to Marchetto da Padova (see *Lucidarium in arte musicae planae* from 1317/18), the whole tone “consists in the perfection of the number nine”; it expresses a “relation”. Marchetto examines its parts, of which there are five. For example, the chromatic semitone (chromaticism as “colour of beauty”) is made up of the diatonic semitone plus *diesis*, which corresponds to the meantone difference between # and b, as we can trace it via Vicentino, who equates the fifth part of a meantone (somewhat approximately) with the small enharmonic diesis, up to Mozart: a line of intonation conventions with subtle divergences. Mozart has his composition student Thomas Attwood begin his training in harmony, counterpoint, and free composition by writing up the major and minor scales, differentiating between *mezzi tuoni grandi* and *mezzi tuoni piccoli*.
- 9 Derived analogously to Schoenberg's chromatic scale (see *Problems of Harmony*), but instead of the 7th, 11th and 13th overtone there is a division of the octave into tempered semitone steps as follows:

G +2¢		19/G=Bb -0.5¢	27/G=E +8¢	81/G=B +10¢
C 0¢	17/C=Db +5¢	19/C=Eb -2.5¢	27/C=A +6¢	
F -2¢	17/F=Gb +3¢	19/F=Ab -4.5¢	27/F=D +4¢	

10 See score example, *Fonds, Schach, Basar*.