

# Josef Matthias Hauer's *Melischer Entwurf*

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History has relegated Josef Matthias Hauer (1883-1959) to the rank of *Kleinmeister* and his twelve-tone works to a position subordinate to that held by the Schoenberg circle. His highly idiosyncratic compositions and theoretical writings exerted little influence on later generations, and they were regarded as inconsequential, if not somewhat eccentric, by many of his contemporaries. Nevertheless, Hauer remains a notable and colorful figure, and his works constitute a likely barometer of the cultural and intellectual climate of Vienna after World War I. Much of his oeuvre remains unpublished and awaits serious study.

Hauer's extravagant metaphysical views on music and his prickly personality placed him outside the Viennese musical mainstream, yet he associated with some of the leading figures of the day, most notably the Christian existentialist philosopher Ferdinand Ebner (1882-1931) and the Bauhaus artist Johannes Itten (1888-1967). The writings of both men reveal Hauer's influence. He is chiefly remembered, however, as a rival of Schoenberg, having developed his own twelve-tone method and begun to publish his findings around 1919, slightly ahead of Schoenberg--a fact that proved particularly irksome to the more well-known composer.

The two men were on friendly terms briefly in the 1920s. During this time, Hauer dedicated his two-volume *Etüden für Klavier* (1922-1923) and his aesthetic treatise *Vom Melos zur Pauke* (1925) to Schoenberg. His compositions were performed by Schoenberg's *Verein für musikalische Privataufführungen*, and the two composers even considered collaborating on a book and a school for twelve-tone composition, neither of which were ever realized. Hauer also recalled that during a private conversation Schoenberg admitted "We have both found one and the same diamond, you look at it from one side and I from the opposite side," to which Hauer replied, "And so can many, many others view it from all sides."<sup>1</sup> In later years both composers grew increasingly less magnanimous, each stubbornly asserting his primacy in discovering the idea of composing with twelve tones.

The "melodic sketch" shown here dates from Hauer's final period (roughly 1939-1959)



and illustrates the basic features of his mature compositional method. This leaf shows preliminary ideas for a *Zwölftonspiel*, meaning both, in general, "twelve-tone composition" and, more literally, "twelve-tone game." The particular work, a string quartet written in 1954, was dedicated to the German conductor Hans Rosbaud; the dedication can be seen on the upper-right-hand corner of this sketch. The Moldenhauer Archives at the Library of Congress also contains the autograph score of the unpublished quartet and a letter from Rosbaud to Hauer, inquiring about a possible performance.

As suggested by the heading *Melischer Entwurf*, the essence of Hauer's approach to composition lay in melody, for which he used the Greek term *Melos*. Far outweighing elements such as rhythm or harmony, *Melos* was, for Hauer, both the true substance of music and the root of spiritual existence, the "Alpha and Omega of discerning man...it 'exists' from the beginning to the end of all time."<sup>2</sup> (The word was also adopted as the name for the journal here quoted and reflected the ideas of the Schoenberg circle.) Hauer's concept of *Melos* was influenced by the writings of ancient China, which he claimed represented the purest culture of *Melos*, and his aesthetic philosophy was strongly informed by Taoism and the *I Ching*.

According to Hauer, atonal (i.e., twelve-tone) music was not invented (*erfunden*) but rather "perceived" ("*gehört*"). The atonal musician was not an active agent--neither a music maker (*Musikmacher*) nor a performer (*Musikant*) or "original genius" ("*Originalgenie*")--but a passive "hearer" ("*Hörender*"), one who "perceives that which is unchanging, intangible, the eternal in the essence of things ("*Tao*")."<sup>3</sup> Compositions were regarded as a *Sphärenmusik* that provided a path to self-discovery, and the creative process was likened to a cosmic game, with certain elements left to chance. In his later years, Hauer abandoned the use of opus numbers and descriptive titles, designating each of over one thousand works simply as a *Zwölftonspiel*, and distinguishing one from another by way of date and performance medium.

The resources Hauer required in order to realize his *Zwölftonspiel* are charted in this manuscript. One of the more peculiar features of the manuscript (and Hauer's sketches in general) is his unique notational system, essentially a keyboard system founded on the principle of equal temperament and a belief in the equivalence of the twelve chromatic pitches. In order to represent these pitches equitably and without the hierarchical values implied by accidentals, Hauer devised a new staff, one that eliminated the need for accidentals and approximated the design of a piano keyboard.

On Hauer's eight-line staff, all lines represent the black keys of the keyboard while spaces represent the white keys. This is explained in the left-hand margin of the manuscript:

"Die Noten auf den Linien bezeichnen die Töne der schwarzen Tasten, die in den Zwischenräumen die der weißen." Traditional clefs are retained, but they are used in a nontraditional way. Treble and bass clefs no longer indicate the pitches G and F, respectively; rather, they define an octave, both indicating the pitch class G#/Ab. The "C" clef rests in the middle space, dividing the octave symmetrically at the tritone, D-natural. The wider spacing between lines 3-4 and 5-6 allows for the writing of two separate noteheads, E-F and B-C, the semitones of the piano keyboard that are represented by consecutive white notes. The lower of each pair of notes rests on the lower line, the higher pitch hangs from the line above. This neutralized notational system, first described in *Vom Wesen des Musikalischen* (1920), is used consistently in Hauer's *Melische Entwürfe*. For ease of performance, however, he generally reverted to conventional notation for full and published scores.

Fundamental to Hauer's method of composition is the trope, indirectly analogous to Schoenberg's twelve-tone row. Each new work is based on one of twelve universal trope tables, each table being oriented around a different pitch level in the chromatic scale. For each table, the basic trope consists of the simple chromatic scale, followed by forty-three systematic permutations for a total of forty-four possible tropes. (Hauer's system of tropes, tentatively announced in various articles from the early 1920s, is most thoroughly explained in his *Zwölftontechnik* of 1926. He revised his trope tables in 1948; this composition is based on the later version of the tables.)

The operative element in Hauer's method was not the total chromatic scale, however, but the hexachord. This is shown in the present manuscript. For this composition, based on the trope table oriented around C#, Hauer has chosen to use tropes 2, 5, 25, 16, 28, and 10. These are copied on the top staff and subdivided into their respective hexachords. The alignment of these hexachords as stacks of pitches rather than strict linear orderings reflects a fundamental difference between Hauer's and Schoenberg's methods; it likewise represents an aspect of Hauer's approach that was influenced by Chinese philosophy and that incorporated an element of chance.

Hauer viewed his hexachords as pitch fields or *Konstellationen*: while the pitch content of tropes and their hexachords was determined systematically, by means of interval relationships, the ordering of pitches within each hexachord was indeterminate. Like the hexagrams of the *I Ching*, Hauer's hexachords were aggregate symbols that, while clearly defined, could be internally reconfigured and were subject to a wide variety of interpretations.

Twelve-tone compositions (*Zwölftonspiele*) embody functions of the galaxy system,

[they] are the kinetic formation-center of organic processes. The twelve-tone 'game' (*Zwölfton-'spiel'*) is also similar to the oracle 'game,' as it has been handed down in the ancient Chinese book of wisdom, the *I Ching*.<sup>4</sup>

Pitch ordering was consequently not fixed as in Schoenberg's method, for this would inhibit the "hearing" composer's ability to divine "musical truths" from the symbology of the hexachords. In practical terms, this meant that within a given hexachord, pitches could occur in any order and recur or be reiterated freely, without violating the integrity of that hexachord. The primal law of the total chromatic scale, what Hauer called the *Urgesetz* or *Nomos*, obtained on a deep structural level, in the continuous circulation of the twelve chromatic pitches; surface patterning did not contradict or negate this fundamental law.

While he did not admit so openly, Hauer appears to have been influenced likewise by the unique organizational properties of Eastern music. His *Zwölftonspiele* are ultimately not "closed" compositions based on the purposeful working out of pregnant themes and motifs, but rather highly sectional, "open cycle" compositions based on schematic repetitions of hexachord pitches. Tellingly, in his many aesthetic and theoretical writings, Hauer studiously avoided concrete terms such as *Thema* or *Motiv* opting instead for the vague and all-embracing *Melos*. He also chose the passive term *Entfaltung* (unfolding) to describe the interaction of musical ideas rather than active, teleologically charged terms like *Entwicklung*, *Durchführung*, or *Variation*.

In his attempt to appropriate ancient Chinese thought for his twelve-tone method, Hauer was neither comprehensive nor entirely consistent. To cite just one example: nowhere in his exhaustive literature on the subject does he spell out exactly how chance enters into his creative process. (Schoenberg criticized Hauer's frequent invocation of mystical and oriental philosophy as a smoke screen, intended to disguise what he saw as serious flaws in the musical foundation of Hauer's method. However, Schoenberg himself claimed "divine guidance" in the formulation of his own twelve-tone method.) Hauer also acknowledged his indebtedness to a miscellany of more traditional influences including Goethe's *Zur Farbenlehre* and medieval and ancient Greek philosophy. And while, like Schoenberg, Hauer was musically self-trained, his compositions reveal a thorough knowledge of conventional theory, as evidenced, for example, by the permutational sequence of his trope tables, the selections of tropes for a given composition, and his reliance on basic contrapuntal procedures.

Nonetheless, Hauer's interest in Oriental philosophy and its relevance to contemporary composition forms a distinctive and highly significant part of his musical aesthetic. It is

indicative as well of a larger intellectual current that swept the former Hapsburg Empire after the First World War, one preoccupied with a redefinition of Western culture that embraced a variety of non-Western ideas and witnessed a resurgent interest in Taoism. Equally significant, although Hauer's work had little influence on later composers, his attempt to integrate the element of chance into the creative process and his view of composition as a musical "game" prefigure the work of John Cage, Karlheinz Stockhausen, and Pierre Boulez.

Sketches on the upper left side of the present manuscript show ideas for a *Zwölftonreihe*, the one element for which Hauer did establish a definitive pitch ordering (hence his use of the linear term *Reihe* rather than the more amorphous *Trope*). The row was the first newly composed element of a *Zwölftonspiel* and it functioned somewhat like a *cantus firmus*. While not outwardly thematic, this row recurred unchanged throughout the composition, its pitches embedded within the figures of individual phrases. The significance of a twelve-tone "row" as opposed to a trope was threefold: it provided a harmonic underpinning as well as a structural foundation for the composition, and its linear reiteration of the complete overtone series (German: *Obertonreihe*) symbolized the constancy and totality of the cosmos or "the Continuum" (*Das Kontinuum*).

This particular row is derived from a hexachordal division of trope 2. The basic hexachords of this trope are first reconfigured (staves 1 and 2, left), and the row is then transferred to begin on the second pitch, E-natural (stave 2, left). Hauer confirms this new beginning with a vertical line and the word *Anfang*. The new row is transferred down a perfect fourth to begin on B-natural (stave 2, center), and it is this version that provides the basis for the composition.

The analogy between row and *cantus firmus* is especially strong in this early stage of sketching, for the piece is built polyphonically around this single, independent line. The row is typically the only pitched element in Hauer's *Melische Entwürfe*. Black noteheads seen throughout the manuscript surrounding each row statement are essentially place holders, suggesting how the row is to be "harmonized." It is from this proposed harmonization, always sketched in four parts, that individual "melodies" are later created, based on the chosen tropes. (Hauer interpreted the term *Melos* rather loosely; while his *Zwölftonspiele* are essentially polyphonic compositions, piano works occasionally employ chordal accompaniments.) The row is distinguished further from these inchoate melodies by the use of augmented white-note values. This too is an abstraction; in the final composition, these row pitches will be incorporated into musical lines which use faster values.

The colored dots on the upper right corner of the manuscript constitute a *Vierweg* (four-way), a self-perpetuating matrix similar to a Magic Square. Also created anew for each composition, this matrix provides the *Spielregel* or "rule of the game" which governs how the piece will unfold. On a more practical level, the *Vierweg* serves as a voice-leading graph, its colored dots plotting a general course for musical ideas to be determined at a later stage of sketching. The *Vierweg* could be implemented on any number of levels and in a variety of ways; however, it did not automatically dictate decisions on details such as number of measures, choice of trope, instrumentation, or the number and constitution of musical ideas.

Hauer's related concepts of row and *Vierweg* were rooted in a neo-Pythagorean belief that music reflects the eternal and absolute laws of the cosmos, "the Continuum," and that each *Zwölftonspiel* offers a brief glimpse of this Continuum. The linear representation of the cosmos offered by the row is rendered two-dimensional in the *Vierweg*, a relationship underscored by his description of the latter as *das vierstimmige harmonische Band: Das Kontinuum* (the four-voiced harmonic thread: the Continuum).

For Hauer, each *Vierweg* offered a "specific external linking of the Continuum, providing the basis for the building of the most varied musical forms (*Spielformen*)." The *Vierweg*'s union of horizontal and vertical dimensions and its boundless potential to generate musical ideas transcended the constraints of time and place, thus elevating the resulting *Zwölftonspiel* to a higher level of reality. As explained by Hauer's student, Viktor Sokolowski:

The system of the pitch world encloses itself into a unity: twelve-tone cycle, four-way and overtones enjoin in the *Zwölftonspiel* to a recognizable law of the fourth dimension, the reality of time and place. Time and place are in equilibrium.<sup>5</sup>

The glimpse of the continuum afforded by this particular matrix is sketched in greater detail on the bottom of the manuscript. The ideas on staves 3-10 provide a near-complete picture of how the quartet will be put together; indeed, the entire quartet is plotted on these eight staves. This particular composition is extremely concise, and it divides neatly into four distinct blocks, each block comprising four separate polyphonic lines. Lines are exchanged at the same, regularly recurring distance of thirty-two measures (i.e., at measures 32, 64, and 96), so that blocks are perfectly synchronized. In this instance, then, the correspondence between *Vierweg* and composition is quite literal: each colored dot represents a single musical line, and each instrument of the quartet articulates exactly one statement of each line. The *Vierweg* thus represents a skeletal picture of the entire composition.

The course of the first block is mapped on the lower eight staves. Beginning with stave 3, each staff contains a single, four-measure phrase which is defined by a complete row statement and characterized by a distinctive rhythmic value. Hauer notes these values in the margin to the left. These rhythmic values serve as a general guideline and help to shape the basic rhythmic profile of the phrase. A succession of phrases characterized first by quarter notes, then eighth-note triplets, eighth notes, and finally sixteenth notes is stated twice, with a different harmonization for the second statement (i.e., staves 7-10).

These eight staves consequently chart the course of one complete thirty-two-measure block. But since the lines of this block wander throughout the composition and are simply relayed in subsequent blocks (following the pattern of the *Vierweg*), the remainder of the composition is embodied here as well. Hauer's "melodic sketch," in essence a contrapuntal graph from which the musical substance of the piece will be generated, thus also serves a purpose similar to a short score.

<sup>1</sup> Schoenberg sagte zu mir: "Wir haben beide einen und denselben Brillanten gefunden, Sie schauen ihn von der einen Seite an und ich von der entgegengesetzten." Ich antwortete ihm: "Und so können noch viele, viele den Brillanten von allen Seiten betrachten," quoted in Walter Szmolyan, *J. M. Hauer* (Wien: Verlag Elisabeth Lafite, 1965), p. 49.

<sup>2</sup> "Das atonale Melos...ist das A und O des geistigen Menschen...ist 'da' vom Anfang bis zum Ende aller Zeiten," Josef Matthias Hauer, "Melos und Rhythmus," *Melos 3* (1922): 186.

<sup>3</sup> "Eine atonale Melodie kann nicht erfunden, sondern nur 'gehört' werden. Der atonale Musiker ist kein Muskmacher, kein Musikant...kein 'Originalgenie,' sondern ein 'Hörender,' einer, der das Unveränderliche, Unantastbare, Ewige im Wesen der Dinge ('Tao') vernimmt," "Melos und Rhythmus," p. 186

<sup>4</sup> "Zwölftonspiele beinhalten Funktionen der Milchstraßensysteme, die motorische Formungszentren organischer Prozesse sind. Das Zwölfton-'spiel' ist auch gleichzeitig ein Orakel-'spiel,' wie es in dem uralten Weisheitsbuch der Chinesen, im I Ging, überliefert ist." Josef Matthias Hauer, *Zwölftonspiel (8 Juli 1957) für Klavier zu vier Händen* (Wien: Fortissimo Musikverlag, 1957).

<sup>5</sup> "Das System der Tonwelt schließt sich zu einem Ganzen: Zwölftonzyklus, Vierklänge und Öbertöne vereinen sich im Zwölftonspiel zum erkennbaren Gesetz der vierten Dimension, der raumzeitlichen Wirklichkeit. Raum und Zeit sind im Gleichgewicht." "Über das Zwölftonspiel," Viktor Sokolowski [untitled exhibition catalog], (Vienna: R. Schaffer, [n.d.]).