

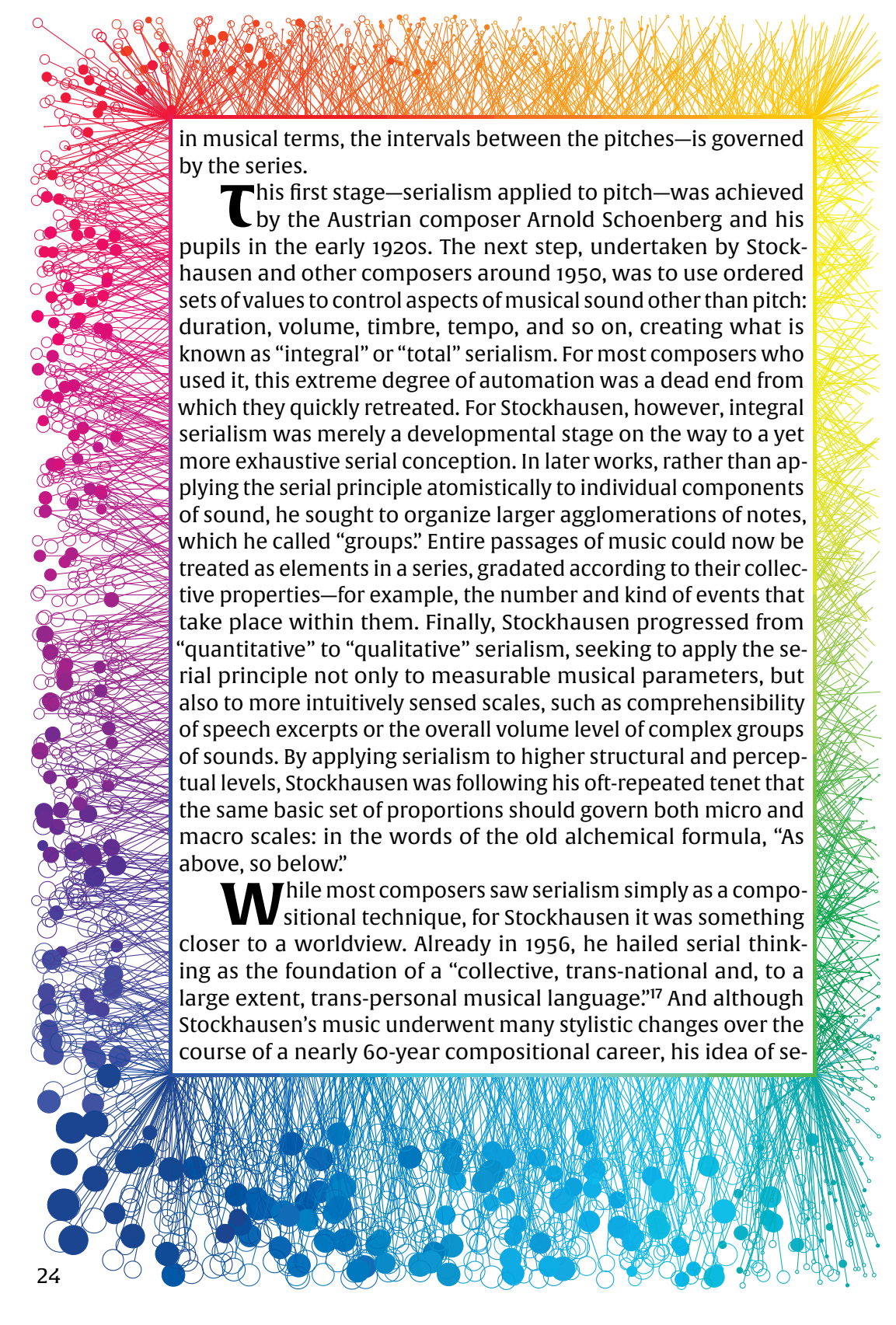


STOCKHAUSEN'S SYSTEMS

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SKarlheinz Stockhausen probably wrote more about music than any other composer in history. His voluminous writings grapple with virtually all aspects of the art, from history and aesthetics to acoustics and technology, and—above all—with the compositional techniques employed in his own works. Stockhausen has accordingly earned a reputation as an “intellectual” or “cerebral” composer, one for whom ideas are, allegedly, more important than music. Many people believe that listening to or enjoying his music requires an advanced degree, but in fact his basic mindset can be understood without recourse to higher mathematics or music theory. At the core of Stockhausen’s music thought is the idea of *serialism*, one of the most important, influential, and controversial concepts in twentieth-century music. His music cannot be understood without knowing what serialism meant to him.


In the simplest of terms, serialism involves devising a scale of values between two extremes, then creating a series in which each value appears once, and using that pattern and its permutations to determine the material of a composition. To make this less abstract, take the chromatic scale (every key on the keyboard from any given tone to its octave above or below), which represents a division of the pitch continuum into twelve equal segments. To create a series, which in mathematical terms is an *ordered set*, you simply place the twelve pitches of the chromatic scale in a particular sequence. This sequence—known as a *twelve-tone row* or *series*—governs the pitch content of a given composition: all pitches used in the composition are drawn, in order, from the series or one of its permutations. The serial technique thus ensures that all pitches appear with equal frequency, but in a nonrandom way, since the order in which they appear—



in musical terms, the intervals between the pitches—is governed by the series.

This first stage—serialism applied to pitch—was achieved by the Austrian composer Arnold Schoenberg and his pupils in the early 1920s. The next step, undertaken by Stockhausen and other composers around 1950, was to use ordered sets of values to control aspects of musical sound other than pitch: duration, volume, timbre, tempo, and so on, creating what is known as “integral” or “total” serialism. For most composers who used it, this extreme degree of automation was a dead end from which they quickly retreated. For Stockhausen, however, integral serialism was merely a developmental stage on the way to a yet more exhaustive serial conception. In later works, rather than applying the serial principle atomistically to individual components of sound, he sought to organize larger agglomerations of notes, which he called “groups.” Entire passages of music could now be treated as elements in a series, gradated according to their collective properties—for example, the number and kind of events that take place within them. Finally, Stockhausen progressed from “quantitative” to “qualitative” serialism, seeking to apply the serial principle not only to measurable musical parameters, but also to more intuitively sensed scales, such as comprehensibility of speech excerpts or the overall volume level of complex groups of sounds. By applying serialism to higher structural and perceptual levels, Stockhausen was following his oft-repeated tenet that the same basic set of proportions should govern both micro and macro scales: in the words of the old alchemical formula, “As above, so below.”

While most composers saw serialism simply as a compositional technique, for Stockhausen it was something closer to a worldview. Already in 1956, he hailed serial thinking as the foundation of a “collective, trans-national and, to a large extent, trans-personal musical language.”¹⁷ And although Stockhausen’s music underwent many stylistic changes over the course of a nearly 60-year compositional career, his idea of se-



rialism remained essentially unaltered. In a 1971 interview, he declared that serialism is “a spiritual and democratic attitude toward the world. The stars are organized in a serial way. Whenever you look at a certain star sign you find a limited number of elements with different intervals.” (Opponents of serialism, on the other hand, often decried it as musical communism, a forced and artificial equality between pitches that overturned the supposedly natural hierarchy of the tonal system.) Ironically, considering how widely he was seen as a symbol of artistic excess, Stockhausen understood serialism as a stabilizing force; he believed its ability to integrate many complex phenomena under a single formal principle offered an antidote to the chaotic jumble of postmodern culture. In many respects, Stockhausen was a surprisingly traditional thinker, concerned above all with order and hierarchy. Late in his life, in the ultimate act of avant-garde sacrilege, he declared “I prefer the works of a Tchaikovsky to those of a John Cage.”¹⁸

Stockhausen’s serialism takes a new twist in KLANG. The fifth hour, HARMONIEN (Harmonies) is a solo that exists in three different versions for bass clarinet, flute, and trumpet. The following hour, SCHÖNHEIT (Beauty) was created by taking the three individual parts of HARMONIEN, reconfiguring their internal sections, and superimposing them, thus making a trio that can be seen as a “remix” of the solo movement on which it is based. In the following six hours, each consisting of a trio for a different group of three instruments, the serial principle is applied on the highest formal level: in each piece we hear a different ordering of the five original sections of SCHÖNHEIT. This technique of generating derivative compositions was, in part, practical: Stockhausen was likely aware that he did not have much longer to live and hoped to finish KLANG before his death. At the same time, his approach is entirely consistent with his understanding of the serial principle as a means of generating multiplicity from unity. In his own words, “There is a hidden power of cohesion, a relatedness among the proportions: a structure. Not similar things in a chang-

ing light. Rather this: different shapes in a constant, all-pervading light.”¹⁹ The perceptual correlate of serialism in Stockhausen’s music is a listening experience that is kaleidoscopic and constantly renewed—always different and yet, at a deeper level, always the same.

