Fear of Music: Why People Get Rothko But Don't Get Stockhausen
By David Stubbs (Zero Books, £9.99)

The writer Joe Queenan caused a minor rumpus in the austere world of contemporary classical music last year, by complaining about how painful much of it is. He called Berio's *Sinfonia* (1968) "35 minutes of non-stop torture," Stockhausen's *Kontra-Punkte* (1953) like "a cat running up and down the piano" and Birtwistle's latest opera *The Minotaur* "funereal caterwauling." "A hundred years after Schoenberg," he wrote, "the public still doesn't like anything after *Transfigured Night*, and even that is a stretch."

Inevitably, Queenan was lambasted as a reactionary philistine. Performances of "modern" works like this were well attended, his critics said. And while Queenan took pains to distance himself from the conservative concert-goers who demand a steady diet of Mozart and Brahms, his comments were denounced as the same old clichés. Yet clichés become clichés for a reason. It's true that these challenging works will find audiences in London's highbrow venues, but the fact remains that Stockhausen and Penderecki, whose works are now as old as "Rock Around the Clock," have not been assimilated into the classical canon in the way that Ravel and Stravinsky have. When someone like Queenan has earnestly tried and failed to appreciate this "new" music, it's fair to ask what the problem is.

David Stubbs considers this important question in *Fear of Music*, but doesn't come close to answering it. His speculative suggestion—that musical performance lacks an "original object" that, in the case of visual art, may become the subject of veneration or trade—clearly has little force, given that it applies equally to Beethoven and Birtwistle. Indeed, Stubbs's analysis is part of the problem rather than the solution. Like economists trying to understand market crashes, he wants to place all the motive forces outside the system: his gaze never fixes on the music itself. To Stubbs, our responses to music are determined by our context and perspective, not by the music itself. His comparison of visual and musical art takes no account of how the two are processed in cognitive terms.

In explaining fear of the avant-garde through ideology, Stubbs is in good company. Theodor Adorno, perhaps the 20th century's most renowned social theorist, was a passionate advocate of Schoenberg's atonal modernism for political reasons: tonality, he declared, was the bastion of bourgeois complacency. Following Adorno's lead, the hardline musical modernists of the 1950s and 1960s treated any hint of tonality as a form of recidivism to be denounced with Maoist vigour; Pierre Boulez refused for a time even to speak to tonal composers. Similarly, the American composer Milton Babbitt's provocative 1958 essay "Who Cares if You Listen?" argued that it was time for serious composers to withdraw from public engagement, while offering nothing in the way of explanation for the public's antipathy to "difficult" music except a belief that they were too ill-informed to understand it.

No one can deny that audiences are conservative, whether they be Parisians rioting at the première of the *Rite of Spring* in 1913 or punks lobbing bottles at the art-rock group Suicide when they went on tour with the Clash. And Stubbs himself is justifiably indignant at the fact that even fans of conceptual art will parrot trite witticisms about the "cacophony" of much experimental music. But the understanding of the cognitive mechanisms of music that has emerged in recent years implies that it is not enough to tell ingrates bemused by Stockhausen to try harder.

There are certainly parallels in the way we make sense of acoustic and visual information. Chief among these rules are the "Gestalt principles" identified by a group of German psychologists in the early 20th century. These are a series of rules applied within every human mind that help people to make good guesses at how to interpret complex sensory stimuli by grouping them together. We make assumptions about continuity, for example: the aeroplane that flies into a cloud is the same one that flies out the other side. We group objects that look similar, or that are close together. Although the Gestalt principles are not foolproof, they make the world more comprehensible. Both in sound and in vision, the ability to interpret sensory data this way must have had evolutionary benefits.

One difference between the avant-garde in music and in visual art, however, is that it is possible for music to defy these organising principles in a way that visual art cannot. Although some viewers may fret that they cannot "understand" what is in front of them, it takes no more cognitive effort to "see" a painting by Mark Rothko than it does to look at wallpaper. The fact we can see it at all as a coherent object gives our interpretive mind something to work on, even if it comes up with nothing more than a vague sense of beauty or absurdity. Music can defy even this basic sort of cognitive parsing: it can refute our efforts to find coherence, rather as if a video artist were to present us with unstructured static. The problem is made worse by the dynamic and pervasive quality of sound: even Jackson Pollock's chaos is contained, while sound is at

once everywhere and constantly shifting.

Many musicologists accept a definition of music as "organised sound." Yet sound is structured into music not on paper, nor even in the mind of the composer, but in the mind of the listener. Music is sound in which the organisation must be audibly perceptible to a listener, not just theoretically present—and it is in this question of perception that it differs from other arts.

When we encounter unfamiliar music, we may need to adjust some of our decoding rules, or learn new ones, before we can truly hear it as music rather than merely as sound. There are, however, a number of universal principles that come into play in differentiating music from mere noise. For example, melodies that move in small steps tend to sound unified and "good," while ones with large and frequent jumps between high and low notes are liable to seem fragmented and harder to make out. Regular rhythms also contribute to coherence, while erratic ones often confuse us.

The composer's job is to manipulate the expectations that these principles produce—enough to avoid predictability and create a lively musical surface, but not so much as to lose coherence. Out of the interplay between expectation and reality comes much of music's capacity to excite and move us. But what happens if these rules are undermined? In Boulez's *Structures I* or Stockhausen's *Klavierstück VII*, say, there is no discernible rhythm, and the melody line, if one can call it that, is as jagged as the Dolomites. In this situation, we can develop no expectations about the music, and this absence of an audible relationship between one note and the next cuts off a key channel of musical affect.

And yet how can *Structures I* lack structure? It is one of the most "structured" pieces of music ever written. It was composed using "integral serialism," a method related to the 12-tone or "serial" method introduced in the 1920s by Schoenberg. The serial method ensures that no note is used more often than any other within a piece of music, so that the piece cannot become anchored to any particular musical key, as it always would have been in the "tonal" western classical tradition to that date. By the 1950s, serialism had become, in many schools of classical composition, the only respectable way to compose; anything hinting at tonality was considered passé and bourgeois. Yet Schoenberg not only failed to justify his horror of tonality but never came to terms with what its abandonment implied for composer and listener. Since atonality has no tonal "home," there was nowhere to depart from or return to, so that beginnings, endings and structure became problematic.

This is not to say that atonality in general, and serialism in particular, is doomed to sound aimless and incomprehensible. There are plenty of other parameters that a composer can deploy to create coherent structures, and many have done so to great effect. But, as integral serialism and other techniques progressively and systematically subverted other means of providing audible organisation, it was unsurprising that audiences found the music harder to understand. The serialist's rules are not ones that can be heard. Boulez's serial piece *Le Marteau Sans Maître* was acclaimed when premièred in 1955, but it took over two decades for anyone else to figure out how it was serial: no one could deduce analytically, let alone hear, the organisational structure.

This is not to imply that music must return to tonal composition. But "experimental" music can surely only qualify as an experiment if it includes the possibility of failure. And if musical composition takes no account of cognition—denies that cognition has a role to play, or actively frustrates it—then composers cannot complain when their music is unloved.

Sadly, although these difficulties afflict only one strand of modern classical music, the fact that it was once dominant means that all the rest get tarred with the same brush. Often the only thing that stands in the way of comprehension is a refusal to adapt on the part of audiences—to realise that it is no good trying to hear all music the way we hear Mozart. We need to find other "listening strategies."

It could benefit all concerned if some experimental music, like much of Stockhausen's oeuvre and certainly the ambient noises of John Cage's silent *4'33"*, were viewed as "sound art," a term coined by composer Dan Lander and anticipated by the futurist Luigi Russolo's 1913 manifesto "The Art of Noises". That way, one is not led to expect from these compositions what we expect of actual music. For if music is not acknowledged as a mental process, sound is all that remains.

Philip Ball is a science writer and author. His book "The Music Instinct" (Bodley Head) will be published in spring 2010