The goal of this study is to elucidate the musical meanings behind some of the more unusual passages in one of Thelonious Monk's best-known compositions, "Ruby, My Dear." A five-note scale-degree set is identified that appears on the surface level of the A sections and the bridge, and on a higher structural level as the set of all tonalities established by authentic cadence throughout the piece, including the final tonality at the end of the coda. Pitch-class inversion operations are found to govern the internal structure of three particularly unusual passages, and in two of them, are found to highlight the global dominant in conjunction with the higher-level manifestation of the set described above, helping to prepare the final cadence of the piece. Far from being gratuitously non-conformist, then, Monk's unusual passages — his "Monkish" moments, as it were — are found to play key roles in the logical unfolding of this piece.