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The intensities of the *f* ↔ *f* transitions of trivalent lanthanide ions have been discussed many times in the scientific literature (e. g. in R. D. Peacock, Structure and Bonding, 22 (1975) 83-122). In this talk, the relative intensities of the $^5D_0 \rightarrow {}^7F_J$ (J=0, 1, 2, 4) transitions of Eu^{3+} in crystalline hosts will be considered. Several examples, taken from my research work, will be described, showing an uncommon or unexpected behaviour of the observed relative intensities of the $^5D_0 \rightarrow {}^7F_J$ transitions. The reasons for these anomalies will be presented and discussed on the basis of existing theories. The local structure at the Eu^{3+} ion, the presence of disorder, the ligand polarizability and the effect of vibronic coupling are found to be responsible for the observed behaviour.