We apply metric and non-metric multidimensional scaling to voting patterns in the U.S. Supreme Court over the period 1953-1991 for each of the 15 nine member "natural courts" during this time period in which a substantial number of cases were heard by the full court. We show that voting in the Supreme Court has been largely unidimensional (with a two-dimensional solution explaining virtually all of the variance) and that the fit of a purely unidimensional model has never been higher than in the Rehnquist Courts. While the exact numerical values of MDS-obtained locations cannot be compared across different "natural courts," the positions of justices across their careers relative to the courts on which they served can be traced. Given the fundamental unidimensionality in the data, we are able to determine the identity of "median" members of each court and show how the "relative" centrism of particular justices changes over time. We consider the degree to which such shifts reflect changes in the composition of the court as opposed to changes in the judicial philosophies of individual justices. Our data show overwhelming quantified evidence of a very strong rightward drift in the composition of the court as we move from the Warren Court to the Burger Court and again as we move from the Burger Court to the Rehnquist Court.