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Ellen J Goldstein* (ellen.goldstein@bc.edu), Department of Mathematics, Carney Hall,
Room 301, Boston College, Chestnut Hill, MA 02467. *A generalization of Young diagrams.*

It is well known that an endomorphism X of a finite dimensional vector space V over an algebraically closed field K is determined by its Jordan normal form up to conjugation by $\mathrm{GL}(V)$. If X acts nilpotently, we obtain from the sizes of the Jordan blocks a partition of $n = \dim V$ and thus a Young diagram corresponding to the conjugacy class of X . We present a generalization of Young diagrams, called *ab*-diagrams, that classify pairs (A, B) of linear maps between vector spaces U and V . These have been used to study the geometry of nilpotent orbit closures in the classical groups, most recently by the author in generalizing to prime characteristic results of Kraft and Procesi regarding the normality of nilpotent orbit closures in the orthogonal and symplectic groups. Time permitting, we will see how quivers can be used to classify so-called *orthosymplectic nilpotent pairs* in this setting. (Received August 31, 2014)