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Jacob North Clark* (jnc6w3@mail.missouri.edu) and **Stephen Montgomery-Smith** (stephen@missouri.edu). *Shapley-like values without symmetry*. Preliminary report.

Following the work of Lloyd Shapley on the Shapley value, and tangentially the work of Guillermo Owen, we offer an alternative non-probabilistic formulation of part of the work of Robert J. Weber in his 1978 paper “Probabilistic values for games.” Specifically, we focus upon efficient but not symmetric allocations of value for cooperative games. We offer an alternative condition “reasonableness,” and retain standard efficiency and linearity to replace the usual axioms. In the pursuit of the result, we discover properties of the linear maps that describe the allocations. This culminates in a special class of games for which any other map that is “reasonable, efficient” can be written as a convex combination of members of this special class of allocations, via an application of the Krein-Milman theorem. (Received August 22, 2018)