1003-11-1665 **Oscar G Villareal*** (`oscar@math.berkeley.edu`), PO Box 4491, Berkeley, CA 94704-0491.
Countable Unions of Subvarieties of Varieties defined over $\overline{\mathbb{Q}}$. Preliminary report.

Let A be an abelian variety defined over $\overline{\mathbb{Q}}$ and let X be a proper subvariety. Let $\mathrm{Maps}(A)$ be the set of all maps from A to itself. We study subsets $I \subset \mathrm{Maps}(A)$ for which the set $B = \bigcup_{f \in I} f(X(\overline{\mathbb{Q}}))$ does not equal $A(\overline{\mathbb{Q}})$. In particular, we may take I to be the monoid generated by all the automorphisms plus finitely many translations, the set of all surjective endomorphisms or, in special cases, the set of all non-surjective endomorphisms. (Received October 06, 2004)