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We investigate if the actions by individuals in creating effective new innovations are aligned with the reuse of those innovations by others in a private-collective software development context. This relationship is studied in the setting of eleven “wiki-like” programming contests, where contest submissions are open for reuse by others, each involving more than one hundred contributors and several thousand attempts to generate, over a one-week period, the “best” software solution to a difficult programming challenge. We find that greater amounts of new code and novel recombinations of others' code, in a contest submission, increases both the probability of achieving top rank and the subsequent reuse by others in their own submission (community value). While, increasing use of borrowed code in a submission reduces the probability of achieving top rank, but increases the community value of the submission. Code structures that are more non-conforming to commonly accepted programming conventions similarly increase the probability of generating a top performer, but reduce subsequent reuse by others. Surprisingly, greater code complexity in a submission increases both the odds of generating a top performing entry and its community value. We discuss the implications of these findings in light of the literature on private-collective innovation with an emphasis on the importance of considering both individual and community perspectives as they relate to knowledge creation, reuse and recombination for innovation.