The Past, Present, and Future of the R Project – Social Organization of the R Project

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Much of the work in the social sciences on the development of open-source software focuses on the issue of motivation: Why do individuals or organizations participate in open-source projects? Is their participation rational? Voluntary activity is, however, a natural part of social life, and I find it more interesting to ask how an open-source project, such as the R Project for Statistical Computing, is organized, and how its social organization contributes to the success – or lack of success – of the project. After all, anarchic voluntary cooperation does not, on the face of it, seem a promising approach to developing a complex product such as statistical software. My investigation, based partly on interviews with members of the R Core team and with other individuals closely associated with the R Project, suggests that the success of R is due to a number of factors. Some of these factors, such as the implementation of a division of labour (albeit an informal one), are common to most organizations; other factors, such as the clever social use of technology (e.g., version control and package systems), are specifically adapted to the development of software; and still others, such as the adoption of the S language, which was already in wide use prior to the introduction of R, are particular to R.