The table shows that the method can be very effective even if the individual functions do not tend to zero at the minimum. The number of function values quoted for $\delta = 0$ is less than the corresponding number in Table 1, because the minimum is better determined in the experiment, as there are twice as many functions as variables.

This paper would not be complete without the example showing the effect of the procedure on Rosenbrock's (1960) minimization problem

$$f^{(1)} = 10(x_2 - x_1^2), f^{(2)} = 1 - x_1. \qquad (36)$$

Because there are only two variables, the results of each iteration are given in Table 3. The total number of function values required is 70, and during the iterations the progress can best be described as "lively." Once the corner of the parabolic valley has been turned, the variables increase monotonically to their final values, the eventual convergence being particularly impressive.

As well as being tried on the examples presented, the procedure has been used to solve a number of practical problems at A.E.R.E. It has proved thoroughly successful, and it is particularly encouraging that there appears to be no tendency for the method to become less efficient as the number of variables is increased.

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