

Definition 5.1.2 (Gries, p. 90)

Let b be an array function.

Let i be any expression.

Let e be an expression of the type of the array elements.

Then $(b; i : e)$ is_{df} the array function that is the same as b except that, when applied to the value of i , it yields e :

$$(b; i : e)[j] =_{df} \begin{cases} e & \text{if } i = j \\ b[j] & \text{if } i \neq j \end{cases}$$