

SICP Exercise 3.20

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The environment structure created by evaluating `(define x (cons 1 2))` and `(define z (cons x x))` is given as follows.

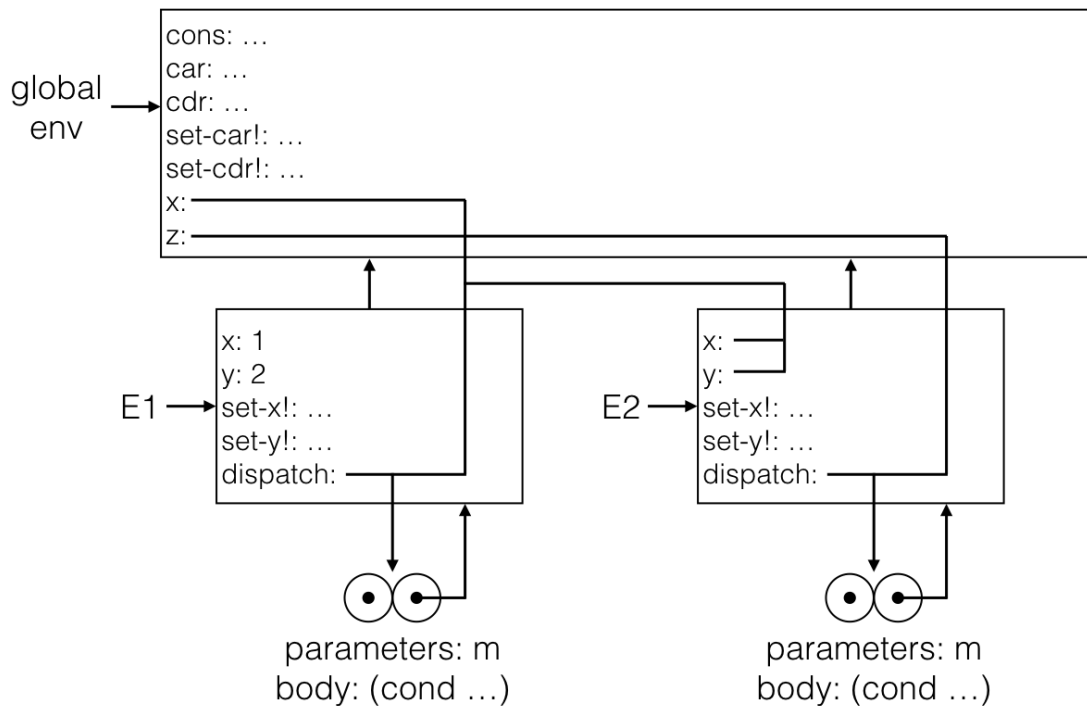


Figure 1: Effect of `(define x (cons 1 2))` and `(define z (cons x x))`.

The environment structures created by evaluating `(set-car! (cdr z) 17)` and by evaluating `(car x)` are given as follows, respectively.

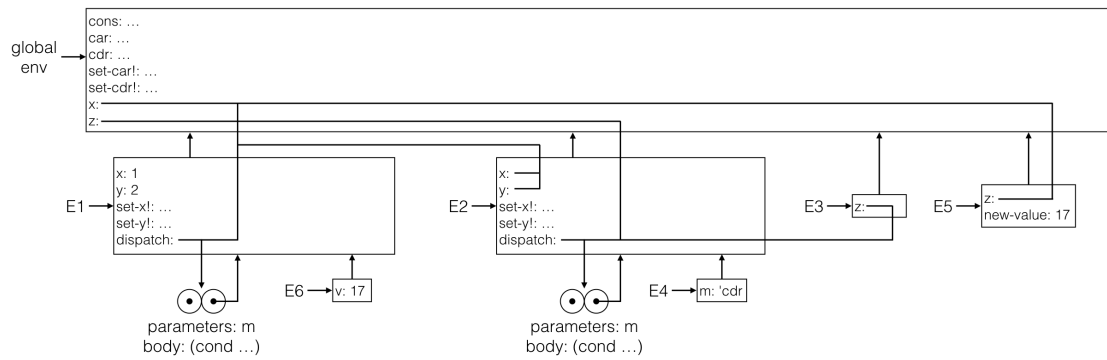


Figure 2: Effect of `(set-car! (cdr z) 17)`.

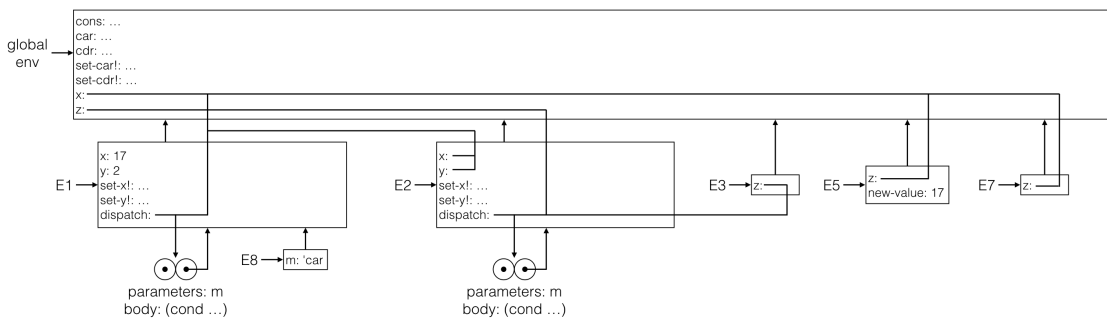


Figure 3: Effect of `(car x)`.