## **LValue**

AnIvalue is a syntax element that represents a target that can be assigned values. The syntax of anIvalue is a member-path: A sequence of identifiers separated by dots. Example: 'a',foo.bar.baz . The first identifier must be a mutable local variable (defined with themut keyword). Each subsequent identifier must be a member of the type of the previous identifier, assuming the previous identifier is of astruct type.

## Mutability in an immutable world

A common misconception about assigning to Ivalues is that it somehow changes the memory. However, Cairo's memory model is immutable. Values are immutable, and cannot be changed. However, variablescan refer to different values. A variable does not represent a single memory target. Instead, it is a logical placeholder for some memory target. The meaning of assignment is that the variable now refers to a different memory target.

## Member borrowing

Assigning to a member path (e.g.a.b) is possible since the compiler keeps track of the individual member values. Not only variables are now logical placeholders, but also members.

6.2 Assignment statement 6.4 Item statement ŏ§