Lists in Prolog

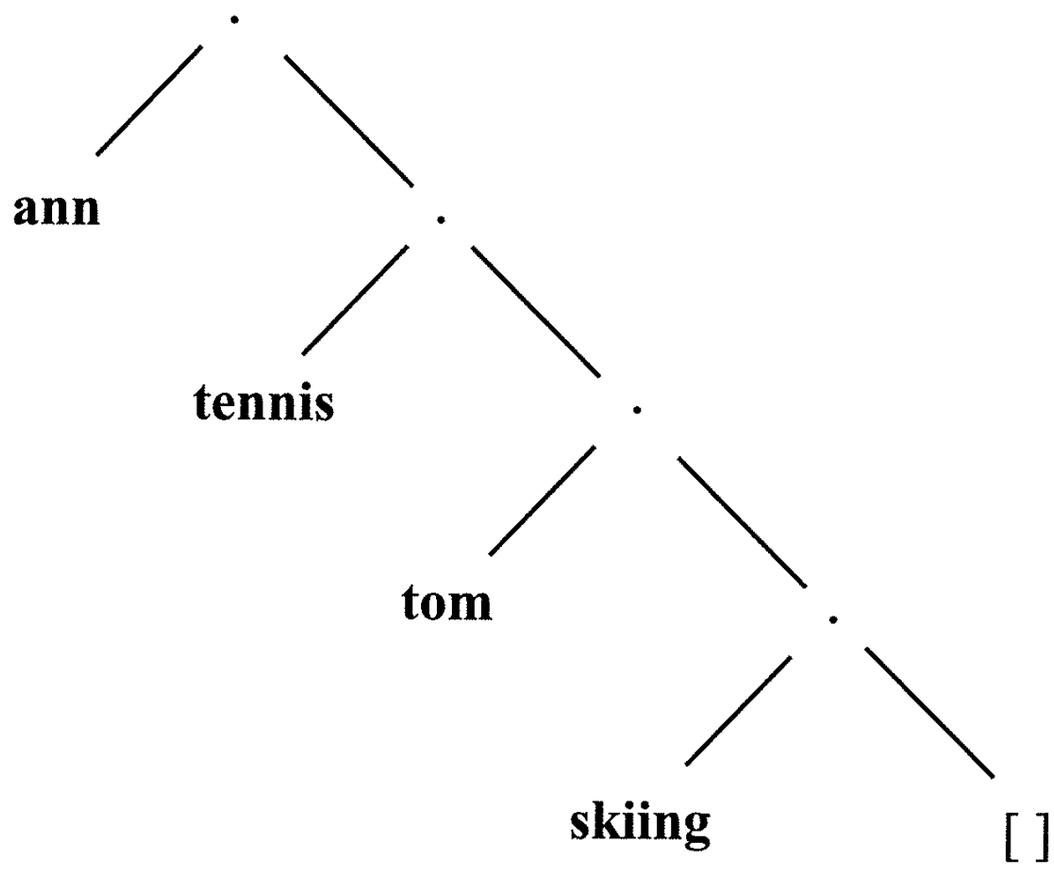

Figure 3.1 Tree representation of the list [**ann, tennis, tom, skiing**]

```
'.'(ann, '.'(tennis, '.'(tom, '.'(skiing, [])))).
```

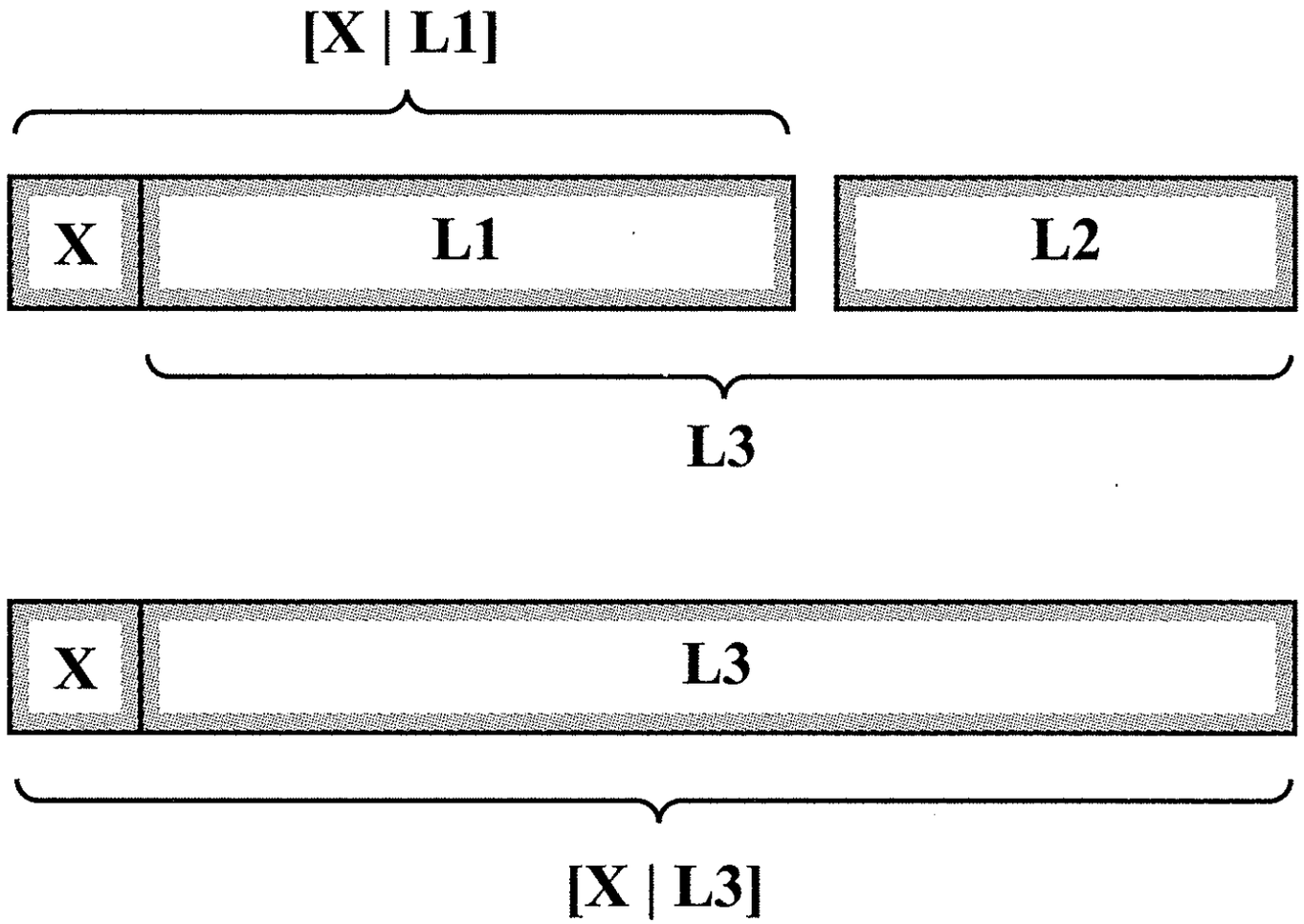

Figure 3.2 Concatenation of lists.

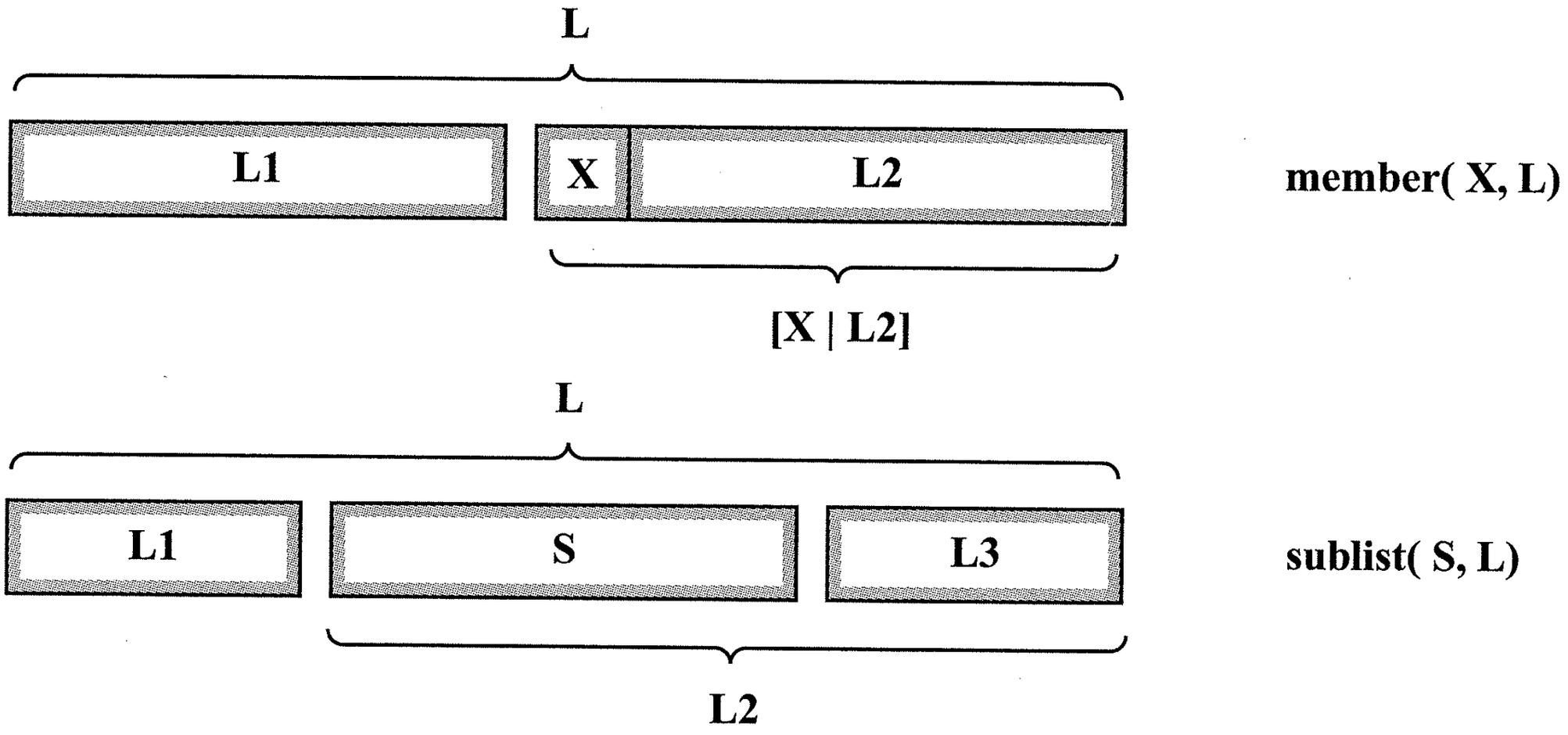

Figure 3.4 The **member** and **sublist** relations.

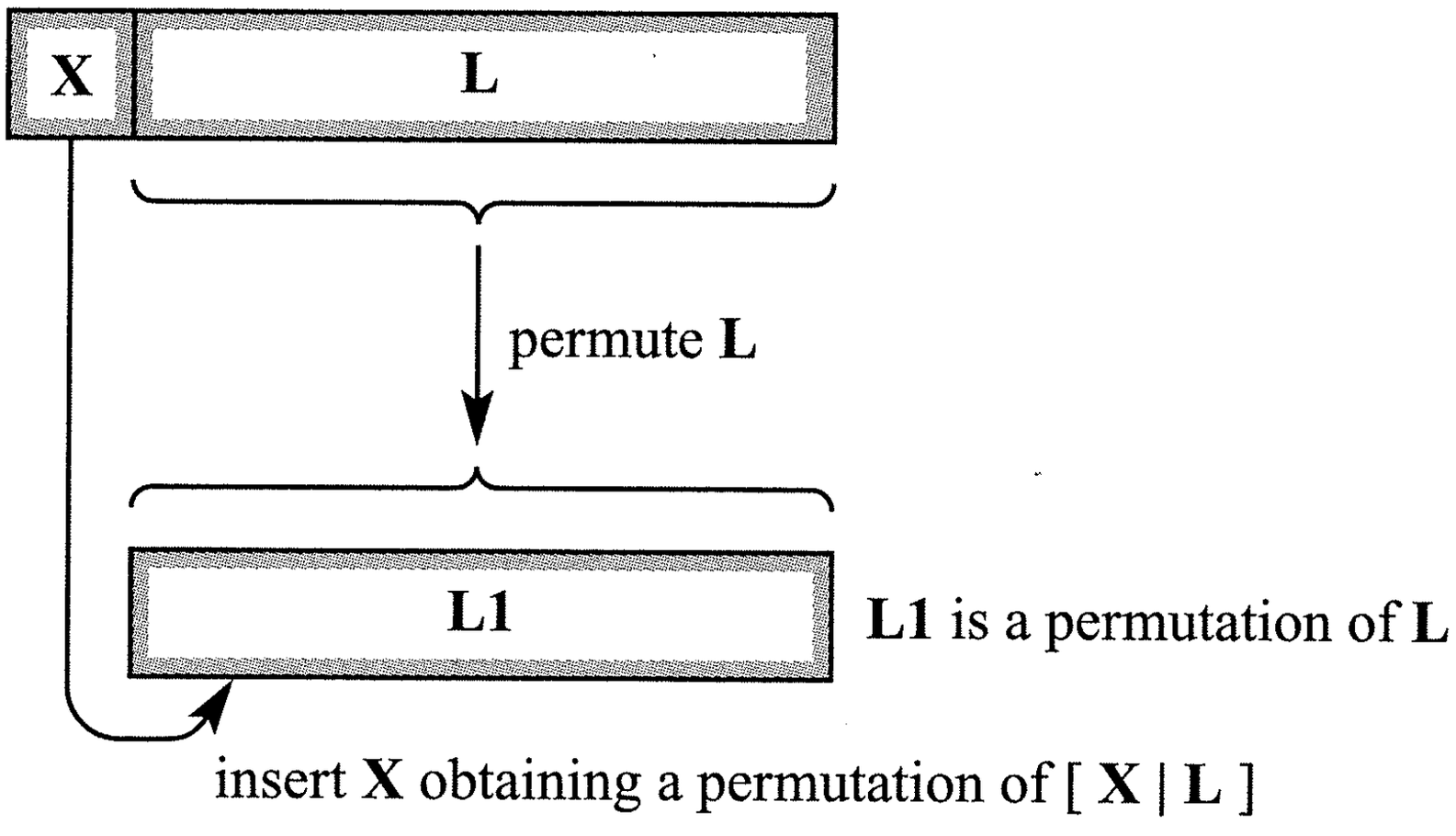

Figure 3.5 One way of constructing a permutation of the list [X | L].

The `is` operator

Forces evaluation.

Similar to the assignment statement.

The left argument is a simple object.

+	addition
−	subtraction
*	multiplication
/	division
**	power
//	integer division
mod	modulo, the remainder of integer division

X > Y	X is greater than Y
X < Y	X is less than Y
X >= Y	X is greater than or equal to Y
X =< Y	X is less than or equal to Y
X =:= Y	the values of X and Y are equal
X =\= Y	the values of X and Y are not equal