Names in PlusCal Code

Each label name is used as the name of a defined action. Had we used p as a label instead of p1, the translation could not have used p as the name of the action because it would have conflicted with the variable name p. The translator would have chosen a different name (by default, the name p_-). Similarly, had we used the same label in the two different processes, a different name would have been used for one of the corresponding actions.

This kind of renaming makes the TLA⁺ translation harder to understand. In the hyperbook, I will choose names that avoid renaming. You should do the same for your algorithms if you want to read the translations—for example, if you are writing rigorous correctness proofs. The translator adds a comment at the beginning of the translation to indicate any renaming that it did.