

Only a matter of style?

For educational purposes we analyse the opening pages of an 11-page article that appeared in The American Mathematical Monthly, Volume 102 Number 2/February 1995. We have added line numbers in the right margin.

line 4: Since in this article, squares don't get alternating colours, it could be argued that the term "chessboard" is misplaced.

line 4: The introduction of the name "B" seems unnecessary: it is used -in the combination "the board B"- in the text for Figure 1 and in line 71; in both cases just "the board" would have done fine. In line 77 occurs the last use of B, viz. in " $X \subset B$ ", which is dubious since B was a board and not a set; in line 77, I would have preferred "Given a set X of cells".

line 7/8: The first move, being a move like any other, does not deserve a separate discription. The term "step" is redundant.

line 8: Why not "a move consists of"?

line 10/11: At this stage the italics are puzzling, since a move is possible if,

for some i, j , cell (i, j) contains a pebble and cells $(i+1, j)$ and $(i, j+1)$ are empty.

line 10: Twice the term "positions" for what everywhere else is called "cells".

line 12: Why not "After k moves the board has $k+1$ pebbles on it."?

line 12/14: In the one sentence, k counts moves, in the other k counts pebbles. Since the prose does not indicate the scope of dummies, this double use of the same k is a little bit unforgivable.

line 14: "and we set $R := \bigcup_{k \geq 1} R(k)$ ". We remark

- the use of the verb "to set" when defining (the set!) R can be considered unfortunate
- since " R " is not used on the next two pages, the name seems to be introduced too early
- the introduction of the name R seems unnecessary; in the rest of the paper I saw it used once in " $\text{any } C \in R$ ", where "any reachable configuration" would have done. (Note. In the context in question -p 116- the reachable context can remain anonymous: the quoted occurrence of C is the only occurrence of the identifier C in that context. My conclusion is that the reachable configuration has been