Report

on the revised version of the paper

Hardy's inequality in variable ...

by

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In the revised version the authors mainly took into account the comments of the 1st report, in particular they excluded the case $M = \infty$ in Theorem 5.2 and made corrections of the proof of that theorem.

Still some slight changes should be made before the publication of the paper.

1. The fact that the validity of the Hardy inequality with variable exponent $p(x)$ depends only on the information about the behavior of $p(x)$ near the boundary, was already discovered in the one-dimensional case in [13]. Non-mentioning this in the beginning of Section 5 is not quite fair in this relation.

2. (**This comment is optional**). It might have sense to mention explicitly in Theorem 3.3 that

$$a_0 = \frac{1}{\|M\|_{p(\cdot)} \cdot C_0} \qquad C_0 = \sup_{\substack{x \in \Omega \\ u \in W_0^{1,p(\cdot)}(\Omega)}} \frac{|u(x)|}{\delta(x) M[\nabla u(x)]},$$

probably, as a remark after that theorem.

3. Some misprints should be also corrected:

a) Page 4, line 5. In the end of the formula there should be $\|_{p(x)}$ instead of $\|_{p(x)a}$

b) Page 8, line 8_. There should be "number" instead of "number number".

The paper is recommended for publication after the corresponding slight changes.