

Dear **John A.R. Legon**,

3/26/2020 5:35:30 AM.

Before you, I had known **Perring, Smyth, Petrie**, etc. because of their works at the Giza Pyramids. But while I'm working in the pyramid of KHAFRE, I couldn't understand the 11,54 M measurement of **Maragioglio-Rinaldi** for the level of the basement of the existing upper passage from the ground platform (See "5,1 Maragioglio, V; Rinaldi, C - L'architettura delle piramidi menfite Testo Le Piramidi di Zedefrà e di Chefren (1966) LR" and "5,2 Maragioglio, V; Rinaldi, C - L'architettura delle piramidi menfite Tavole Le Piramidi di Zedefrà e di Chefren (1966) LR").

**PROBLEM:** According to the measurements of **Maragioglio-Rinaldi**, the levels (heights) of the first 9 stones in front of the door in TAV 8/fig. 1:

1<sup>st</sup> stone: 1,14 M

2<sup>nd</sup> stone: 1,17 M

3<sup>rd</sup> stone: 1,15 M

4-5<sup>th</sup> stones: 1,92 M

6<sup>th</sup> stone: 0,85 M

7<sup>th</sup> stone: 1,23 M

8<sup>th</sup> stone: 0,98 M

9<sup>th</sup> stone: 0,83 M

and sum of these is

$$(1) \quad 1,14 + 1,17 + 1,15 + 1,92 + 0,85 + 1,23 + 0,98 + 0,83 = 9,27 \text{ M.}$$

But 11<sup>th</sup> stone is on its slope of the upper passage and 10<sup>th</sup> stone (which is the support of 11<sup>th</sup> stone) under 11<sup>th</sup> stone is almost on the slope of the passage. Therefore their total level with the best approached is:

$$(2) \quad (1,36 + 0,90)\text{Cos}26^\circ 30' = 2,26. \text{Cos}26^\circ 30' \cong 2,023 \text{ M.}$$

Now we find the level of the basement of the existing upper passage from the ground platform of the pyramid according to (1) and (2):

$$(3) \quad 9,27 + 2,023 = 11,293 \text{ M.}$$

Whereas **Maragioglio-Rinaldi** gave it as 11,54 M (See TAV. 6/fig. 10 and TAV. 7/fig. 1).

On the other hand, in 1837 British civil engineer **John Shae Perring** measured the level in the same place as 37' 8" or 11,4808 M (See "The Pyramids of Gizeh-1840"). But due to the wear in the pyramid, the measurement location has changed in 1966, so the level may have dropped slightly!

**Leon Cooper** reports this level as 12,9 M and that the large Horizontal passage is under 3,55 M from the pyramid ground platform in "[Ancient Egyptian Pyramid Design: The Khafre \(aka Chephren\) Pyramid](#)" (See "[THE DESIGN OF THE PYRAMID OF KHAEFRE, Tables I and II, pp.30 – 31](#)").

**MY QUESTIONS:** You too, do you agree with the result in (3) according to the measurements of the stones in TAV 8/fig. 1? What is the truth for you?

**NOTE:** I give you the following files in the attachment:

1. **Maragioglio, V-Rinaldi, C:** 5.1-L'architettura delle piramidi menfite Testo Le Piramidi di Zedefrà e di Chefren (1966) LR.
2. **Maragioglio, V-Rinaldi, C:** 5.2-L'architettura delle piramidi menfite Tavole Le Piramidi di Zedefrà e di Chefren (1966) LR.
3. **Perring, John Shae:** The Pyramids of Gizeh-1840.
4. LR-8.pdf.
5. LR-8.dwg.

Sincerely, **D. PAMUKTULUM**.