Corrigenda

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1. Replace in [1] Section C (from page 72 to the 4th paragraph of page 74) by:

Theorem 3.

Under the hypothesis of Theorem 2, the sequence $(A_1, A_2, ...)$ converges to the Lebesgue area of the surface.

Proof:

Corresponding to the sequence (Π_1, Π_2, \ldots) there is the sequence $(F_{1xy}, F_{2xy}, \ldots)$. We may choose this so that $F_{(n+1)xy}$ is a refinement of F_{nxy} . Let the corresponding sequence of the polyhedral areas be $(A_{1xy}, A_{2xy}, \ldots)$. Since Lebesgue surface area is completely additive, it follows by [1] that this sequence converges to the Lebesgue area of a portion of S.

Similarly, corresponding to the sequence $(F_{1xz}, F_{2xz}, \ldots)$ the sequence $(A_{1xz}, A_{2xz}, \ldots)$ converges to the Lebesgue area of a second portion of S.

Similarly, corresponding to the sequence $(F_{1yz}, F_{2yz}, \ldots)$ the sequence $(A_{1yz}, A_{2yz}, \ldots)$ converges to the Lebesgue area of a third portion of S.

It is seen that the above three portions of S constitute a decomposition of S, these portions being disjoint except for boundary points. It now follows that the sequence (A_1, A_2, \ldots) converges to the Lebesgue area of S.

2. Replace the last two lines of the 1st paragraph of page 75 by: Polyhedral areas converges to the Lebesgue area

$$L_{\varepsilon}$$
 of $S = F(E_{\varepsilon})$.

3. a) From page 75 to the end of the paper replace

$$\int_{E_{\varepsilon_1}} \sqrt{J_1^2 + J_2^2 + J_3^2} \, d(u, v) \text{ by } L_{\varepsilon_1}; \quad \int_E \sqrt{J_1^2 + J_2^2 + J_3^2} \, d(u, v) \text{ by } L_{\varepsilon};$$

$$\int_{E_{\varepsilon_2}} \sqrt{J_1^2 + J_2^2 + J_3^2} \, d(u, v) \text{ by } L_{\varepsilon_2}.$$

b) Omit the last sentence on page 75.

Reference

[1] TORALBALLA, L. V.: A Geometric Theory of Surface Area. Part II: Triangulable Parametric Surfaces. Monatsh. Math. 76, 66-77 (1972).

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