

Correction to: Analytic Function Theory of Several Variables



Correction to:

**J. Noguchi, *Analytic Function Theory of Several Variables*,
<https://doi.org/10.1007/978-981-10-0291-5>**

In the following numbered list, the first number is the page number; the second is the line number from above (the number with minus sign means the line number from the bottom), and: “A \Rightarrow B” means that text A is corrected to text B.

- 1) xi; 7: oppotunities \Rightarrow opportunities
- 2) xi; -11: opporunity \Rightarrow opportunity
- 3) 19; 6 (the first raw in the determinat):

$$\frac{\partial f_1}{\partial w_1} \frac{\partial f_1}{\partial w_1} \frac{\partial f_1}{\partial w_2} i \frac{\partial f_1}{\partial w_2}$$
$$\dots \Rightarrow \frac{\partial f_1}{\partial w_1} i \frac{\partial f_1}{\partial w_1} \frac{\partial f_1}{\partial w_2} i \frac{\partial f_1}{\partial w_2} \dots$$

- 4) 31; -1: $\mathbf{Z} \Rightarrow \mathbf{Z} \setminus \{0\}$
- 5) 43; 10: $(\beta_1 \cdots \beta_n)^n \Rightarrow (\beta_1 \cdots \beta_n)^m$
- 6) 57; -4: $q. \text{ we} \Rightarrow q, \text{ we}$
- 7) 58; 5: $\sum_{v=0}^{p'} \Rightarrow \sum_{v=0}^{p'-1}$
- 8) 58; 14: $\mathcal{O}_{\mathbb{P}\Delta_{n-1}}^{p+p'} \Rightarrow \mathcal{O}_{\mathbb{P}\Delta_{n-1}}^{p+p'(q-1)}$
- 9) 59; 3: constants \Rightarrow constants in z_n

The updated original version of the book can be found at
<https://doi.org/10.1007/978-981-10-0291-5>

- 10) 60; -3, -1: $\begin{pmatrix} 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{pmatrix} \Rightarrow \begin{pmatrix} 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{pmatrix}$
- 11) 62; -14, -12: $a_j \Rightarrow t_j$
- 12) 62; -5: $w(w(z)) \Rightarrow w(z)$
- 13) 109; -6: $\eta(\xi_1, \dots, \xi_q) \in \mathcal{E}^{(q)}(X) \times (\mathcal{X}(X))^q \rightarrow \mathcal{E}(X). \Rightarrow \eta : (\xi_1, \dots, \xi_q) \in (\mathcal{X}(X))^q \rightarrow \eta(\xi_1, \dots, \xi_q) \in \mathcal{E}(X).$
- 14) 110; 11: $C^0(\mathcal{U}, X) \Rightarrow C^0(\mathcal{U}, \mathcal{O}_X)$
- 15) 129; -1: was was \Rightarrow was
- 16) 152; -4: $\mathbf{N}^2. \Rightarrow \mathbf{N}^2$, where $|0|^k := 1$ and $|0|^l := 1.$
- 17) 199; -2: $F^{-2} \Rightarrow F^{-}$
- 18) 201; -12: (5.3.2) \Rightarrow (5.3.3)
- 19) 204; -6: $\frac{z_u}{z_r} \Rightarrow \frac{z_u}{z_i}$
- 20) 229; -7: $\underline{X}_a \Rightarrow \underline{X}_a$
- 21) 273; 1: $\mathcal{I}\langle Y \rangle_0 \Rightarrow \mathcal{I}\langle Y \rangle_a$
- 22) 279; -4...-2 (three lines): for $(u, v) \in \mathbf{P}\Delta_2 \subset \mathbf{C}^2, \dots 0 \in \mathbf{P}\Delta_2. \Rightarrow$ for $(u, v) \in \mathbf{C}^2$. Show that $A \cap \{z_1 \neq 0\}$ is an analytic subset of $\{z_1 \neq 0\}$, but that A is not an analytic subset in any neighborhood of $0 \in \mathbf{C}^3$.
- 23) 279; -1: $\mathcal{O}_{2,0} \Rightarrow \mathcal{O}_{3,0}$
- 24) 318; 11: (7.4.4) \Rightarrow (7.4.5)
- 25) 319; 10: $\Omega_\Omega \Rightarrow \mathcal{O}_\Omega$
- 26) 325; -10: making \Rightarrow making use of
- 27) 325; -8...-4 (five lines): *The following ... (i) ... (ii) ... (iii) ... convex. \Rightarrow If a Riemann domain X is holomorphically convex, there is an element $f \in \mathcal{O}(X)$ whose domain of existence is X ; in particular, X is a domain of holomorphy.*
To obtain the converse of this theorem, we have to wait for Oka's Theorem 7.5.43.
- 28) 351; 9: $f \Rightarrow \underline{f}_0$
- 29) 364; -8: $\alpha_1 \Rightarrow \alpha_1^n$
- 30) 364; -8: $\alpha_2 \Rightarrow \alpha_2^n$
- 31) 384; 17: Rossi \Rightarrow Rossi,
- 32) 386; 8, 11-12: <http://www.lib.nara-wu.ac.jp/oka/> \Rightarrow <https://www.nara-wu.ac.jp/aic/gdb/nwugdb/oka/>
- 33) 387; right column 17: Complete continuous \Rightarrow Completely continuous

Corrections to: Analytic Function Theory of Several Variables — Elements of Oka's Coherence, version 2023

In the following numbered list, the first number “p.xx” is the page number; the second “ℓ.yy” is the line number from above (the number with minus sign means the line number from the bottom), and : “A ⇒ B” means that text A is corrected to text B.

- 1) p.56, ℓ.14: z_n -polynomial-like elements ⇒ a z_n -polynomial-like element
- 2) p.318, ℓ.4: $(U_{j_0}, U_{j_1}) ⇒ (U_{j_0} ∩ Ω, U_{j_1} ∩ Ω)$
- 3) p.319, ℓ.1: $V_i ⇒ V_i ∩ Ω$
- 4) p.319, ℓ.6, 8 (2 places): $V_α ∩ V_β ⇒ V_α ∩ V_β ∩ Ω$