

# Errata : Algebraic Combinatorics on Words

This document contains errata for the book *Algebraic Combinatorics on Words*. Page and line numbers refer to the printed version. Please report errors to the author of the chapter or to one of the editors.

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## Finite and Infinite Words

### page 35, line -10

replace the end of the last sentence by “to a vertex in  $X$  if and only if  $A^*X \cap A^n \neq \emptyset$ ”.

## Sturmian Words

### page 56, eq. (2.1.7)

replace  $\dots < 1 + \rho + v_n$  by  $\dots < 1 + \beta + v_n$ . (Kwon, Doyong)

### page 56, line 7

replace  $(x + y, x)$  by  $(x + y, y)$ . (Kwon, Doyong)

### page 57, line 8

replace  $R^{n+i}(\rho)$  by  $R^{n+k}(\rho)$  and replace  $R^{-i}(I_{b_i})$  by  $R^{-k}(I_{b_i})$ . (Kwon, Doyong)

### page 61, last paragraph of the proof of Proposition 2.1.18

It should read: “... We may suppose that  $\beta < \alpha$ . For any factor  $u$  of  $s$  such that  $(\alpha - \beta) \geq 2/|u|$ , one has  $\pi(u) - \alpha > -1/|u|$  by Proposition 2.1.10 whence  $\pi(u) - \beta = (\pi(u) - \alpha) + (\alpha - \beta) \geq 1/|u|$  showing that ...”. (K. Saari, Kwon, Doyong)

**page 67, line -13**

Replace “if follows” by “it follows”. (*Kwon, Doyong*)

**page 72, line 4**

Replace  $(x, y), (x', y')$  by  $(y, x), (y', x')$ . (*Kwon, Doyong*)

**page 79, line 10**

$w^d$  is a *left* special factor. (*C. Reutenauer*)

**page 83, line 3**

$\mu() = \frac{1}{N} \dots$ . (*C. Reutenauer*)

**page 92, lines 14–15**

Replace  $\varphi$  by  $G$  and  $\tilde{\varphi}$  by  $\tilde{G}$  (twice each). (*C. Reutenauer*)

**page 99, line 1**

Replace “only  $1 - \alpha$ ” by “only if  $1 - \alpha$ ”. (*Kwon, Doyong*)

**page 102, line 3, (Exercise 2.1.1)**

Replace “the only two-sided” by “the only non-Sturmian two-sided”. (*D. Perrin*)

**page 108, line -16**

... the infinite word  $01^{k_0}01^{k_1}01^{k_2} \dots$ . (*C. Reutenauer*)

**Numeration Systems****page 243, line 5**

Replace  $f_{F(Y^*)}$  by  $f_{Y^*}$ . (*Kwon, Doyong*)

**page 251, lines 23–24**

Remove the first sentence. (*G. Skordev*)

**References****page 491**

The correct subtitle of Morse and Hedlund (1940) is : II. Sturmian trajectories, and the volume is **62**. (*C. Reutenauer*)