

## Complex Systems: Errata and Changes, Volume 1

All known errata and changes are given below for articles published in *Complex Systems*, Volume 1, 1987.

**Bruce M. Boghosian and C. David Levermore, “A Cellular Automaton for Burgers’ Equation”, pages 17–29**

The two columns of figures on page 27 are transposed; they are labelled correctly.

The words “Below we plot” on page 28 refer to the plots on page 27.

**Daniel G. Maeder, “The Free Energy Concept in Cellular Automaton Models of Solid-Solid Phase Transitions”, pages 131–143**

The caption for figure 2 should be replaced by the following:

Printout of a hypothetical two-dimensional cellular automaton model for a shape memory alloy, at a temperature producing about one-third of martensite in equilibrium with two thirds of austenite. The pattern resembles some enlarged details of figure 1c where the variants A, B, C, D show up as different gray shades. For better contrast, austenitic cells have been represented by colons rather than by a letter. At high temperature, each martensitic plate must shrink into a single permanent “germ” cell of the respective variant. A realistic model should contain very few germs (i.e. crystal defects) per 1000 cells.

**Kristian Lindgren, “Correlations and Random Information in Cellular Automata”, pages 529–543**

Equation (2.11) should be

$$\Delta S_m = S_m - S_{m-1}$$

In section 3, “Algorithmic information theory”, the notation  $h_{(\alpha_m)}$  should be  $h(\alpha_m)$ ,  $\Delta dH_d$  should be  $\Delta_d H_d$ ,  $\Delta ts_\mu$  should be  $\Delta_t s_\mu$ . In equation (4.1),  $\sum_{\alpha_m+2r}$  should be  $\sum_{\alpha_m+2r}$ .

Equation (4.5) should be

$$R(i_{-r} \dots i_r) = i_r + f(i_{-r} \dots i_{r-1}) \bmod 2$$

The second part of equation (4.7) should be

$$\sum_{\beta_m} T_R(\alpha_{m+2r}, \beta_m) = 1$$

The second half of equation (4.14) is missing a right parenthesis before  $p_m(\cdot)$ .

In section 4,  $\Delta t\eta(t)$  should be  $\Delta_t\eta(t)$ .