

# Erratum and Clarifications for *Models of Conflict and Cooperation*

Rick Gillman and David Housman

July, 2011

Page 11: To be clearer, we assume throughout the chapter that North will always play first in **Trickster**, with play moving in a clockwise direction. For the linear notation, the order of play is from left to right.

Page 21, Paragraph 2: The reference is to section five, not to section four.

Page 38, Exercise 11: We should have stated in the problem “a legal move keeps the sum *no greater than* the target” instead of “less than” (to be consistent with section 1). The problem as stated results in a smaller tree than as the problem was intended. The solution manual now includes a solution for both problem statements.

Page 118. There is no error here, but we want to emphasize our definition of *dominates*. We chose to use *strong* dominance ( $>$  in all comparisons) rather than *weak* dominance ( $\geq$  in all comparisons and  $>$  in at least one). Our decision was motivated by the fact that a strongly dominated strategy cannot be part of a Nash equilibrium while a weakly dominated strategy can be part of a Nash equilibrium.

Page 126, Exercise 4: The payoff pair for strategy pair (A,C) should be (5,3). Without this correction, the answer on page 384 would be incorrect.

Page 130: In this section, the payoffs are ordered (Rose, Colin), unless otherwise specified in the text.

Page 139, Exercise 12: In parts (a)-(c), investments can only be made in \$1 increments.

Page 149, Exercise 6: Note that payoffs need not be changed when eliminating some outcomes.

Page 171, Exercise 1, Part (o): The second “is” should be “if”.

Page 181: On the last line of the page, the correct expression for  $q$  is  $\frac{a-e}{(g-c)+(a-e)}$ . The expression given is for  $1 - q$ .

Page 196: More precisely, in a *zero-sum game*, the payoffs in each payoff pair sum to zero. Thus, zero-sum games clearly model situations in which the two players have strictly opposing interests: any gain by one player must come from another player. The discussion on pages 197-198 then suggests that strictly opposing interests may be somewhat obscured but can be recovered by utility transformations. With this more precise zero-sum game definition, our fair game definition makes sense.

Page 202, Exercise 9, Part (b): The given strategy pair should be

$$((0, 3/5, 2/5, 0), (0, 4/7, 3/7, 0))$$

Page 222, Exercise 5, Part (a): The table should be labeled “Value of the Farmer’s herd”.

Page 262: To be clearer, the Egalitarian Characterization Theorem says that the efficient, unbiased, and strongly monotonic properties IMPLIES the egalitarian method. But we know that the egalitarian method is not efficient for some of the games under consideration. So, one conclusion is that there is NO method that satisfies all three properties on the class of games under consideration. On the other hand, the egalitarian method is efficient for many games. Specifically, if the set of rational payoffs is compact, convex, and strictly comprehensive, then the egalitarian payoff pair is efficient.

Page 349: In Table 2.16, the correct entry for the cell (Share, Nada) is 144.4%.

Page 357:  $\$12,000 + \$27,000 - \$1,000 = \$38,000$  in the second line after Table 3.3. The Better value for Carol in Table 3.3 should be \$38,000.