Due brevi e facili trattati, il primo di Arithmetica, l'altro di Geometria

Book III, pages 40–41

Giovanni Francesco Peverone*

Lyon, 1558

Introduction

Here we present the relevant text of the *Due trattati*[1] of Peverone [2] associated with the division of stakes.

One sees that the three problems presented by Peverone are taken from Cardano's *Pratica* Chapter LXI, §§13–15. He does so without attribution and also contributes nothing. Kendall [1] discusses Peverone in some detail and credits him with a near miss to the correct solution of the problem of points. This is not the case however.

Text and Translation

De giuochi.

Giocando occorreno à le fiate i piu strani casi non mai piu vditi. Come in esempio due giouocano à 10 partite, ò vero 10 giuochi. Et il primo ne ha guadagnate 7, il secondo 9, accade certo inconueniente che non si puote finire. Se voi saper quanto ogniuno douerebbe riceuere del deposito, fa cosi, Diffalca 7, da 10, auanza 3, similmente diffalca 9, da 10, auanza 1, la progressione di 3, è 6, & quella di 1, è 1: partendo adunque il deposito in 7 parti, 6 toccano al secondo, & 1 parte al primo.

Concerning gaming.

For playing, the odd cases never more experienced are necessary to the calculations. As, for example, two play to 10 matches, or indeed 10 games. And the first one has won 7, the second 9, a certain inconvenience happens that it could not be ended. If you would know how much any one should receive of the stake, make like this: Deduct 7 from 10, it leaves 3; similarly deduct 9 from 10, it leaves 1. The progression of 3 is 6, & that one of 1 is 1: dividing therefore the stake into 7 parts, the second receives 6, & the first one 1 part.

*English translation by Richard Pulskamp, Department of Mathematics, Xavier University, Cincinnati, OH. Created on January 31, 2009.

[1] See `http://fondosdigitales.us.es/books/`

Altro esempio.

Vno dice, Voglio giocare con questo patto, che tu nõ possi vincere, se non guadagni 3, giuochi, & io, vencendone vno, voglio hauer vinto. Et poniam caso che quello che bisogna che guadagni 3 giuochi, metti in giuocho scutti 2, l'altro non è tenuto à mettere scutti 12: questa è la ragione che se giuocassero à 1, giuoco, bastarebbono scutti 2: & à due giuochi 6, per che vincendo solo 2, giuochi, guadagnarebbe scutti 4: ma questo sta con pericolo di perdere il secondo, vinto il primo: pero deue guadagnare scutti 6, & à 3 giuochi scutti 12, per che si indopia la difficulta, & pericolo.

Another example.

One says, I want to play with this pact, that you are not able to win unless you win 3 games, & I, winning one of them, want to have won. And I put the case that who must win 3 games, set into the game 2 coins, the other is held to set 12 coins: this is the reason, that if they played to 1 game, 2 coins would be enough: & to two games 6, for winning 2 games alone would earn 4 coins: but that it is with danger to lose the second, the first one won: but two to earn 6 coins & to 3 games 12 coins, for the difficulty & danger is doubled.

Altro esempio.

Due giocando vno à posto 4, contra 5, & secondo 13, contra 16, volendo saper chi à fatto miglior condizzione, questo si fa per la regola del tre, multiplicando 5, in 13, fa 65, parti 4, ne riesse 16, $\frac{1}{4}$ & tanto doueua porre il secondo, cio è 13, contra 16, $\frac{1}{4}$.

Another example.

Two playing; one to stake 4 against 5, & the second 13 against 16, wanting to know who in fact has better condition, this is made by the rule of three: multiply 5 into 13; makes 65, divide by 4, it is $16\frac{1}{4}$ & so much the second had to stake, that is 13 against $16\frac{1}{4}$.[1]

1 We have from the proportion $\frac{5}{4} = \frac{x}{13}$ that $x = 16\frac{1}{4}$.

References

[1] M. G. Kendall. Studies in the history of probability and statistics II. the beginnings of a probability calculus. *Biometrika*, 43(1/2):1–14, Jun. 1956.

[2] Gio. Francesco Peverone. *Due brevi e facili trattati, il primo d'arithm'etica, l'altro di geometria, ne i quali si contengono alcune cose nuove, piacevoli 'e utili si 'a gentilhuomini come ariegiani*. G. di Tournes, Lyon, 1558.