Erratum: Contextuality and noncontextuality measures and generalized Bell inequalities for cyclic systems [Phys. Rev. A **101, 042119 (2020)]**

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Having established that two measures of contextuality, CNT_1 and CNT_2 , coincide for any cyclic system, in the last section of the paper we attempted to show by a counterexample that

$\mathfrak{S}$: for noncyclic systems, CNT_1 and CNT_2 do not generally coincide, nor is one of them any function of the other.

As it turns out, this statement is correct, but the counterexample we chose was flawed due to a mistake in programming (see Fig. 1).

Here is a correct demonstration of $\mathfrak{S}$. Consider the following system of dichotomous (0/1) uniformly distributed random variables,

R_1^1	R_2^1			c_1
	R_2^2	R_3^2		c_2
		R_3^3	R_4^3	c_3
R_1^4			R_4^4	c_4
R_1^5	R_2^5	R_3^5	R_4^5	c_5
q_1	q_2	q_3	q_4	

(1)

Assuming the variables in each of the first four rows are perfectly correlated, compute CNT_1 and CNT_2 for various joint distributions of the four variables in context c_5 . The results in Fig. 2 show that statement $\mathfrak{S}$ is true.

The flawed counterexample was only used to demonstrate $\mathfrak{S}$, so nothing else in the paper is affected.

FIG. 1. A corrected version of Fig. 16 for system (66) in the paper, with the same meaning of the symbols. Although CNT_1 and CNT_2 do not coincide, they are linearly related.

FIG. 2. CNT_1 vs CNT_2 for system (1), with $\Pr[R_j^i = 1] = 1/2$ for all i, j in the system. Each symbol corresponds to a specific choice of the joint distribution of $R_1^5, R_2^5, R_3^5, R_4^5$, while keeping $R_1^1 = R_2^1, R_2^2 = R_3^2, R_3^3 = R_4^3$, and $R_4^4 = R_1^4$. Neither CNT_1 nor CNT_2 is a function of the other, as indicated by the horizontally and vertically aligned points.