"Quantum Games and Competitive Advance of Entangled Entrepreneurs"

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Quantum games have proposed a new point of view for the solution of the classical problems and dilemmas in game theory. It has been shown that are more efficient than classical games and provide a saturated upper bound for this efficiency [1]. Entanglement, when included in quantum games, makes (somehow) everybody win. Entangled quantum strategies are such that all players cooperate, and classical egoism (destructive) is replaced by quantum altruism (constructive) [2]. Entanglement might explain some form of telepathy, actually quantum pseudo-telepathy between "quantum-minded" players who play a quantum game. Thanks to entanglement, perhaps the most nonclassical manifestation of quantum mechanics, two or more quantum players can accomplish a distributed task with no need for communication whatsoever, which would be an impossible feat for classical players. Einstein, Bohr, Bell, Kochen and Specker were all concerned with hidden variables ("elements of reality"). Pseudo-telepathy also deals with this issue: it provides alternate versions of Bell's argument against local realistic theories. But it is more than just that. Pseudo-telepathy games often provide a more concise and convincing argument than those along the lines of Bell. They may also prove useful in devising loophole-free experimental tests to rule out local realistic descriptions of the physical world [3]. Inspired by the metaphor of 'Quantum Entanglement,' the conference " Entanglement at the Human Scale" held on February 17-20, 2000 by the University for Humanist Studies, Utrecht, were about people as histories, information, emotions that interact and have memories of past and projections of future intentions. More recently Dean Radin has done extensive work on the idea of Human Entanglement. He describes experiments that shown a non-local connection between human beings when they 'think' of each other [4]. Piotrowski and Sladkowski have stated what they called the *Quantum anthropic principle: e*ven if at earlier stages of civilization markets were governed by classical laws, the incomparable efficiency of quantum algorithms in conveying comparative advantage should result in market evolution such that quantum behaviors will prevail over classical ones. Since nature already plays quantum games, it would appear that humans do so also using their personal quantum computers (human brains) [5]. Bill McKelvey has found that an understanding of entanglement from quantum theory can throw useful light on the nature of ties among people and their impact on emergent order in organizations. In terms of human behavior, he explained that: a high correlation between the paired histories of people would mean they think in similar ways; a low correlation would mean they go in different directions [6]. McKelvey observed that social entanglement ties are inherently unstable and deteriorate toward weak or strong ties over time. Strong ties occur typically when people meet at least once or twice a week; weak ties when they meet a few times year. Bridges across social groups are important because ties between existing cliques can help to bridge differences between functionally specialized 'silos' in firms. This concept of a social entanglement is analogous to Granovetter's 'strength of weak ties' finding that innovation and novelty tends to come from weak ties, as strong ties generally favors the status quo and are therefore not as adaptively efficient as emergence from weak ties [7].

The majority of research in entrepreneurship [8], marketing [9] and economics [10] have had their meta-theoretical assumptions in the functionalist camp (i.e., positivist or postpositivist perspective). Similarly, "the bulk of International Entrepreneurship (IE) research captures data in a logical positivist manner, emphasizing inferential statistics, hypothesis testing, and so on" [11]. These paradigms have not been without success, else, they would not have commanded loyalty for so long [12]; however, in the context of international entrepreneurship research, this monoculture can be considered a weakness [13].

A quantum computer could perform some tasks, such as database searches, trillions and trillions of times faster than conventional computers can. James D. Miller guess that a practical quantum computer would be one of the most beneficially disruptive forces to ever hit an economy. A quantum computer would only be able to work on a limited class of problems. But once a quantum computer was developed, entrepreneurs would enthusiastically seek to find practical uses for it. Google poses the greatest threat to Microsoft. Miller suspects that some Microsoft executives dream about having a quantum computer that is so good at database searches that it drives Google to technological oblivion [14].
In our definition Human Quantum Biocatalysts (HQB) are human beings able to catalyze human relationships through quantum entanglement (here we intend quantum entanglement of three tubulin qubits of three different brains) [15]. Consider Max, Paula and Elian (P and E replace the usual quantum couple Alice and Bob) M is the HQB: the commutative diagram of the classical case becomes the associative property of the connective entanglement [@]

$$(Q_P \text{ @ } Q_E) \text{ @ } Q_M = Q_P \text{ @ } (Q_E \text{ @ } Q_M)$$

This property cannot be demonstrated in Basic Logic [16] because the third qubit Q_M plays the role of a context on the right , then in this case Basic Logic must be extended to Basic Logic plus context on the right (BR). The right connective [@] has a symmetric, the left connective [§] for which the associative property requires a context on the left. In this case we should consider Basic Logic plus context on the left (BL), the maximally entangled state of three qubits being the *GHZ state:* (I000> + I111>) [17].
On approaching global world-Knowledge economy the competitive advance of entrepreneurs should not only rely upon a forthcoming quantum computers or quantum internet [18] but should also consider how a new metalanguage [19] could be enhance creativity, intuition and a winner attitude when adopted in a team of entangled minds entrepreneurs.

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