## From Creative Quantum to Granular Interaction Thinking Theory

## Phuong-Tri Nguyen

Securities Research and Training Center, State Security Commission, HCMC, Vietnam

February 16, 2025

Recently, the AISDL Team has integrated insights from quantum mechanics and information theories to propose a foundational understanding of information-value nexus in social sciences: Granular Interaction Thinking Theory [1]. This marks a significant milestone in the team's ongoing pursuit of deeper inquiries into the nature of value. Specifically, this theory posits that value emerges from interactions of information that reduce entropy in ways beneficial to human survival, development, and reproduction.



Illustration. Creative quanta (generated by Canva)

The exploration of value, quantum theory, and information processing can be traced back to 2013, culminating in a study published in 2014—led by Professor Quan-Hoang Vuong—that sought to clarify the creative process [2]. Within the framework of the 2014 study, data, information, and primitive insights were conceptualized as "creative quanta." These quanta pass through processors in discrete (not continuous) packets, appearing in diverse forms and at unpredictable moments to generate innovations.

Thus, the formulation of the informational entropy-based notion of value and Granular Interaction Thinking Theory required myriad inputs and interactions of "creative quanta," a process that has unfolded over the course of 12 years.

While future applications and developments of the theory remain to be seen, it is expected to open up interesting perspectives and explorative attempts spanning from economics to the humanities research.

## References

- [1] Vuong, Q. H., La, V. P., & Nguyen, M. H. (2025). Informational entropy-based value formation: A new paradigm for a deeper understanding of value. <a href="https://philpapers.org/rec/VUOIEV">https://philpapers.org/rec/VUOIEV</a>
- [2] Vuong, Q. H., & Napier, N. K. (2014). Making creativity: the value of multiple filters in the innovation process. *International Journal of Transitions and Innovation Systems*, 3(4), 294-327. <a href="https://dx.doi.org/10.1504/IJTIS.2014.068306">https://dx.doi.org/10.1504/IJTIS.2014.068306</a>