How to Progress Quickly by Taking Shortcuts in Vietnamese Social Sciences?

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"[...] the age of technology has arrived, and Kingfisher has decided it's time for something new: Technological Innovation. Innovation can help Kingfisher conserve energy while maintaining a sense of tranquility, which is suitable for an increasingly advanced age with diminishing physical strength."

In "Innovation"; <u>The Kingfisher Story Collection</u> (2022)

The term – "đi tắt, đón đầu," whose translation is "to gain a head start by taking a shortcut," has been regularly mentioned by Vietnamese policymakers in the recent years as a means to successfully adopt the Industrial Revolution 4.0. The frequent appearance of this term on mass media (Thang & Thien, 2018; Hanh, 2018) has brought into my mind a question: "Is there any means by which Vietnam can gain a head start by taking a shortcut in scientific development?". An answer to this issue is not easy to get because of the complex and interdependent connections among related actors, such as states, institutions, researchers, and the public. Fortunately, partly contributing to the book (Vuong & Trung, 2019) – "The Vietnamese Social Sciences at a Fork in the Road," has inspired me to come up with a fair answer which is promoting open science and interdisciplinary research.

Open Science

"Knowledge turned into science increases its value as it is more widely spread."

- García-Peñalvo (2010) -

Open science is the future of scientific progress in Social Sciences. The Open movement was believed to be initially started by the Royal Society of London for the Improvement of Natural Knowledge in 1667 to promote and disseminate scientific knowledge. However, it has only been brought into focus since the end of the 20th century and more currently reinforced due to the reproducibility crisis (Baker, 2016). Apart from the crisis, benefits drawn from open science, such as increasing transparency and faith in research, reducing errors/frauds, and facilitating replication and extension, the open movement in scientific publishing has been becoming accepted by a wider range of researchers (Ho & Vuong, 2019; Allen & Mehler, 2019; Vuong, 2017), thus nurturing open research culture (Nosek et. al, 2015) will be an inevitable agenda for every scientific community.

As a result, achieving an open science should be set as Vietnam's scientific agenda "to gain a head start" in scientific publishing in Social Sciences. Based on the data of the SSHPA database, Health Care has demonstrated a clear tendency toward open science. Among the top 20 highest JIF Health Care articles, 15 articles were published in fully open-access journals, and two articles were published in partially open-access journals (Le et al., 2019). Nonetheless, the open-access movement seems to be confined in the Health Care discipline, and thus, it should be widespread and promoted across disciplines.

Interdisciplinary Research

The world is now moving to an era in which solutions for multiple challenges, from climate change to social and political conflicts, require the integration of diverse understandings (McLeish & Strang, 2015). Interdisciplinary research has, therefore, been increasingly considered as essential means to ease the situation and promote scientific progress through not only generating new knowledge but even converting scientific knowledge into societal impacts (Pedersen, 2016). According to Noorden (2015), the percentage of studies citing

papers outside of their own disciplines has grown substantially since the mid-1980s, notably in terms of Social Sciences.

Fostering the growth of interdisciplinary research in Social Sciences in Vietnam will be able to improve the scientific output in terms of quantity and swiftly create positive impacts on fueling development. Given the fact that in emerging countries, like Vietnam, the budget for science is limited, the financial support should be to be spent wisely and effectively on research that is more policy-making-friendly (Vuong, 2018). Encouraging interdisciplinary research, whose results are relatively more suitable for policy-making than monodisciplinary research, can be the key mode in "taking a shortcut" to scientific progress while maintaining policy significance at a reasonable cost. Interestingly, the three most productive research fields in Vietnam Social Sciences – Economics, Health Care, and Education, obtain a highly interdisciplinary nature (Vu et al., 2019), which in turn, indicates the effect of interdisciplinary research on boosting scientific output.

Final Remark

To conclude, the promotion of open science and interdisciplinary research in Vietnam might not be sufficient, but necessary for assisting Vietnamese Social Sciences to catch up with the world scientific progress while effectively contributing to the policymaking at an appropriate cost, and eventually raising the public's trust in science (Vuong, 2019).

References

Allen, C., & Mehler, D. M. A. (2019). Open science challenges, benefits, and tips in early career and beyond. *PLOS Biology*, 17(5). doi: 10.1371/journal.pbio.3000246

Baker, M. (2016). 1,500 scientists lift the lid on reproducibility. *Nature*, 533(7604), 452–454. doi: 10.1038/533452a

Le, T., Pham, H., La, V., et al. (2019). Chapter 3. The faster-growing fields. *The Vietnamese Social Sciences at a Fork in the Road* (pp. 52-79). Warsaw, Poland: De Gruyter. doi:10.2478/9783110686081-008

García-Peñalvo, F. J., Figuerola, C. G. D., & Merlo, J. A. (2010). Open knowledge: challenges and facts. *Online Information Review*, 34(4), 520–539. doi: 10.1108/14684521011072963

Hanh, H. (2018, August 28). "Cơ hội vàng" để Việt Nam đi tắt đón đầu cuộc cách mạng công nghiệp 4.0. Retrieved August 11, 2019, from <u>https://dantri.com.vn/giao-duc-khuyenhoc/co-hoi-vang-de-viet-nam-di-tat-don-dau-cuoc-cach-mang-cong-nghiep-4020180828205018835.htm</u>

Ho, M.-T., & Vuong, Q.-H. (2019). The values and challenges of 'openness' in addressing the reproducibility crisis and regaining public trust in social sciences and humanities. *European Science Editing*, 45(1), 14–16. doi:10.20316/ese.2019.45.17021

McLeish, T., & Strang, V. (2015, July 31). How to value research that crosses more than one discipline. Retrieved August 11, 2019, from <u>https://theconversation.com/how-tovalue-research-that-crosses-more-than-one-discipline-45324</u>

Noorden, R. V. (2015). Interdisciplinary research by the numbers. *Nature*, 525(7569), 306–307. doi: 10.1038/525306a

Nosek, B. A., Alter, G., Banks, G. C., Borsboom, D., Bowman, S. D., Breckler, S. J., ... Yarkoni, T. (2015). Promoting an open research culture. *Science*, 348(6242), 1422–1425. doi:10.1126/science.aab2374

Pedersen, D. B. (2016). Integrating social sciences and humanities in interdisciplinary research. *Palgrave Communications*, 2(1). doi: 10.1057/palcomms.2016.36

Thang, H., & Thien, H. (2018, January 6). Cách thức "đi tắt, đón đầu." Retrieved August 11, 2019, from <u>https://www.nhandan.com.vn/cuoituan/item/35210402-cach-thuc-"ditat-don-dau".html</u>

Vu, T., Tran, T., Hoang, P., et al. (2019). Chapter 4. Economics: The trend-setting field. *The Vietnamese Social Sciences at a Fork in the Road* (pp. 80-97). Warsaw, Poland: De Gruyter. doi:10.2478/9783110686081-009

Vuong, Q., & Tran, T. (Ed.) (2019). *The Vietnamese Social Sciences at a Fork in the Road*. Warsaw, Poland: De Gruyter. doi:10.2478/9783110686081

Vuong, Q.-H. (2017, December 12). Open data, open review and open dialogue in making social sciences plausible. Nature Scientific Data Updates. Retrieved August 8, 2019, from http://blogs.nature.com/scientificdata/2017/12/12/authors-corner-open-dataopen-review-and-open-dialogue-in-making-social-sciences-plausible/

Vuong, Q.-H. (2018). The (ir)rational consideration of the cost of science in transition economies. *Nature Human Behaviour*, 2(1), 5. doi: 10.1038/s41562-017-0281-4

Vuong, Q.-H. (2019). Breaking barriers in publishing demands a proactive attitude. *Nature Human Behaviour*, 3(10), 1034. doi: 10.1038/s41562-019-0667-6

Vuong, Q.-H. (2022). *The Kingfisher Story Collection*. <u>https://www.amazon.com/dp/B0BG2NNHY6</u>