

“Ceramic Road” – Seen from Village Communal House Carving Art

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Abstract

Inheriting the essence of traditional art has always been considered the fulcrum for the development of modern art. Pottery Road is the sketch for viewers of artworks re-enacting important historical events of the country, and scenic spots along the quintessence of traditional pottery villages. The image of “Ceramic Road” in close relationship with regions in the country is also simulated by a 100m-long ceramic painting piece, using ceramic coated with a colored glaze, fired at a temperature of 1,200 degrees Celsius, ensuring durability stands firm against time. The ceramic path with the application of traditional artistic elements, although not a creative application, has also achieved certain successes.

Keywords: Hanoi Ceramic Mosaic Mural, Traditional Art, Public Art, Social, Community.

Introduction

Since the implementation of Doi Moi, Vietnam has undergone a significant transition from a subsidized economy to a socialist-oriented market economy. This shift has not only spurred economic development but has also catalyzed the creation and proliferation of public art. One notable example is the inception of the "Ceramic Road," a groundbreaking endeavor marked by its diverse themes and innovative forms of expression, contrasting with conventional monuments. This initiative is hailed as a promising precursor to the future evolution of public art within Vietnamese urban landscapes. The "Ceramic Road," renowned as the world's longest ceramic painting, serves as a vibrant testament to Vietnamese artistic heritage. Each of Vietnam's ethnic groups boasts distinct cultural characteristics and unique modes of artistic expression. Urban public art, while introduced from external influences, has been warmly embraced, constructed, and enriched upon the bedrock of traditional artistic values.

Methodology

The study analyzed data collected from field observations to determine the similarities, differences and influences between village communal house carving art and the "Ceramic Road". Explore how historical, cultural, and socioeconomic factors have shaped these art forms over time. Analyze the data collected from field observations, interviews, and surveys to identify similarities, differences, and influences between village communal house carving art and the "Ceramic Road." Explore how historical, cultural, and socio-economic factors have shaped these art forms over time.

Interdisciplinary Approach: Collaborate with experts from various disciplines such as art history, anthropology, sociology, and urban planning to gain diverse perspectives on the significance and impact of village communal house carving art and the "Ceramic Road" within Vietnamese society.

Case Studies: Select specific examples of village communal house carving art and segments of the "Ceramic Road" for in-depth case studies. Analyze the evolution, symbolism, and community engagement associated with these case studies to provide nuanced insights into the interplay between tradition and modernity in Vietnamese public art.

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Theoretical Framework: Ground the study within relevant theoretical frameworks such as cultural heritage preservation, visual anthropology, and urban cultural studies to contextualize the findings and contribute to broader scholarly discourse on art, culture, and society.

Results and Discussion

Elements of Traditional Vietnamese Art in the Ceramic Road

Ceramic road and artistic expression methods of village communal house carving

In essence, the "Ceramic Road" and the decorative carvings of the communal house all have in common that they both beautify public works. "Ceramic road" beautifies Yen Phu dike (a public work of the Capital); also carved village communal house to beautify the village communal house (a communal religious architecture of ancient Vietnamese village communities). Due to the same purpose of decorating and beautifying a particular public architecture; On the other hand, in tradition, village communal house carving not only beautifies the village communal house, but it is also considered the pinnacle of Vietnamese traditional visual art, but the "Ceramic Path" has chosen the method of painting artistic expression according to the artistic expression method of village communal house carving: artistic expression according to the principle of harmonious symmetry; describe images in a consistent sequential manner; describe the images very specifically but with nuances of association.

The choice of the method of artistic expression according to the above-mentioned aesthetic principles has made the "Ceramic Path", a form of expression of public art, with "foreign" origins, becoming closer and more familiar to the Vietnamese people.

Traditionally, village communal house carving has been a great success because it has creatively inherited the aesthetic principles shaped from the Dong Son period and developed continuously throughout the previous history; then "Ceramic Road", with the inheritance of aesthetic principles of village communal house carving, has achieved certain successes.

In fact, in "Ceramics Road" the expression of images continuously and consistently: expressing according to the law of shaping, connecting a single motif into a series of rhythmically moving motifs, is the way of doing things seen in most of the scenes of the picture.

In the passage with the theme "Pattern of Vietnam's ethnic groups", "Ceramic Road" used the form of linking simple motifs into blocks of multi-dimensional patterns in harmony with the diamond-shaped layout consecutively in a sequence, in a regular way, giving the ornament a gentle rhythm (the rhythmic line that governs the whole set of patterns is the blue-red; red - yellow lines of the filling-shaped edges), very suitable for the aesthetic habits of Vietnamese people.

In connection with the next dissonant pattern motifs, "Ceramic Road" still retains the same decorative rhythm. Because the monolithic motifs are linked in the large pattern block in each block, to create a rule for this pattern series, "Ceramics Road" has used small copper-shaped blocks of the pattern. The rhythm connecting the large fillings has asymmetrical symmetry. The array of patterns thus has the dynamism of decorative art; this is a fairly common practice in the art of carving and decorating the communal house. On the planks, trusses, seven heads... the motifs of dragons, phoenixes; cloud shape; flowers, and leaves... although they are very diverse in form of expression, they are still arranged in a certain order, but the contrasting nature of each type of motif is shown as a rule. The repetition of a certain pattern layout on the wooden planks running horizontally across the communal house is a conscious arrangement because the continuity of those patterns creates the dynamism of art decoration.

In the segments from under Long Bien bridge to An Duong Vuong border gate, the form of connecting dissimilar motifs is clearly shown, with successive interweaving of peach blossom images and French architecture, lotus flowers, high-rise buildings, and symbolic images embossed with embossed blocks such as One Pillar Pagoda, Long Bien Bridge, Hanoi Old Quarter... However, the interweaving combination of

these motifs does not highlight the contrasting nature of motif types: combining pairs of motifs with opposing morphology; or combining pairs of motifs of opposite nature and content (For example, the combination of French-style architecture - an expression of Western culture - with lotus - an expression of Eastern culture). On the other hand, in the association between these dissimilar motifs, the property of the continuous mode is consistent: never separating a particular image from the descriptive whole, is not realized. Therefore, the images shown in the above picture segments also difficult to fully express the content of the topic that it wants to aim at. In terms of form, viewers are also easily bored by the discreteness of the images.

The principle of never describing a specific image separate from the overall description of the consistent continuous form, shaped from the carvings on the surface of Dong Son fields, has been the basis for the method of "co-presentation", a characteristic of village communal house carving art, was born. It can be said that the pairing of animations (carvings depicting a specific activity of the ancient Vietnamese peasants), with different themes on a certain architectural element of the communal house, is a typical feature of village communal house carving art. Each piece of life is displayed on a redundant architectural element that must be included in the architectural structure of the house. The beautiful, colorful life of the ancient Vietnamese farmers has been fully and completely displayed in the village communal house architecture system.

Inheriting the "co-presentation" feature of village communal house carving, "Ceramic Road" has shown the theme of "Hanoi - a city for peace" by combining pictures drawn by Vietnamese children South and international. However, in village communal house carving, the connection of images and scenes has created an aesthetic balance for the carvings; In "Ceramic Road", the paintings still seem to lack a close connection to achieve that aesthetic balance.

The reason for this situation is that in village communal house carving, the pairing of images and scenes is always done according to the principle of harmonious symmetry of pairs of opposites and contrasts (according to the philosophy of Yin and Yang) - Positive). For example: the image of a young girl (Yin) combined with an old dragon (Yang) in the scene of a mischievous village girl sitting on a dragon's back, holding a dragon's beard in her hand. Or images of beautiful fairies riding dragons and phoenixes (sacred) combined with images of mothers carrying their children, or images of diligent mothers holding children while taking care of pigs (customary). The images are combined with the structural elements of the communal house architecture, so there is never a separation. The aesthetic balance of the images, scenes, on the architecture of the communal house, thus, is effective. As for "Ceramics Road", the principle of harmonious symmetry according to the contrasting pair structure is less noticed in the passages where many different images are combined, so the connection of the paintings in the overall description of the topic in paragraph A3 is somewhat loose and fragmentary. The effect of aesthetic balance in this scene, therefore, is not as high as it should be. However, this does not mean that in "Ceramic Path", one cannot find manifestations of the inheritance of the principle of harmonious symmetry in the structure of a pair of contrasting opposites. In fact, in short paintings like "Thang Long - Hanoi"; "Sacred Soul of Dai Co Viet"; and "Temple of Literature" ... this principle is expressed very clearly. For example, in the painting "Thang Long - Hanoi" at the beginning of Chuong Duong bridge, the combination of two dragons (Yang) and a rainbow (Yin) in the layout of contrasting shapes and the winding lines of the dragon, the curve of the rainbow, and its auras, and the cherry blossom dots, etc.), have made the piece very aesthetically pleasing. Even in the advertisement for Viet Ha beer as mentioned in the previous section, one can also see the expression of the above principle. The combination of the image of a stork with a herd of elephants; and the image of rice fields with images of clouds, not only made the advertising meaning of this beer clearly expressed; but also made the rhythm of the picture more lively. In terms of art, this painting is also one of the pieces that achieve aesthetic balance.



Figure: Some pictures of Ceramic Road in Hanoi

Source: Nguyen Thi Lan Huong – Taken in Hanoi in 2023

In village communal house carving, the expression of specific images but with evocative nuances of Dong Son plastic art has become an impressive shaping technique: "Children's look". And that innocent, rustic, witty "child's look" has helped the carvings on the wooden planks, wind panels, screens, calves... of the communal house's architectural system to achieve unexpected effects in terms of aesthetics; as well as helping the traditional Vietnamese visual arts have one more characteristic in artistic expression. The "Ceramic Road" has inherited this artistic feature with the drawings of Vietnamese and international children, shown in the theme "Hanoi - a city for peace".

Traditional elements of the aesthetic space environment

Traditionally, the art of village communal house carving has been very successful not only because it creatively inherited the artistic expression principles of previous periods, making unique shaping techniques for people. The success of village communal house carving art is also due to it creatively inheriting the way of handling space, exploiting space elements subtly and flexibly, to beautify its works from earlier periods. For example, to increase the aesthetic effect of carvings on the bearing wooden frames of the communal house, where the light is often very weak, the village communal house carvers have used various forms. technique of perforating, shallow touching, deep touching, wide touching ... make the effect of light-dark change, causing high enjoyment. In particular, thanks to the perforations in the carvings, the carvings on the architectural elements of the communal house have achieved a balanced aesthetic effect, as well as revealing their lively rhythms. Carving technique, an innovation in spatial processing of communal house carving art, has transformed the heavy feeling of load-bearing wooden frames into lighter and more airy. The carvings on those wooden frames have almost no background images, but only human figures, figures, flowers, plants, etc. protrude out, anti-cross many layers, many layers, very vivid and full of symbols feeling, as if the reality of Vietnamese village life is running up to the architectural system of communal houses.

Although it has inherited the aesthetic principles of village communal house carving in artistic expression, "Ceramic Road" does not seem to inherit the experience of handling space, exploiting the surrounding space, to make beautiful their works as the village communal house carvings have done in the past.

Although the decorative plan is not as complicated as that of the village communal house carving, the decoration of the "Ceramic Road" faces many obstacles. Because Yen Phu dike strip was originally divided into many areas for stairs to serve the travel of people living inside and outside the dike strip. Not only that, but the decorative ground of the "Ceramic Road" is also hindered by lighting poles, traffic signal lights, under the Long Bien Bridge, and the overpass system around the Chuong Duong bridgehead area. In some sections, this decorative ground is also divided into two layers above and below, by the strips of ornamental plants and flower beds of the urban environment company. All these cuts have caused significant obstacles

to the aesthetic effect of ceramic paintings. Therefore, if "Ceramic Road", from experience dealing with the relationship between works - space, of village communal house carvings in the past, finds its treatment in the terraced areas, lampposts, under bridges..., turning these disadvantages into places showing the uniqueness of the "Ceramic Road"; thoroughly exploit the strips of flowers, ornamental plants, as well as street light poles, to beautify their works; certainly "Ceramic Road" has achieved much more brilliant success than the present. The uncultured treatment of the "Ceramic Road" also reduces the chances of occurring in these dissecting areas, if they become places that show the uniqueness of the "Ceramic Road".

In handling the relationship between works - and space, village communal house carvings not only have exploited the spatial elements subtly to beautify their works, turning the disadvantages of space into where shows the uniqueness of village communal house carving art; but village communal house carving also always pays attention to the compatibility between the work and the surrounding environment of the work. Each carved figure on the communal house is the crystallization and sublimation of the folk artist (who is also the farmer), in the way of building vivid themes of their real life. Whether refined in the touch or strong in the rustic in the chisel, all are aimed at capturing reality in the most vivid, closest way and expressing the most love and intention of the farmer. Therefore, the carvings of the communal house are not only suitable for the "common house" space of the communal house; They are also suitable for the living space of farmers in ancient village communities. This compatibility not only made a name for the village communal house carving art but also created a unique feature for the communal house carving art. And so, it made the villagers proud of it, the sense of protecting it was born from there. However, in "Ceramic Road", the suitability of the work with the surrounding landscape and space environment does not seem to have been noticed.

Conclusions

Public art is not a material profit but brings a great spiritual benefit to the majority of the population and urban communities. "Ceramic Road", viewed from the village communal house carvings, perhaps, some propaganda paintings should be removed and replaced with paintings that reflect the aspirations of low-income people who are living mainly in this area, the uniqueness of "Ceramic Road" will have many opportunities to express, to develop more. And it – the "Ceramic Road" – will also have an attraction that attracts more visitors, as well as earns more respect for it from the people living in this area. In general, "Ceramic Road" has inherited the quintessence of traditional Vietnamese visual arts, especially village communal house carving, and has received support from the community. The ceramic road" has inherited and promoted traditional artistic values to a moderate extent, but not inherited the creativity and quintessence of traditional art. But, the successor of "Ceramic Road" is still a respectable inheritance, in part it is also an avant-garde work in urban public art. It was also one of the beginnings of Vietnamese public art.

References

- Abbas, M., Jam, F. A., & Khan, T. I. (2024). Is it harmful or helpful? Examining the causes and consequences of generative AI usage among university students. *International Journal of Educational Technology in Higher Education*, 21(1), 10.
- Aguilera-Hermida, A. P. (2020). College students' use and acceptance of emergency online learning due to COVID-19. *International Journal of Educational Research Open*, 1, 100011. <https://doi.org/10.1016/J.IJEDRO.2020.100011>
- Ahmed, I., Farooq, W., & Khan, T. I. (2021). Customers' Perceptions and their Responses to Objectives of Islamic Banks—A Three-Wave Investigation. *Asian Economic and Financial Review*, 11(1), 43. al politics and job outcomes.
- Azhar, N., & Rani, N. (2020). Student Readiness Towards E-Learning Adoption in Higher Education: A Conceptual Model Based on Extended Technology Acceptance Model. *Upikpolimas.Edu.My*, 5(Education, Vocational December, Issue), 61–74. <http://upikpolimas.edu.my/ojs/index.php/JTVE/article/view/382>
- Baber, H. (2021). Modelling the acceptance of e-learning during the pandemic of COVID-19-A study of South Korea. *The International Journal of Management Education*, 19, 100503. <https://doi.org/10.1016/j.ijme.2021.100503>
- Bobrick, B., & Labyrinths, I (1981). *A History of the World's Subways*. New York: Newsweek Books.
- Bojović, Ž., Bojović, P. D., Vujošević, D., & Šuh, J. (2020). Education in times of crisis: Rapid transition to distance learning. *Computer Applications in Engineering Education*, 28(6), 1467-1489.
- Careaga-Butter, M., Badilla-Quintana, M. G., & Fuentes-Henriquez, C. (2020). Critical and prospective analysis of online education in pandemic and post-pandemic contexts: Digital tools and resources to support teaching in synchronous and asynchronous learning modalities. *Aloma*, 38(2), 23–32. <https://doi.org/10.51698/ALOMA.2020.38.2.23-32>

- Carol, B. (2011). *Making America, Volume 2: A History of the United States: Since 1865, Brief Fifth Edition*.
- CEPAL-UNESCO. (2020). *La educación en tiempos de la pandemia COVID-19*. Comisión Económica Para América Latina y El Caribe, Santiago - Oficina Regional de Educación Para América Latina y El Caribe de La Organización de Las Naciones Unidas Para La Educación La Ciencia y La Cultura, 11, 11–18. <https://unesdoc.unesco.org/ark:/48223/pf0000374075?posInSet=1&queryId=9ccf4a39-7c50-43e4-856b-a09632daa7a2>
- Chapman, D. D. (2011). *Contingent and Tenured / Tenure-Track Faculty : Motivations and Incentives to Teach Distance*.
- Chen, C. (2006). *American City Sculpture (American Urban Statue)*. China: Liaoning Science & Technology Publishing House.
- Cher, K. (2008). *Public Art: theory, practice and populism*, Public Art: theory, practice and populism. Oxford: Blackwell Publishing.
- Chetty, R., Friedman, J. N., Hendren, N., Jones, M. R., Porter, S. R., Hall, R., & Hendren Harvard, N. (2018). *The Opportunity Atlas: Mapping the Childhood Roots of Social Mobility*. www.opportunityatlas.org/tract-level-data/available<https://opportunityinsights.org/data/>
- Davis, F. D. (1985). A technology acceptance model for empirically testing new end-user information systems: Theory and results. [Massachusetts Institute of Technology]. In MIT. <https://doi.org/10.1126/science.146.3652.1648>
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly: Management Information Systems*, 13(3), 319–339. <https://doi.org/10.2307/249008>
- Davis, F. D., Al-Suqri, M., & Al-Aufi, A. (1989). Technology acceptance model: TAM. *Information Seeking Behavior and Technology Adoption*, 205–219.
- Duong, N.V. (2013). *Fine Arts of Thang Long – Hanoi*. Hanoi: National Political Publishing House.
- Edwards, A. L. (1946). A critique of “neutral” items in attitude scales constructed by the method of equal appearing intervals. *Psychological Review*, 53(3), 159–169. <https://doi.org/10.1037/H0054184>
- Farooq, S., Ahmad, Z., Hassan, N., & Sarfraz Khan, M. (2021). Technology Acceptance Model for E-Learning during COVID-19: Empirical Insight from Pakistan: A Technology Acceptance Model for E-Learning during COVID-19: Empirical Insight from Pakistan. *Ilkogretim Online-Elementary Education Online*, Year, 20(4), 975–984. <https://doi.org/10.17051/ilkonline.2021.04.105>
- Fernández Aráuz, A. (2015). Aplicación del análisis factorial confirmatorio a un modelo de medición del rendimiento académico en lectura. *Revista de Ciencias Económicas*, 33(2), 39. <https://doi.org/10.15517/rce.v33i2.22216>
- Graham, C. (1984). *Form - Space and Vision*. Prentice Hall, 4 Sub Edition.
- Grant, M. R., & Thornton, H. R. (2007). Best Practices in Undergraduate Adult-Centered Online Learning: Mechanisms for Course Design and Delivery. *MERLOT Journal of Online Learning and Teaching*, 3(4), 346–356.
- Green, T., Alejandro, J., Brown, A. H., & Green, T. (2023). International Review of Research in Open and Distributed Learning the Retention of Experienced Faculty in Online Distance Education Program: Understanding Factors that Impact their Involvement The Retention of Experienced Faculty in Online Distance Education Programs: Understanding Factors that Impact their Involvement.
- Gutiérrez Doña, B. (2008). *Modelos Lineales Estructurales: Conceptos Básicos, Aplicaciones y Programación con Lisrel*. Serie Cuadernos Metodológicos 2, January 2008, 89.
- Hodges, C., Moore, S., Locke, B., Trust, T., & Bond, A. (2020). The Difference Between Emergency Remote Teaching and e-Learning. *Educause - Frontiers in Education*, 7. <https://doi.org/10.3389/feduc.2022.921332>
- Huang, F., Sánchez-Prieto, J. C., & Teo, T. (2020). The influence of university students' learning beliefs on their intentions to use mobile technologies in learning: a study in China and Spain. (pp. 3547–3565). *Education Tech Research Dev*. <https://doi.org/https://doi.org/10.1007/s11423-020-09806-0>
- Ibrahim, N. K., Al Raddadi, R., AlDarmasi, M., Al Ghamdi, A., Gaddoury, M., AlBar, H. M., & Ramadan, I. K. (2021). Medical students' acceptance and perceptions of e-learning during the Covid-19 closure time in King Abdulaziz University, Jeddah. *Journal of Infection and Public Health*, 14(1), 17–23. <https://doi.org/10.1016/J.JIPH.2020.11.007>
- Iqbal Khan, T., Kaewsang-on, R., Hassan Zia, M., Ahmed, S., & Khan, A. Z. (2020). Perceived organizational politics and age, interactive effects on job outcomes. *SAGE Open*, 10(3), 2158244020936989.
- Jamil, R. A., Qayyum, U., ul Hassan, S. R., & Khan, T. I. (2023). Impact of social media influencers on consumers' well-being and purchase intention: a TikTok perspective. *European Journal of Management and Business Economics*, (ahead-of-print).
- Jatmikowati, T. E., Rachman, A. U., & Adwitiya, A. B. (2021). Technology Acceptance Model in using E-learning on Early Childhood Teacher Education Program's student during pandemic. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, 5(2), 1501–1511. <https://doi.org/10.31004/obsesi.v5i2.801>
- Jöreskog, K. G., & Sörbom, D. (2007). *LISREL 8.80*. (8.80). Scientific Software International. Inc. www.ssicentral.com.
- Khai, P. (2003). *Fine art in construction architecture*. Hanoi: Fine Arts Publishing House.
- Khan, F. A. J. T. I., Anwar, F., Sheikh, R. A., & Kaur, S. (2012). Neuroticism and job outcomes: Mediating effects of perceived organizational politics. *African Journal of Business Management*, 6(7), 2508.
- Khan, M. T., Khan, T. I., & Khan, S. (2020). Innovation & Its Diffusion in Business: Concept, Stages & Procedural Practices. *sjesr*, 3(4), 174-186.
- Khan, T. I., & Akbar, A. (2014). Job involvement-predictor of job satisfaction and job performance-evidence from Pakistan. *World Applied Sciences Journal*, 30(30), 8-14.
- Khan, T. I., & Akbar, A. (2015). Impact of stressors on employee performance: Moderating role of big five traits. Islamabad: Mohammad Ali Jinnah University.
- Khan, T. I., Akbar, A., Jam, F. A., & Saeed, M. M. (2016). A time-lagged study of the relationship between big five personality and ethical ideology. *Ethics & Behavior*, 26(6), 488-506.
- Khan, T. I., Kaewsang-on, R., & Saeed, I. (2019). Impact of workload on innovative performance: Moderating role of extrovert. *Humanities & Social Sciences Reviews*, 7(5), 123-133.

- Khan, T. I., Kaewsaeng-On, R., & Saeed, I. (2019). Impact of workload on innovative performance: Moderating role of extrovert. *Humanities & Social Sciences Reviews*, 7 (5), 123-133.
- Khan, T. I., Khan, A. Z., & Khan, S. (2019). Effect of time pressure on organizational citizenship behavior: Moderating role of agreeableness. *Sir Syed Journal of Education and Social Research (SJESR)*, 2(1), 140-156.
- Khan, T. I., Khan, S., & Zia, M. H. (2019). Impact of personality traits on workplace deviance—a pakistani perspective. *Global Regional Review, Humanity only*, 4(2), 85-92.
- Khan, T. I., Nisar, H. G., Bashir, T., & Ahmed, B. (2018). Impact of aversive leadership on job outcomes: Moderation and mediation model. *NICE Research Journal*, 56-73.
- Khoa, D.Q. (1978). Mega paintings on architectural surfaces. *Journal of Academic Club of Vietnam College of Fine Arts*, pp.41-52.
- Kumar, S., & Kumara, S. (2018). The Digital Divide among the Rural and Urban Students: An Exploration. 18(2). www.schooleducation.kar.nic.in
- Kuo, Y. K., Khan, T. I., Islam, S. U., Abdullah, F. Z., Pradana, M., & Kaewsaeng-On, R. (2022). Impact of green HRM practices on environmental performance: The mediating role of green innovation. *Frontiers in Psychology*, 13, 916723.
- Kuo, Y. K., Khan, T. I., Islam, S. U., Abdullah, F. Z., Pradana, M., & Kaewsaeng-On, R. (2022). Impact of green HRM practices on environmental performance: The mediating role of green innovation. *Frontiers in Psychology*, 13, 916723.
- Lai, N.T. (2000). *Vietnam Modern Sculpture, Proceedings of the Vietnam Fine Arts Workshop XX century*. Hanoi: Fine Arts Publishing House.
- Lavery, M. P. J., Abadi, M., Bauer, R., Brambilla, G., Cheng, L., Cox, M. A., Dudley, A., Ellis, A., Fontaine, N., Kelly, A., Marquardt, C., Matlhane, S., Ndagano, B., Petruccione, F., Slavík, R., Romanato, F., Rosales-Guzmán, C., Roux, F., Roux, K., ... Forbes, A. (2018). Sustainable photonics that bridge the digital divide.
- Lazim, C. S. L., Ismail, N. D. B., & Tazilah, M. D. A. K. (2021). Application of technology acceptance model (TAM) towards online learning during Covid-19 pandemic: accounting students perspective. *International Journal of Business, Economics and Law*, 24, 1. <https://www.researchgate.net/publication/349214593>
- Li, H. X., Hassan, K., Malik, H. A., Anuar, M. M., Khan, T. I., & Yaacob, M. R. (2022). Impulsive and compulsive buying tendencies and consumer resistance to digital innovations: the moderating role of perceived threat of COVID-19. *Frontiers in Psychology*, 13, 912051.
- Ligorio, M. B., Cacciamani, S., & Cesareni, D. (2020). L'accettazione della Didattica a distanza: una ricerca nel contesto universitario. In P.P. Limone, G.A. Toto, N. Sansone (a cura di) *Didattica universitaria a distanza. Tra emergenze e futuro*. In Quaderni di Qwerty, Bari: Progedit (pp. 91–102).
- Mardia, K. V. (1970). Measures of multivariate skewness and kurtosis with applications. *Biometrika*, 57(3), 519–530. <https://doi.org/10.1093/biomet/57.3.519>
- Messina, D., & García, L. (2020). Estudio diagnóstico sobre docentes en América Latina y el Caribe.
- Mukminin, A., Muhaimin, M., Prasajo, L. D., Khaeruddin, K., Habibi, A., Marzulina, L., & Harto, K. (2022). Analyzing Social Media Use in Tefl Via the Technology Acceptance Model in Indonesian Higher Education During the Covid-19 Pandemic. *Teaching English with Technology*, 22(1), 3–22.
- Mushtaq, R., Jabeen, R., Begum, S., Khan, A., & Khan, T. (2021). Expanded job scope model and turnover intentions: A moderated mediation model of Core-Self Evaluation and job involvement. *Management Science Letters*, 11(5), 1473-1480.
- Pal, D., & Vanijja, V. (2020). Perceived usability evaluation of Microsoft Teams as an online learning platform during COVID-19 using system usability scale and technology acceptance model in India. <https://doi.org/10.1016/j.childyouth.2020.105535>
- Pekrun, R., Goetz, T., Frenzel, A. C., & Barchfeld, P. (2011). Measuring emotions in students' learning and performance. *Contemporary Educational Psychology*, 36(1), 36–48.
- Penny, B. B. (1992). *Public Art in Philadelphia* (NTCC in Philadelphia). Philadelphia) University Press,
- Pérez-Gil, J. A., Chacón Moscoso, S., & Moreno Rodríguez, R. (2000). Validez de constructo: El uso de análisis factorial exploratorio-confirmatorio para obtener evidencias de validez. *Psicothema*, 12(SUPPL. 2), 442–446.
- Saiyad, S., Virk, A., Mahajan, R., & Singh, T. (2020). Online teaching in medical training: Establishing good online teaching practices from cumulative experience. *International Journal of Applied and Basic Medical Research*, 10(3), 149.
- Sangthong, M. (2020). The Effect of the Likert Point Scale and Sample Size on the Efficiency of Parametric and Nonparametric Tests. *Thailand Statistician*, 18(1), 55–64. <https://ph02.tci-thaijo.org/index.php/thaistat/article/view/228886/155776>
- Sarwat, N., Ali, R., & Khan, T. I. (2021). Challenging, hindering job demands and psychological well-being: The mediating role of stress-related presenteeism. *Research Journal of Social Sciences and Economics Review*, 2(1), 135-143.
- Sukendro, S., Habibi, A., Khaeruddin, K., Indrayana, B., Syahrudin, S., Makadada, F. A., & Hakim, H. (2020). Using an extended Technology Acceptance Model to understand students' use of e-learning during Covid-19: Indonesian sport science education context. *Heliyon*, 6(11), e05410. <https://doi.org/10.1016/J.HELIYON.2020.E05410>
- Teo, T. (2008). Pre-service teachers' attitudes towards computer use: A Singapore survey. *Australasian Journal of Educational Technology*, 24(4), 413–424. <https://doi.org/10.14742/ajet.1201>
- Teo, T. (2010a). The development, validation, and analysis of measurement invariance of the technology acceptance measure for preservice teachers (tampst). *Educational and Psychological Measurement*, 70(6), 990–1006. <https://doi.org/10.1177/0013164410378087>
- Teo, T. (2010b). Validation of the technology acceptance measure for pre-service teachers (TAMPST) on a Malaysian sample: A cross-cultural study Epistemology profiling of Singapore teachers View project BJET: Technology Acceptance Models: What We Know and What We (Still) . Article in *Multicultural Education & Technology Journal*. <https://doi.org/10.1108/17504971011075165>
- Teo, T. (2014). Unpacking teachers' acceptance of technology: Tests of measurement invariance and latent mean differences. *Computers and Education*, 75, 127–135. <https://doi.org/10.1016/j.compedu.2014.01.014>

- Teo, T., Lee, C. B., & Chai, C. S. (2007). Understanding pre-service teachers' computer attitudes: applying and extending the technology acceptance model. *Journal of Computer Assisted Learning*. <https://doi.org/https://doi.org/10.1111/j.1365-2729.2007.00247.x>
- Thuy, N.T. (1997). *Urban Landscape Environmental Management Organization*. Hanoi: Hanoi Publishing House.
- Thuy, N.T.T., & Lien, T.T. (1985). *City landscape architecture*. Hanoi: Publishing House.
- Tinh, D.K. (1999). *Aesthetic and artistic values in architectural and design theory*. Hanoi: Education Publishing House.
- Vaca-Cárdenas M. E., Ordonez-Avila R., Vaca-Cárdenas L. A., & Vaca-Cárdenas A. N. (2024). Students' acceptance toward asynchronous virtual education during COVID-19 pandemic. *Kasetsart Journal of Social Sciences*, 45(3).
- Vaca-Cardenas, M. E., Meza, J., Estrada, A., & Vaca-Cardenas, L. A. (2020b). Connectivism as a driver to improve citizen learning in cognitive cities: A literature review. *The IAFOR International Conference on Education – Hawaii 2020 Official Conference Proceedings*, 1–16. <https://doi.org/10.22492/issn.2189-1036.2020.1>
- Vaca-Cárdenas, M. E., Ordoñez Ávila, E. R., Vaca-Cárdenas, L. A., Vargas Estrada, A., & Vaca-Cárdenas, A. N. (2020a). Connectivism as a potential factor to advertise housing let or sale. A multiple case study applied in ecuadorian cities. *Information Technology, Education and Society*, 17(2), 5–21. <https://doi.org/10.7459/ites/17.2.02>
- World Health Organization (2020). WHO coronavirus (COVID-19) dashboard with vaccination data. <https://covid19.who.int/>
- Yu, S., Luo, L., Kalogiannakis, M., Liu, Q., Hong, X., & Zhang, M. (2021). Preschool Teachers' Technology Acceptance During the COVID-19: An Adapted Technology Acceptance Model. *Front. Psychol*, 12, 691492. <https://doi.org/10.3389/fpsyg.2021.691492>