



AICT 2025

The Twenty-First Advanced International Conference on Telecommunications

ISBN: 978-1-68558-248-7

April 6 - 10, 2025

Valencia, Spain

AICT 2025 Editors

Eugen Borcoci, National University of Science and Technology POLITEHNICA
Bucuresti (UNSTPB), Romania

AICT 2025

Forward

The Twenty-First Advanced International Conference on Telecommunications (AICT 2025), held between April 6th, 2025, and April 10th, 2025, in Valencia, Spain, continued a series of international events covering a variety of challenging telecommunication topics ranging from background fields like signals, traffic, coding, communication basics up to large communication systems and networks, fixed, mobile and integrated, etc.

We take here the opportunity to warmly thank all the members of the AICT 2025 technical program committee, as well as all the reviewers. The creation of such a high-quality conference program would not have been possible without their involvement. We also kindly thank all the authors who dedicated much of their time and effort to contribute to AICT 2025. We truly believe that, thanks to all these efforts, the final conference program consisted of top-quality contributions. We also thank the members of the AICT 2025 organizing committee for their help in handling the logistics of this event.

We hope that AICT 2025 was a successful international forum for the exchange of ideas and results between academia and industry for the promotion of progress in the field of telecommunications.

AICT 2025 Chairs

AICT 2025 Steering Committee

Dragana Krstic, University of Niš, Serbia

Kevin Daimi, University of Detroit Mercy, USA

Gautam Srivastava, Brandon University, Canada

Sergei Semenov, HiSilicon, Sweden

Sonia Ben Rejeb, ISI/University El Manar, Tunisia

Nader F. Mir, San Jose State University, USA

AICT 2025 Publicity Chairs

Francisco Javier Díaz Blasco, Universitat Politècnica de València, Spain

Ali Ahmad, Universitat Politècnica de València, Spain

Sandra Viciano Tudela, Universitat Politècnica de València, Spain

José Miguel Jiménez, Universitat Politècnica de València, Spain

AICT 2025 Committee

AICT 2025 Steering Committee

Dragana Krstic, University of Niš, Serbia
Kevin Daimi, University of Detroit Mercy, USA
Gautam Srivastava, Brandon University, Canada
Sergei Semenov, HiSilicon, Sweden
Sonia Ben Rejeb, ISI/University El Manar, Tunisia
Nader F. Mir, San Jose State University, USA

AICT 2025 Publicity Chairs

Francisco Javier Díaz Blasco, Universitat Politècnica de València, Spain
Ali Ahmad, Universitat Politècnica de València, Spain
Sandra Viciano Tudela, Universitat Politècnica de València, Spain
José Miguel Jiménez, Universitat Politècnica de València, Spain

AICT 2025 Technical Program Committee

Ghulam Abbas, GIK Institute, Pakistan
Iwan Adhicandra, Bakrie University, Indonesia
Abdullah Al-Alaj, Virginia Wesleyan University, USA
Abdulazaz Albalawi (Aziz), University of California, Santa Cruz, USA
Michele Albano, Aalborg University, Denmark
Nicolae Dumitru Alexandru, "Gheorghe Asachi" Technical University of Iasi, Romania
Arrate Alonso Gómez, Mondragon Unibertsitatea, Spain
Marco Aurélio Spohn, Federal University of Fronteira Sul, Brazil
Marios Avgeris, Carleton University, Ottawa, Canada
Ilija Basicovic, University of Novi Sad, Serbia
Oussama Bazzi, Lebanese University, Lebanon
Carlos Becker Westphall, Federal University of Santa Catarina, Brazil
Sara Behjatjamal, Altinbas University, Turkey
Sonia Ben Rejeb, ISI/University El Manar, Tunisia
Stefano Berretti, University of Firenze, Italy
Robert Bestak, Czech Technical University in Prague, Czech Republic
Petros Bithas, National and Kapodistrian University of Athens, Greece
Razvan Bocu, Transilvania University of Brasov, Romania
Antonella Bogoni, Scuola Superiore Sant'Anna-TeCIP Institute, Italy
Eugen Borcoci, National University of Science and Technology POLITEHNICA Bucharest, Romania
Christos Bouras, University of Patras, Greece
An Braeken, Vrije Universiteit Brussel, Belgium
Lubomir Brancík, Brno University of Technology, Czech Republic
Peter Brida, University of Zilina, Slovakia
Ivana Bridova, University of Zilina, Slovakia
Nicola Calabretta, Eindhoven University of Technology, Netherlands

Vítor Carvalho, 2Ai-EST-IPCA / Algoritmi Research Center - Minho University, Portugal
Fernando Cerdan, Polytechnic University of Cartagena, Spain
Adil Chekati, University of Tunis El Manar, Tunisia
Bo-Rong Chen, University of Illinois Urbana-Champaign, USA
Chen Chen, Chongqing University, China
Enrique Chirivella Pérez, Universitat de Valencia, Spain
Tanveer Choudhury, Federation University Australia, Australia
Chi-Wai Chow, National Chiao Tung University, Taiwan
Giampiero Contestabile, Scuola Superiore Sant'Anna, Pisa, Italy
Kevin Daimi, University of Detroit Mercy, USA
Rogério Dionísio, Instituto Politécnico de Castelo Branco, Portugal
Laura-Maria Dogariu, National University of Science and Technology POLITEHNICA Bucharest, Romania
Thomas Dreibholz, SimulaMet - Simula Metropolitan Centre for Digital Engineering, Norway
Ersin Elbasi, American University of the Middle East, Kuwait
Mahmoud M. Elmesalawy, Helwan University, Egypt
Anna Esposito, Università della Campania "Luigi Vanvitelli", Italy
Mario Ezequiel Augusto, Santa Catarina State University, Brazil
Mário Ferreira, University of Aveiro, Portugal
Wendy Flores-Fuentes, Autonomous University of Baja California, Mexicali, Mexico
Wolfgang Froberg, AKAD University Stuttgart, Germany
Diluka Galappaththige, University of Alberta, Canada
Ivan Ganchev, University of Limerick, Ireland / University of Plovdiv "Paisii Hilendarski", Bulgaria
Seema Garg, Nokia, India
Gustavo Gatica, Universidad Andres Bello, Chile
Alireza Ghasempour, The University of New Mexico, USA
Pantea Nadimi Goki, TeCIP Institute Scuola Superiore Sant'Anna, Pisa, Italy
Luís Gonçalo Cancela, ISCTE-IUL & Instituto de Telecomunicações, Portugal
Norton Gonzalez, Luciano Feijão Faculty, Sobral, Ceará, Brazil
Javier Gozálvez, Universidad Miguel Hernandez de Elche, Spain
Christian Grasso, University of Catania, Italy
Serkan Günel, Dokuz Eylül Üniversitesi, Turkey
Yibo Guo, University of California San Diego, USA
Jan Haase, University of Lübeck, Germany
Jiayi He, Guangdong University of Technology, Guangzhou, China
Raimir Holanda Filho, University of Fortaleza - UNIFOR, Brazil
Xinyue Hu, University of Minnesota - Twin Cities, USA
Takeshi Ikenaga, Kyushu Institute of Technology, Japan
Muhammad Ikram, Macquarie University, Australia
Ilias Iliadis, IBM Research - Zurich Laboratory, Switzerland
Faouzi Jaidi, University of Carthage | Higher School of Communications of Tunis & National School of Engineers of Carthage, Tunisia
Sara Behjat Jamal, Ayyansaray University, Turkey
Vahid Joroughi, GomSpace, Denmark
Branislav Jovic, Defence Technology Agency (DTA) | New Zealand Defence Force (NZDF), Auckland, New Zealand
Kheira Kahili, ESTACA'LAB, France / LMT Lab, Algeria
Georgios Kambourakis, University of the Aegean, Greece
Dimitris Kanellopoulos, University of Patras, Greece

Arashdeep Kaur, GLBITM, Greater Noida, India
Anne Kayem, Hasso-Plattner-Institute | University of Potsdam, Germany
David Khoury, AUST (American University of Science & Technology), Beirut, Lebanon
Uliana Kochetkova, Saint Petersburg State University, Russia
Josiane Kouam, INRIA, France
Ivan Kotuliak, Slovak University of Technology, Bratislava, Slovakia
Višnja Križanović, Josip Juraj Strossmayer University of Osijek, Croatia
Dragana Krstic, University of Niš, Serbia
Andreas Kunz, Lenovo, Germany
Hoang Le, Google, USA
Gyu Myoung Lee, Liverpool John Moores University, UK
Luciano Leonel Mendes, Inatel - National Institute of Telecommunications, Brazil
Gong-Ru Lin, National Taiwan University, Taiwan
Yu-Sheng Lin, Southern Taiwan University of Science and Technology, Tainan, Taiwan
Chao-Tsung Ma, National United University, Taiwan
Juraj Machaj, University of Zilina, Slovakia
Zoubir Mammeri, IRT - Toulouse, France
Alina-Elena Marcu, National University of Science and Technology POLITEHNICA Bucharest, Romania
Andrea Marotta, University of L'Aquila, Italy
Kajetana Marta Snopek, Warsaw University of Technology, Poland
Alexandru Martian, National University of Science and Technology POLITEHNICA Bucharest, Romania
Erik Massarczyk, RheinMain University of Applied Sciences Wiesbaden Rüsselsheim, Germany
Natarajan Meghanathan, Jackson State University, USA
Amalia Miliou, Aristotle University of Thessaloniki / Center for Interdisciplinary Research and Development, Greece
Kristian Miok, West Univesity of Timisoara, Romania
Nader F. Mir, San Jose State University, USA
Rodrigo Moreira, Federal University of Viçosa, Brazil
Andrea Morichetta, University of Camerino, Italy
Ioannis Moscholios, University of Peloponnese, Greece
Marco Mugnaini, University of Siena, Italy
Karim M. Nasr, University of Greenwich, UK
Carlos Natalino, Chalmers University of Technology, Gothenburg, Sweden
Antonio Navarro, Universidad Complutense de Madrid, Spain
Ranyelson Neres Carvalho, University of Brasilia, Brazil
Roman Odarchenko, Bundleslab KFT, Budapest, Hungary
Claudia Cristina Oprea, National University of Science and Technology POLITEHNICA Bucharest, Romania
Constantin Paleologu, National University of Science and Technology POLITEHNICA Bucharest, Romania
Nicola Pasquino, Università di Napoli Federico II, Italy
Cathryn Peoples, Ulster University, UK
Luciana Pereira Oliveira, IFPB, Brazil
Paulo Pinto, Universidade Nova de Lisboa, Portugal
Ivan Miguel Pires, Instituto de Telecomunicações | Universidade da Beira Interior, Covilhã, Portugal
Ladislav Polak, Brno University of Technology | SIX Research Center, Brno, Czech Republic
Luca Potì, Photonic Networks and Technologies Lab (CNIT), Pisa, Italy
Vijay Prakash, University of Malta, Malta
Roberto Proietti, Politecnico di Torino, Italy
Emanuel Puschita, Technical University of Cluj-Napoca, Romania

Anamaria Radoi, National University of Science and Technology POLITEHNICA Bucharest, Romania
Oded Raz, Eindhoven Henrdik Casimir institute | Eindhoven University of Technology, The Netherlands
Stefano Rinaldi, University of Brescia, Italy
Juha Röning, University of Oulu, Finland
Lyazid Sabri, University Bachir el Ibrahim, Bordj Bou Arreridj, Algeria
Zsolt Saffer, Institute of Statistics and Mathematical Methods in Economics | Vienna University of Technology, Austria
Abheek Saha, Hughes Systique Corp., India
Ioakeim K. Samaras, Intracom-Telecom, Software Development Center, Thessaloniki / Industrial Systems Institute, Greece
Demetrios Sampson, University of Piraeus, Greece
Leonel Santos, CIIC - Polytechnic of Leiria, Portugal
Paulus Insap Santosa, Universitas Gadjah Mada - Yogyakarta, Indonesia
Vincent Savaux, b<>com, Rennes, France
Antonio Luiz Schalata Pacheco, Federal University of Santa Catarina, Brazil
Motoyoshi Sekiya, Fujitsu, Japan
Sergei Semenov, HiSilicon Lund Research Center, Sweden
António Serrador, Lisbon School of Engineering, Portugal
Ana Serrano Tellería, University of Castilla La Mancha, Spain
A. F. M. Shahan Shah, Yildiz Technical University, Istanbul, Turkey
Yingjie Shao, The Chinese University of Hong Kong, Hong Kong
Shuaib Siddiqui, Fundacio i2CAT, Barcelona, Spain
Zdenek Smekal, Brno University of Technology, Czech Republic
Antonio Sorrentino, Università Parthenope, Napoli, Italy
Gautam Srivastava, Brandon University, Canada
Kostas Stamos, University of Patras, Greece
Horia Stefanescu, Orange, Romania
Oscar Tamburis, Università "Federico II" Napoli, Italy
Vasileios Theodorou, Intracom Telecom, Greece
Angelo Trotta, University of Bologna, Italy
Thrasyvoulos Tsiatsos, Aristotle University of Thessaloniki, Greece
Sezer Ulukaya, Trakya University, Turkey
Rob van der Mei, Centre for Mathematics and Computer Science (CWI), Netherlands
Bernd E. Wolfinger, University of Hamburg, Germany
Xuwei Xue, Beijing University of Posts and Communications, China
Ramin Yahyapour, Georg-August-Universitaet Goettingen/GWDG, Germany
Hui Yang, Beijing University of Posts and Telecommunications (BUPT), China
Mehmet Akif Yazici, Informatics Institute - Istanbul Technical University, Turkey
Chien-Hung Yeh, Feng Chia University, Taiwan
Shaohua Yu, Northwestern Polytechnical University, China
Xinchun Yu, Shenzhen International Graduate School of Tsinghua University, Shenzhen, China
Mariusz Zal, Poznan University of Technology, Poland
Francesco Zampognaro, University of Rome "Tor Vergata", Italy
Stefania Zinno, University of Naples Federico II, Italy
Mario Zitelli, Sapienza Univ. di Roma, Italy
Piotr Zwierzykowski, Poznan University of Technology, Poland

Copyright Information

For your reference, this is the text governing the copyright release for material published by IARIA.

The copyright release is a transfer of publication rights, which allows IARIA and its partners to drive the dissemination of the published material. This allows IARIA to give articles increased visibility via distribution, inclusion in libraries, and arrangements for submission to indexes.

I, the undersigned, declare that the article is original, and that I represent the authors of this article in the copyright release matters. If this work has been done as work-for-hire, I have obtained all necessary clearances to execute a copyright release. I hereby irrevocably transfer exclusive copyright for this material to IARIA. I give IARIA permission to reproduce the work in any media format such as, but not limited to, print, digital, or electronic. I give IARIA permission to distribute the materials without restriction to any institutions or individuals. I give IARIA permission to submit the work for inclusion in article repositories as IARIA sees fit.

I, the undersigned, declare that to the best of my knowledge, the article does not contain libelous or otherwise unlawful contents or invading the right of privacy or infringing on a proprietary right.

Following the copyright release, any circulated version of the article must bear the copyright notice and any header and footer information that IARIA applies to the published article.

IARIA grants royalty-free permission to the authors to disseminate the work, under the above provisions, for any academic, commercial, or industrial use. IARIA grants royalty-free permission to any individuals or institutions to make the article available electronically, online, or in print.

IARIA acknowledges that rights to any algorithm, process, procedure, apparatus, or articles of manufacture remain with the authors and their employers.

I, the undersigned, understand that IARIA will not be liable, in contract, tort (including, without limitation, negligence), pre-contract or other representations (other than fraudulent misrepresentations) or otherwise in connection with the publication of my work.

Exception to the above is made for work-for-hire performed while employed by the government. In that case, copyright to the material remains with the said government. The rightful owners (authors and government entity) grant unlimited and unrestricted permission to IARIA, IARIA's contractors, and IARIA's partners to further distribute the work.

Table of Contents

Anchors' Presentation of Selling Purple-Clay Teapots: Toward a Nexus Analysis of Douyin Live Streaming Selling	1
<i>Xixin Su</i>	

Copyright (c) IARIA, 2025. ISBN: 978-1-68558-248-7

1

Abstract—This paper investigates the discourse and multimodal strategies employed in a Douyin live stream promoting Yixing purple-clay teapots, a significant element of Chinese intangible cultural heritage. Through nexus analysis, we examine how the anchor's linguistic and multimodal practices shape audience engagement and cultural appreciation. Prior research has predominantly focused on the operational and financial aspects of live streaming sales, often overlooking its cultural and educational dimensions. This paper addresses this gap by analyzing the interplay of mediated actions, interaction order, and historical context to reveal the mechanisms driving audience immersion and cultural dissemination. This research highlights live streaming as a tool for educational and cultural promotion by demonstrating how linguistic and multimodal strategies educate audiences about traditional craftsmanship and showcase live streaming as an innovative, technology-driven service model, bridging commerce, culture, and education in the digital era.

Keywords—live streaming selling; Yixing purple-clay teapots; nexus analysis; multimodal discourse strategies; cultural heritage promotion.

2006. These handcrafted teapots, deeply rooted in humanistic and artistic traditions, require a distinct sales approach that integrates storytelling, demonstration, and cultural education.



Live streaming e-commerce has surged in popularity over the past decade, with China leading this trend through its extensive base of tech-savvy, young, and active online shoppers. According to the latest China Internet Network Information Center (CNNIC) [3] report, 68.5% of China's 1.096 billion Internet users fall within the 20-59 age range, among which more than 900 million users engage in online shopping. The interactive and real-time nature of live streaming has fostered a rich linguistic repertoire, as anchors employ diverse linguistic strategies and multimodal techniques to engage audiences.

While prior studies on Live Streaming Selling (LSS) have largely emphasized operational and financial aspects, such as consumer attitudes [2], purchase intentions [16], streamer identity [7], and influencer marketing [13], they tend to focus on fast-moving consumer goods like snacks, cosmetics, and agricultural products. Figure 1 provides an overview of recent studies revolving around the keyword “livestreaming.” This paper shifts attention to culture-laden products, specifically Yixing purple-clay (zisha) teapots, recognized as China’s intangible cultural heritage since

The integration of live streaming technologies with global e-commerce functions has created new opportunities for promoting heritage-rich products to broader audiences. Using a nexus analysis framework, this study examines the discourse patterns and linguistic practices employed by anchor Fanfan from Da Guan Culture when selling Yixing teapots on Douyin. Specifically, this research aims to contribute to discussions on technology's role in cultural preservation and digital commerce by analyzing the discursive mechanisms underpinning LSS, demonstrating how it bridges education, culture, and global markets as a dynamic, technology-driven model. It explores how these practices contribute to the promotion of traditional pottery culture and the establishment of a distinctive interaction order. By analyzing multimodal strategies, this research aims to enhance LSS discourse for cultural products and contribute to sustaining and revitalizing intangible cultural heritage in the digital economy, providing valuable insights for applied linguistics and beyond. However, this study primarily focuses on the anchor's discourse, with limited attention to the audience's perspective. Future research could benefit from ethnographic approaches to explore audience co-construction of cultural narratives. Additionally, the single case study design may limit generalizability.

suggesting the need for broader studies across multiple anchors and sessions.

The paper is structured as follows: Section 2 provides a literature review, examining relevant studies on live streaming e-commerce and nexus analysis to establish a theoretical foundation for the research. Section 3 details the methodology employed, including data collection and the analytical frameworks of nexus analysis and multimodal discourse analysis. Section 4 presents the findings, illustrating the discourse patterns and multimodal strategies used by the anchor to promote Yixing teapots. Section 5 discusses the implications of these findings, focusing on how they contribute to cultural preservation and audience engagement. Finally, Section 6 concludes the study, summarizing the key insights and suggesting directions for future research in this area.

II. LITERATURE REVIEW

The rapid development of live streaming e-commerce has transformed platforms like Douyin into dynamic spaces for cultural and economic exchange. Since introducing its webcast feature in 2017, Douyin has enabled anchors to engage audiences through multimodal strategies, including storytelling, product demonstrations, and real-time interaction. These practices, influenced by social and cultural norms, have redefined how traditional products like Yixing purple-clay teapots are marketed. Beyond transactions, live streaming has become a platform for cultural education and community building, making it a compelling subject of study.

To analyze these dynamics, this study employs the nexus analysis framework developed by Scollon and Scollon [21], as shown in Figure 2. Nexus analysis views discourse as a form of social action and integrates three core elements: mediated actions, interaction orders, and historical bodies. These elements help explain how discourse shapes and sustains practices in social settings. In the context of LSS, anchors' linguistic and multimodal strategies serve as mediated actions that influence audience behavior and cultural engagement. For instance, anchors often use rhetorical and visual techniques to immerse viewers in the cultural narratives surrounding Yixing teapots. Recognized as part of China's intangible cultural heritage since 2006 (enlisted in the *List of the First Batch of National Intangible Cultural Heritage*), these handcrafted products demand a unique sales approach that integrates storytelling and cultural education. By highlighting the historical and artistic significance of these teapots, anchors establish a shared Nexus of Practice (NoP) with their audiences, fostering cultural appreciation and a sense of belonging.

A. Nexus Analysis in Discourse Studies

Nexus analysis builds on foundational work by Gee [12] and Blommaert [10], who emphasize the interplay between small-d discourse (language in use) and big-D Discourse (social and historical contexts). These perspectives are particularly relevant for live streaming, where linguistic and cultural elements converge in real-time. A bibliometric analysis of "live streaming selling" literature using

VOSviewer (see Figure 1) shows that themes like social presence and consumer behavior dominate the field, leaving cultural and educational dimensions underexplored. This study addresses this gap by examining how anchors integrate cultural heritage with digital commerce through their discursive practices.

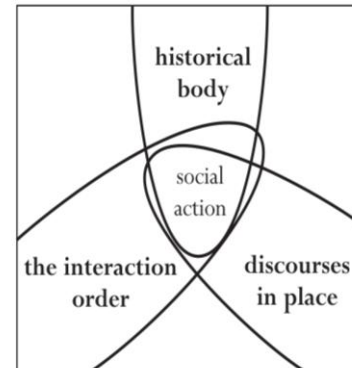


Figure 2. The framework of nexus analysis ([22], p. 20).

By situating LSS within these frameworks, this review highlights its dual role as an economic activity and a cultural phenomenon. The multimodal and interactive nature of live streaming not only facilitates sales but also serves as a medium for cultural preservation, making it a valuable area for applied linguistics research.

B. Research Questions

Through its analysis of the discursive mechanisms underpinning LSS, this research contributes to discussions on the role of technology in cultural preservation and digital commerce. It demonstrates how live streaming bridges education, culture, and global markets, showcasing its potential as a dynamic, technology-driven service model.

To explore these dynamics, the study addresses the following research questions:

RQ: How is a nexus of practice established in the context of live streaming selling?

Sub-question 1: What discourse patterns do anchors employ to promote Yixing purple-clay teapots?

Sub-question 2: How do these discourse patterns contribute to audience engagement and cultural promotion within the nexus of practice?

III. METHODOLOGY

A. Data Collection

This study focuses on the live streaming room of Da Guan Culture, which regularly features both the anchor and an invited master potter. Established in 2005, Da Guan has been recognized for promoting the intangible cultural heritage of Yixing purple clay teapots and its success in live streaming includes awards like TikTok's Factory of the Year for Craftsmanship in 2023. The primary subject of observation is anchor "Fanfan."

Data collection involved screen recordings of live streaming sessions using Tencent Meeting and transcriptions

of anchor and guest speeches through iFLYTEK, followed by meticulous proofreading. Four hours of live streaming footage were recorded, but this study focuses on a one-hour excerpt from April 25th, 2023, which exemplifies the key discursive and multimodal strategies used to promote Yixing teapots.

B. Data analysis

This study employs nexus analysis and multimodal discourse analysis to explore how social actions are constructed and sustained in the live streaming context. Nexus analysis maps the relationships among mediated actions, interaction orders, and historical bodies, while discourse analysis examines the communicative patterns embedded in these relationships. Together, these methodologies provide a comprehensive framework to understand how discourse shapes audience engagement and cultural promotion.

The transcripts were processed through text analysis tools (e.g., keyword extraction, as shown in Figure 3) to identify salient linguistic and multimodal features and visual elements (such as camera transitions).



Figure 3. The most frequent words in Da Guan's LSS session.

Guided by nexus analysis, data coding focused on:

1. Practices and linguistic resources constructing the social order;
2. Discourses reflecting audience values and identities; and
3. Historical bodies representing embodied cultural experiences.

IV. FINDINGS

A. Phase 1: engaging the NoP

The first phase of establishing the Nexus of Practice (NoP) involved building anticipation for the live stream. Da Guan Culture began by sharing a short video introducing the "Longshan Four Treasures," clay materials with historical and cultural significance—Zhusha, purple Jinsha, golden Duanni, and Zini. The session spotlighted master potter Jiang Rong, the innovator behind the Four Treasures, and Hong Tao, her protégé and inheritor of these techniques.

The discourse during this phase emphasized the craftsmanship and cultural heritage embedded in the teapots.

Techniques such as three-dimensional relief carving, pioneered by Xue Song, were repeatedly referenced. Anchor Fanfan and Hong Tao highlighted the intricate nature of the carvings, often mentioning over 10,000 carving strokes, to underline the added value and artistry of the teapots. Fanfan's neutral, educative tone positioned him as a guide to the teapots' history, while Hong Tao's role as inheritor reinforced the authenticity of the products.

The live streaming room was constructed as a unique NoP, catering to an audience already invested in Jiang Rong's craftsmanship and eager to collect Hong Tao's works. This phase laid the foundation for establishing a shared social space centered on appreciation for Yixing zisha culture.

B. Phase 2: navigating the NoP

The second phase involved consolidating the NoP through multimodal engagement, analyzed using three excerpts.

Excerpt 1

H: "The inheritor of zisha Floral Vessels is determined to excel in crafting such exquisite vessels. That is my responsibility. This Longshan Zhusha turns red and becomes lustrous upon contact with water. After being nurtured, it becomes glossy and vibrant. This material was also highly cherished by my Shigong. Therefore, at the age of 84, Teacher Jiang Rong, in her later years, specifically inscribed a poem for this clay material."

The first excerpt was about teapot culture, dedicated to the notion of the Scollons' historical context by highlighting the cultural heritage of teapots. The life experiences of Hong as an individual social actor were narrated via his inheritance from the great master. The stress on cultural continuum serves to reinforce the current NoP as a social group enthusiastic about zisha culture and the spiritual essence behind the intangible culture relics.

Excerpt 2

F: "Ah, thanks, Teacher Li. Almost missed your gift. Friends, we have a top-ranked super fan here—Teacher Li. Thanks, everyone, no need for gifts, just send me some hearts. That's enough. Friends, it's over, no more teapots left, because Mr. Hong Tao's teapots are indeed scarce. So, this wraps it up. Anyway, grab what you can first all, and forget about the gifts. Thanks, Teacher Li, please no gifts."

The second excerpt was related to the interaction order within the room. On one hand, "Teacher Li" appeared at the beginning and end of this piece. Fanfan was busy declaring the sold-out situation and presenting a new teapot while in the meantime expressing gratitude for this top-ranking super fan of his LSS room. His words implied that Da Guan was different from its counterparts on Douyin, conveying a message that consumers could save money without wasting time and money on sending virtual gifts. What Da Guan cared about is never such profit, but about bringing scarce though invaluable masterpiece teapots to their fans. In this way, he constructed the NoP into an elegant and caring style, aloof from inaesthetic financial gains.

Excerpt 3

F: “Give me a close-up. My friends, this is what we call excellent clay material. This high-quality material turns red and becomes lustrous once it meets water. Yes, there’s no need to deliberately think about how to nurture the teapot. Oh, once hot water is poured over it (Figure 4 is one of the many close-up shots of on-site presentation), everyone, take a close look at this material. In an instant, you’ll feel this glossy texture, just this feeling.”



Figure 4. Close-up of performance.

C. Phase 3: changing the NoP

In the final phase, the NoP evolved into a more dynamic entity, offering opportunities for audience retention and growth.

Excerpt 4

F: “The teapot I have here, friends, is single-sided masterpiece by Master Hong Tao, named “Clear Spring,” with a capacity of 330 milliliters, personally engraved by Master Xue Song. Just look at the stairs, really, this kind of distant-to-near layering effect, this three-dimensional feeling, it’s as if you’re right there, indeed, friends. Let me give you a close-up. This “Clear Spring” by Master Hong Tao, with a capacity of 330 milliliters, made of Longshan Zhusha, how about the craftsmanship? The top figure in the industry for three-dimensional relief engraving, it’s top-notch. This teapot is priced at 1580. Get ready, 3, 2, 1, go. The actual physical teapot is even more awe-inspiring.”

Excerpt 5

H: “This carving of Jiayuguan [Jiayu Pass, a key frontier fortress of the Ming dynasty Great Wall] was the work of Master Xue Song. This is a major high-intensity carved and painted work with over 90,000 strokes. With a small capacity of 170 milliliters, this should be considered a true masterpiece-level work.”

Keywords in excerpts four to five are “top-notch” and “masterpiece-level” and each were mentioned three times by Fanfan and Hong. A stark contrast was created by the huge number of engraving strokes and the tiny capacity (as shown in Figure 5) compared with much bigger regular teapots.



Figure 5. Close-up of the carving technique.

V. DISCUSSION

The findings of this article demonstrate that the nexus of practice within Da Guan LSS room is characterized by the anchor’s meticulous establishment and maintenance. Anchor Fanfan set up a nexus of practice with assistance from the master potter Hong Tao. The author herself was an active presence in the NoP, not only observing, but also participating in the whole session. The idea of constructing a dynamic NoP serves to observe the types of discourses and how they mediate discourse and in the meanwhile change the interactions [1][8][13]. Under the nexus analysis framework, it is at the intersection of the historical bodies, the interaction order, and the discourses in place that the social action of live streaming occurred and was maintained. Adopting this framework, this article discusses the way that the factors in Figure 6 interact to shed light upon the complex dynamics within a particular webcasting room.

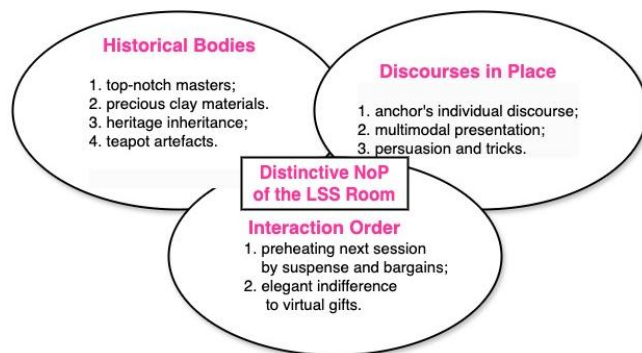


Figure 6. The nexus of practice within Da Guan LSS room.

A. Constructing LSS Interaction Order with Intended Peculiarities

In the discussion of the primary findings of the study, we have delved into the collaborative dynamics between the anchor and the invited guest, observed how they took the floor alternately, and established a distinctive framework of practice unique to Da Guan’s Reception Room.

First, Fanfan interspersed his livestreams with motivational and enticing messages that foster a strong sense of community among the audience, thereby encouraging repeat viewership without resorting to soliciting virtual gifts.

In the meanwhile, the master guest conveyed a poignance by lowering signs and rueful smiles whenever Fanfan announced the price of each product, ranging between 1,680 to 1,980 yuan. These gestures hinted at the undervaluation of craftsmanship, suggesting that each teapot was worth far more than its four-digit price tag, not to mention the immeasurable cultural heritage embodied in each purple clay creation. Such suspense and generous offer of gifts matched the second interaction order, namely an indifference to virtual gifts. In contrast to many anchors' typical hailing of begging for gifts from audience, Fanfan reiterated that he only hoped that his beloved fans could land their ideal teapots and that there was no need to waste time or money on gifts.

The dual dimensions of the above features hold together the NoP by hailing the cultural and historical aspects, managing an elegant ambience.

B. Bringing Historical Bodies into LSS Rooms

During Fanfan's live streaming, he centered on the cultural significance of the teapots, which were imbued with a rich heritage stemming from the esteemed female master Jiang Rong, renowned for her expertise in crafting floral vessels and introducing the Longshan Four Treasures. Hong Tao, as the heir within her lineage, exhibited a commitment beyond financial gains. He demonstrated his uprightness by using in all his works the precious Zhusha clay, renowned for a shrinkage rate of 30%. Such a gesture of "unbelievable extravagance" within the teapot-making industry was further accentuated by the involvement of "top-notch" engravers, who meticulously carved over 10,000 strokes onto each teapot.

In this way, the glory of top-notch masters is revived through precious clay materials, heritage inheritors and other distinct teapot artefacts. Given these different historical bodies, the audience developed a loyalty to the LSS room, which was at the same time aligned with the elegant interaction order, and which in turn subjected them to committed zealotry in the new order. For example, the top tip-follower [榜一大哥, the person who gave away the most tip/gifts to an anchor] was discouraged repeatedly from offering monetary contributions but he continued due to personal identification with Da Guan.

C. One Dominant Persuasion Discourse in Place

A key persuasion strategy in live streaming selling involves anchors establishing credibility and creating an immersive experience through multimodal elements such as storytelling, demonstrations, and meticulously designed settings. Fanfan exemplified this through repetitive cycles of discourse: presenting teapot details, conducting close-ups, and performing live demonstrations (e.g., pouring water to showcase the clay's quality). These strategies solidified a Nexus of Practice (NoP) characterized by cultural richness, professionalism, and persuasiveness.

Two primary elements defined this discourse.

1. Multimodal Cultural Elements

The setting of Da Guan's Reception Room played a pivotal role in conveying the company's cultural and

professional ethos. A backdrop of red curtains created a dramatic, warm ambience, echoing the vibrant hues of Longshan Zhusha teapots. Tea-related items were prominently displayed, reinforcing the atmosphere of a traditional Chinese tea ceremony. The deliberate curation of the setting (as shown in Figure 7) enhanced the audience's engagement, immersing them in the cultural and artistic narrative of zisha craftsmanship.



Figure 7. A panoramic screenshot of Da Guan's Reception Room.

2. Strategic Rhetorical Devices

The anchor employed Aristotle's rhetorical triad—logos (logic), pathos (emotion), and ethos (credibility)—to influence the audience. Logos was evident in Fanfan's factual explanations, such as detailing the scarcity and quality of Longshan clay. Pathos emerged through emotional appeals, including admiration for master craftsmen and the cultural legacy they represent. Ethos was established by emphasizing the prestige of Longshan's Four Treasures, master Hong Tao's expertise, and the authenticity of the showcased teapots.

However, in the world of live streaming selling, this rhetoric discourse is often, as Hamad [22] observed, "full of faulty logic and bad arguments on all sides" of the commercial field. Consumers can too easily fall prey to the logical fallacies and manipulative persuasive tactics employed by many live stream anchors. The author further illustrates examples of such tactics, drawing on Thouless' taxonomy of Thirty-Eight Dishonest Tricks [23] used in persuasive discourse:

Proof by Selected Instances: Fanfan highlighted high competitor prices and extensive carving strokes to imply unmatched value, diverting attention from other unmentioned works.

Suggestion by Repeated Affirmation: He frequently stressed product scarcity and uniqueness, prompting urgency without offering concrete evidence.

Suggestion by Prestige: The reputation of Jiang Rong, master Hong Tao, and 3D carving experts was leveraged to endorse the products, though details like certificate authenticity remained vague.

These multimodal and rhetorical techniques not only reinforced the NoP but also swayed audience perceptions,

blending cultural heritage with commercial imperatives in the live streaming context.

VI. CONCLUSION AND FUTURE WORK

This study has illustrated how the anchor and guest of Da Guan's live streaming room created a culture-rich, multimodal experience that intersected with persuasive discourse strategies. Using the framework of nexus analysis, it identified key discourse patterns and strategies that shaped a Nexus of Practice (NoP), revealing how linguistic practices and interactive engagement promote traditional Yixing pottery culture.

A. Implications and Future Directions

While this research provides valuable insights into live streaming discourse for cultural product promotion, some limitations must be acknowledged. First, the findings are based on a single case study of a Douyin anchor, limiting their generalizability. Expanding the scope to include multiple anchors and sessions across similar industries could yield broader insights. Second, this study focused on the anchor's discourse, without incorporating audience perspectives. Future research could adopt an ethnographic approach to examine how viewers co-construct cultural narratives and engage with the NoP in live streaming contexts.

Despite these limitations, the findings underscore the potential of live streaming platforms as powerful tools for sustaining intangible cultural heritage in the digital economy. The strategic use of language, storytelling, and viewer engagement demonstrated in this study highlights how live streaming fosters a sense of cultural community, builds credibility, and enhances appreciation for traditional crafts like Yixing pottery. These insights hold practical relevance for cultural institutions, e-commerce platforms, and practitioners aiming to promote culture-embedded products.

Aligned with AICT 2025 themes, this study highlights how live streaming intersects with e-learning and telecommunications by educating audiences about cultural heritage and with future applications and services by showcasing innovative methods for cultural promotion in digital commerce. Future research could adopt interdisciplinary approaches, combining discourse analysis, cultural studies, and digital ethnography to explore live streaming's broader role in revitalizing intangible heritage across diverse product categories in the 21st century.

ACKNOWLEDGMENT

The author expresses her great appreciation to Professor Zhang Haomin's guidance and knowledge of research methods, as well as to her supervisor, Martin Cortazzi, for proving the inspiration for this work.

REFERENCES

- [1] C. Huo, X. Wang, M. W. Sadiq, and M. Pang, "Exploring factors affecting consumer's impulse buying behavior in live-streaming shopping: An interactive research based upon SOR

model," *SAGE Open*, vol. 13(2), no. 21582440231172678, 2023.

- [2] C. I. Ho, Y. Liu, and M. C. Chen, "Antecedents and consequences of consumers' attitudes toward live streaming shopping: an application of the stimulus-organism-response paradigm. *Cogent Business & Management*, vol. 9(1), no. 2145673, 2022.
- [3] China Internet Network Information Center [CNNIC]. (2024). The 54th China Statistical Report on Internet Development. [Retrieved: December, 2024 from <https://www.cnnic.com.cn/IDR/ReportDownloads/202411/P020241101318428715781.pdf>], 2024.
- [4] F. M. Hult, "Nexus analysis as scalar ethnography for educational linguistics," in *Researching Multilingualism*, M. Martin-Jones, D. Martin, Eds. Routledge, pp. 103-118, 2016.
- [5] G. A. Kennedy, *On rhetoric: A theory of civic discourse* (Later Printing Edition). New York: Oxford University Press, 1991.
- [6] G. Freeman and D. Y. Wohn, "Streaming your identity: Navigating the presentation of gender and sexuality through live streaming," *Computer Supported Cooperative Work (CSCW)*, vol. 29, no. 6, pp. 795-825, 2020.
- [7] G. Kress, *Multimodality: A social semiotic approach to contemporary communication*. Routledge, 2009.
- [8] G. Li, Y. Cao, B. Lu, Y. Yu, and H. Liu, "Luxury brands' live streaming sales: the roles of streamer identity and level strategy," *International Journal of Advertising*, vol. 42(7), pp. 1178-1200, 2023.
- [9] H. Huang, J. Blommaert, and E. Van Praet, "'OH MY GOD! BUY IT!' a multimodal discourse analysis of the discursive strategies used by Chinese ecommerce live-streamer Austin Li," *Proc. HCI International 2020-Late Breaking Papers: Interaction, Knowledge and Social Media: 22nd HCI International Conference, HCII 2020 Proceedings 22*, Springer International Publishing, Jul. 2020, pp. 305-327.
- [10] J. Blommaert, "Sociolinguistics and discourse analysis: Orders of indexicality and polycentricity," *Journal of multicultural discourses*, vol. 2(2), pp. 115-130, 2007.
- [11] J. Blommaert, *Key topics in sociolinguistics*. Reino Unido: Cambridge, 2005.
- [12] J. Chen and J. Liao, "Antecedents of viewers' live streaming watching: a perspective of social presence theory," *Frontiers in Psychology*, vol. 13, no. 839629, 2022.
- [13] J. P. Gee, "Discourse, small d, big D," *The international encyclopedia of language and social interaction*, vol. 3, pp. 1-5, 2015.
- [14] J. Wielki, "Analysis of the role of digital influencers and their impact on the functioning of the contemporary on-line promotional system and its sustainable development," *Sustainability*, vol. 12(17), no. 7138, 2020.
- [15] K. Burke, *A rhetoric of motives*. University of California Press, 1969.
- [16] L. Almén, *One-school-for-all As Practice-A Nexus Analysis of Everyday Digitalization Practices* [PhD dissertation, Jönköping University, School of Education and Communication], 2021. [Retrieved: February, 2025 from <https://hj.diva->

- portal.org/smash/record.jsf?pid=diva2%3A1585540&dsid=-3229.]
- [17] M. A. Hossain, A. Kalam, M. Nuruzzaman, and M. Kim, "The Power of Live-Streaming in Consumers' Purchasing Decision," *SAGE Open*, vol. 13(4), no. 21582440231197903, 2023.
 - [18] M. C. Larsen and P. Raudaskoski, "Nexus analysis as a framework for Internet studies," in *Second international handbook of internet research*, J. Hunsinger, M. M. Allen, and L. Klastrup, Eds. pp. 815-834, 2020.
 - [19] M. C. Larsen, Unge og online sociale netværk: En neksusanalytisk undersøgelse af medierede handlinger og offentlige diskurser [Youth and online social networking: a nexus analytic study of mediated actions and public discourses] [Doctoral dissertation, Retrieved: March, 2024 from https://vbn.aau.dk/ws/portalfiles/portal/549488224/ph-d-afhandling_malene-charlotte-larsen.pdf]. Department of Communication and Psychology, Aalborg University, 2010.
 - [20] P. De Costa, W. Li, and J. Lee, "Unpacking the positioning of being 'disengaged' and 'disrespectful' in class through nexus analysis: an international student's navigation of institutional and interactional university norms," *International Review of Applied Linguistics in Language Teaching*, vol. 0, 2023.
 - [21] R. E. Widodo and T. A. Napitupulu, "Exploring the Impact of Live Streaming for E-Commerce Business: A Systematic Literature Review," *Journal of Theoretical and Applied Information Technology*, vol. 101(16), 2023.
 - [22] R. Scollon and S. W. Scollon, *Nexus Analysis. Discourse and the Emerging Internet*. Routledge, 2004.
 - [23] S. S. Hamad, A critical analysis of rhetorical fallacies as a persuasive strategy and their ideologies in the political speech of Prime Minister Nouri Al-Maliki [Unpublished doctoral thesis shared by supervisor]. School of Graduate Studies, Universiti Putra Malaysia, Selangor, 2021.
 - [24] R. H. Thouless, *Straight and crooked thinking*. Pan Books. [Online]. [Retrieved: February, 2025 from https://neglectedbooks.com/Straight_and_Crooked_Thinking.pdf], 1953.