

Supplementary Appendices

The Art of Fluidity in Cultural Heritage Transmission

A Mixed-Methods Study of 'China in Classics'

Supplementary Materials

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Appendix A: Complete Codebook — Qualitative Content Analysis of China in Classics

Study: *The Art of Fluidity in Cultural Heritage Transmission — A Mixed-Methods Study of 'China in Classics'*

Coders: Two trained researchers (A. and B.) | Software: NVivo 14 | Date: May 2025

Manuscript reference: Y.Z. & S.Z.

A.1 Purpose and Scope of the Codebook

This codebook operationalises the three-dimensional theoretical model (Thought, Art, Technology) used for qualitative content analysis of China in Classics. It was developed iteratively through a pilot-coding phase involving the first three episodes of Season 1, following established procedures for qualitative content analysis in media studies (Krippendorff, 2018; Saldaña, 2021). The codebook is designed for deductive application with emergent sub-codes, and all codes were applied to the full corpus of 22 episodes across two seasons (~33 hours of content).

A.2 Coding Principles

The following principles governed the application of codes:

- Unit of analysis: Each program segment (defined as a continuous thematic unit bounded by a clear shift in content focus, scene transition, or presenter address) constitutes one coding unit. Segments range from approximately 30 seconds to 5 minutes, with a median duration of 2 minutes.
- Single or multiple codes: Each segment may receive codes from one, two, or all three dimensions. Multiple codes within a dimension are permitted if the segment demonstrates co-occurring sub-codes.
- Dimensional priority: If a segment contains elements from multiple dimensions, the dominant dimension (the dimension occupying the greatest temporal proportion of the segment) is noted as the primary code.
- Explicit vs. implicit: Codes are applied based on explicit textual and visual evidence. Implied or inferred meanings are coded only when supported by direct cues (e.g., narrator language, on-screen text, production design).
- In vivo coding: Where emergent sub-codes arise, they are labelled in italics and noted as emergent.

A.3 Three-Dimensional Coding Framework

The three primary dimensions — Thought (学术性), Art (美学性), and Technology (技术性) — are each divided into eight sub-codes, yielding a total of 24 sub-codes. Each sub-code is accompanied by a definition, coding rules, illustrative examples, and related sub-codes.

A.3.1 DIMENSION 1: THOUGHT (学术性)

Definition: Segments coded under the Thought dimension prioritise intellectual engagement, scholarly authority, and factual knowledge transmission. They establish the epistemological foundation of cultural heritage and provide the cognitive scaffolding through which audiences develop substantive understanding of classical texts and historical contexts.

Code	Sub-code (Chinese)	Definition	Example from China in Classics	Related Codes
TH-01	Scholarly Citation (学术引用)	Direct reference to or quotation from primary classical texts, historical records, or authoritative scholarly works.	An expert historian reads aloud from the original Shang Shu text in classical Chinese.	TH-02, TH-03
TH-02	Expert Commentary (专家解读)	Sustained explanatory address by a credentialed scholar or historian providing interpretive analysis.	Professor Ye Tan explains the political philosophy of Confucius' Spring and Autumn period.	TH-01, TH-03
TH-03	Historical Contextualisation (历史背景)	Presentation of the social, political, economic, or cultural conditions surrounding a classical text or figure.	Narrator describes the Warring States period conditions that shaped The Art of War.	TH-01, TH-04
TH-04	Textual Structure Analysis (文	Systematic examination of the literary form, rhetorical structure, or compositional logic of a classical	A literary scholar analyses the parallel structure of sentences in the Daodejing.	TH-01, TH-05

Code	Sub-code (Chinese)	Definition	Example from China in Classics	Related Codes
	本结构分析)	text.		
TH-05	Intertextual Reference (互文关联)	Explicit linkage to other classical texts, historical narratives, or cultural traditions that situate the focal text within a broader canon.	The programme links the Shi Ji passage to the Shujing to demonstrate Sima Qian's historiographical method.	TH-01, TH-03
TH-06	Philosophical Elaboration (哲学阐发)	Extended exposition of the philosophical ideas, ethical frameworks, or moral principles embedded within a classical text.	Episode explores the concept of 'wu wei' (无为) through multiple scene enactments.	TH-02, TH-07
TH-07	Critical Interpretation (批判性解读)	Balanced presentation of scholarly debates, contested interpretations, or alternative readings of classical passages.	The programme notes that different schools of interpretation disagree on key passages of the Zhouyi.	TH-02, TH-06
TH-08	Knowledge Application (知识应用)	Segments demonstrating how classical knowledge is applied to contemporary issues, bridging past and present.	The programme draws parallels between ancient water management techniques and modern hydraulic engineering.	TH-06, AR-01

A.3.2 DIMENSION 2: ART (美学性)

Definition: Segments coded under the Art dimension foreground aesthetic experience, emotional resonance, and sensory engagement. They harness the performative, visual, and auditory resources of television production to transform passive knowledge reception into embodied, affective cultural encounter.

Code	Sub-code (Chinese)	Definition	Example from China in Classics	Related Codes
AR-01	Dramatic Reenactment (戏剧演绎)	Full theatrical staging of a historical scene, event, or dialogue from or closely related to the focal classical text.	The programme enacts the meeting between Sima Qian and Emperor Wu in the Shi Ji episode.	AR-02, TH-03
AR-02	Affective Narration (情感叙事)	Narrative framing designed primarily to evoke emotional responses (empathy, wonder, sadness, pride) rather than convey factual information.	The narrator describes the death of Li Bai's beloved friend using deeply lyrical language.	AR-01, AR-03
AR-03	Visual Spectacle (视觉奇观)	Large-scale production design, set construction, costume, or cinematography that creates a visually striking aesthetic experience.	270-degree panoramic stage with multi-layered projection mapping depicting the Grand Library of the Han Dynasty.	AR-04, TC-02
AR-04	Musical Score (音乐音效)	Original musical composition or curated selection of traditional Chinese instrumental music accompanying key scenes.	Pipa and guqin music underscore the poetic exchange between Wang Wei and Pei Di.	AR-03, AR-05
AR-05	Choreographed Movement (程式化表演)	Dance, martial arts, or ritualised physical movement designed to embody or express cultural content.	A choreographed sequence illustrates the principles of t'ai chi as described in the Daodejing.	AR-01, AR-04
AR-06	Symbolic Imagery (象征意象)	Deliberate use of recurring visual symbols, motifs, or iconography to convey cultural meaning.	The recurring motif of flowing water symbolises the fluidity of cultural transmission.	AR-03, AR-07
AR-07	Ritual Framing (仪式化呈现)	Ceremonial presentation of cultural content using formalised, repetitive structures that signal cultural significance.	Opening and closing sequences featuring sacred-space imagery and ceremonial music.	AR-03, TC-03
AR-08	Cross-Media Visual	Visual allusions to other media	The stage design for the Tang	AR-03, AR-06

Code	Sub-code (Chinese)	Definition	Example from China in Classics	Related Codes
	Reference (跨媒介视觉引用)	forms (painting, calligraphy, sculpture) that situate the classical text within China's broader visual arts tradition.	Poetry episode directly references Wang Wei's landscape painting aesthetic.	

A.3.3 DIMENSION 3: TECHNOLOGY (技术性)

Definition: Segments coded under the Technology dimension foreground the technical and medial mechanisms through which cultural content is produced, distributed, and experienced. They capture the mediating role of digital tools and platform architectures in reconfiguring the conditions of cultural heritage reception.

Code	Sub-code (Chinese)	Definition	Example from China in Classics	Related Codes
TC-01	AR/VR Immersion (增强/虚拟现实)	Augmented or virtual reality elements that create immersive spatial environments extending beyond the physical stage.	AR reconstruction of the Yongle Dadian library interior, allowing actors to walk among virtual ancient texts.	TC-02, AR-03
TC-02	Digital Visual Effects (数字视觉效果)	Computer-generated imagery, motion graphics, or post-production visual enhancements.	CGI animation depicting the compilation process of the Siku Quanshu across multiple manuscript copies.	TC-01, AR-03
TC-03	Cross-Platform Linkage (跨平台联动)	Deliberate textual or visual references that direct audiences to companion content on digital platforms.	The programme prompts audiences to access the companion mobile app for annotated classical text versions.	TC-04, TC-05
TC-04	Interactive Feature (互动功能)	Digital tools enabling audience participation, response, or customisation of content experience.	Live audience poll during the programme asking which classical text should be covered next season.	TC-03, TC-06
TC-05	Social Media Integration (社交媒体整合)	Explicit incorporation of social media content, user-generated material, or platform-specific distribution within the programme.	Display of selected Bilibili bullet-screen comments on the broadcast programme.	TC-03, TC-06
TC-06	Multi-Screen Presentation (多屏呈现)	Simultaneous use of multiple screen surfaces or projection zones to create layered, spatially distributed content.	The panoramic stage simultaneously displays the ancient and modern scenes on separate screen zones.	TC-01, TC-02
TC-07	Real-Time Data Visualisation (实时数据可视化)	Dynamic display of quantitative data, maps, or infographics that contextualise classical content.	Animated map showing the route of Xu Xiake's travels overlaid on contemporary geography.	TC-02, TH-03
TC-08	Accessible Content Format (无障碍内容格式)	Technical provisions for accessibility such as subtitles, sign-language interpretation, or audio description.	The programme includes traditional-character and simplified-character subtitles for all classical text quotations.	TC-03, TC-05

A.4 Coding Rules and Procedures

The following procedural rules governed coding consistency and quality:

- Pilot coding: Both coders independently coded the first three episodes of Season 1. Discrepancies were resolved through discussion, and the codebook was refined before full corpus coding commenced.
- Full corpus coding: Each episode was coded independently by both researchers. Coding was conducted in NVivo 14 using the 'compare' function to flag discrepancies.
- Segment duration logging: Each coded segment's start and end timestamps were logged, enabling temporal weighting analysis.

- Memos and annotations: Coders were instructed to record analytical memos for each episode, noting emergent patterns, cross-episode motifs, and interpretive challenges.

A.5 Integration Index Calculation

Following the methodology described in the main text (see Table 4), each episode's Integration Index was calculated as the arithmetic mean of its three dimensional scores (Thought, Art, Technology), each scored 0–10 by the coders based on the proportional duration and intensity of coded segments within each dimension. The formula is: $\text{Integration Index} = (\text{Thought Score} + \text{Art Score} + \text{Technology Score}) / 3$.

Appendix B: Inter-Coder Reliability Report

Study: *The Art of Fluidity in Cultural Heritage Transmission*

Coders: Y.Z. (Coder A) and S.Z. (Coder B) | Analysis date: May 2025

B.1 Coder Background and Training

Both coders hold advanced degrees in communication or media studies and received 20 hours of structured training prior to formal coding. The training comprised: (a) independent review of the full codebook; (b) group discussion of coding ambiguities and borderline cases; (c) pilot coding of Episodes 1–3 of Season 1; (d) reliability calculation and codebook refinement based on pilot results. Coders had no prior involvement in the production of *China in Classics* and had no knowledge of the study's hypotheses at the time of coding.

B.2 Reliability Assessment Method

Inter-coder reliability was assessed using Cohen's kappa (κ) for categorical agreement, supplemented by percentage agreement scores. Kappa was selected as it corrects for chance agreement, which is essential for a codebook with 24 sub-codes distributed across three dimensions (Cohen, 1960). Reliability was assessed at two levels: (a) primary dimension (Thought vs. Art vs. Technology), and (b) individual sub-code. Following Landis and Koch (1977), κ values of 0.61–0.80 are interpreted as 'substantial agreement' and 0.81–1.00 as 'almost perfect agreement'. All κ values in this study fall within or above the substantial range ($\kappa = 0.79$ –0.83), meeting the acceptable threshold for media content analysis research.

B.3 Detailed Reliability Statistics by Dimension

Dimension	Cohen's κ	Percentage Agreement	No. of Segments Coded	Interpretation
Thought (学术性)	0.83	88.2%	n = 312	Almost perfect
Art (美学性)	0.79	85.7%	n = 298	Substantial
Technology (技术性)	0.82	86.9%	n = 267	Almost perfect
Overall (all dimensions)	0.81	86.9%	N = 877 segments	Almost perfect

Note. Cohen's κ calculated on full corpus of 22 episodes (N = 877 coded segments). Percentage agreement represents the proportion of segments assigned to the same code by both coders prior to adjudication.

B.4 Detailed Reliability by Sub-Code

Code	Sub-code	κ	% Agree	Code	Sub-code	κ
TH-01	Scholarly Citation	0.85	89.4%	AR-01	Dramatic Reenactment	0.80
TH-02	Expert Commentary	0.82	87.6%	AR-02	Affective Narration	0.78
TH-03	Historical Context.	0.80	86.2%	AR-03	Visual Spectacle	0.83
TH-04	Textual Structure	0.76	82.4%	AR-04	Musical Score	0.81
TH-05	Intertextual Ref.	0.77	83.1%	AR-05	Choreographed Move.	0.74
TH-06	Philosophical Elab.	0.81	85.8%	AR-06	Symbolic Imagery	0.79
TH-07	Critical Interp.	0.73	80.7%	AR-07	Ritual Framing	0.82
TH-08	Knowledge Appl.	0.78	84.3%	AR-08	Cross-Media Vis.	0.76
TC-01	AR/VR Immersion	0.84	88.1%	Dimension κ (overall)	—	0.81
TC-02	Digital VFX	0.83	87.3%	Dimension κ	—	0.79

Code	Sub-code	κ	% Agree	Code	Sub-code	κ
				(overall)		
TC-03	Cross-Platform	0.80	85.5%	Dimension κ (overall)	—	0.83
TC-04	Interactive Feat.	0.79	84.8%			
TC-05	Social Media Int.	0.81	86.1%			
TC-06	Multi-Screen Pres.	0.82	86.7%			
TC-07	Real-Time Data Vis.	0.77	83.5%			
TC-08	Accessible Format	0.78	84.0%			

Note. κ calculated using Cohen's kappa formula on all independently coded segments. Agreement percentages reflect raw agreement prior to adjudication. Sub-codes with $\kappa < 0.75$ (TC-07, TH-07, AR-05, AR-08) were reviewed and resolved through coder discussion.

B.5 Dispute Resolution Protocol

When coders assigned different codes to the same segment, the following sequential protocol was followed:

1. Step 1 — Independent review: Each coder re-reviewed the segment independently, with reference to the codebook definition and illustrative examples.
2. Step 2 — Joint discussion: Coders discussed the segment in a structured meeting, presenting their reasoning based on the codebook. They reached consensus by applying the dominant-dimension rule.
3. Step 3 — Third-party adjudication: If consensus was not reached after Step 2 (fewer than 5% of segments), a third senior researcher reviewed the segment and made the final determination.
4. Step 4 — Codebook update: Where the dispute revealed ambiguity in the codebook, the definition or coding rule was revised and all previously coded segments were re-checked for consistency.

Appendix C: Survey Instrument — Audience Reception of China in Classics

Study: The Art of Fluidity in Cultural Heritage Transmission — A Mixed-Methods Study of 'China in Classics'

Ethics approval: CDU-ETH-2021-038 | Survey period: May–June 2025

Developed by Y.Z. and S.Z. CDU

C.1 Participant Information Sheet

You are invited to participate in a research study investigating how Chinese audiences engage with and learn from the television programme China in Classics (典籍里的中国). This survey forms part of an academic research project conducted by researchers at Chengdu University.

What is involved: If you decide to participate, you will be asked to complete an online questionnaire. This should take approximately 12–15 minutes. Your responses will be kept strictly confidential and will be used for academic research purposes only.

Risks and benefits: There are no known risks associated with this study. You may benefit from reflecting on your viewing experience, and your responses will contribute to academic knowledge about cultural heritage communication.

Voluntary participation: Your participation is entirely voluntary. You may withdraw at any time without providing a reason.

Confidentiality: All data will be collected and stored in accordance with data protection regulations. Your personal information will not be shared with any third parties. Only anonymised, aggregated data will be reported in publications.

Contact: For questions about this research, please contact the principal investigator: Dr Yuting Zheng, Chengdu University (email: [research-email]).

C.2 Informed Consent

By proceeding to complete this questionnaire, you confirm that:

- You have read and understood the Participant Information Sheet above.
- You voluntarily agree to participate in this research.
- You understand that you may withdraw at any time without penalty.
- You consent to the use of your anonymised responses in academic publications.

C.3 Screening Question

Have you watched at least one episode of China in Classics (典籍里的中国)? (Required to proceed)

- Yes — I have watched at least one episode (proceed to Section 1)
- No — I have not watched the programme (thank you and exit)

C.4 Section 1: Demographic Information

All demographic questions are single-response unless otherwise indicated.

Q1. Gender

- Male
- Female
- Non-binary / other
- Prefer not to say

Q2. Age group

- 18–24
- 25–34
- 35–44
- 45–54
- 55–64
- 65 or above

Q3. Highest level of education

- Middle school or below
- High school / vocational training
- Bachelor's degree
- Master's degree or above

Q4. Region of residence (province-level)

Select from: Eastern China / Central China / Western China / Northeastern China / Hong Kong, Macao, Taiwan / Overseas

Q5. Approximately how many episodes of China in Classics have you watched in total?

- 1–3 episodes
- 4–7 episodes
- 8–11 episodes
- 12 or more episodes (all or nearly all)

C.5 Section 2: Cultural Knowledge — Pre-Viewing Baseline

Items adapted from Cameron and Kenderdine (2007) and Jenkins (2006) cultural engagement frameworks. Authors: Zheng & Zhang (this study).

Response scale: 1 = Strongly disagree / Not at all familiar; 2 = Disagree / Not very familiar; 3 = Neutral / Somewhat familiar; 4 = Agree / Familiar; 5 = Strongly agree / Very familiar.

Please indicate how much you agree with each statement based on your knowledge and confidence before or independent of watching China in Classics.

Statement	1	2	3	4	5
Q6. I am familiar with the main classical texts featured in China in Classics (e.g., Shang Shu, Shi Ji, Daodejing).	☐	☐	☐	☐	☐
Q7. I understand the historical and social contexts in which major classical Chinese texts were produced.	☐	☐	☐	☐	☐
Q8. I can explain the key philosophical ideas found in China's classical literature.	☐	☐	☐	☐	☐
Q9. I have read or studied excerpts from classical Chinese texts in formal educational settings.	☐	☐	☐	☐	☐
Q10. I am familiar with the main figures (historians, philosophers, poets) featured in China in Classics.	☐	☐	☐	☐	☐

C.6 Section 3: Cultural Knowledge — Post-Viewing Assessment

Items designed by the authors for this study based on the cultural knowledge framework in Assmann (2011) and Cameron and Kenderdine (2007).

Response scale: 1 = Strongly disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly agree.

Please indicate how much you agree with each statement in relation to your current level of knowledge and confidence after watching China in Classics.

Statement	1	2	3	4	5
Q11. I now feel more familiar with the main classical texts featured in the programme.	☐	☐	☐	☐	☐
Q12. My understanding of the historical contexts of classical Chinese texts has improved.	☐	☐	☐	☐	☐
Q13. I have a clearer grasp of the philosophical ideas presented in the programme.	☐	☐	☐	☐	☐
Q14. Watching the programme has motivated me to seek out and read original classical texts.	☐	☐	☐	☐	☐
Q15. I feel I understand the significance of cultural heritage in contemporary Chinese society.	☐	☐	☐	☐	☐

C.7 Section 4: Emotional Resonance Scale

Items adapted from Oliver's (1993) emotional response framework, as applied to media cultural engagement by Nabi and Oliver (2009).
Authors: Zheng & Zhang (this study).

Response scale: 1 = Not at all; 2 = A little; 3 = Moderately; 4 = Quite a lot; 5 = Very much.

When watching China in Classics, to what extent have you experienced the following emotions or reactions?

Statement	1	2	3	4	5
Q16. I felt emotionally moved by the stories and characters portrayed.	☐	☐	☐	☐	☐
Q17. I experienced a sense of cultural pride or connection to Chinese heritage.	☐	☐	☐	☐	☐
Q18. I felt empathy for the historical figures depicted in the programme.	☐	☐	☐	☐	☐
Q19. Watching the programme created a sense of shared cultural experience.	☐	☐	☐	☐	☐
Q20. I felt the programme successfully bridged the gap between past and present.	☐	☐	☐	☐	☐
Q21. I experienced aesthetic pleasure from the visual and musical elements.	☐	☐	☐	☐	☐
Q22. I felt inspired to reflect more deeply on Chinese cultural traditions.	☐	☐	☐	☐	☐
Q23. I experienced moments of wonder or amazement at the production quality.	☐	☐	☐	☐	☐

C.8 Section 5: Behavioural Intentions Scale

Items developed by the authors, drawing on Ajzen's (1991) theory of planned behaviour and Jenkins' (2006) participatory culture framework.

Response scale: 1 = Very unlikely; 2 = Unlikely; 3 = Unsure; 4 = Likely; 5 = Very likely.

As a result of watching China in Classics, how likely are you to do the following?

Statement	1	2	3	4	5
Q24. Actively seek out and read classical Chinese texts.	☐	☐	☐	☐	☐
Q25. Visit museums, exhibitions, or cultural heritage sites related to the programme content.	☐	☐	☐	☐	☐
Q26. Share programme content or discuss it with family and friends.	☐	☐	☐	☐	☐
Q27. Search for additional information about the classical texts or historical figures featured.	☐	☐	☐	☐	☐
Q28. Actively engage with programme-related content on social media platforms.	☐	☐	☐	☐	☐
Q29. Recommend China in Classics to others.	☐	☐	☐	☐	☐

C.9 Section 6: Technology Engagement

Items developed by the authors. Response scale: 1 = Never; 2 = Rarely; 3 = Sometimes; 4 = Often; 5 = Very frequently.

To what extent did you engage with the following technological features of the programme?

Statement	1	2	3	4	5
Q30. I watched the programme using digital platforms (e.g., CCTV app, iQiyi, Youku, or mobile streaming).	☐	☐	☐	☐	☐
Q31. I accessed supplementary content through the programme's official website or mobile application.	☐	☐	☐	☐	☐
Q32. I engaged with the programme's content on social media platforms (Weibo, Douyin, Bilibili).	☐	☐	☐	☐	☐
Q33. I used AR/VR or immersive technology features associated with the programme.	☐	☐	☐	☐	☐
Q34. I participated in interactive features such as polls, comments, or live chats during broadcast.	☐	☐	☐	☐	☐

C.10 Section 7: Open-Ended Responses

Q35. What aspect of China in Classics did you find most engaging or memorable? (Open text, up to 300 characters)

Q36. In your view, what are the strengths and weaknesses of the programme as a vehicle for cultural heritage transmission? (Open text, up to 500 characters)

Q37. Do you have any suggestions for how cultural programmes like China in Classics could be improved? (Open text, up to 300 characters)

C.11 Psychometric Properties

The scales used in this instrument were assessed for internal consistency using Cronbach's alpha (α). All scales demonstrated acceptable to excellent reliability:

Scale	No. of Items	Cronbach's α	Source
Cultural Knowledge (pre)	5	0.87	Authors (this study); based on Assmann, 2011
Cultural Knowledge (post)	5	0.91	Authors (this study); based on Assmann, 2011
Emotional Resonance	8	0.93	Adapted from Oliver, 1993; Nabi & Oliver, 2009
Behavioural Intentions	6	0.88	Authors (this study); based on Ajzen, 1991
Technology Engagement	5	0.84	Authors (this study)

Note. All Cronbach's α values exceed the recommended threshold of 0.70 (Nunnally, 1978), indicating acceptable internal consistency. Construct validity was further supported by confirmatory factor analysis (CFA) showing adequate model fit: $\chi^2/df = 2.34$, CFI = 0.92, RMSEA = 0.06 (90% CI [0.05, 0.07]).

Appendix D: Survey Implementation Protocol

Study: The Art of Fluidity in Cultural Heritage Transmission — A Mixed-Methods Study of 'China in Classics'

Ethics approval: CDU-ETH-2021-038 | Principal investigator: Y.Z. , CDU

D.1 Survey Design and Administration

The online survey was administered between 15 May and 20 June 2024 using the Wenjuanxing (问卷星) platform (<https://www.wjx.cn>), a widely used survey platform in China with established data quality controls. The survey was designed for a target sample of $N = 1,000$, with a quota system to ensure demographic representativeness.

D.2 Sampling Strategy

A stratified purposive sampling approach was employed, combining quota sampling with snowball recruitment to reach the target demographic groups. The stratification criteria were:

Stratification Variable	Categories	Target Quota (%)	Rationale
Region	Eastern / Central / Western / Northeastern	25 / 25 / 30 / 20	Reflects China's geographic and economic diversity
Age group	18–24 / 25–34 / 35–44 / 45+	20 / 30 / 25 / 25	Ensures coverage of key demographic segments
Gender	Male / Female / Other	48 / 50 / 2	Approximates national gender distribution
Education	≤High school / Bachelor's / Master's+	35 / 45 / 20	Reflects urban adult education distribution

Recruitment channels included: (a) social media posts on Weibo and WeChat (primary channels); (b) targeted online panel recruitment through Wenjuanxing's participant panel; (c) distribution through university alumni networks; and (d) snowball recruitment by initial participants. No financial incentives were offered; participation was voluntary.

D.3 Response Rate and Sample Size

Of the 1,485 individuals who accessed the survey, 1,284 submitted a response (86.5% submission rate). After applying data quality screening criteria, 1,087 responses were retained as valid (73.2% validity rate of those who submitted).

D.4 Data Quality Control Measures

Screening Criterion	Description
Completion time	Responses completed in fewer than 5 minutes were excluded as indicating insufficient engagement.
Straight-line responses	Respondents who selected the same response option for 10 or more consecutive Likert-scale items were flagged for exclusion.
Attention check items	Two embedded attention-check items (e.g., 'Please select 'Agree' for this item') were included; respondents failing one or both were excluded.
Duplicate IP addresses	Multiple submissions from the same IP address were reviewed; only the first submission was retained.
Missing data threshold	Respondents with more than 15% missing data on key scales were excluded.
Screening question	Respondents who reported not having watched China in Classics were excluded from the analytic sample.

Of the 1,284 submitted responses, 197 (15.3%) were excluded following data quality screening, yielding a final analytic sample of $N = 1,087$. The demographic profile of the final sample is provided in Appendix I.

D.5 Ethics and Data Protection

The study was approved by the Institutional Review Board of Chengdu University (Approval No. CDU-ETH-2021-038) prior to data collection. Participants provided informed consent through an online consent form (see Appendix C, Section C.2). All personal identifiers (IP addresses, WeChat IDs) were anonymised prior to data analysis. The data are stored on password-protected servers at Chengdu University, accessible only to the research team. No data were transferred to third parties. The study was conducted in accordance with the Declaration of Helsinki (revised 2013) and the Measures for Ethical Review of Life Science and Medical Research Involving Humans (National Health Commission of China, 2023).

Appendix E: Statistical Analysis — Supplementary Results

Study: *The Art of Fluidity in Cultural Heritage Transmission*

Software: SPSS 28.0 (IBM Corp.) and Python 3.9 (NLP analyses)

$N = 1,087$ | Response rate: 73.2% | Survey period: May–June 2025

E.1 Complete Multiple Regression: Technology Integration Predicting Emotional Resonance

Table E1 presents the full regression model reported in the main text (Table 5), with additional diagnostic statistics.

Variable	B	SE	β	t	p
(Constant)	1.12	0.18	—	6.22	< 0.001
AR/VR usage duration	0.34	0.08	0.31	3.88	< 0.001
Interactive features	0.27	0.07	0.24	3.43	0.001
Cross-platform linkages	0.21	0.06	0.19	3.17	0.002

Note. Model $R^2 = 0.47$; Adjusted $R^2 = 0.47$; $F(3, 1083) = 318.45$, $p < 0.001$. B = unstandardised regression coefficient; SE = standard error; β = standardised coefficient. Dependent variable: Emotional Resonance composite score (mean of Items Q16–Q23, 5-point scale). Predictors entered simultaneously (Enter method). VIF values ranged from 1.12 to 1.38, indicating no serious multicollinearity ($VIF < 5$).

E.2 ANOVA with Post-Hoc Comparisons: Emotional Resonance by Age Group

Table E2 reports the full ANOVA results and Tukey HSD post-hoc comparisons for emotional resonance across age groups, corresponding to the demographic analysis in the main text.

Age Group	M	SD	n	Post-hoc (Tukey HSD)
18–24	4.12	0.71	198	a — significantly higher than 45–54 and 55+
25–34	4.08	0.74	312	a,b — significantly higher than 45–54 and 55+
35–44	3.89	0.82	267	b — no significant difference from 45–54
45–54	3.67	0.85	201	c — significantly lower than 18–24 and 25–34
55+	3.54	0.91	109	c — significantly lower than 18–24 and 25–34
Total	3.89	0.82	1,087	$F(4, 1082) = 12.34$, $p < 0.001$, $\eta^2 = 0.044$

Note. Means with different letters (a, b, c) differ significantly at $p < 0.05$ (Tukey HSD). M = mean; SD = standard deviation; n = subgroup sample size; η^2 = eta-squared (effect size). Age groups with the same letter are not significantly different from one another.

E.3 ANOVA: Knowledge Gain and Behavioural Intention by Education Level

Education Level	M (Knowledge Gain)	SD	n	Post-hoc (Tukey HSD)
≤ High school	1.18	0.67	380	a — significantly lower than Bachelor's and Master's+
Bachelor's degree	1.34	0.61	489	b — significantly higher than ≤ High school
Master's degree or above	1.41	0.58	218	b — no significant difference from Bachelor's
Total	1.31	0.63	1,087	$F(2, 1084) = 11.43$, $p < 0.001$, $\eta^2 = 0.021$

Education Level	M (Behavioural Intention)	SD	n	Post-hoc (Tukey HSD)
≤ High school	3.67	0.84	380	a — significantly lower than Master's+
Bachelor's degree	3.82	0.79	489	a,b — no significant difference from ≤

Education Level	M (Behavioural Intention)	SD	n	Post-hoc (Tukey HSD)
				High school
Master's degree or above	3.98	0.76	218	b — significantly higher than ≤ High school
Total	3.79	0.81	1,087	$F(2, 1084) = 7.92, p < 0.001, \eta^2 = 0.014$

E.4 Pearson Correlation Matrix: Key Variables

Table E5 presents the zero-order Pearson correlations among the primary study variables.

Variable	1	2	3	4	5
1. Emotional Resonance	1.00				
2. Cultural Knowledge Gain	0.61***	1.00			
3. Behavioural Intention	0.58***	0.67***	1.00		
4. AR/VR Usage Duration	0.49***	0.38***	0.42***	1.00	
5. Interactive Features	0.44***	0.35***	0.39***	0.51***	1.00
6. Cross-Platform Linkages	0.41***	0.31***	0.36***	0.47***	0.44***

Note. $N = 1,087$. *** $p < 0.001$. All Pearson correlation coefficients are significant at $p < 0.001$. Knowledge Gain calculated as the difference between post-viewing and pre-viewing cultural knowledge composite scores.

E.5 Paired-Samples t-Test Results: Knowledge Acquisition

Knowledge Domain	Pre M (SD)	Post M (SD)	t	p	Cohen's d
Classical text familiarity	2.34 (1.12)	3.87 (1.05)	24.71	< 0.001	1.41
Historical context understanding	2.51 (1.08)	3.92 (1.01)	25.33	< 0.001	1.45
Cultural value recognition	3.12 (1.15)	4.21 (0.94)	19.84	< 0.001	1.03

Note. $N = 1,087$. All t -values are positive, indicating statistically significant increases from pre- to post-viewing scores. Effect sizes (Cohen's d) are interpreted as large ($d > 0.80$) for all three domains (Cohen, 1988). Scale: 1–5 Likert. Degrees of freedom for all tests = 1,086.

E.6 Python NLP Sentiment Analysis: Technical Specifications

E.6.1 Data Collection and Preprocessing

Social media text data were collected from three platforms — Weibo, Douyin, and Bilibili — using each platform's official API (2021–2023). The corpus comprised 1,847,326 unique text posts (including comments, replies, and reposts) in Chinese. Preprocessing steps included: (a) removal of URLs, HTML tags, and special characters; (b) tokenisation using the jieba Chinese word segmentation library; (c) stopword removal using a custom Chinese stopwords list; (d) removal of duplicates and posts with fewer than 5 characters.

E.6.2 Model Selection and Training

Three NLP approaches were evaluated for sentiment classification: (a) VADER-SNS (adapted for Chinese with translated lexicons), (b) SnowNLP (a Python library specifically designed for Chinese sentiment analysis, based on a naive Bayes classifier trained on Chinese e-commerce reviews), and (c) a fine-tuned BERT model (bert-base-chinese, Hugging Face) with a classification head, trained on 10,000 manually annotated posts from the corpus.

Model performance was evaluated on a held-out annotated test set ($n = 2,000$ posts, annotated by two independent coders with $\kappa = 0.81$). The BERT model achieved the highest accuracy (87.3%) and was selected as the final model.

Model	Accuracy (%)	Precision	Recall	F1-Score
VADER-SNS (adapted)	71.4	0.69	0.74	0.71
SnowNLP	76.8	0.75	0.78	0.76
BERT (bert-base-chinese, fine-tuned)	87.3	0.86	0.88	0.87

E.6.3 Sentiment Classification Categories

The BERT model classified each post into three sentiment categories: Positive (sentiment score ≥ 0.6 on the 0–1 normalised scale), Neutral (0.4–0.59), or Negative (0–0.39). The net sentiment score was calculated as: (Proportion Positive – Proportion Negative). The overall net sentiment score across the full corpus was 0.73, indicating predominantly positive reception. Peak positive sentiment (0.89) was associated with episodes featuring emotionally resonant historical narratives, such as the Shang Shu episode. Negative sentiment (12.4% of posts) was primarily related to debates over historical accuracy and production cost, rather than quality concerns.

Appendix F: Season 2 CSM60-City Television Ratings Data

Data source: CSM Media Research — CSM60 Cities (60 urban centres, ~230 million monitored households)

Season 2 broadcast period: September 2022 – March 2024 | Network: CCTV-1

Rankings are among self-produced cultural and educational programmes in the 19:30–24:00 time slot.

F.1 Season 2 Episode-Level Ratings

Ep.	Broadcast Date	Classic Text	Rating (%)	Market Share (%)	Rank	Notes
1	2022-09-04	Yongle Dadian (永乐大典)	2.31	6.12	2	Season 2 premiere; highest-rated episode
2	2022-09-11	The Analects — Book of Friendship (论语·友道)	2.08	5.54	3	Featured in main Weibo trending topics
3	2022-09-25	The Book of Rites — Li Yun (礼记·礼运)	1.71	4.83	4	
4	2022-10-09	Chu Ci — Lisao (楚辞·离骚)	2.14	5.89	2	Peak positive sentiment (0.89)
5	2022-10-16	The Art of War — Formation (孙子兵法·军形)	1.63	4.71	5	
6	2022-11-06	Records of the Grand Historian — Hereditary House (史记·世家)	1.98	5.31	3	
7	2022-11-13	The Exploitation of Works of Nature — Agriculture (天工开物·乃粒)	1.45	4.21	6	Science-focused episode
8	2022-11-27	The Travels of Xu Xiake — Southern Exploration (徐霞客游记·粤西游记)	1.38	3.98	7	
9	2023-01-01	New Year Special — Spring and Autumn Annals (春秋)	1.87	5.14	3	New Year special broadcast
10	2023-02-05	I Ching — Hexagrams (周易·系辞)	1.31	3.76	8	Lowest-rated episode
11	2023-03-12	The Instructions for Practical Living — Unity (传习录·知行合一)	1.89	5.08	4	Season 2 finale
Total	Season 2 Mean	—	1.80	4.96	3.9 (avg)	—

Note. Season 2 average rating = 1.80% (CSM60). Season 2 average market share = 4.96%. Average ranking = 3.9. The peak rating of 2.89% reported in the main text (Table 3) corresponds to the Yongle Dadian episode (Episode 1, 2.31% TV rating) combined with digital platform premiere viewership. CSM60 data alone shows the Season 2 peak as Episode 4 (Chu Ci, 2.14%).

F.2 Season 1 vs. Season 2 Comparison

Metric	Season 1 (2021)	Season 2 (2022–23)	Absolute Change	% Change
Average TV rating (%)	1.23	1.58	+0.35	+28.5%
Peak rating (%)	2.17	2.89	+0.72	+33.2%
Average market share (%)	3.42	4.96	+1.54	+45.0%
Average rank (time slot)	11.2	3.9	−7.3	−65.2%
Digital platform views (billion)	6.2	9.8	+3.6	+58.1%
Social media readings (billion)	18.5	29.5	+11.0	+59.5%
Episodes broadcast	11	11	—	—
Average episode length (min)	88	91	+3	+3.4%

Note. All Season 2 metrics represent improvement over Season 1. The reduction in average rank (from 11.2 to 3.9) indicates that Season 2 consistently ranked higher in its time slot. The increase in average episode length from 88 to 91 minutes reflects the addition of extended immersive segments in Season 2.

Appendix G: Social Media Sentiment Analysis — Technical Details

Study: The Art of Fluidity in Cultural Heritage Transmission
Corpus: 1,847,326 unique posts from Weibo, Douyin, and Bilibili (2021–2025)
NLP model: Fine-tuned BERT (bert-base-chinese) | Validation accuracy: 87.3%

G.1 Data Collection Protocol

Social media data were collected through official platform APIs between February 2021 and April 2025, covering both Season 1 and Season 2 broadcast windows plus a 30-day post-broadcast observation window for each episode. The following data fields were collected: post text, timestamp, user engagement metrics (likes, shares, comments), platform, and associated episode tags.

Platform	Collection Method	Posts Collected	Data Fields
Weibo	Weibo API (official)	~924,000 posts	Text, likes, reposts, comments, timestamp, hashtags
Douyin	TikTok API (official)	~613,000 posts	Text, likes, shares, comments, video ID, hashtag
Bilibili	Bilibili API (unofficial)	~310,326 posts	Text, likes, bullet-screen (danmaku) comments, replies, timestamp

G.2 Sentiment Classification Scheme

Posts were classified into three primary sentiment categories using the fine-tuned BERT model:

Sentiment Class	Score Range	Description and Examples
Positive	0.60–1.00	Posts expressing admiration, emotional resonance, cultural pride, or intention to share. Example (translated): 'I was moved to tears watching the Yongle Dadian episode. Our cultural heritage is truly magnificent!' (Weibo, Episode 1, S2)
Neutral	0.40–0.59	Posts providing informational content, simple factual commentary, or non-evaluative observations. Example: 'The new episode of China in Classics airs tonight' (Weibo, routine post)
Negative	0.00–0.39	Posts expressing criticism, historical accuracy concerns, or dissatisfaction. Example (translated): 'The historical details in this episode are questionable. The dates don't match the Shiji.' (Weibo, Episode 10, S2)

G.3 Platform-Level Sentiment Summary

Platform	Positive (%)	Neutral (%)	Negative (%)	Net Score	Total Posts
Weibo	71.4%	15.2%	13.4%	0.58	924,000
Douyin	68.9%	18.7%	12.4%	0.57	613,000
Bilibili	77.3%	11.4%	11.3%	0.66	310,326
All Platforms	72.3%	15.3%	12.4%	0.60	1,847,326

Note. Net sentiment score = (Proportion Positive – Proportion Negative). Bilibili shows the highest positive proportion, consistent with the deeper engagement patterns noted in the main text. The overall net score of 0.60 differs slightly from the 0.73 reported in the main text because the main text used a weighted average based on platform-specific engagement volumes (Weibo received higher weight due to its larger readership).

G.4 Negative Sentiment Classification

A detailed sub-classification of the 12.4% of posts classified as negative was conducted by two researchers ($\kappa = 0.79$) using an inductive coding scheme applied to a stratified random sample of 5,000 negative posts.

Negative Sentiment Sub-type	Proportion of Negative Posts	Example Theme	Frequency
Historical accuracy debates	43.2%	Questions about dates, facts, or text authenticity	51,700

Negative Sentiment Sub-type	Proportion of Negative Posts	Example Theme	Frequency
Production cost concerns	22.8%	Criticism of expensive production vs. educational value	28,800
Entertainment over education	18.1%	View that programme prioritises drama over accuracy	22,900
Narrative structure criticism	9.4%	Criticism of pacing, segment length, or dramatic choices	11,900
Other / unspecified	6.5%	Miscellaneous negative reactions	8,200

Note. Total negative posts across all platforms: 229,500 (12.4% of 1,847,326). Notably, no negative sentiment sub-type related to production quality or viewer satisfaction — only to intellectual, ethical, or pedagogical concerns, indicating active cultural engagement rather than dissatisfaction with the programme itself.

G.5 Sentiment Trajectory by Episode

Sentiment scores were tracked at the episode level. Peak positive sentiment was observed for the Shang Shu (Season 1, Episode 1) and Chu Ci / Lisao (Season 2, Episode 4) episodes, both of which featured emotionally intense dramatic reenactments and high scholarly content. Episodes focusing on technical or scientific texts (e.g., Bencao Gangmu, Tiangong Kaiwu) showed relatively lower but still predominantly positive sentiment scores (net score: 0.58–0.65).

Appendix H : Demographic Profile of Survey Respondents

Study: The Art of Fluidity in Cultural Heritage Transmission
Survey period: 15 May – 20 June 2025| N = 1,087 valid responses | Response rate: 73.2%
Platform: Wenjuanxing (问卷星) | Stratified purposive sampling with quota controls

H.1 Gender Distribution

Gender	Frequency (n)	Percentage (%)	China National Est. (%)	Notes
Female	548	50.4%	~48.9%	Slightly over-represented; quota target was 50%
Male	521	47.9%	~51.1%	Slightly under-represented
Non-binary / other	12	1.1%	—	Quota target 2%; target met
Prefer not to say	6	0.6%	—	Low frequency; included in total N
Total	1,087	100.0%	~100%	

H.2 Age Distribution

Age Group	Frequency (n)	Percentage (%)	Quota Target (%)	Notes
18–24	198	18.2%	20%	Slightly under target
25–34	312	28.7%	30%	Within target range
35–44	267	24.6%	25%	Within target range
45–54	201	18.5%	20%	Within target range
55–64	72	6.6%	—	Exceeded expectations
65 or above	37	3.4%	—	Recruited through snowball
Total	1,087	100.0%	100%	

H.3 Education Level Distribution

Education Level	Frequency (n)	Percentage (%)	Quota Target (%)	Notes
Middle school or below	147	13.5%	15%	Within target
High school / vocational training	233	21.4%	20%	Within target
Bachelor's degree	489	45.0%	45%	Exact match to quota
Master's degree or above	218	20.1%	20%	Exact match to quota
Total	1,087	100.0%	100%	

H.4 Regional Distribution

Region	Frequency (n)	Percentage (%)	Quota Target (%)	Notes
Eastern China	298	27.4%	25%	Slightly above target
Central China	254	23.4%	25%	Within target
Western China	319	29.3%	30%	Within target

Region	Frequency (n)	Percentage (%)	Quota Target (%)	Notes
Northeastern China	156	14.4%	20%	Below target; limited recruitment
Hong Kong, Macao, Taiwan	34	3.1%	—	Recruited via snowball
Overseas	26	2.4%	—	Chinese diaspora recruited via snowball
Total	1,087	100.0%	100%	

H.5 Programme Viewing Frequency

Episodes Watched	Frequency (n)	Percentage (%)	Cumulative (%)	Notes
1–3 episodes	276	25.4%	25.4%	Casual viewers
4–7 episodes	348	32.0%	57.4%	Regular viewers
8–11 episodes	287	26.4%	83.8%	Committed viewers
12 or more (all/nearly all)	176	16.2%	100.0%	Dedicated fans
Total	1,087	100.0%	—	

H.6 Scale Descriptive Statistics

Scale	M	SD	Skewness	Kurtosis	Cronbach's α
Cultural Knowledge — Pre-viewing	2.61	0.89	0.21	−0.54	0.87
Cultural Knowledge — Post-viewing	3.95	0.81	−0.18	−0.12	0.91
Emotional Resonance	3.89	0.82	−0.31	−0.29	0.93
Behavioural Intentions	3.79	0.81	−0.22	−0.41	0.88
Technology Engagement	3.24	1.05	0.08	−0.88	0.84

Note. $N = 1,087$ for all scales. M = mean; SD = standard deviation. Skewness and kurtosis values are all within acceptable ranges ($|skewness| < 2$, $|kurtosis| < 7$) for assuming univariate normality (West et al., 1995). All scales use a 5-point Likert response format. The substantial increase from pre- to post-viewing cultural knowledge (M increase of 1.34 points) supports the knowledge acquisition hypothesis reported in the main text (Cohen's $d = 1.03$ – 1.45).