

A. Categorization of Signs

The 958 photographic items were classified according to a functional sign typology comprising four categories. Classification was determined by the sign's primary communicative function rather than its physical location. This distinction matters for two boundary cases. First, locational plaques affixed to heritage structures (e.g., "National Key Cultural Relics Protection Unit" plaques, cultural heritage grade markers) are classified as Introductory/Culture rather than Public-service signs, because their primary function is to identify and valorise cultural significance rather than to orient spatial navigation. Second, for commercial establishments bearing multiple signage elements (shop name board, promotional banners, product displays, LED screens), only the principal sign — typically the shop name board — was treated as the unit of analysis for systematic coding. Subsidiary elements were recorded as supplementary data informing contextual analysis but were not entered into the sign-level code-preference dataset.

Table 1. Sign Categories and Contents

Sign Category	Definition	Contents
Public-service	Signs produced by government or institutional agents to regulate movement, ensure safety, and orient visitors within the scenic site	Street name plaques; directional/wayfinding signposts; locational information boards; prohibition and warning notices; ticket/admission information; metro/transport signage
Introductory/Culture	Signs that identify, describe, or interpret heritage structures, historical narratives, cultural artefacts, or cultural significance	Heritage structure signboards and name plaques; cultural heritage grade markers; interpretive/exhibition panels; monument inscriptions; architectural couplets and calligraphic inscriptions; explanatory boards for historical figures or events
Business	Signs produced by commercial establishments to identify businesses, attract customers, and	Shop name boards; restaurant/café signage; hotel/inn name signs; stall/vendor signage; office/institution name plates for commercial entities

Sign Category	Definition	Contents
Civility	promote products or services	
	Signs disseminating public-morality campaigns, political slogans, or ideological messages produced by government agencies	Socialist Core Values display panels; China Citizen Civilised Covenant posters; heritage-protection awareness signs; community conduct guidelines

B.Thematic Analysis Report

Project: Confucius Temple Linguistic Landscape Study

Analytical approach: Reflexive thematic analysis (Braun & Clarke, 2006, 2019)

Dataset: 30 semi-structured interview transcripts

Total coded extracts: 352

Coding Procedure

Phase	Description
Phase 1: Familiarisation	All 30 transcripts read twice; initial annotations recorded in NVivo memo function. Field observation notes reviewed to contextualise participant responses.
Phase 2: Deductive coding	Initial code framework derived from: (a) three discursive frames identified in sign analysis; (b) code categories (Chinese-only, Ch-En, Ch-En-Ja-Ko, Ch-Pinyin, English-only).
Phase 3: Inductive coding	Emergent codes generated from participant responses not captured by deductive framework, including: : "breaking immersion" (出戏), "ancient-town-ness," biographical attachment, pedagogical repurposing, and production-side regulatory awareness.
Phase 4: Theme development	Codes grouped into candidate themes; reviewed against full dataset for internal coherence and external distinctiveness.
Phase 5: Theme refinement	Finalised as five themes with 13 sub-themes. Tourist data (N=22) generated Themes 1–4; shop-owner/employee data (N=8) generated Theme 5. Cross-references between production-side (Theme 5) and reception-side (Themes 3–4) themes noted.
Inter-coder note	This is a single-researcher reflexive thematic analysis project. Following Braun and Clarke (2019), inter-coder reliability calculation is not applicable to reflexive TA, as coding is understood as an interpretive act rather than a technical procedure. Analytical rigour was maintained through reflexive journaling, iterative comparison with the coded sign dataset, and triangulation with policy-text evidence.

Saturation criterion: A sub-theme was deemed saturated when three consecutive interviews produced no new codes within that sub-theme (Guest et al., 2006). The interview number at which saturation was reached is recorded in each table.

Table 2: theme 1(Frame-Dependent Invisibility)

Sub-theme	Definition	Extract Count	Representative Data
1a. Regulatory transparency	Wayfinding signage operates through perceptual transparency; successful navigation produces non-reflection on the signage itself. Viewers report ease of orientation without attending to sign design or message.	28	"After getting off the metro and entering the scenic area, everything was quite clear" (S16); "The guidance is clear, and there are no dead-end paths" (F2); "The restrooms were easy to find, the directions were quite accurate" (S4); "You could tell where you were just by looking around. The signs are everywhere" (S6)
1b. Ideological habituation	Civility signs achieve ideological implementation through saturation to the point of non-reading. Domestic visitors report content familiarity so complete that active reading becomes redundant. No international visitors reference civility signage.	24	"The socialist core values? It's what we've memorised by heart, so I wouldn't deliberately look at them" (S14); "I see them everywhere... They're just part of the background" (S8); "Each place seems to write different things. Confucius Temple has some about protecting cultural relics" (S15); "Those posters? I think every scenic area has them. I don't read them anymore" (S11)
1c. Visual standardisation	Uniform design (colour palette, typography, pictograms) is registered by viewers not as a linguistic choice but as a marker of institutional competence and site quality. Visual coherence indexes professional management.	16	"Fairly conspicuous, and the text is quite brief; this kind of sign you'd at least glance at" (S3); "The signs look professional. You can tell this is a well-managed scenic area" (S7); "Everything matches—the signs, the buildings, the colour scheme. It feels unified" (S9); "Compared to some other scenic spots, the signage here is more polished" (S17)

Table 3: Theme 2(Authenticity and Accessibility)

Definition	ExtractCount	RepresentativeData
Heritage-Cultural Frame produces authenticity along a spectrum from material-aesthetic appreciation (constructive) through biographical resonance (existential). These are interpenetrating dimensions, not sequential stages. Viewer's cultural knowledge mediates perception of material properties.	35	<i>Constructive end</i> :"古色古香 (antique and elegant)" (S13); "The calligraphy on the archway is beautiful. You can feel the weight of history" (S6); "I know a lot of it has been rebuilt, but it still feels authentic. The style is right" (S9). <i>Existential</i> :"I feel that we haven't left the examination hall even today. I truly feel that the only difference between us and the ancient examination candidates is what exam paper we are answering" (S8); "We memorised it at school and the poem struck a chord immediately" (S6); "Qifangge is a place I've been eating at since I was young... it carries beautiful memories of my family" (S13) <i>Linguistic</i> :"It would be useful to visit with a Chinese speaker in order to better understand the presented information" (F5); "The English gives you the basics, but I felt like I was missing a lot of the details" (F4). <i>Cultural knowledge</i> :"You need some culture in your head and the patience to slow down" (S7); "If you don't know the historical context, the signs don't mean much to you" (S12). <i>Dispositional</i> :"My kids got bored after ten minutes. They wanted to go back to the snack street" (S11); "We hadn't looked into the cultural stuff before visiting; mainly we were just there to see the Qinhuai River" (S16)
Heritage-Cultural Frame's cultural address operates along three non-reducible dimensions: linguistic competence, cultural knowledge, and dispositional readiness. Absence in any dimension constrains access.	56	

Table 4 Theme 3 (Commodification and Spatial Marginalisation)

Sub-theme	Definition	ExtractCount	RepresentativeData
3a. Undifferentiated commercialisation	The Pedestrian Street's commercial signage deploys heritage-evocative forms indiscriminately across generic merchandise. Three integrated problems: (1) toponymic branding efficacy but scepticism; (2) visual incoherence producing paradoxically generic effect; (3) semiotic disjunction between heritage form and mass-produced substance.	70	<i>Toponymic branding</i> : "The place name makes the sign more attractive. It subtly guides consumers toward spending" (S7); "When I saw 'Old Nanjing Osmanthus Cake,' which sounds like something locals would eat, I bought one to taste" (S14). <i>Scepticism</i> : "They're riding the city's tourism hype" (S1); "The whole street is full of so-called 'Nanjing specialties' that have nothing to do with Nanjing" (S12). <i>Visual incoherence</i> : "Confucius Temple pedestrian street has no overall visual coherence... quite chaotic" (S2); "Identical to every cookie-cutter ancient town" (S11). <i>Disillusionment</i> : "In ancient times... the restaurants were all of the highest calibre" (S5); "Coming out of the Museum and walking into the commercial street was a bit jarring" (S8) "Qifangge is a place I've been eating at since I was young... it carries beautiful memories of my family" (S13); "The owner stamped my seal very carefully" (S17); "I noticed 奇芳阁 because of the old-style signboard. It looked different from the others—more genuine somehow" (S9); "Those old restaurants are the real treasure of Confucius Temple, not the tourist shops" (S13); "Most tourists probably walk right past these places. They don't have big flashy signs" (S7)
	Time-honoured brands and artisanal establishments achieve genuine convergence of heritage authority and commercial substance, producing biographical attachment (locals) and participatory engagement (culturally attuned visitors). Structurally marginalised by dominant visual		
3b. Sites of semiotic substance		25	

Sub-theme	Definition	ExtractCount	RepresentativeData
	logic.		

Table 5 Theme 4(English's Frame-Dependent Reconstitution)

Sub-theme	Definition	ExtractCount	RepresentativeData
4a. Regulatory frame: routinised instrumentality	Policy-mandated English is perceived as a standard, expected feature stripped of symbolic excess. Domestic audiences habituated; international tourists confirm functional utility.	18	"English signs seem to be everywhere now and we're completely accustomed to it. It doesn't make a place more international" (S11); "Common practice... a standard for scenic area development" (S1); "It's not just a vanity project; it also attracts more foreign tourists" (S7); "Of course there's English. It's a 5A scenic area. They have to have it" (S9) "It mainly translates core information, with a lot of omission and condensation... quite suited to the exhibition's design characteristics" (S1); "I think English, or Japanese and Korean, represents high-quality planning and service" (S8); "If my English were better, I could use the translations to improve my child's English" (S9); "The museum feels very professional. Even the translations look carefully done" (S5)
4b. Heritage frame: quality marker function	English presence—particularly the fragmentary bilingual strategy—is read as evidence of curatorial care and institutional investment, independent of semantic content.	16	<i>Productive coexistence</i> : "Although the brand name is in English, the overall design still feels very ancient" (S2); "If it's a foreign brand, that's understandable" (S15). <i>Redundancy</i> : "If a Chinese brand deliberately adds English in large text, it's a bit excessive" (S15); "Why would a Nanjing duck shop need English
4c. Commercial frame: volatile reception continuum	English reception oscillates along three positions: (1) productive coexistence when constitutive to brand identity; (2) perceived redundancy when grafted without design integration; (3) disruptive intrusion when rupturing heritage-aesthetic coherence. Classical Chinese semiotics occupy the prestige	24	

Sub-theme	Definition	ExtractCount	RepresentativeData
	position in this context.		on its sign?" (S12). <i>Disruptive intrusion</i> :"When I see purely English signs, it feels like it doesn't belong in the Confucius Temple atmosphere. It breaks the immersion" (S3); "Traditional characters convey the shop's cultural character... a sense of long history" (S13)

Table 6 Theme 5(Production-Side Rationales)

Sub-theme	Definition	Extract Count	Representative Data
5a. Chinese as self-evident default	Shop owners/workers experience Chinese primacy not as a deliberate policy-driven choice but as a self-evident precondition. Two justificatory logics recur: national identity ("We're Chinese") and domestic market orientation ("customers are mainly Chinese"). In Spolsky's (2009) terms, Chinese simultaneously satisfies competence, audience, and identity conditions, explaining why it registers not as a decision but as an unreflected default.	10	<i>National identity</i>: "当然要中文，我们是中国人嘛" [Of course, we use Chinese. We're Chinese] (SO-07). <i>Market orientation</i>: "嗯，有中文就够了。游客，就是那个顾客，还是中国人为主" [Chinese is enough. Our customers are mainly Chinese] (SO-06); "游客没有中文也不知道我们卖的什么" [Without Chinese, tourists wouldn't know what we sell] (SO-08) <i>Symbolic prestige</i>: "有英文就感觉更 fashion 了" [Having English makes the sign feel more fashionable] (SO-04); "确实会更高端一点，外国语" [It does feel a bit more upscale, with a foreign language] (SO-07). <i>Practical accommodation</i>: "如果有外国游客想来的话，他看的话也比较方便" [If foreign tourists want to come, it's more convenient for them] (SO-01); "英文的话是国际语言，大家都能看得懂" [English is an international language; everyone can read it] (SO-04). <i>Brand inheritance</i>: "加盟的这个牌子商标就有个英文，我们直接放上去了" [The brand's trademark already had English, so we just followed the design] (SO-05). <i>Content differentiation</i>: "中文写了店名，英文就是卖的商品" [Chinese for the shop
5b. English orientation heterogeneity	English elicits a spectrum of orientations ranging from active valorisation through indifference to explicit rejection. Seven distinct orientations attested: symbolic prestige, practical accommodation, internationalisation, content differentiation, brand inheritance (franchise), decorative inclusion, and non-consideration/incapacity. The spectrum demonstrates that the Commercial Frame's diverse code-choice profile is not random but reflects systematically different production logics.	18	

Sub-theme	Definition	Extract Count	Representative Data
5c. Regulatory awareness variation	Commercial sign instigators display widely varying awareness of the regulatory regime governing signage. Responses range from formal knowledge of approval requirements, through internalised but possibly misattributed "rules," to complete unawareness. Franchise operators report zero agency over sign design, with code choice imposed by corporate brand. This variation explains why policy intent is unevenly realised in commercial signage.	12	name; English for the products] (SO-07).<i>Decorative inclusion</i>:"我也不懂英文,但是店里这个我会说" [I don't understand English, but I can pronounce this one] (SO-02).<i>Non-consideration / economic concern</i>:"找人设计的时候根本没想过,说不定设计费会多" [We never even thought about it. Probably it would have cost more] (SO-06).<i>Incapacity</i>:"我们初中学历自己都不懂英文,加了干什么" [We can't even read English ourselves. Why bother adding it?] (SO-03) <i>Formal awareness</i>:"是需要有关部门审批的" [The sign requires approval from relevant authorities] (SO-01).<i>Internalised informal "policy"</i>:"英文应该是要在下面,中文在上面" [English should be below, Chinese above] (SO-04; note: this requirement does not appear in any surveyed regulatory document—may reflect observed convention misattributed to mandate).<i>No awareness</i>:SO-03 and SO-06 displayed no awareness of any regulatory framework governing signage content or language.<i>Corporate override / zero agency</i>:"加盟的这个牌子商标就有个英文,我们直接放上去了" [The brand already had English; we just followed] (SO-05; the corporate

Sub-theme	Definition	Extract Count	Representative Data
			brand exercises semiotic authority over the local franchisee, imposing code choice reflecting national/international positioning rather than local sign instigator's competence or intentions)

APPENDIX A: Code-to-Theme Mapping

Code	Description	Theme	Sub-theme	Source	Frequency
NAV-EASE	Reports navigational ease or clarity of wayfinding	1	1a	Tourist	28
CIV-HABIT	Civility sign content recognised but not actively read	1	1b	Tourist	24
CIV-PARTIC	Site-specific particularisation of civility message noted	1	1b	Tourist	4
VIS-UNIFORM	Visual standardisation perceived as quality marker	1	1c	Tourist	16
AUTH-MATERIAL	Authenticity perceived through material-aesthetic properties	2	2a	Tourist	18
AUTH-EXIST	Personal/biographical resonance with heritage content	2	2a	Tourist	17
ACC-LING	Linguistic barrier to heritage engagement	2	2b	Tourist	14
ACC-CULT	Cultural knowledge gap constraining engagement	2	2b	Tourist	22
ACC-DISP	Dispositional readiness (willingness to slow down/engage)	2	2b	Tourist	20
COM-TOPONYM	Toponymic branding noted (positive or sceptical)	3	3a	Tourist	24
COM-SCEPT	Scepticism toward commercial heritage appropriation	3	3a	Tourist	18
COM-INCOHER	Visual incoherence / "ancient-town-ness" noted	3	3a	Tourist	16
COM-DISJUNCT	Gap between semiotic promise and product substance	3	3a	Tourist	12
COM-SUBST	Time-honoured brand / artisanal quality recognised	3	3b	Tourist	15
COM-MARGIN	Semiotic substance marginalised by dominant visual logic	3	3b	Tourist	10
EN-ROUTINE	English on regulatory signs perceived as default/expected	4	4a	Tourist	18
EN-QUALITY	English read as quality/care marker in heritage context	4	4b	Tourist	16

Code	Description	Theme	Sub-theme	Source	Frequency
EN-COEXIST	English on commercial signs accepted (brand-appropriate)	4	4c	Tourist	8
EN-REDUND	English on commercial signs perceived as redundant	4	4c	Tourist	7
EN-DISRUPT	English breaks heritage immersion	4	4c	Tourist	9
PR-ZH-IDENT	Chinese justified via national identity	5	5a	Shop owner/employee	4
PR-ZH-MARKET	Chinese justified via domestic audience orientation	5	5a	Shop owner/employee	6
PR-EN-PRESTIGE	English associated with fashion/upscale connotation	5	5b	Shop owner/employee	3
PR-EN-PRACTICL	English justified by foreign visitor accommodation	5	5b	Shop owner/employee	4
PR-EN-INTERNAT	English linked to internationalisation aspiration	5	5b	Shop owner/employee	2
PR-EN-CONTENT	English used for content differentiation (products vs. name)	5	5b	Shop owner/employee	2
PR-EN-BRAND	English inherited from franchise/brand template	5	5b	Shop owner/employee	2
PR-EN-DECOR	English included decoratively without comprehension	5	5b	Shop owner/employee	1
PR-EN-NOCONS	English not considered; economic concern cited	5	5b	Shop owner/employee	2
PR-EN-INCAP	English rejected due to personal incompetence	5	5b	Shop owner/employee	2
PR-REG-FORMAL	Awareness of formal sign approval requirement	5	5c	Shop owner/employee	2
PR-REG-INFORM	Internalised "rule" not traceable to formal regulation	5	5c	Shop owner/employee	2
PR-REG-NONE	No awareness of any regulatory framework	5	5c	Shop owner/employee	4
PR-REG-CORP	Code choice imposed by corporate brand (zero local agency)	5	5c	Shop owner/employee	4
Total					352

APPENDIX B: Cross-Theme Connections

Connection	Theme pair	Description
Production ↔ Reception: English prestige	5b ↔ 4c	Shop owners who add English for "fashion" (SO-04) produce signs that some tourists accept (S2, S15) but others find redundant (S15) or disruptive (S3). The production-side orientation does not predict reception-side outcome.
Production ↔ Reception: Chinese primacy	5a ↔ 3a	Shop owners' unreflected Chinese default produces the toponymic branding that tourists both appreciate (S7, S14) and critique (S1, S12).
Regulatory awareness ↔ Frame quality	5c ↔ 1c/3a	Variation in regulatory awareness among commercial sign instigators explains the visual incoherence tourists identify on the Pedestrian Street (S2, S11), contrasting with the unified institutional production of the Regulatory-Orientational Frame.
Zero agency ↔ Brand coexistence	5c (PR-REG-CORP) ↔ 4c (EN-COEXIST)	Franchise-imposed English (SO-05) corresponds to the "productive coexistence" reception pattern, where tourists accept English when it is constitutive to an established brand identity (S2, S15).