KHARKIV STATE ACADEMY OF DESIGN AND ARTS

NANTONG MUSEUM
南通博物苑
国家一级博物馆 AAAAA级旅游景区

Principles of Sustainable Design of Cultural and Creative Products for the Nantong Museum

NANTONG MUSEUM

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Research Significance | Project Needs and Museum Education

01 Development Needs from a Real Project

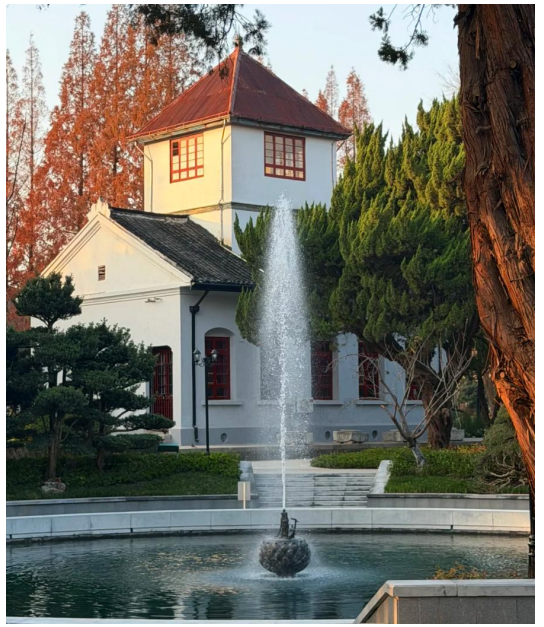
This design originates from a cultural and creative product development project for the Nantong Museum. The museum needs to keep introducing products with a distinct cultural identity and to maintain public engagement with its cultural content beyond the visit.

02 Development Challenges for Museum Products

The Nantong Museum currently offers a limited range of product categories. Cultural symbols are applied rigidly, with limited playfulness, continuity or storytelling across products. This leaves little room for further development and iteration, making long-term vitality difficult to sustain.

03 Continuing the Museum’s Educational Mission

Zhang Jian founded the museum while exploring industry and education as paths to national renewal in modern China. He sought to broaden public knowledge through direct observation and museum learning. Continued product development and science communication extend this public educational ideal into the present.



Research Focus

Develop design principles that connect continued development, cultural communication and consumption.

Research Object

Founded by Zhang Jian in 1905, the Nantong Museum is China's first public museum. Its combination of gardens and exhibition spaces connects collections, historic architecture, nature observation and public education.

Zhang Jian was a prominent modern Chinese industrialist and educator who made major contributions to China's economic and educational development.

Research Content

The research focuses on cultural sign selection, design expression and continued product development. Resources include Zhang Jian and his educational ideas, Haonan Bieye, wisteria, stray cats in the museum grounds, river-and-sea biological resources and representative collections.



Haonan Bieye and Wisteria

Current Conditions and Problems | Rich Cultural Themes, Limited Development Paths

Based on 16 product records collected through fieldwork and online research, the problems concern product formats, renewal methods and communication content.













01 Limited Categories and Use Settings

Magnets, bookmarks and artefact replicas recur, with purchases largely motivated by souvenirs of a visit. Products offer limited playfulness or emotional connection and have few ways to enter study, clothing or home life. After a commemorative purchase, further demand is difficult to generate.

02 Renewal through Element Substitution

Artefact replicas and combinations of architectural elements convey cultural features, but further designs often only replace an object or building or rearrange motifs. Themes change while the product experience remains similar, restricting development and differentiation and potentially causing aesthetic fatigue.

03 Limited Content for Ongoing Communication

Decoration alone struggles to explain cultural context or develop continuing stories. Visitors unfamiliar with the collections may not understand the meanings. A lack of shareable topics also makes it difficult to sustain online attention and motivation to purchase.

Problem chain: repeated expressions → limited new content → fewer topics and encounters → weaker motivation for continued purchases.

Research Objectives | Creating Conditions for Long-Term Development

The question extends from “creating a new product” to “what can be developed next?”

Expand Creative Possibilities

Establish reusable visual identity standards and organise IP content through characters, relationships and settings. New designs can develop around a shared cultural identity without repeatedly seeking another artefact shape to reproduce. Use IP to create engaging museum content and sustain its vitality and audience attention through social media.

Make Cultural Expression Easier to Understand

Avoid rigid applications of cultural symbols. Place them in context and use engaging expressions so that consumers can understand unfamiliar culture through familiar behaviours. Products can then carry content that can be narrated, shared and continued.

Create Reasons for Continued Consumption

Extend beyond souvenirs into everyday products, offering new reasons to choose through function, aesthetics and emotional value. Connect thematic content updates with product development to provide continuing themes and applications for future operations.

Expected outputs: a brand identity system, an expandable IP character series and development methods linked to everyday consumption.

Research Methods | From Research Materials to Design

01 Literature Review

Review semiotics, brand recognition, narrative and consumer value to explain how cultural signs produce meaning and how recognition, emotion and practical needs influence product choices.

02 Investigation of Existing Products

Combine fieldwork and online research. Examine cultural sources, product formats, visual expression and use settings to identify constraints on continued development.

03 Case Analysis

Use Tokyo National Museum products and Kumamon as references for extending cultural imagery into everyday goods, maintaining IP activity and accumulating brand recognition.

04 Design Practice

Extract cultural signs from the research and develop the logo, palette, supporting graphics, shop proposal and IP characters. Show how cultural resources enter design through the transition from sketches to final works.

Use research to support design decisions, then demonstrate how the principles operate through specific works.

Key References | Six Studies Supporting Design Decisions

Sustainability	Yang Z. Research on mechanisms for the sustainable development of cultural and creative design integrating social innovation[D]. China Academy of Art, 2022. (in Chinese).
Semiotics	Zhao Y H. Semiotics: Principles and inferences[M]. Revised ed. Nanjing University Press, 2016. (in Chinese).
Museum IP	Jiang L. IP management: Exploring a new approach to museum public cultural products and services[J]. Chinese Museum, 2017(1): 79–88. (in Chinese).
Brand Recognition	Keller K L. Conceptualizing, measuring, and managing customer-based brand equity[J]. Journal of Marketing, 1993, 57(1): 1–22.
Narrative & Emotion	Escalas J E. Narrative processing: Building consumer connections to brands[J]. Journal of Consumer Psychology, 2004, 14(1–2): 168–180.
Consumer Value	Sweeney J C, Soutar G N. Consumer perceived value: The development of a multiple item scale[J]. Journal of Retailing, 2001, 77(2): 203–220.

Design Method and Process | Bringing Cultural Signs into Use and Communication

Cultural Sources

Identify the artefacts, places and educational ideas to which the signs refer.

→

Design Expression

Select visible features such as shapes, colours and actions.

→

Public Interpretation

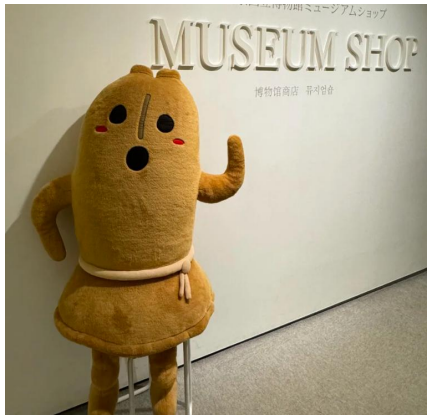
Use familiar situations to build memory, emotion and cultural connections.

Semiotics connects “what an image resembles” with “what it expresses”. Cats invite familiarity, Zhang Jian establishes an educational identity, and artefacts and river-and-sea animals become subjects of observation and discussion in the classroom.

Organise Resources → Extract Key Features → Develop Brand & IP → Extend into Daily Life → Renew Themes

Selection principle: prioritise distinctive local elements that audiences can readily relate to. Use consistent visual rules and character relationships to leave room for further stories and products.

Case Study | Tokyo National Museum: Cultural Imagery in Everyday Products



Haniwa Plush Toy



Socks and Everyday Goods



Haniwa-Shaped Ear Pick

From Cultural Imagery to a Product Series

Tokyo National Museum develops various products based on haniwa forms and promotes its identity through the official character Tohaku-kun. Stable cultural identification connects different products to the same museum.

From Souvenirs to Everyday Use

Socks, stationery and lunch accessories bring cultural imagery into daily activities. Different price levels and use settings expand consumer choices and provide paths for new formats and themes.

Lesson: retain cultural identity while extending beyond replica ornaments; diverse formats create more occasions for use and further purchases.

Case Study | Kumamon: Ongoing IP Management and Place Branding



©2010 熊本県くまモン





The Brand Gives the Character a Clear Identity

Kumamon remains closely associated with Kumamoto. A stable appearance and personality allow activities, media content and products to contribute to a shared brand identity.

Ongoing Activity Generates New Content

Through travel, interaction, festivals and everyday activities, the character continually takes part in new events. Audiences follow “what the character is doing”, creating continuing reasons to watch and share.

Connecting Content and Products

Affection for the character can extend to products and local experiences. For this project, the lesson is that IP requires continued creation and management to gradually connect attention with consumption.

Mutual reinforcement: the brand anchors the IP, while continuing stories and interactions keep the brand in public view.

Branding

Build Recognition and Trust over Time

Unify the logo, colours, supporting graphics and application standards so that products are recognised as one brand. A positive impression of one product can carry over to later releases. Consistent visual and quality experiences create conditions for brand trust and consumer loyalty.

Character-Based IP

A Carrier for Culture and New Content

Create a classroom story world around Zhang Jian and the cats, turning artefacts, natural knowledge and learning into character experiences. The same characters can take part in exhibitions, festivals and everyday events, generating new topics and moving differentiation from “new patterns” to “new stories”.

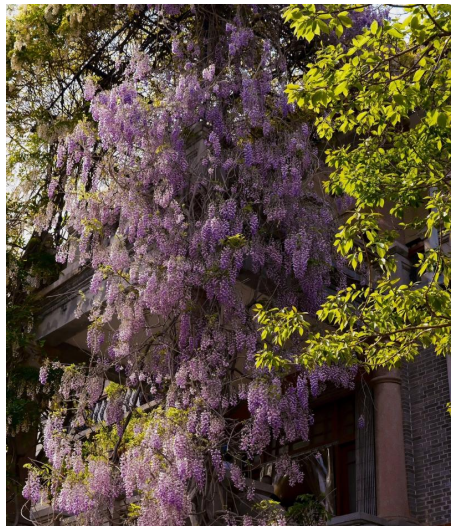
Everyday-Life Integration

Extend Cultural Contact through Use

Extend the designs into stationery, clothing and household goods to bring cultural content into daily life. Products need clear differences in creativity, aesthetics or quality. Combined with the emotional value of the IP, these provide reasons to choose them over ordinary goods.

Branding establishes a shared identity; IP develops emotion and stories; everyday products bring both into repeated daily use.

Cultural Sign Extraction | Building Brand Memory through Place



Wisteria

Wisteria in front of Haonan Bieye is a distinctive seasonal sight that can recall a museum visit. Flower and leaf colours and the outline of the hanging clusters inform the brand palette and supporting graphics.



Central Hall

The museum’ s original logo was based on the form of the Central Hall. Retaining this original symbol in the new design helps establish stable brand memory.



Haonan Bieye

The building and wisteria form a familiar impression of the visit. Using Haonan Bieye as the classroom gives the story a specific setting and connects it to Zhang Jian and the museum’s educational theme.

Cultural Sign Extraction | Organising Stories through People, Animals and Education



Zhang Jian

As the founder and an educator, he guides and explains museum knowledge, giving the IP a clear cultural identity.



Stray Cats

The museum′ s stray cats have a real connection to the site and readily evoke affection. Different personalities and behaviours provide material for interaction, humour and online communication.



River-and-Sea Life: Subjects for Exploration

Drawing on resources such as “River and Sea Wonders—Nantong Biological Resources Exhibition”, aquatic animals and observation activities enrich the story world and provide material for future science communication and exhibition themes.

Education unifies the story: “Establish places of learning to teach and broaden knowledge of birds, beasts, plants and trees.” Classroom relationships connect people, animals and collections.

Cultural Sign Extraction | Turning Collection Features into Memorable Characters

Prioritise culturally representative and visually distinctive collection objects so that audiences can remember the characters and recognise the related artefact features.



Yue Ware Celadon Flask

A well-known highlight of the collection, with a readily recognisable handle, rounded body and celadon colour.



Famille-Rose Magnolia-Shaped Cup

Its petals, branches and cup body evoke nature and offer strong aesthetic value.



Lotus-Shaped Suction Cup

A collection object combining function and playfulness.



Cizhou Ware Pillow with Iron-Rust Decoration

The top depicts two lions playing with a ball. Bamboo and peonies appear on the front and back, with lotus motifs at both ends, providing patterns for design extraction.

Blue printed cloth adds a local craft reference: patterns and clothing associations inspire a raincoat theme and extend the characters' everyday situations.

Brand Logo | From the Central Hall to the NANTON Letterform



Original Museum Logo



Museum Product Brand Logo Sketch

→



Final Logo

The logo begins with NANTONG, the pinyin spelling of Nantong. For graphic composition and artistic expression, G is omitted to form the phonetic-inspired sequence NANTON. Rearrangement, scale contrast and symmetry suggest the architectural form of the Central Hall.

Brand Colours

NANTONG MUSEUM
南 苑 · 造 物

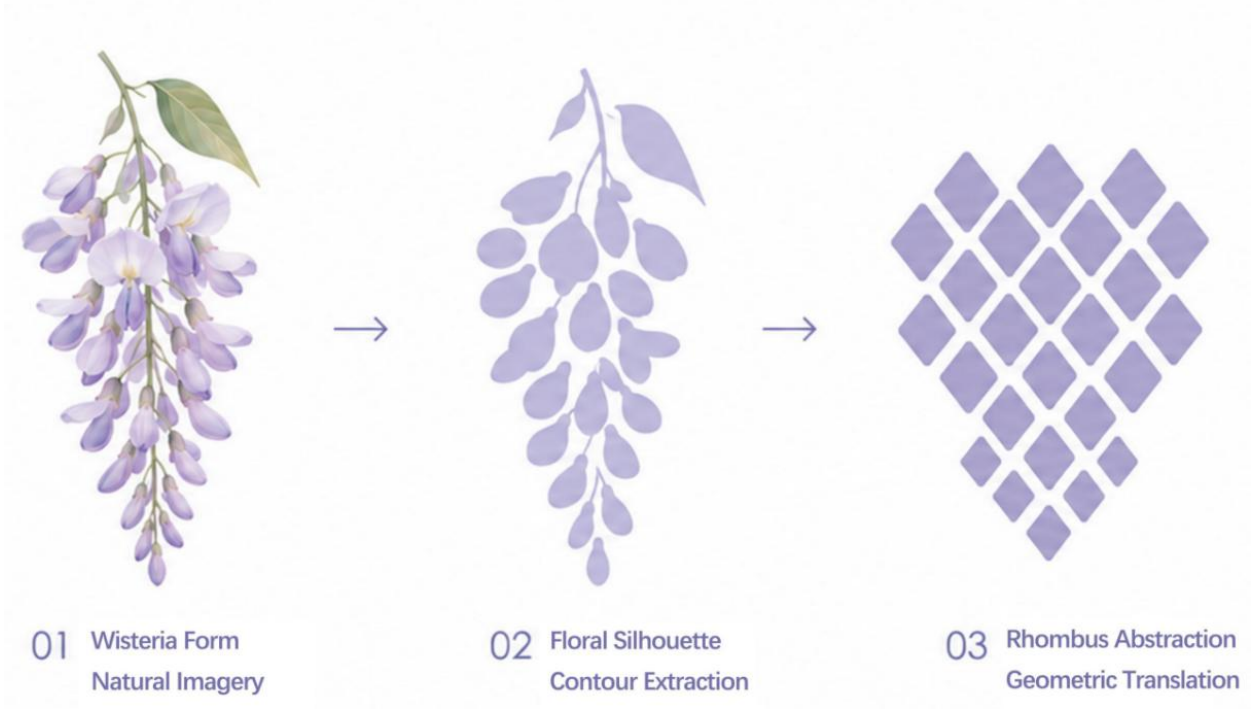
#7472AC
RGB 116 / 114 / 172

#B1B82E
RGB 177 / 184 / 46

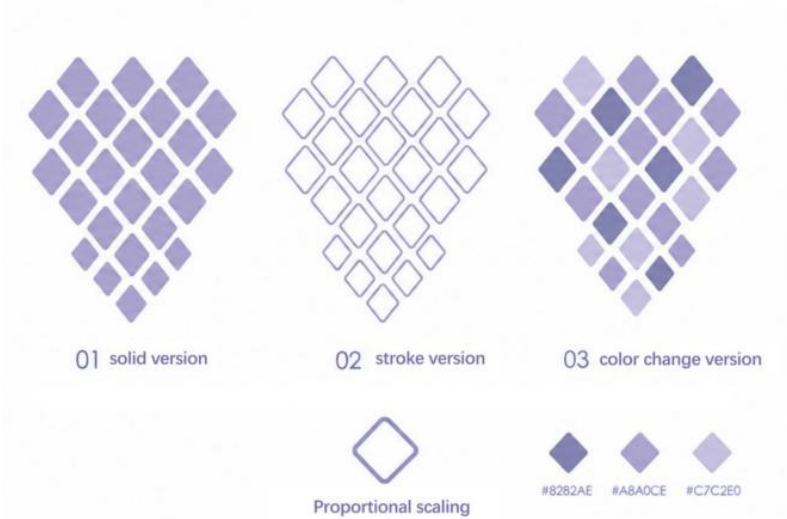


The palette uses the blue-violet of wisteria at Haonan Bieye as the primary colour and the yellow-green of its leaves as the supporting colour. Wisteria offers two recognition cues: hanging clusters and seasonal colour. Violet runs through the logo, packaging and layouts to maintain the same sense of place. Yellow-green highlights the O, the Chinese mark and selected details, creating a clear colour hierarchy.

Supporting Graphics | From Wisteria Clusters to Expandable Patterns



Natural Form → Outline Extraction → Geometric Translation



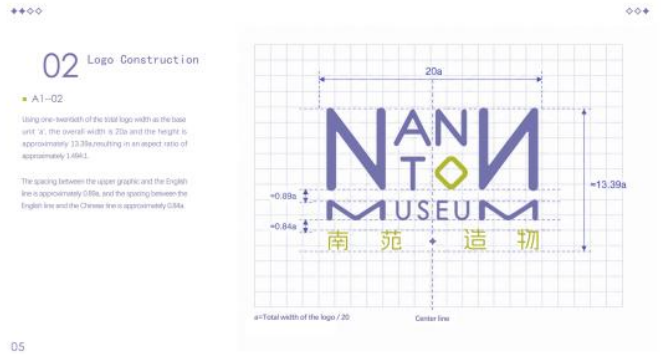
Filled / Outline / Colour Variations

Retain the naturally hanging cluster, broad at the top and tapering below, and simplify the petals into rounded diamonds. Unit size, offset and density preserve the plant's rhythm. Filled forms, outlines, colour changes and cropping adapt the graphic to different applications.

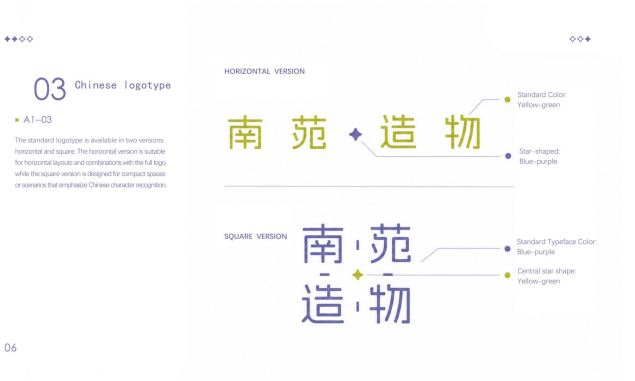
Visual Identity Manual for the Museum Product Brand



Manual Cover



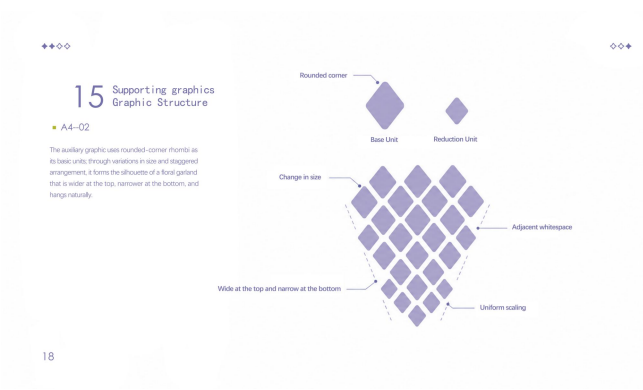
Logo Proportions



Chinese Brand Mark



Colour Combinations



Supporting Graphics



Business Cards

Visual Identity Manual for the Museum Product Brand



Supporting Graphic Applications



Document Envelope



Envelope



Shopping Bag

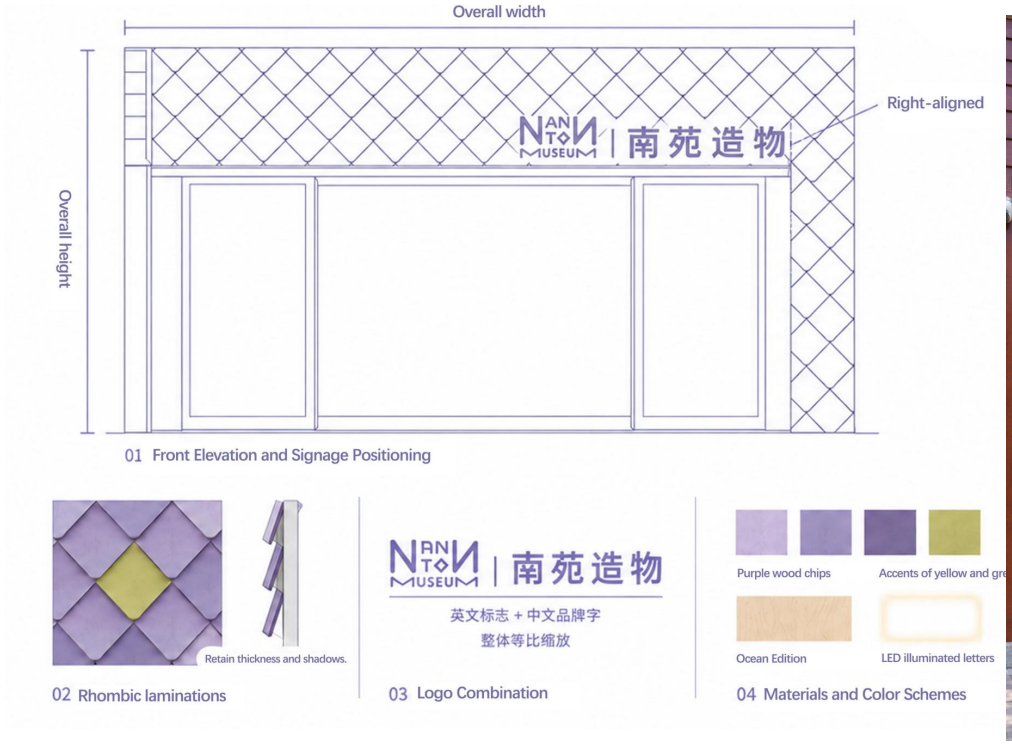


Wayfinding System 1



Wayfinding System 2

Museum Shop | Translating Brand Rules into a Spatial Identity





Storefront Identity

The storefront maintains stylistic continuity by translating rounded diamonds and the wisteria palette into decorative elements.

Marine plywood is the main material for the storefront and shop. The sign is formed by overlapping panels that are sanded and spray-painted, creating a distinctive appearance while maintaining a consistent design language.

IP Story World: Concept Sketch



Establishing Classroom Relationships

In the story world, Zhang Jian teaches at Haonan Bieye, reflecting the museum's educational mission and his identity as an educator. The museum's distinctive cats become students with varied appearances. Aquatic animals from Nantong's river-and-sea culture enrich the setting.

Seats, actions and props organise relationships, giving each character an independent activity.

The classroom accommodates observation, questions, discussion and exploration, providing a narrative structure for introducing artefacts and natural knowledge.

IP Story World: Final Illustration



Classroom and Personalities

Learning, resting, discussion and sleeping happen together, with each cat engaged in its own activity.

The shared museum setting supports individual events and brings the characters together around new themes. It translates the museum's educational meaning into a story world with characters, plots and everyday interactions. IP does more than create recognisable images: it carries stories and connects cultural resources with public emotions. Compared with graphic transformations of isolated cultural elements, characters with distinct personalities and established relationships can generate new plots around learning, visits, festivals and daily life. This provides continuing creative content for illustrations, comics, short videos and later products.

Character Design | Zhang Jian: Museum Education and Classroom Stories



Zhang Jian Sculpture in the Museum Grounds



Character Sketch



Final Character Design

Artefact-Inspired IP Blind-Box Design | Name:Buding (Pudding)



Magnolia-Shaped Cup



Sketch



Final Design

Artefact-Inspired IP Blind-Box Design | Name:Heimi (Black Rice)



Yue Ware Celadon Flask



Sketch



Final Design

Artefact-Inspired IP Blind-Box Design | Name:Yangtao (Starfruit)



Lotus-Shaped Suction Cup



Sketch



Final Design

Artefact-Inspired IP Blind-Box Design | Name:Aoliao (Oreo)



Cizhou Ware Pillow with Iron-Rust Decoration



Sketch



Final Design

Artefact-Inspired IP Blind-Box Design | Name:Yanmai (Oats)



Blue Printed Cloth Raincoat



Sketch



Final Design

Further Development | Connecting Story Updates with Everyday Products

Content Updates: Staying Visible

Use stable character relationships to create illustrations, short stories and science communication around exhibitions, festivals, seasons and learning. Continual participation in new events provides shareable social media topics and repeatedly brings museum culture into public view.

Everyday Applications: Reasons to Use

Integrate stories and visual elements into stationery, clothing and household goods to expand use settings. Creativity, aesthetics or quality must clearly distinguish them from ordinary products. The emotional value of the IP adds a more personal reason to choose them.

Operational Links: Supporting Continued Consumption

Coordinate thematic content releases with new products so that online attention connects to specific goods and experiences. Adjust themes, formats and expression through audience feedback, building relationships through ongoing development rather than a single trend or repeated forms.

From One-Time Souvenirs to an Expandable Cultural Content and Product System

Branding	Address fragmented product recognition: consistent visuals and experiences build brand awareness so that later products can benefit from established trust.
Character-Based IP	Address limited renewal themes and communication content: character relationships carry stories of artefacts, nature and life, enabling continued creation and discussion.
Everyday-Life Integration	Address limited use settings and reasons to buy again: everyday formats combine creativity, quality and emotional value to support continuing contact and consumption.

The brand gives products a shared identity, IP continually enriches the content, and everyday products turn this connection into daily experience.