

# Connecting Cultural Memory Across Time and Space

A Cross-Media and Multi-Technology Framework for Digital  
Cultural Narratives in Public Libraries: Evidence from  
Shanghai Library

QIU Kaiyu, LI Yao

# Connecting Cultural Memory Across Time and Space

## Greetings from the Shanghai Library Team



上海圖書館  
SHANGHAI LIBRARY  
上海科技書情報研究所  
INSTITUTE OF SCIENTIFIC & TECHNICAL INFORMATION OF SHANGHAI

**Shanghai Library**

Library System & Network Center

Qiu Kaiyu

Li Yao



# Connecting Cultural Memory Across Time and Space

## Beyond Boundaries

Isolated,  
temporary  
exhibitions



Sustainable,  
infrastructure-  
level digital  
narratives

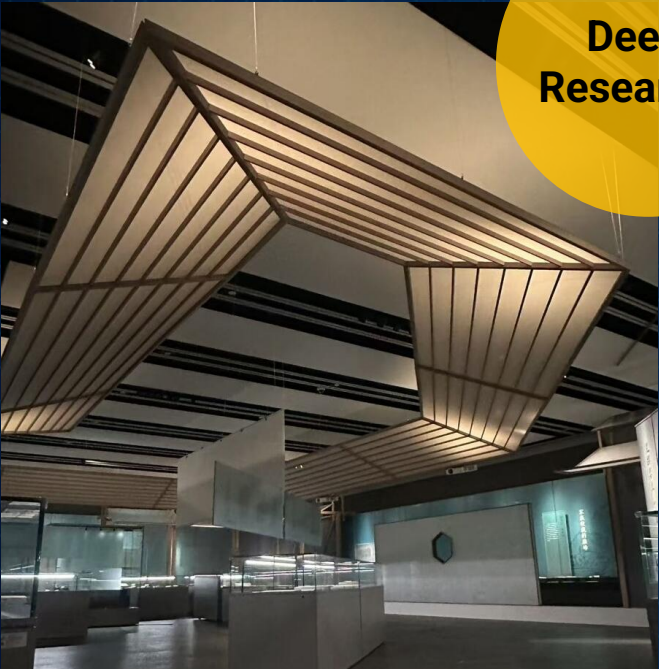




**Deeply  
Researched**

**Highly  
Curated**

**Publicly  
Engaging**



# The Challenge: From Access to Interpretation

01

Strictly Time-Limited Access

Access Provision

02

Repeated Loss of Knowledge

03

Fragmented Digital Initiatives

Mediated Interpretation

# The Strategic Solution: An Infrastructure-Oriented Digital Exhibition Framework

## A Cross-Media and Multi-Technology Framework

### Multimodal Representation

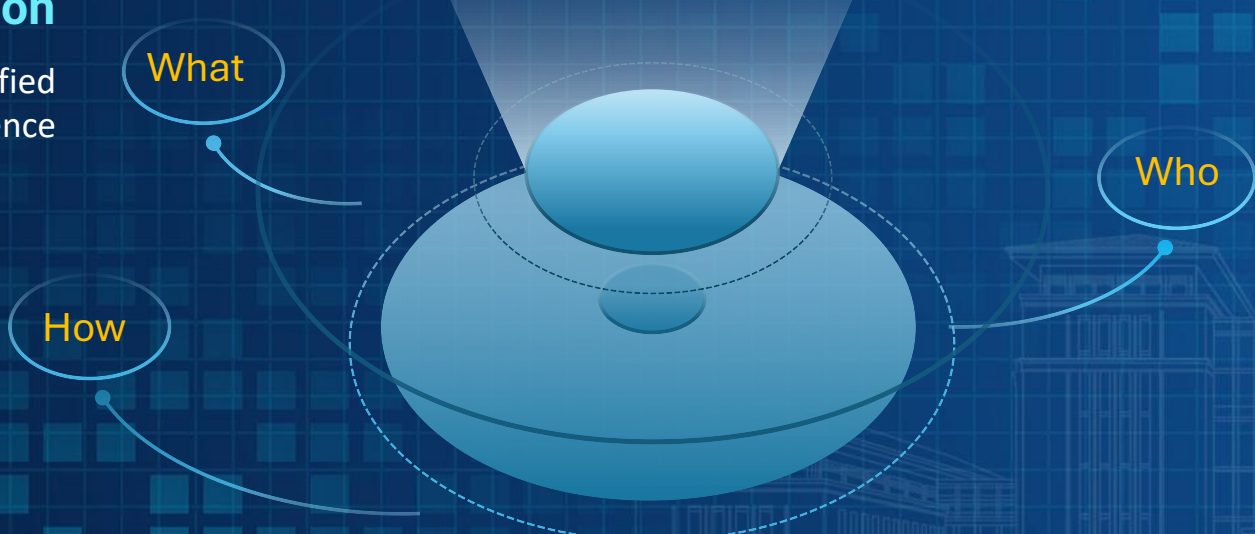
From Scattered Files to Unified Knowledge Experience

### Narrative Organization

From Simple Lists to Multi-Layered Storytelling

### Cultural Memory Generation

From Manual Coding to Automated Lifecycle Production



# Dimension 1: Multimodal Representation

From Scattered Data to Unified Knowledge



# The Showcase

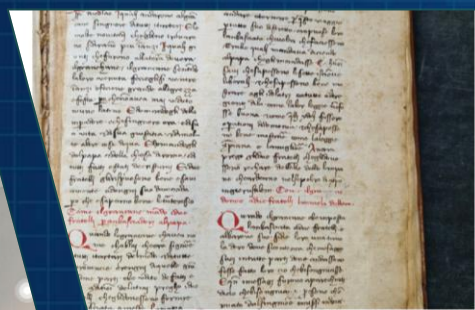
## Online Exhibition Experience

# 【 Showcase Video 】

# Dimension 2: Narrative Organization

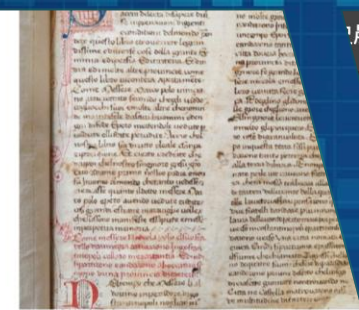


Spatial Narrative



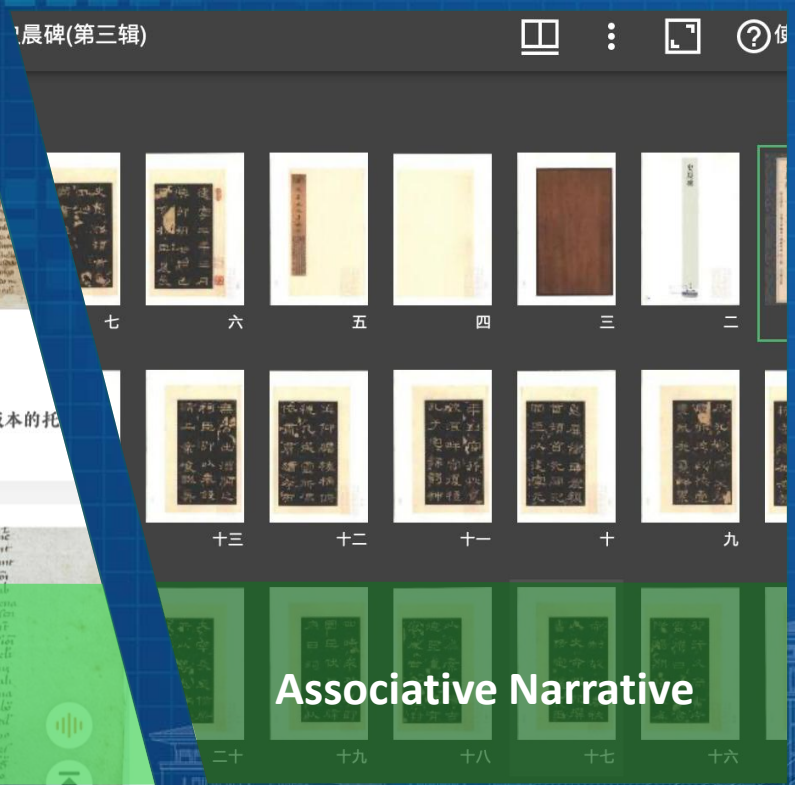
《马可·波罗游记》

《马可·波罗游记》，1391  
[意]马可·波罗，抄本，托斯卡纳语版本 (TA)  
15.5×23×2.7 cm...



《马可·波罗游记》

《马可·波罗游记》，14世纪  
[意]马可·波罗，抄本，译自威尼斯语版本的托  
斯卡纳语版本 (TB) ...



Content Narrative

Associative Narrative

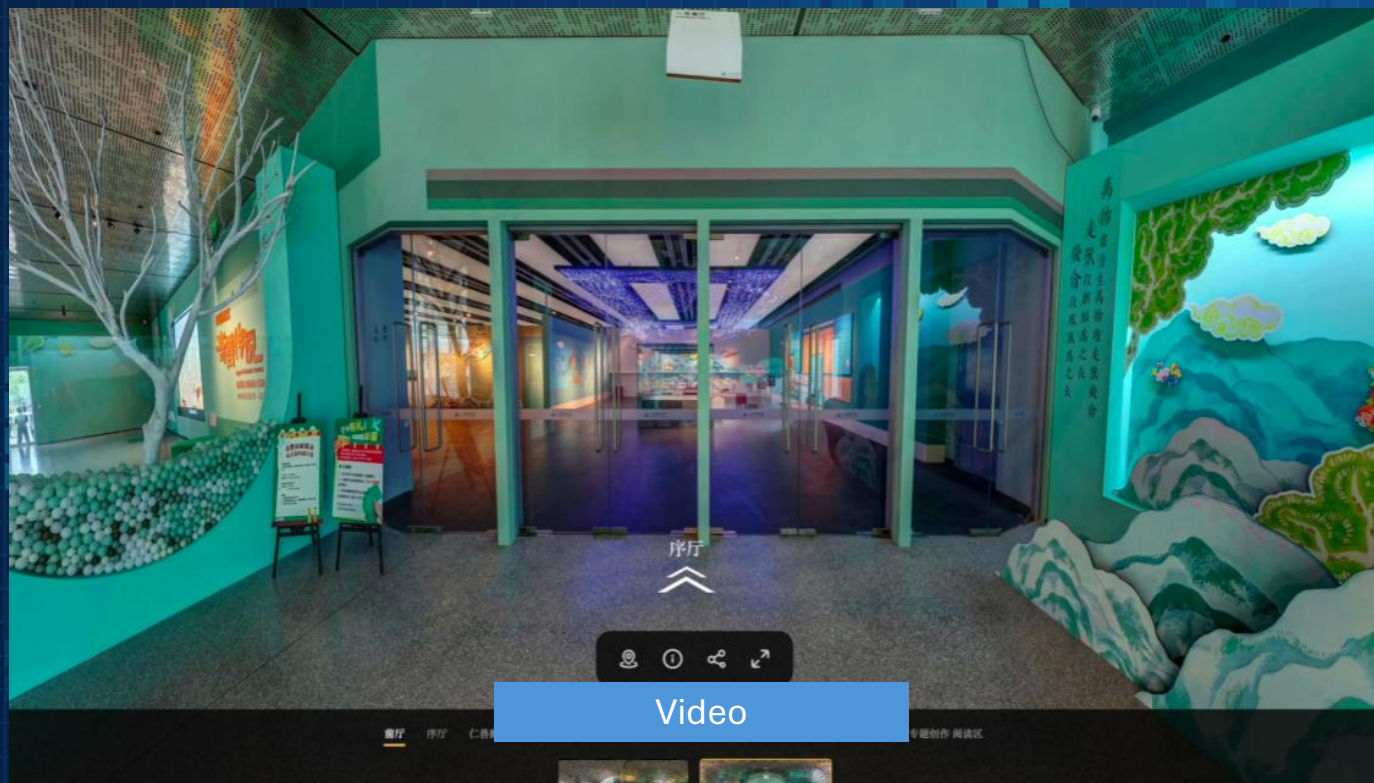
# Layer 1: Spatial Narrative – Connecting Across Space

360°  
Virtual Tour

Navigation Flow

Interactive  
Hotspots

Enduring  
Storytelling



# Layer 2: Content Narrative – Structured Storytelling

Macro level  
Meso level  
Micro level

Progressive  
Interaction

Hierarchical  
Tour

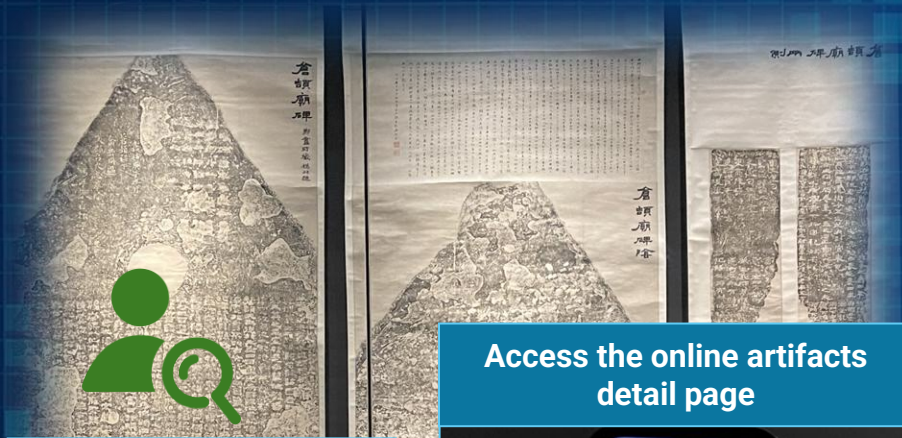
Dynamic  
Synchronization

The desktop screenshot shows the main exhibition page for 'De Hou Liu Guang' (德厚流光). The header includes the Shanghai Library logo and the title '线上展览' (Online Exhibition). The main title '德厚流光' is prominently displayed in large, stylized characters. Below the title, it identifies the exhibition as '馆藏家风家训主题展' (Collection of Family Traditions and Family Education Theme Exhibition) and provides the dates: '线下展览: 上海图书馆 2023.07.04 - 2023.11.07'. A navigation bar below the title lists four units: '整体介绍' (Overall Introduction), '第一单元 砥节砺行' (Unit 1:砥节砺行), '第二单元 重教兴国' (Unit 2:重教兴国), '第三单元 亲仁善邻' (Unit 3:亲仁善邻), and '第四单元 节用裕民' (Unit 4:节用裕民). The '整体介绍' unit is currently selected. The main content area contains a paragraph of text explaining the significance of family traditions and education in Chinese culture, followed by a section titled '展品' (Exhibits) which displays two digital reproductions of historical family education documents. The first document is from the 'Shanghai Library' collection, and the second is from the 'Zhejiang Library' collection.

The mobile screenshot shows the same exhibition page adapted for a smartphone. The layout is more compact, with the title '德厚流光' and the exhibition name '馆藏家风家训主题展' clearly visible. The navigation bar is simplified, showing '整体介绍', '第一单元 砥节砺行', and '第二单元 重教兴国'. The text content is also adapted for the smaller screen. At the bottom, the Shanghai Library logo and dates are visible, along with the website URL 'szz.library.sh.cn' and a refresh icon.

# Layer 3: Associative Narrative – Connecting Resources

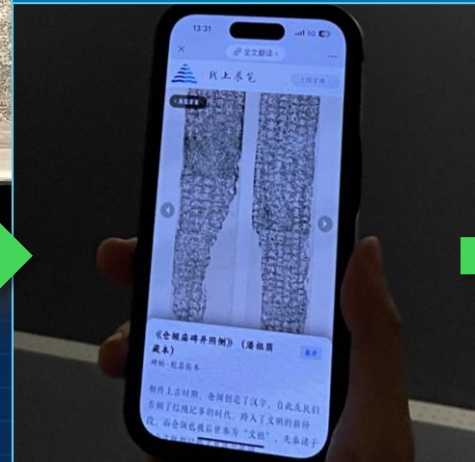
Offline  
to  
Online



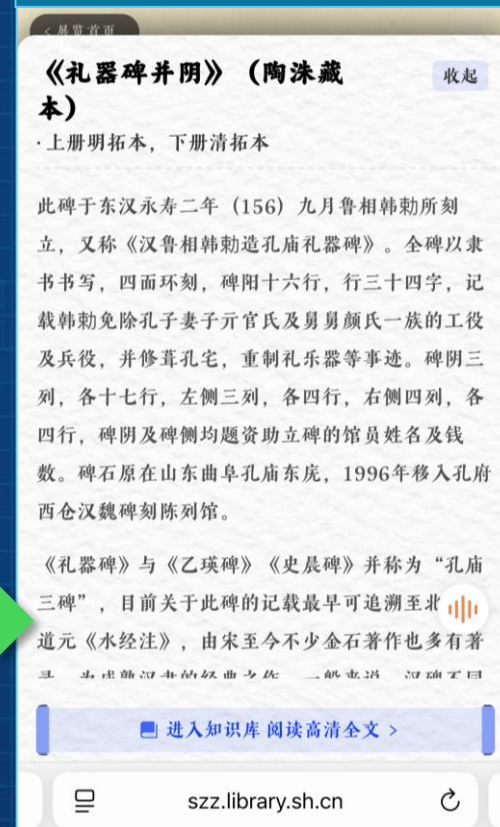
Access the online artifacts  
detail page



Scan a QR code offline



Read detailed descriptions



Listen to the AI-powered  
audio description



Artifacts  
to  
Semantic  
Knowledge  
Resources

# Layer 3: Associative Narrative – Connecting Resources

Offline  
to  
Online

Artifacts  
to  
Semantic  
Knowledge  
Resources

碑帖名家籍贯分布图

全部朝代

- 汉
- 魏晋
- 唐
- 宋
- 元
- 明
- 清

寇谦之

李百药

王羲之

颜真卿

柳公权

苏轼

徐铉

李邕

盛唐

欧阳通

黄庭坚

何绍基

检索结果: 48

默认排序 碑帖数量

蔡鸿鑒

行书, 楷书 浙江 清

思古斋黄庭经上兰亭序合册

浙江鄞县(今宁波)人。字慕卿(一作号),号季白(一作字),室名墨海楼(藏书楼,筑于上海沪西)、二百八十峰草堂(有《二百八十峰草堂诗集》一册)。原为鄞县富商蔡荣禄子,侨寓上海,喜藏...

化度寺邕禅师舍利塔铭

楷书 李百药(撰文) 欧阳询...

(吴湖帆藏本)

唐贞观五年(631)刻立,李百药撰文,欧阳询楷书。三十五行,行三十三字。宋庆历初(1041-)以前,原石已经断裂,时任河南制府范雍(981-1046)见到的《化度寺》已是断石,庆历间(1041-1048),《化度寺》断石又被僧徒击碎,又三断,后残石移置范雍洛阳府署,至北宋末年佚失。

此碑在宋代有不少翻刻本流传,传至今日著名的翻刻本有六种:吴县陆恭恮下清斋藏本、临川李宗瀚静观室藏本、南海吴安光瑞清斋藏本、大兴翁方纲苏斋藏本、南海伍崇曜尊雅堂藏本、敦煌石室本。前五种为宋代翻刻,敦煌本乃唐代翻刻本,传世唯有吴湖帆四歌堂藏本是原石拓本。

虞恭公温彦博碑

楷书 欧阳询(楷书) 岑文本...

(吴湖帆四歌堂本)

唐贞观十一年(637)十月立。岑文本撰文,欧阳询楷书,凡三十六行,行七十七字。碑额阳文篆书“唐故特进尚书右仆射虞恭公温彦博碑”十六字。此碑为昭陵陪葬碑之一,在醴泉县北二十五里烟霞河西昭陵南十里。拓碑书人给至香来,践履庄稼,影响治安,为当地人深恶痛绝,乡人遂以凿毁碑字为报。此碑文字已亡其大半,通碑原有二千八百余字,今最佳宋拓本也不过八百余字,碑主姓氏、谥字、里居皆磨,历官亦缺略。故明代以前拓本多仅拓上截文字清晰部分(整碑每行七十七字,宋明间拓本每行仅存十九至二十二字间),千嘉以后始见整碑全拓。

龙藏寺碑

楷书 张公礼(撰文)

(诸星约藏本)

开皇六年(586)十二月五日刻立。楷书,碑阳三十行,行五十字,碑阴五列,列三十行。有额正书三行,行五字,额阴题名二列,上列八行,下列十二行。碑额题名三行。宋于德六年(963)龙藏寺更名为“龙兴寺”。碑今仍在河北正定龙兴寺。

此册系明代中期拓本,仅次于唐翰墨所藏“元明间拓本”(今藏上海图书馆),洵为“天下第二本”。经诸星约(味音)、朱士林(半亭)递藏。朱士林、朱永威皆定为宋拓本。

礼器碑並阴(第四辑)

礼器碑

礼器碑

8/74 八

# Dimension 3: Cultural Memory Generation



# Component 1

## The 360° Virtual Tour Production Platform

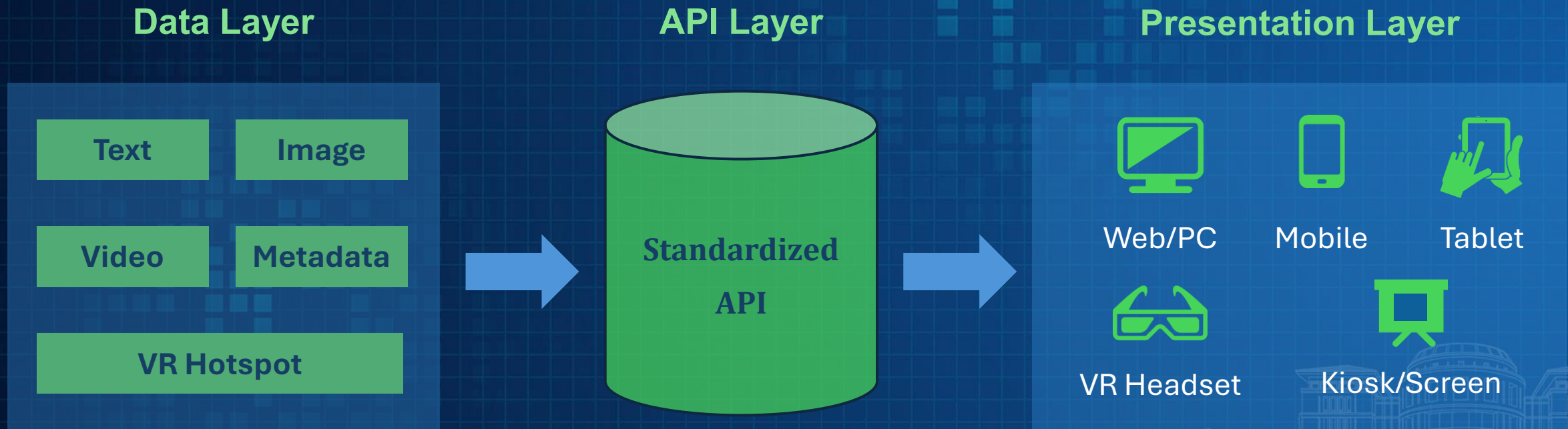
# 【 Showcase Video 】

# Component 2

## The Self-Service Curation System

# 【 Showcase Video 】

# Technical Principle: Data-Driven, Decoupled Architecture



# AI Governance & Trust

01  
Exhibition  
Scoped



02  
Data  
Constrained

03  
Algorithmic  
Control

# Connecting Cultural Memory: The Results



**Space  
Expansion**



**Time  
Preservation**



**Sustainable  
Production**

马可波罗展



整体简介序 第一单元 奇迹之书 第二单元 沙舟海帆 第三单元 日月有常 第四单元 烂然星陈



第三单元-01



第三单元-02



第三单元-03



第三单元-04



第三单元-05



第三单元-06



第三单元-07



第三单元-08

# Future Enhancements

## Semantic Spatial Intelligence

Plan-to-Scene Alignment ∙ Interactive Hotspots Auto-generating

## Intelligent Curation Assistance

AI Research Partner ∙ Knowledge Management

## AI-Powered Visitor Experience

Curator AI Agent ∙ Active Recommendation



# BEYOND BOUNDARIES: New Modes of Access and Accessibility through Emerging Technologies Symposium

# Thank You!



**Explore Our Project:**  
<https://szz.library.sh.cn/home>

**Contact Us:**  
Kaiyu Qiu: [kyqiu@libnet.sh.cn](mailto:kyqiu@libnet.sh.cn)  
Yao Li: [yaoli@libnet.sh.cn](mailto:yaoli@libnet.sh.cn)

Organised by:

