



HDW Project Kleutghen

Kristina Kleutghen, Art History & Archaeology

Haley Harris 2022

Gloria Jin 2023

Lingran Zhang 2021



Output/Goals and Guiding Principles

[KK Adapt milestones/outputs from next slide]

KK Add in how place names, place name counts, object and mapping data will be used in research for this chapter (with implications for other chapters)

Object-centered

Digital Art History

Bilingual (English/Chinese)

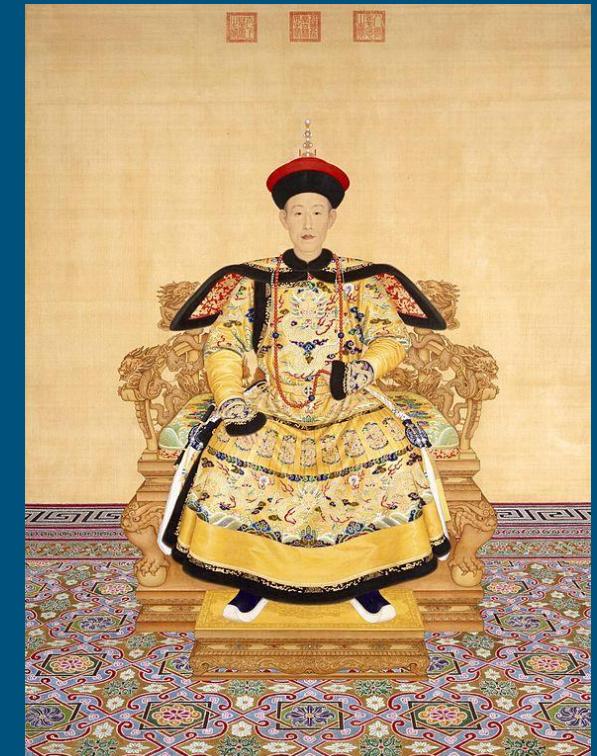
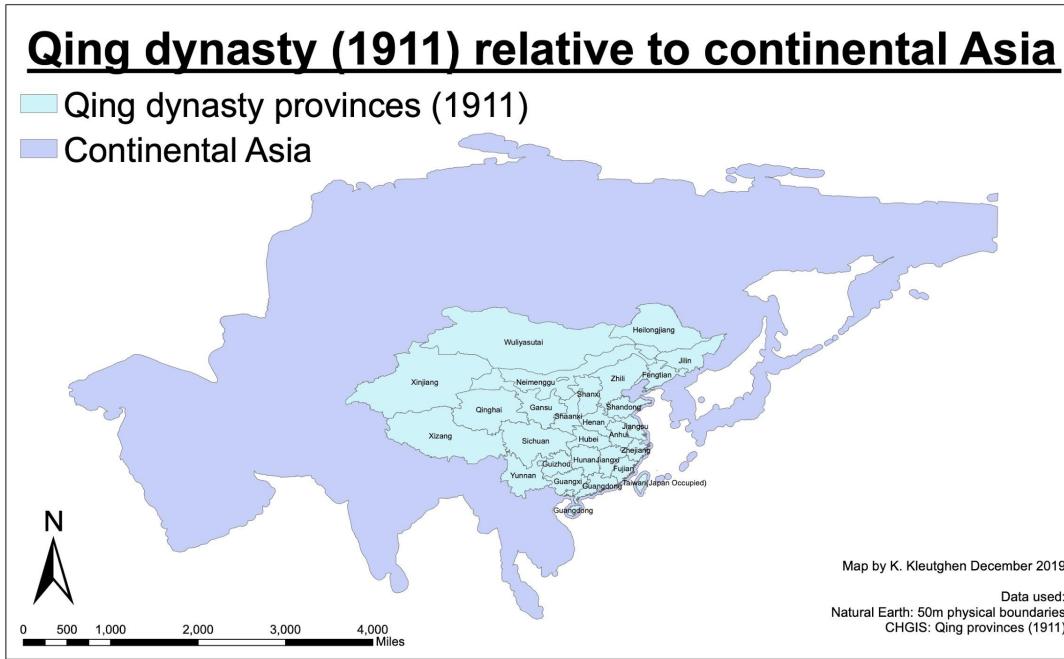
Open Access images

Mapping and Data Visualization

Open Source tools

Open Scholarship

Qing Dynasty (1644-1911) and the Qianlong emperor (r. 1736-1795)



Nephrite jade mined in Khotan, 4000km from Beijing



The Qianlong Emperor's "Hindustan" Jades (Qing empire, c. 1760-1800)



Mughal floral-form jade bowl (India, 1526-1858)
Collected by Qianlong emperor c. 1760-1770
Incised with Qianlong's poem in Chinese dated 1770



Fall 2019

- ① 玉 榄 玉榄來回部，輸誠供闔閭，召公懷不寶，韓子戒無當，異致白毛鹿，引恬鯨尾鈞（回部葉爾奇木哈什哈爾初役屬於準噶爾，為所拘禁，因我大軍戡定伊犁，始釋之令歸所部，其長伯克卓遣使求內屬，此其所貢也），勞俠非力并，天眷奉昭彰。

載於御製詩二集，卷65，頁18，丙子（乾隆二十一年，西元1756年）此詩加琢於該玉碗外壁，藏於本院，品號天三四八，圖版壹，插圖30。

② 玉 盤 瑰 玉盤博徑得二尺，圍六尺有五寸益，虛中盛水受一石，素質不彰其色碧，旁達孚尹瓊瓈澤，葆光撫不留手跡，群玉之精出崑崙，吉日甲子天子賓，于西王母瑤池津，行觴介紹簾簷疇，爾時所御器今存，作鑄西極永好完，未入震旦三千年，問今何來不脛偶，準噶爾亡淪世守，阿睦撒納茲竊取，王師突入靖孽醜，於將獲之聯豫走，棄其重器為我有，元英大呂陳座右，咄哉玉盤徒華滋，不可食兮不可衣，連城價詎如窮奇，俘彼禍除可罷師，前歌後舞樂雍熙，瓊玩吾將安用之，擬付鄆人一例椎。

載於御製詩二集，卷75，頁3，戊寅（乾隆二十三年，西元1758年）至乾隆四十年時，高宗賦“和闐採玉”一詩，詩註中記錄此事：「平定伊犁以後，陸曉爾撒納叛走，王師追擒得其所棄玉盤一，徑二尺圍六尺有奇，中可受水一石，蓋準部盛時琢以盛酪漿者，戊寅春進至，曾紀以詩，及耕屯既開，壬午春墾地者復獲其一以進，形制尺寸並同，仍疊前韻紀之。」

③ 詠玉茶椀 于闐何必購奩環，通貢薄來每厚還，保定不期致遠域，琢磨亦復藉他山。示禎碧落星辰表，延喜明廷樽俎間，灑雪浮香真恰當，思推解渴福區寰。

載於御製詩二集，卷78，頁17，戊寅（乾隆二十三年，西元1758年）

④ 玉 榄 曾未于闐遣使求，堅昆玉榄自來投，詎云有翼千斤獻，那肯無端大白浮。賢問乃明君子德，工言幾誤楚人璆，歲時宴饗斟香茗，延喜明廷弃葉葵。

A	B	C	D	E
NPMT 1983 poem listing	Object	Incised text	Text source	Volume C
1	玉椀	玉椀來回部,輸誠供闔閭,召公懷不實,韓子戒無當,異致白毛鹿,引恬頰尾鈞(回部葉爾奇木哈什哈爾初役屬於準噶爾,為所拘禁,因我大軍戡定伊犁,始釋之令歸所部,其長伯克和卓遣使求內屬,此其所貢也),勞徧非力并,天眷奉昭彰。	載於御製詩	二集 卷6
2	玉盤瑤	玉盤博徑得二尺,圍六尺有五寸益,虛中盛水受一石,素質不雕其色碧,旁達孚尹瓊華澤,葆光撫不留手跡,群玉之精出崑崙,吉日甲子天子賓,于西王母瑤池肆,行觴介紹簠簋禮,爾時所御器今存,作鎮西極永好完,未入震旦三千年,問今何來不脛偶,準噶爾亡渝世守,阿睦撒納茲竊取,王師深入靖孽醜,於將獲之聯獮走,棄其重器為我有,元英大呂陳座右,咄哉玉盤徒華滋,不可食兮不可衣,連城價詎如窮奇,俘彼禍除可罷師,前歌後舞樂雍熙,壞玩吾將安用之,擬付鄒人一例椎。	載於御製詩	二集 卷7
3	詠玉茶椀	于闐何必購奩環,通貢薄來每厚還,保定不期致遠域,琢磨亦復藉他山。示頴碧落星辰表,延喜明廷樽俎間,流雪浮香真恰當,思推解渴福區襄。	載於御製詩	二集 卷7
4	玉椀	會未于闐遣使求,堅昆玉椀自來投,詎云有翼千斤獻,那肯無端大白浮。賢問乃明君子德,工言幾誤楚人璆,歲時宴饗斟香茗,延喜明廷弈葉麻。	載於御製詩	二集 卷8
5	玉盤聯句	此為乾隆二十七年(壬午,西元1762年),清高宗為了新獲得的一件回部的玉盤,在重華宮曲宴傅恒、來保、劉統勳、兆惠等,共二十四位內廷大學士翰林,君臣相互唱答的聯句,並有序及七言律詩二首,詩長無法全錄。	原詩載於御製詩	三集 卷1
6	博洛爾部沙瑚沙默特伯克所進武器製匣藏之並紀是什	(回劍)文列星行光溢溝,切崑璆似斷秋毫,于闐西去千餘里(博洛爾在和闐西幾二千里,和闐即古于闐也),那數尋常玉櫛刀(宋開寶二年于闐貢玉櫛刀)。 (回斧)齊斧言旋早洗兵,更無拓遠祇持盈,集鱗流仰寧當拒,厚往惟嘉底貢誠。	載於御製詩	三集 卷2
7	碧玉盤謠	碧玉之盤徑尺,質本規圓色光澤,準夷重器守世則,貯以馬漚可盈石,穹盧玉醴斯陳席(準俗四月馬漚新得時,置筵酬神,許馬為慶,謂之玉醴斯。蒙古亦然,但不如其盛耳)。以招百福繁生息,仁義不施攻守易,矯虔奪攘紛兵革,休屠金人且弗惜,玉盤自合棄荒輦,磕破邊角秦璽墮,伊犁墾田耕者獲,驛使致京飛不翼,取裁改作葵花式,穆然完好綿几側,湯之盤銘日新德,用識頰末苔華勒。	載於御製詩	三集 卷2

HDW Project Kleutghen - Jades

- Inside China
 - Full collection unavailable on...
 - Capital Museum
 - Guangdong Museum
 - Hangzhou Museum x
 - Henan Museum
 - Liaoning Provincial Museum
 - Nanjing Museum x
 - National Museum of China
 - Qinghai Museum x
 - Shanghai Museum**
 - Shanxi Museum
 - Shenyang Palace Museum
 - Suzhou Museum x
 - Tianjin Provincial Musem
 - Haidian Museum
 - Hunan Museum x
- Jades outside DPM/NPMT
 - Art Institute of Chicago
 - British Museum
 - Cantor Arts Center, Stanford

Hindustan Jade Qing middle period
 style value 历史价值 清中期 玉器
 痕都斯坦 风格

Title	Creator
consider purchasing the book 《中国...}	
Full collection unavailable	
These objects don't have inscriptions	
嵌宝八角玉盘	张
嵌宝花形环耳分格玉盘	
海水人物花卉纹玉盒	
清中期痕都斯坦玉器研究	

Item Type Artwork
 Title 嵌宝八角玉盘
 Artist (last), (first)
 Abstract 八角形，平底，口沿未作子母口，推测为盘。盘外壁嵌金丝，突显边框，并镶嵌宝石作花卉纹，花卉形制接近西番莲。盘底中心阳刻六字篆文“大清乾隆御用”，周边环绕对称的阴刻八字隶书“子子孙孙永宝用之”，款内填金。便携拉曼测试得知，白色玉质为闪石质软玉(和田玉)，镶嵌的红、绿色宝石分别为红宝石和祖母绿。此盘的镶嵌技法为莫卧尔常见的金托法，但是器壁较厚，抛光粗哑，嵌宝花叶纹与莫卧尔痕玉有别，推测为清乾隆时期中亚东部玉工仿印度痕玉的作品，进入清廷后受到乾隆帝喜爱，加刻款识。
 Medium White jade
 Artwork Size Height: 3.1cm; Diameter: 12.4 厘米
 Date Qianlong
 Language CHN
 Short Title
 Archive
 Loc. in Archive Shanghai Museum
 Library Catalog
 Call Number
 URL <http://cn.oversea.cnki.net/kcms/detail/...>
 Accessed
 Rights
 Extra Mentioned in the research article (see URL above)
 Date Added 10/22/2019, 2:38:20 AM
 Modified 10/22/2019, 2:35:40 PM

Summer 2020

Entry ID	Obj_title_Eng	Obj_title_Ch	NPMT 1983 poem listing	Museu m	Museum catalogue number	tion on	Text_Chinese
Jade006	Large green jade robe dish (as published, but Chinese is same for 007 and 008 as "shape of a	碧玉葵花式盤	6				<p>(回斧)齊斧言旋早洗兵，更無招遠紙持盈。集鱗流仰寧當拒，厚往推幕底貢誠。</p> <p>君玉之蓋在途八，貴不勝圓巴九。四。</p> <p>穹廬玉醴斯陳席，以招百幅繁生息。仁義不施攻守易，矯度奪攘紛兵革。</p> <p>休屠金人且弗借，玉盤自合棄荒蠻。磕破邊角秦璽匱，伊犁墾田耕者獲。</p> <p>驃使致京飛不翼，取裁改作葵花式。穩然完好趨幾側，湯之銘額日新德。</p>
Jade007			7	DPM	故103477		
Jade008	Green jade dish in the shape of a water chestnut	碧玉葵花式盤	8	DPM	故103476		<p>玉不自甘墮以六，兩位所存有七。惜其獨置於筍席，和闐六城久休息。</p> <p>產玉歲貢春秋易，更番驛遞盛以革。相材琢磨工盡惜，聞時成盤等垂鍼。</p> <p>舊器既免播越墘，新器更慶良朋獲。物必有偶如鳥翼，連珍萃美昭良式。承惟擅几不欹側，疊韻詠誄詠合德。</p>
Jade009	Pale green jade dish	青玉盤	9	DPM	新051614		<p>玉盤昔為厄魯用，定功獻闕早曾頌。那無遺棄沙汎間，概弗搜求霧飄逐。</p> <p>回城伯克觀輪年，以此表誠充土質。貢亦弗卻賞從厚，仍愧不脛天府狂。</p> <p>徒觀製樸汎雕鑿，羣彩輝耀盈尺洞。崑崙重器昔凶彊，深足園賜此仲。</p> <p>乳香久謝貯盧，幸爾文筵伴清供。幸兮謝兮盤兩忘，我則湯銘思折中。</p>
Jade010	Large grayish-blue green jade lotus-flower plate (1983) Floral-shaped jade dish (webcat)	花式盤 (2007)	10	NPMT	古玉2471		<p>佛經此欲界內以須彌山為中，須彌山四面有四大部洲，居南面者為閻浮提，即華言南瞻部洲者是。閻浮提內有三大國，各所屬及弗相屬之，小國弗與焉，而閻浮提又以崑崙為中，居崑崙之東，及東南東北者，即我中國為一大國。居崑崙之南及西南者，為天竺一大國(即今西藏所稱厄訥特珂克也)，居崑崙之西北及北者，為洪諾爾一大國。而天竺一國為東西南北中五印度，即梵經所謂印達爾，印達爾者，華言自在境界之謂也。五印度皆厄訥特珂克之地，唐史宋史記印度為身毒，或稱身夷，而所載事蹟及入朝中國，大率不實，亦不得要領。何言之古中華聲教所訖，莫過於本朝，而本朝百餘年中，從未有天竺遣使進貢之事，雖於乾隆庚辰年間，烏特噶里拉奇頌拉汗，會遣婆羅門進表奉羌，故葉爾羌之西，過厄魯，即波達克山，由拔達克山轉而南為克什米爾，又轉而西為溫都斯坦；若夫北印度，實近我回部之葉爾羌，故葉爾羌之西，過厄魯，即波達克山，由拔達克山轉而南為克什米爾，又轉而南為北印度特珂克，其方向如是，此道里亦莫得而詳焉。溫都斯坦雖回地也，而回人相傳彼地有佛遺蹟，益知即北印度交界，或者昔為天竺屬而後為回部屬，皆不可知。溫都斯坦，今唐古忒及回語，皆稱為溫都斯坦，但音聲相近。所謂天竺並印度近回部，此亦一驗也。要知道痕與溫、與印、與身，及度與興、與夷、與都，皆非天竺本語，而又何必較是非於一字一句之間哉。宋史載：天竺僧施法，行程有至惹惹農之國，惹惹農音聲亦與厄訥特珂克相近而通。考所謂雪山過御濕闍勒國者，雪山即今惹惹，而御濕闍勒亦即克什米爾之額耳。若夫元史稱元太祖見惹惹於印度，疑即今溫都斯坦之北印度，與回部交界者耳，非中印度也。東印度既近西藏，故天竺之事，西藏時間之，據西藏僧傳：天竺雖佛現身說法之地，然今天竺實不興佛教，而異異教。此亦與梵帙、佛受記五百後，佛法漸微，而斂流東行至震旦(即中國)與天竺之國，與天竺之國相符合。天以今中國之力，若唐宋之僧道還禪，克什米爾以達天竺，中印度亦何難，但既非德政，更以計取，雖遠地圖，何關實政，故不為也。近得蒙古疏論，謂元太祖進兵至厄訥特珂克，遇一角獸狀若聳耳者三，元太祖曰：是殆上天示予自此往斡爾圖頃林者蒙古語謂金剛林也，即佛現身說法之中印度之證。而獸為人言，更可信元史之謬為附會，因考天竺五印度，故並謂其跡歸如右。</p>
Jade011	Large ash-green jade plate in the shape of a lotus blossom (webcat)	花式盤 (2007, webcat)	11	NPMT	古玉2472		<p>念彼安南帝，抑八一二，惟文真移，小君自上承。來自南向北，中國自南向，抑木木不拒，弗罷賈挺言，盈尺區寧論，成雙瓦窯存，中規仍瓣瓣，合度更渾渾，帶蒂芳葩簇，通身翠葉翻，荒唐說訴水，約界定呂垣，謁認蓮池貴，端知五德尊，孫卿有佳喻，已嘗臨軒。</p>

天眷奉昭彰	玉椀來回部輸誠供闔闔間名公懷	致白毛鹿引恬賴尾鯊	玉椀	閒心略擬湖山寄無逸關懷未敢	盆菊仍霏清淨香省歲幸逢秋有	旭影溫暉射瓦霜輝冬景物足倘
軍戡定伊犁始和卓遣使求內屬	伯克和卓遣使求內屬	之令	此歸其所	屬於葉爾	噶	生息。伊犁徵頏末

View Insert Cell Kernel Widgets Help

Run C Code

```
#This step is for formating the final output csv:
import csv
index = 0

with open('output.csv', 'a', newline='') as csvfile:
    fieldnames = ['poem', 'keywords']
    spamwriter = csv.DictWriter(csvfile, fieldnames=fieldnames)
    spamwriter.writeheader()

#Finding matching keywords
for entry in allTexts:
    matches = 0
    storedMatches = []

    #for each entry:
    allWords = [item for item in entry.split(' ') if item != '']
    for word in allKeywords:
        for item in allWords:
            if word in item:
                #if a keyword match is found, store the result.
                if word in storedMatches:
                    continue
                else:
                    storedMatches.append(word)
                matches += 1

    #if there is a stored result, print it out
    if matches == 0:
        print(' ')
    else:
        matchString = ''
        for match_item in storedMatches:
            matchString = matchString + match_item + '\t'
        matchString = matchString + '\n'

    #Final output
    with open('output.csv', 'a', newline='') as csvfile:
        spamwriter = csv.DictWriter(csvfile, fieldnames=fieldnames)
        spamwriter.writerow({'poem': ''.join(entry.split(',')[:]), 'keywords': matchString})
```

keywords	
繫因我大軍戡定伊犁始釋之令歸所部其長伯克和卓遣使求內屬此其所責也) 勞徧非力并天眷奉昭彰。 "	噶爾
羣玉之精出崑崙，吉日甲子天子賓。于西王母瑶池津，行觴介紹簠簋鱗。爾時所御器今存，作鎮西極永好完。	連城 噶爾 鎮西
羣玉之精出崑崙，吉日甲子天子賓。于西王母瑶池津，行觴介紹簠簋鱗。爾時所御器今存，作鎮西極永好完。	連城 噶爾 鎮西
喜明廷弈葉麻。 "	于闐
露交擎碧苔為趺三五曜靈滿暉始也軍諮驛遞未碎斗而楚帳烏飛繼焉屯長犁翻存竊鉤而魯庭盜走失守見可敦並棄崩	崑 嶺 連城 蒙古 燕
二年于闐貢玉柶刀。(右回劖)齊斧言旋早洗兵更無拓遠祇持盈集鱗流仰寧當拒厚往惟嘉底貢誠。 "	崑 和闐 于闐
酬神詐馬為慶謂之玉醴斯蒙古亦然但不如其盛耳)，以招百福繁生息。仁義不施攻守易，矯虔奪攘紛兵革。休肩蒙古 光澤	蒙古
前盤宛然無別然彼幾阨於兵燹之餘此久隱於山澤之畔夷險殊塗同登清燕仍用前韻成篇以誌有美必合云爾。玉不自	和闐 燕
龍不脰天府虹徒觀製朴泥彫鑄采輝輝盈尺洞崑崙重器昔成謠深足圓唇此其仲乳香久謝貯穹廬幸爾文筵伴清供幸	崑崙 崑
屬及弗相屬之小國弗與焉而闐浮提又以崑崙為中居崑崙之東及東南東北者即我中國為一大國。居崑崙之南及西	痕都 天竺 崑崙 崑
達克山西南即其地蓋北印度交界說詳考訛篇中)瓊枝產寶夥水磨省工煩(聞彼處治玉以水磨不以沙石錯)泰冒徒聞治	痕都 天竺 崑崙 崑
難收便聯函璧府疑兼雙珏蓋彼貴人所用供奉膳章。其來萬里而遙微懃玩物為憶旁行左向綱秘笈者曾供削牘之書	管城
球琳欄內鐵銜定種穗室端銀鏤諸以短乘長休論彼薄來厚往益懷予。 "	和闐 安居
旅同。 "	痕都 痘都斯坦
旅同。 "	痕都 痘都斯坦
郭也四疊圓荷葉雙牽長艾枝製非出華夏巧實勝般倕撫處不留手琢時冉耳構思旅獒垂法語三復晷懸斯。 "	痕都 痘都斯坦

FuzzyChinese

“昆仑，崑崙，昆侖，崑崙”

```
'').replace('\"', '\"').replace(
  ('`').replace('`', '\"').replace(
    '?', '\"').replace('`', '\"').replace(
    '/', '\"').replace('?', '\"').replace(
    '_', '\"').replace(';', '\"').replace(':', '\"') for item in allWo
```

```

column_num = len(allWords)
poem_words = pd.Series(allWords)
fcm.fit(poem_words)
top_similar = fcm.transform(key_words, n=column_num)
column_names = [ 'top'+str(item+1) for item in range(column_num)]
column_score_names = [ 'top'+str(item+1)+'_score' for item in range(column_num)]
res = pd.concat([key_words,
                 pd.DataFrame(top_similar, columns=column_names),
                 pd.DataFrame(fcm.get_similarity_score(), columns=column_score_names)],
                axis=1)
for item in res.values:
    print(item)

```

[回部葉爾奇木哈什哈爾初役屬於準噶爾為所拘繫因我大軍戡定伊犁始釋之令歸所部其長伯克和卓遣使求內屬此其所貢也] '勞徳非力并天眷奉昭影' 0.0
0.0 0.0]
['春秋' '玉梅來回部輸誠供闖闘召公懷不實韓子戒無當異致白毛鹿引活頹尾鷲'
[回部葉爾奇木哈什哈爾初役屬於準噶爾為所拘繫因我大軍戡定伊犁始釋之令歸所部其長伯克和卓遣使求內屬此其所貢也] '勞徳非力并天眷奉昭影' 0.0
0.0 0.0]
['含光' '玉梅來回部輸誠供闖闘召公懷不實韓子戒無當異致白毛鹿引活頹尾鷲'
[回部葉爾奇木哈什哈爾初役屬於準噶爾為所拘繫因我大軍戡定伊犁始釋之令歸所部其長伯克和卓遣使求內屬此其所貢也] '勞徳非力并天眷奉昭影' 0.0
0.0 0.0]
['噶爾' '回部葉爾奇木哈什哈爾初役屬於準噶爾為所拘繫因我大軍戡定伊犁始釋之令歸所部其長伯克和卓遣使求內屬此其所貢也'
玉梅來回部輸誠供闖闘召公懷不實韓子戒無當異致白毛鹿引活頹尾鷲] '勞徳非力并天眷奉昭影' 0.08176464567823842 0.0 0.0 1
['安居' '玉梅來回部輸誠供闖闘召公懷不實韓子戒無當異致白毛鹿引活頹尾鷲'
[回部葉爾奇木哈什哈爾初役屬於準噶爾為所拘繫因我大軍戡定伊犁始釋之令歸所部其長伯克和卓遣使求內屬此其所貢也] '勞徳非力并天眷奉昭影' 0.0
0.0 0.0]
['宜春' '玉梅來回部輸誠供闖闘召公懷不實韓子戒無當異致白毛鹿引活頹尾鷲'
[回部葉爾奇木哈什哈爾初役屬於準噶爾為所拘繫因我大軍戡定伊犁始釋之令歸所部其長伯克和卓遣使求內屬此其所貢也] '勞徳非力并天眷奉昭影' 0.0
0.0 0.0]
['崑崙' '玉梅來回部輸誠供闖闘召公懷不實韓子戒無當異致白毛鹿引活頹尾鷲'
[回部葉爾奇木哈什哈爾初役屬於準噶爾為所拘繫因我大軍戡定伊犁始釋之令歸所部其長伯克和卓遣使求內屬此其所貢也] '勞徳非力并天眷奉昭影' 0.0
0.0 0.0]

```

top3_similar = fcm.transform(key_words, n=3)
res = pd.concat([key_words,
                 pd.DataFrame(top3_similar, columns=['top1','top2','top3'])])
for item in res:
    print(item)

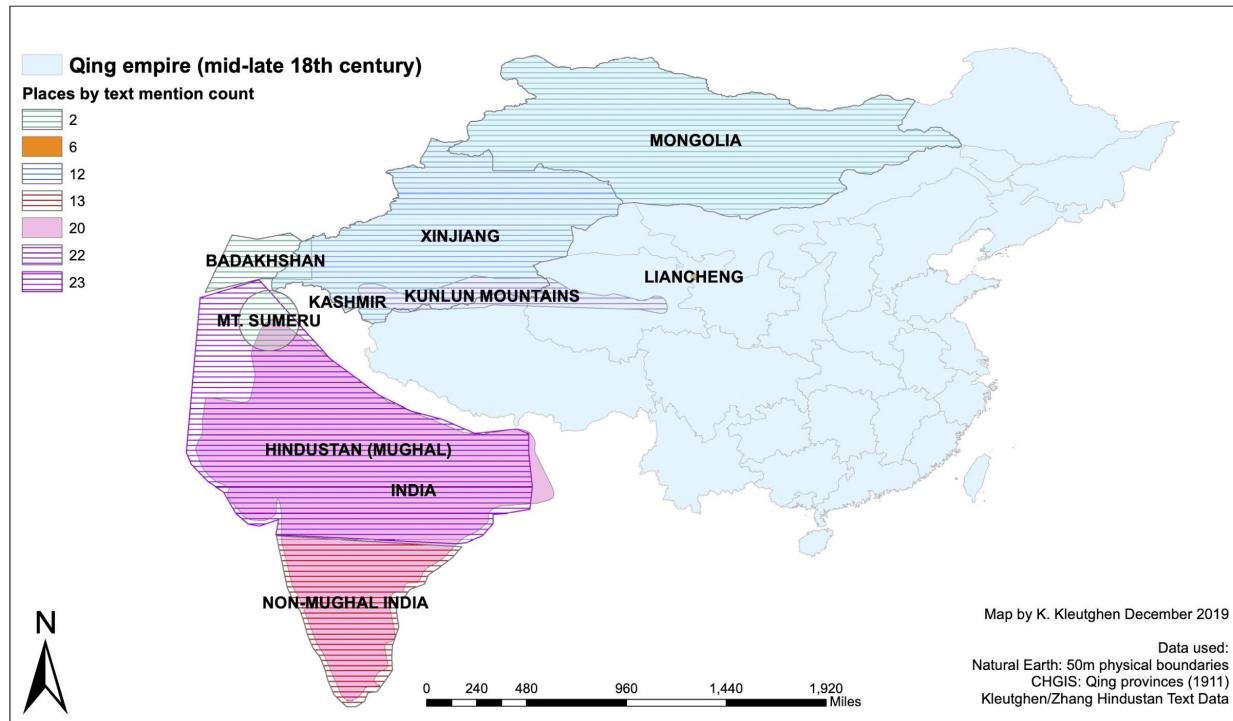
```

0
top1
top2
top3
0
top1
top2
top3
0
top1
top2
top3
0
top1
top2
top3

Unable to decompose character '𠵼'.
Unable to decompose character '𠵼'.

Why QGIS/Leaflet rather than ArcGIS/Online

Mention count of places in Qianlong emperor's texts on "Hindustan" jades (1755-1799)



ArcGIS benefits:

Comprehensive

Widely-used in industry

ArcGIS limits:

Difficult to learn, PC-only
Closed source and costly

ArcGIS Online benefits:

Simple to learn and use
WUSTL-supported
Browser-based,
cross-platform

ArcGIS Online limits:

Low popup/image support
Variable historical mapping
Not mobile-friendly
Restrictive formatting
Closed source and costly

Expand the Spreadsheet

Entry ID	Obj_title_Eng	Obj_title_Ch	NPMT 1983 poem listing	Muse um	Museum catalogue number	Size	C#	原陳 設於	Official image(s) for download &	Unofficial images (for reference only)	Pub_1
Jade024	Bluish-white jade bowl with two handles (1983) Flower-shaped bowl with two	青玉雙耳碗(1983) 花口花蕾形雙柄碗	24	NPMT	古玉3165	Length 15.4cm, width 11.6cm, diameter at base 5.8-6.2cm, height	天49.25	乾清宮 QQG	https://the-me.npm.edu.tw/open-data/DigitI	http://antiquities.npm.gov.tw/Utensils_Page.aspx?Itemid=53588	Taipei 1983 pp140-141 pl8
Jade025	Bowl in the shape of a chrysanthemum flower		25	MET	02.18.762	H. 2 5/8 in. (6.7 cm); W. at handles 8 1/4 in. (21.6 cm) Diam. of rim: 6 3/4 in.			https://www.metmuseum.org/art/collection/search/65211	MetPublications	
Jade026	Six-lobed cup with flower-shaped handles	花耳六曲杯 or 青玉花耳六曲碗	26	DPM	故103944	口徑 22.2x17.3 底徑 8 高5.5厘米	調 154.2 0丁 575/3				HK 2015 p118-11
Jade027	Eight-lobed bowl with Flower-Shaped Handles	碧玉多曲碗	27	DPM	故103930	口徑 20.2x17.6 底徑8.1x7 高11.4厘米	鉅 181.2 7				
Jade028	Half-gourd-shaped greed jade cup (1983), half gourd cup (2007, catweb)	痕都斯坦瓜	28	NPMT	古玉2860	Length 16.6cm, width 12.8cm, height 4.7cm, body wall	天414	乾清宮 QQG	https://the-me.npm.edu.tw/open-data/DigitI	http://antiquities.npm.gov.tw/Utensils_Page.aspx?Itemid=53588	
Jade029	Candle holder with acanthus leaves	碧玉燭台 p202 莓苔葉紋燭台 p170	29	DPM	故100717	高42.9、盤徑29厘米	天441 丁 980/3 7				

Objects rather than images
Bilingual aspect

依朝代：全部 資料總筆數：11筆



蒙古兒帝國 瓜瓣杯



新疆回部 羊頭瓜瓣杯



新疆回部 羊頭瓜瓣杯



蒙古兒帝國 瓜瓣杯



蒙古兒帝國 瓜瓣杯



蒙古兒帝國 瓜瓣杯

Keywords

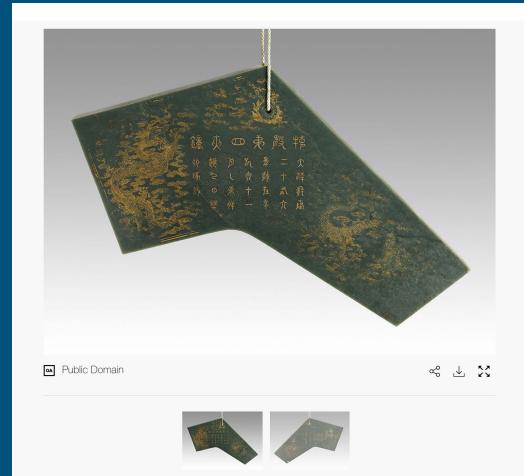
瓜瓣

Digital Art History/ Open Access Images

A Guiding Principle for Digital Art History: **Images are not Objects**

- Open Access/ Image Rights
- Metadata Standards
 - VRA Core & Dublin Core
 - Cataloguing Cultural Objects (CCO)

“Digitization does not equal access.” - Murtha Baca
(Introduction to Metadata)



“Qing,” mid 18th C (inscription), Metropolitan Museum of Art, New York City

Digital Art History/ Open Access Images

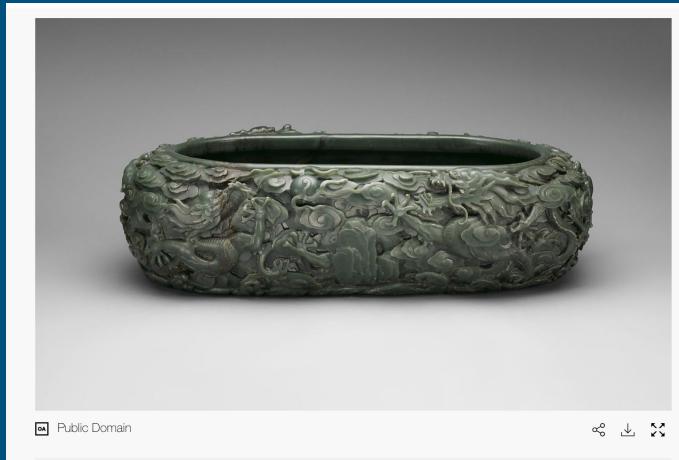
Open Access API :

- Ex: MET + V&A

Use of JSONs

- Compatibility
- Cleaning/ Organizing Data
- Consistency

Corresponding
JSON file



Open
Access
Image



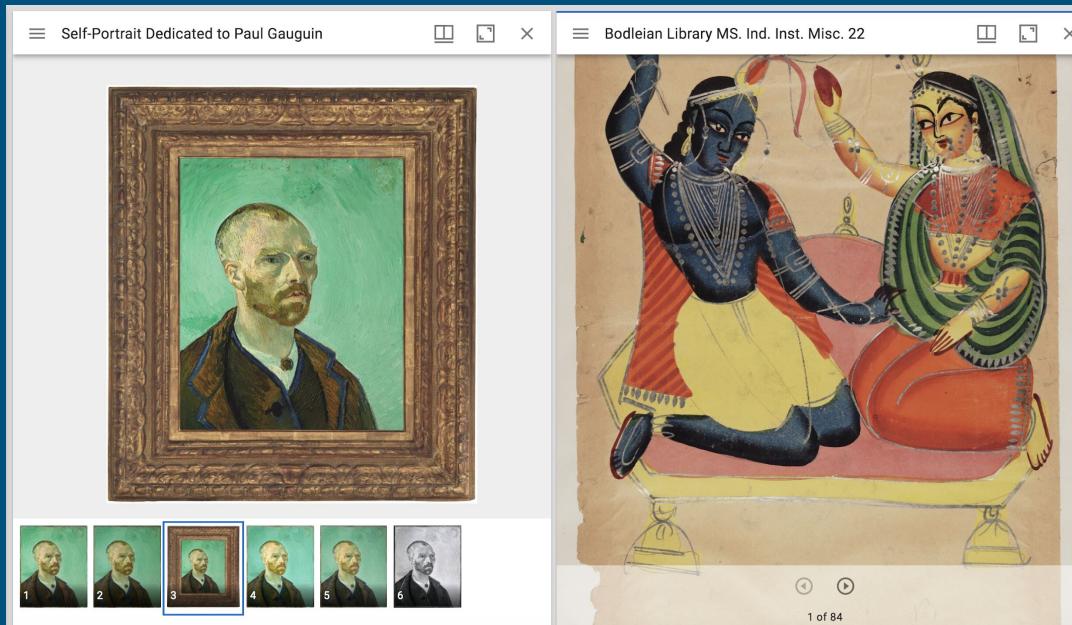
"Green Khotanese nephrite basin", 1774 (inscription), Metropolitan Museum of Art, New York City

```
{"objectID":42060,"isHighlight":false,"accessionNumber":"02.18.689","accessionYear":1902,"isPublicDomain":true,"primaryImage":"https://images.metmuseum.org/CRDImages/as/original/DP-14153-068.jpg","primaryImageSmall":"https://images.metmuseum.org/CRDImages/as/web-large/DP-14153-068.jpg","additionalImages":[{"https://images.metmuseum.org/CRDImages/as/original/DP-14153-069.jpg","https://images.metmuseum.org/CRDImages/as/original/DP-14153-070.jpg","https://images.metmuseum.org/CRDImages/as/original/DP-14153-071.jpg","https://images.metmuseum.org/CRDImages/as/original/DP-14153-072.jpg","https://images.metmuseum.org/CRDImages/as/original/DP-14153-073.jpg"}],"constituents":null,"department":"Asian Art","objectName":"Basin","title":"Basin","culture":"China","period":"Qing dynasty (1644-1911), Qianlong period (1736-95)","dynasty":"","reign":"","portfolio":"","artistRole":"","artistPrefix":"","artistDisplayName":"","artistDisplayBio":"","artistSuffix":"","artistAlphaSort":"","artistNationality":"","artistBeginDate":"","artistEndDate":"","artistGender":"","artistWikidata_URL":"","artistULAN_URL":"","objectDate":dated 1774,"objectBeginDate":1774,"objectEndDate":1774,"medium":"Jade (nephrite)","dimensions":"H. 7 5/8 in. (19.3 cm); W. 29 15/16 in. (76. 1 cm); D. 16 15/16 in. (43 cm)"}, "creditLine": "Gift of Heber R. Bishop, 1902", "geographyType": "", "city": "", "state": "", "county": "", "country": "", "region": "", "subregion": "", "locale": "", "locus": "", "excavation": "", "river": "", "classification": "Jade", "rightsAndReproduction": "", "linkResource": "", "metadataDate": "2020-04-02T14:22:10.83Z", "repository": "Metropolitan Museum of Art, New York, NY", "objectURL": "https://www.metmuseum.org/art/collection/search/42060", "tags": [{"term": "Dragons", "AAT_URL": "http://vocab.getty.edu/page/aat/300375726"}], "objectWikidata_URL": "https://www.wikidata.org/wiki/Q83562266", "isTimelineWork": true}
```

Digital Art History/ Open Access Images

Further Goals/ Areas for Exploration:

- IIIF Viewer / Presentation API



Ex. IIIF Tool: **Mirador**

Next Steps

Project Components, Tools, and Workflow

- Object-centered CSV coordinating extant/lost objects with related texts, collection locations, images, publications, Imperial Workshop Archives, etc.
 - Google Sheets and GitHub to support synchronous and asynchronous collaboration across projects, tasks, team members, and time zones both now and in the future
- Object-centered CSV coordinating/counting places for use in maps
 - Google Sheets, OpenRefine, Python
- Data processing for research use
 - Place counts: which places appear; when; on what objects; in what quantity
 - quantitative vs. qualitative data
 - Mapping places demonstrates inter-regional vs. intra-regional interactions
 - Determine effects of watershed events/years on object production, collection, etc.
 - Role of decorative arts and material culture in empire expansion and multiethnic growth

Project Components, Tools, and Workflow

- Data visualization: maps and [form yet to be determined]
 - Maps: QGIS and China Historical GIS (basemaps); Leaflet (mobile-friendly interactive maps)
 - Visualization: Gephi? (TBD - suggestions welcome)
- IIIF viewer to compare/annotate/zoom Open Access images across collections
 - OA institutions for Image API ; Mirador (or Universal Viewer) as Presentation API
 - IIIF plugin for Leaflet to include images in map pop-ups
- Website to present data; data visualizations in maps, etc.; IIIF viewer
 - Static website built with Jekyll and GitHub Pages