

Digital and Physical Preservation: Comparing and Bridging Records of the Xindian First Graveyard

Oliver Streiter & James X. Morris

National University of Kaohsiung, Taiwan & National Chengchi University Taipei,

Taiwan

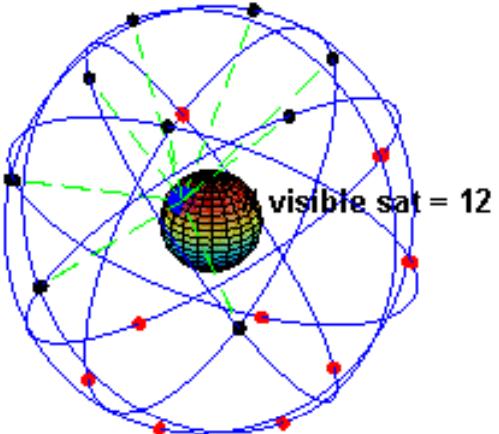
Asia-Pacific SpatioTemporal Institute at the National Chengchi University Taipei

ostreiter@nuk.edu.tw, james.x.morris@gmail.com

March 2016
ECAI Workshop

Imagery ©

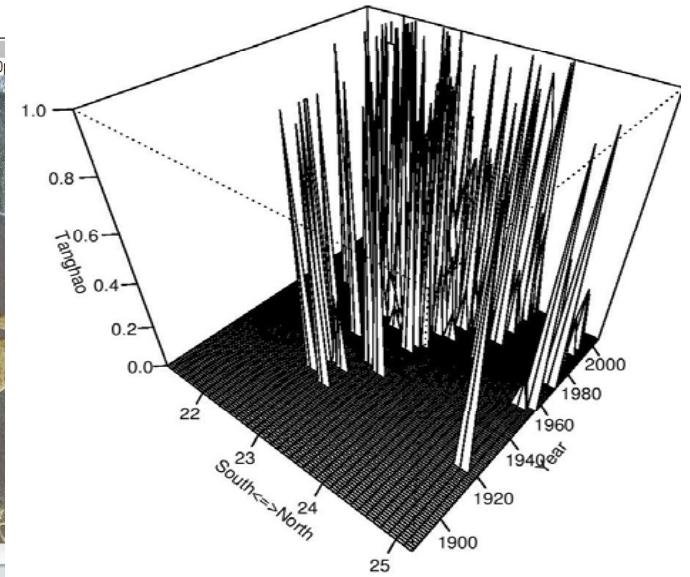
Digital Documentation: Fieldwork, Photos, Annotation, Transcription and Analysis



ThakBong ... X Google Docs ... A-Gong'sHo... QNAP Multi... dsc02867.jpg... Constellation...

stone writing direction	script	death	form	duilian	units	img url
I2br2l	chinese	[edit]	[edit]	[edit]	1	200px 300px 400px 500px 600px 800px 200px 400px 600px 800px 1000px 1500px 2000px 2500px 3000px
	-	not marked	-	4c		
	latin	not	-	5c		
	chinese	readable	6c			
	chin:jap			oval [V]		
	96 丁	亥	star			
	95 丙戌	戊	wong			
	94 乙酉	酉	block			
	93 甲申	申	brick			
	92 戌未	未	cross			
	91 壬午	午	heart			
	90 辛巳	巳	broken			
	89 庚辰	辰	church			
	88 己卯	卯	circle			
	87 戊寅	寅	pagoda	top		
	86 丁丑	丑	round	top		
	85 丙子		pointed			
			natural stone			

完成



Struggling: Impossible camera specifications

GPS

Compass (電子羅盤)

Manual mode

ISO

shutter speed

aperture

Distance, size, 3d, Black light,
infrared



→ using different cameras with different functions

→ tricks, additional measures

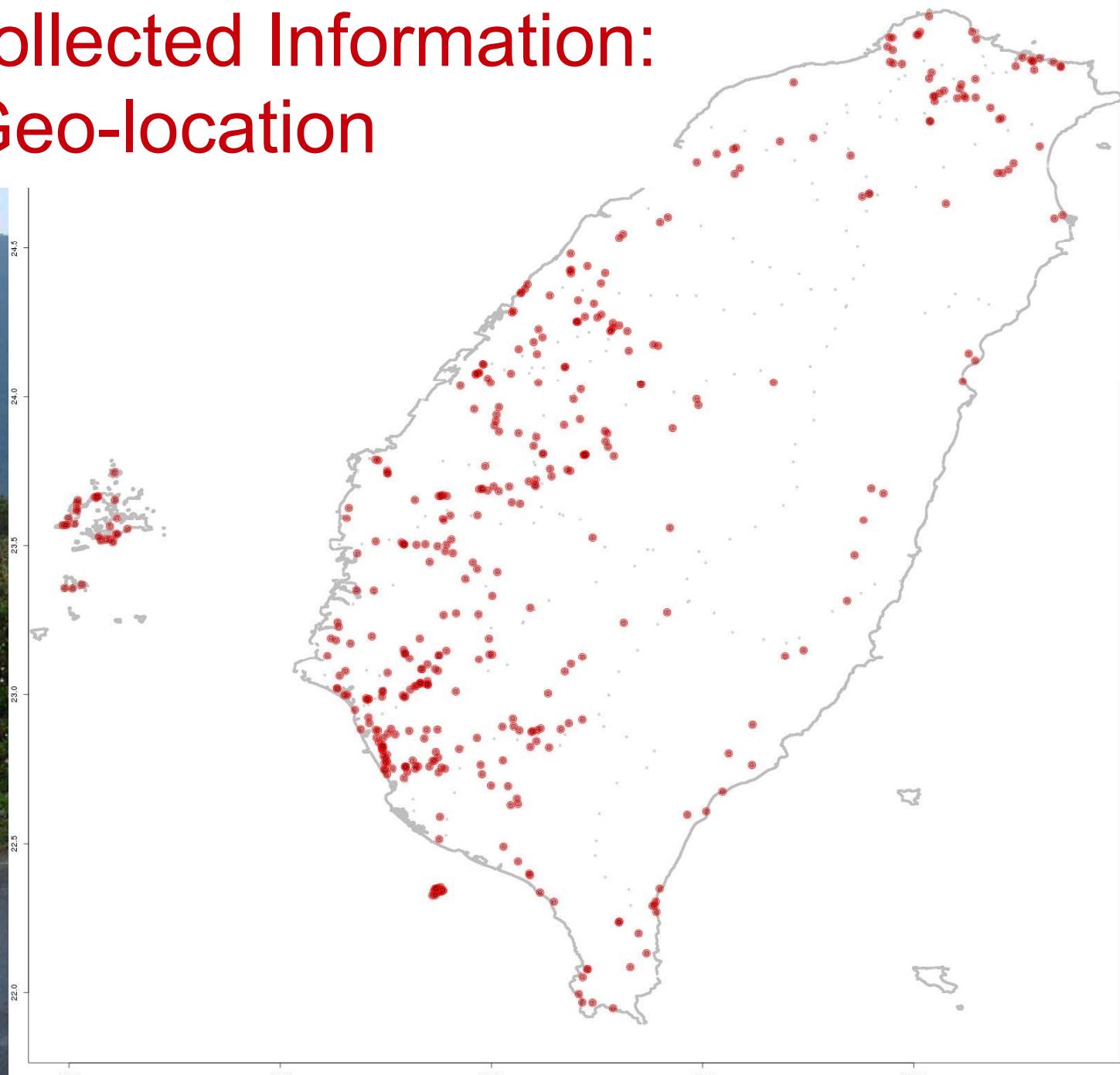
→ gaps in our data



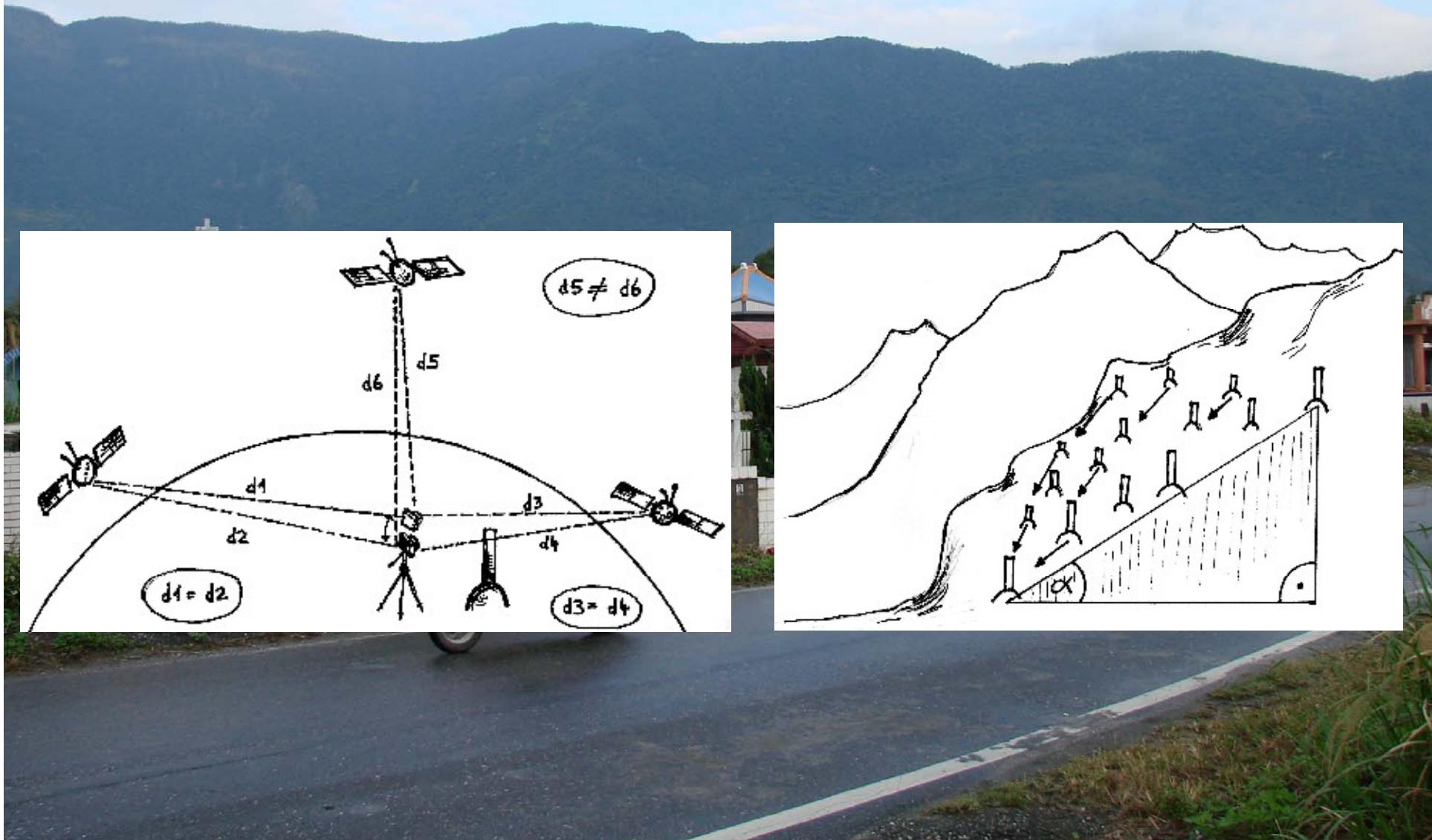
Digitally Collected Information



Digitally Collected Information: Geo-location



Digitally Collected Information: Elevation, Orientation, Slope



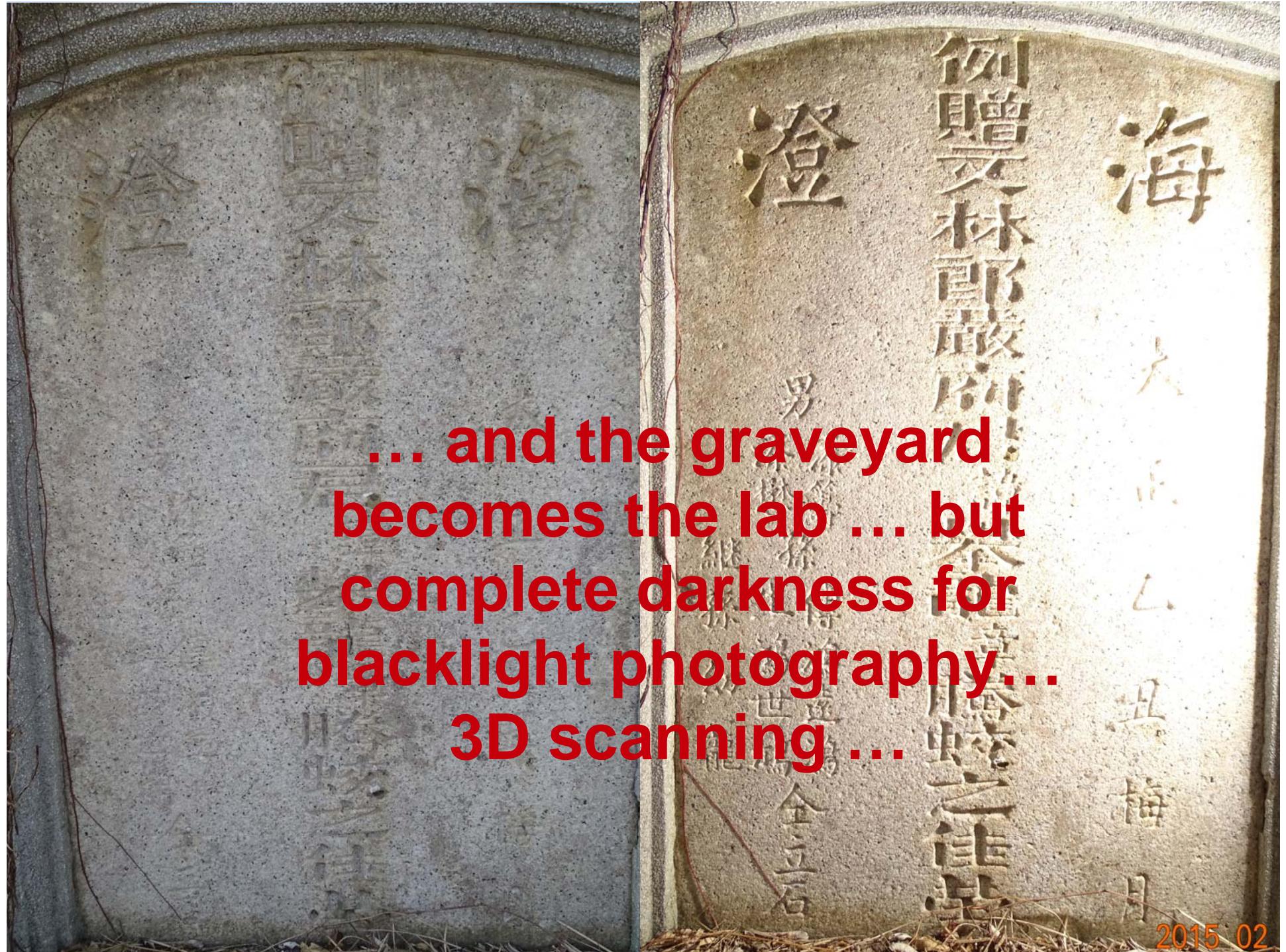
Large-scale Sampling and Documentation:

**230.00 geo-reference photos,
700 graveyards
60.000 tombs
26.400 tombstone transcriptions
(8.5 years, 0.7 MM)**



Archeology of the Future: Documentation becomes Preservation



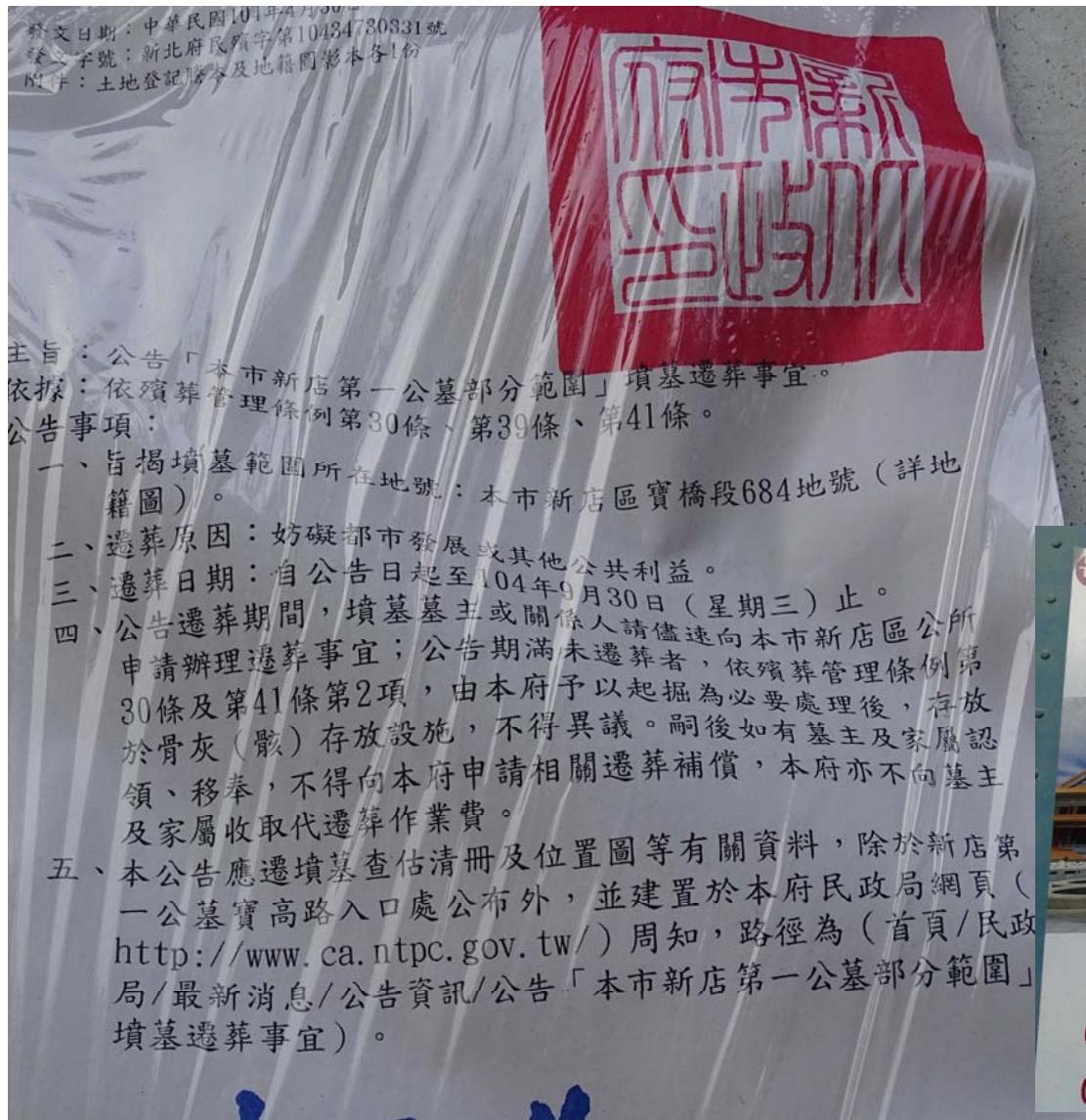




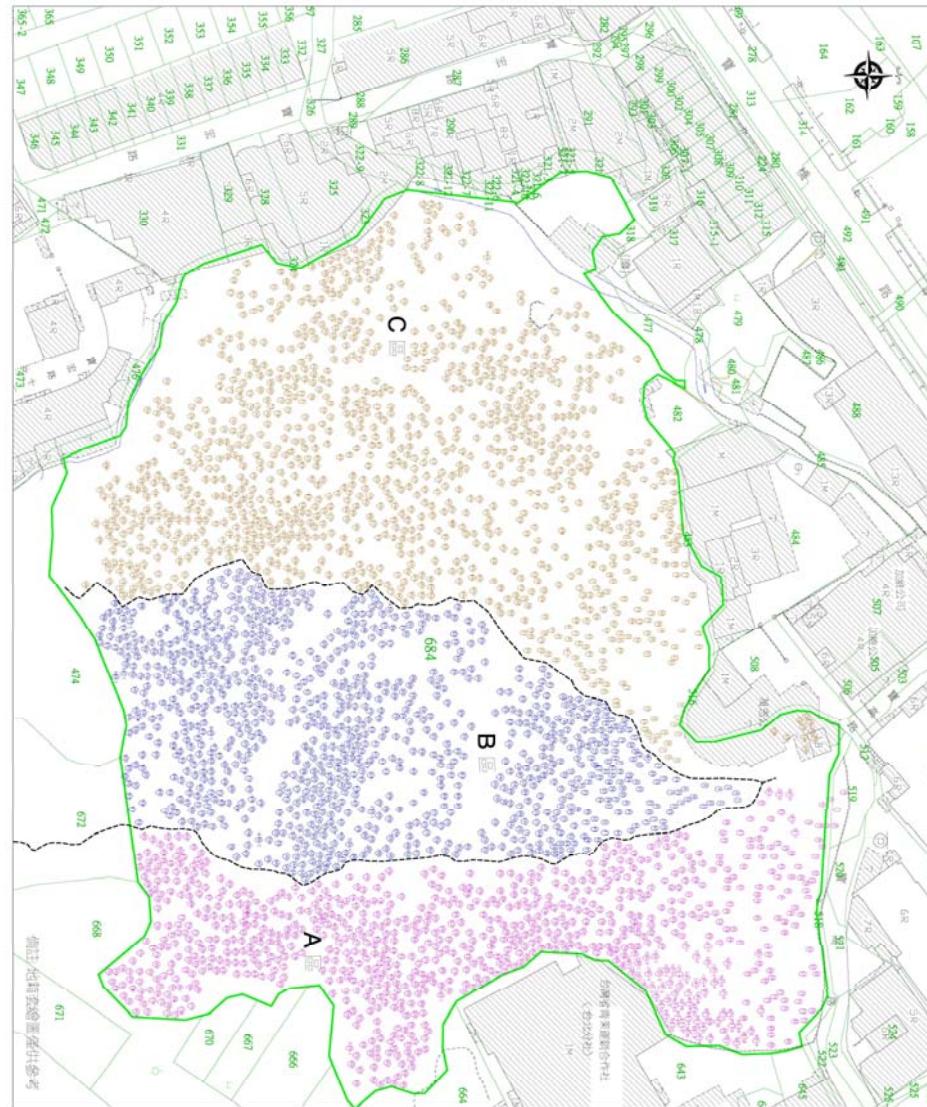
**Xindian First Graveyard
March 2015, this is not a lab ...**

2015/04/03 09:59:50

... and it is going to be removed ...



... 6.000 tombs in a partially swampy area ...



2015年5月15日的田野調查

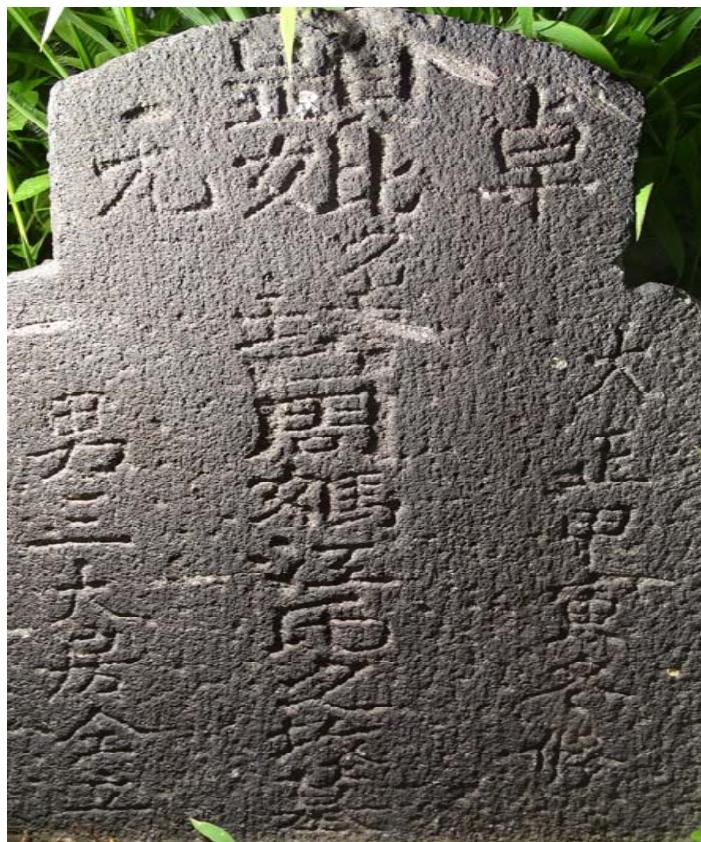
Qing 道光

光緒 (Guangxu)



2015年5月15日的田野調查

Taisho 大正

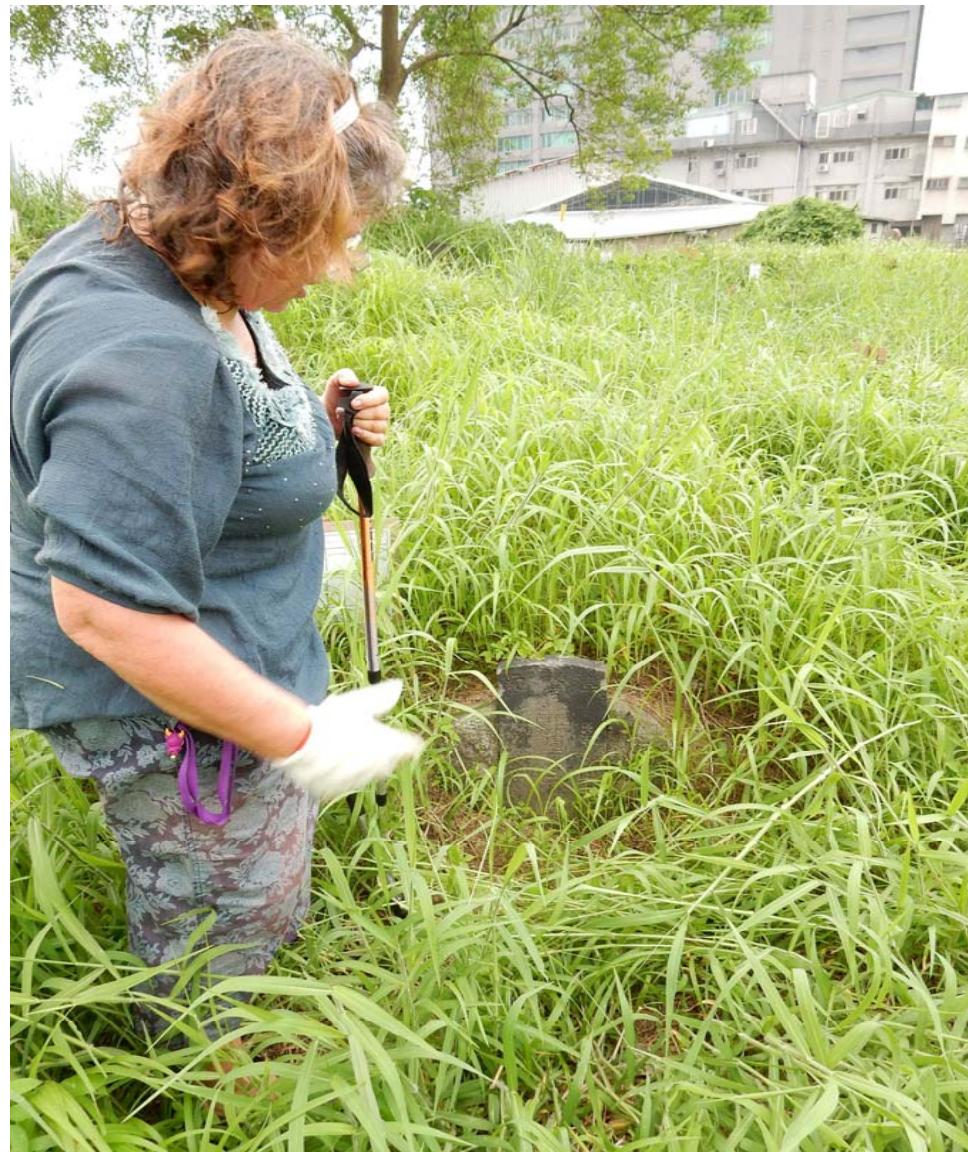


道光



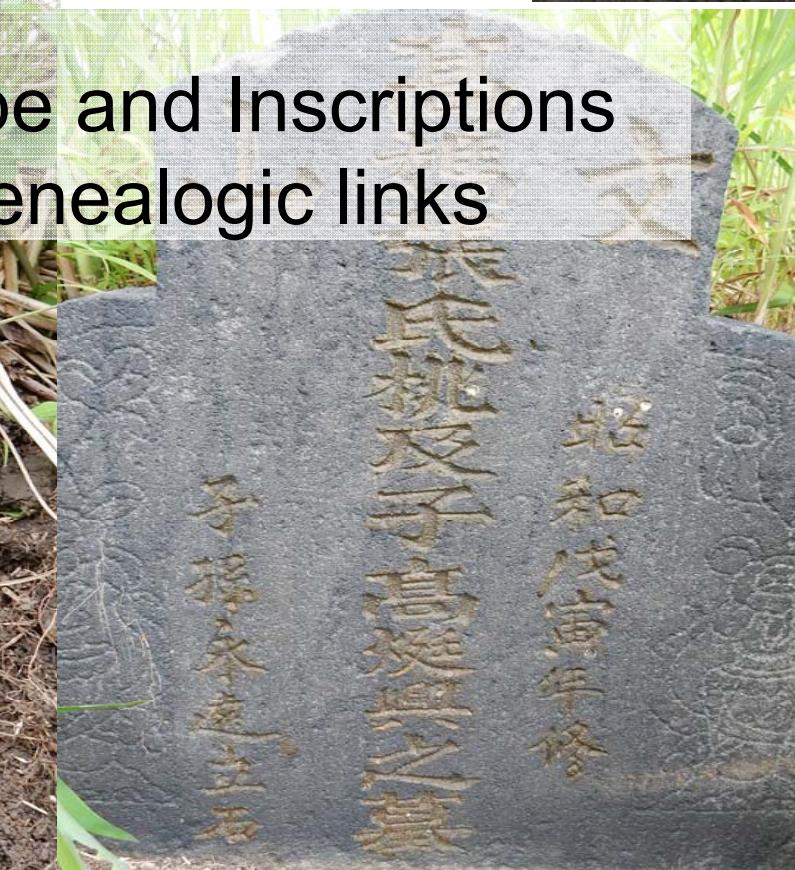
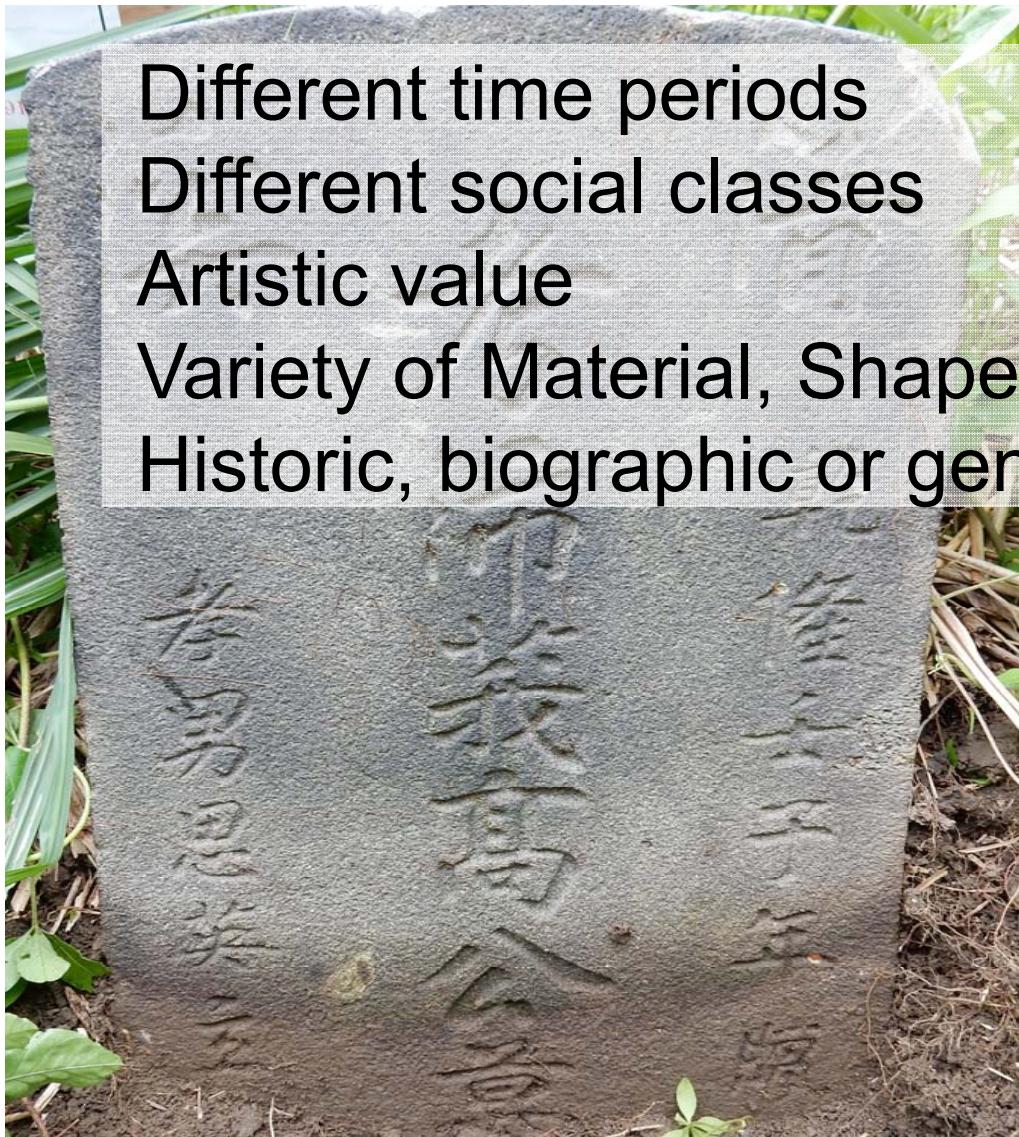
2015年5月15日的田野調查

Showa 昭和



Physical Preservation: Selection Criteria

Different time periods
Different social classes
Artistic value
Variety of Material, Shape and Inscriptions
Historic, biographic or genealogic links



Digital vs. Physical Preservation: Muddy vs. cleaned



Digital vs. Physical Preservation: Size above the ground vs. total size



Digital vs. Physical Preservation: Context vs. ...



Digital vs. Physical Preservation: Context vs. component



Digital vs. Physical Preservation: Composed vs. scattered vs. reassembled



Digital vs. Physical Preservation: Bright side vs. dark side



Digital vs. Physical Preservation: Process vs. state



Digital vs. Physical Preservation: Image vs. material (stone, color, ceramics, technique, age)

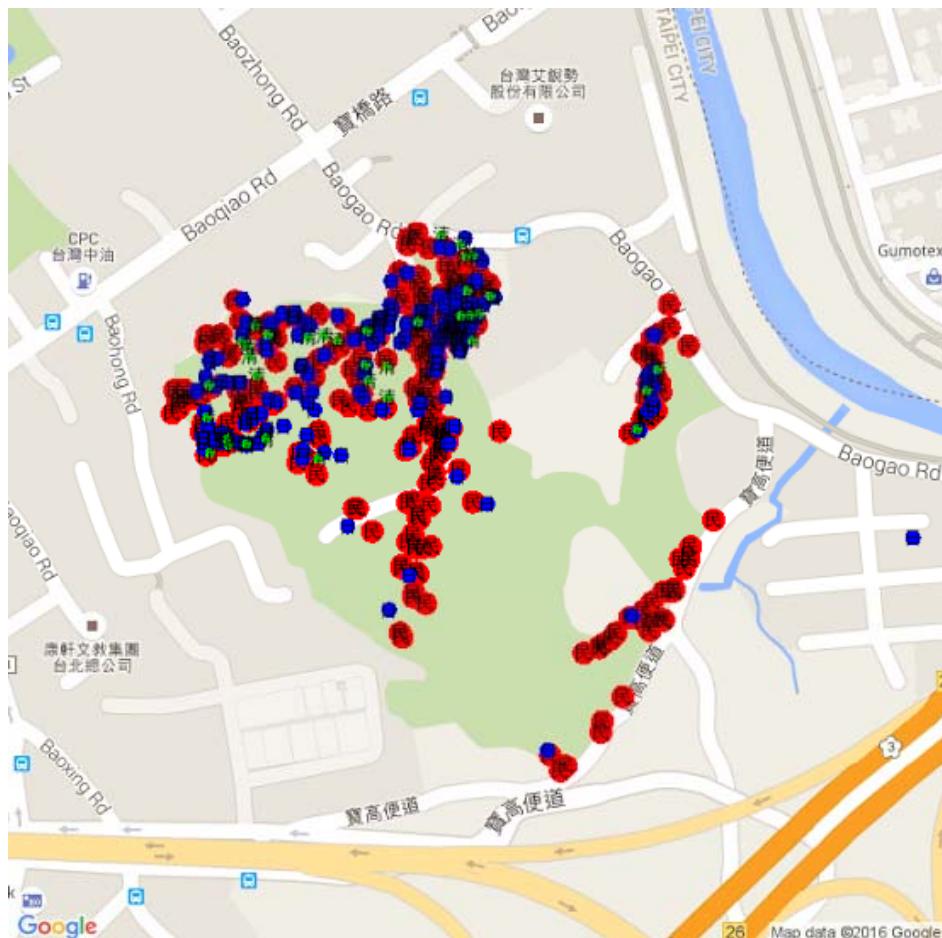


Preservation efforts so far

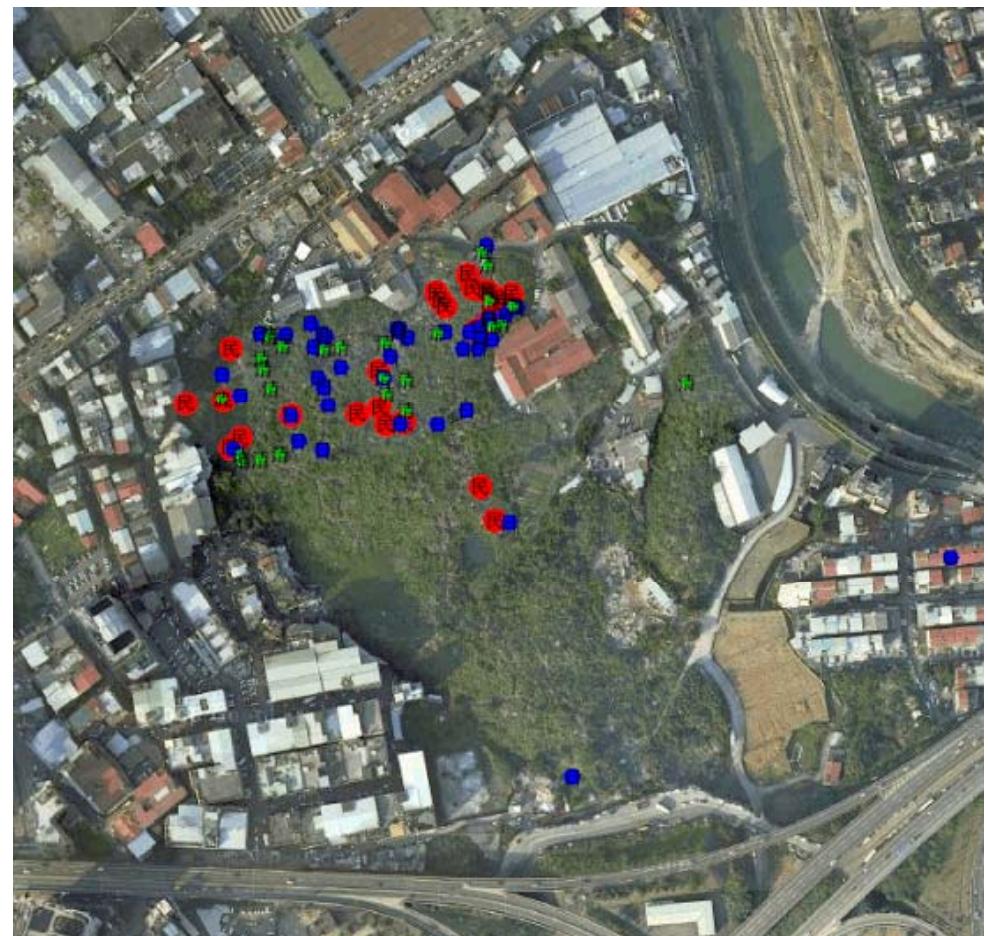
Spatial Sampling

民: R.O.C., 日: Japanese Period, 清: Qing Period
showing one weakness of our sampling

Digital preservation



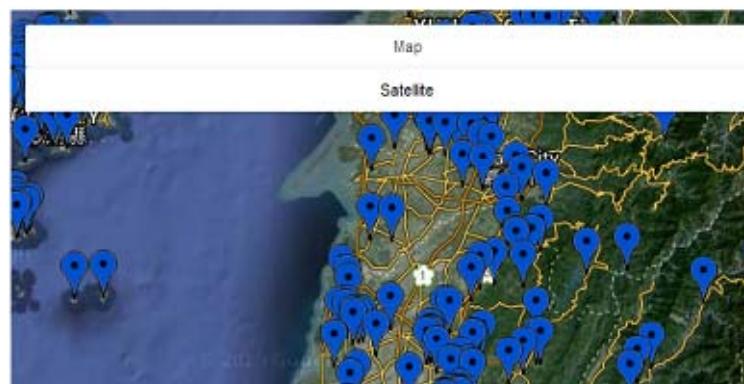
Physical preservation



ThakBong – Digitizing Taiwan's Tombstones



Screen Map Timeline Names Visits Graveyards Concession Rescue





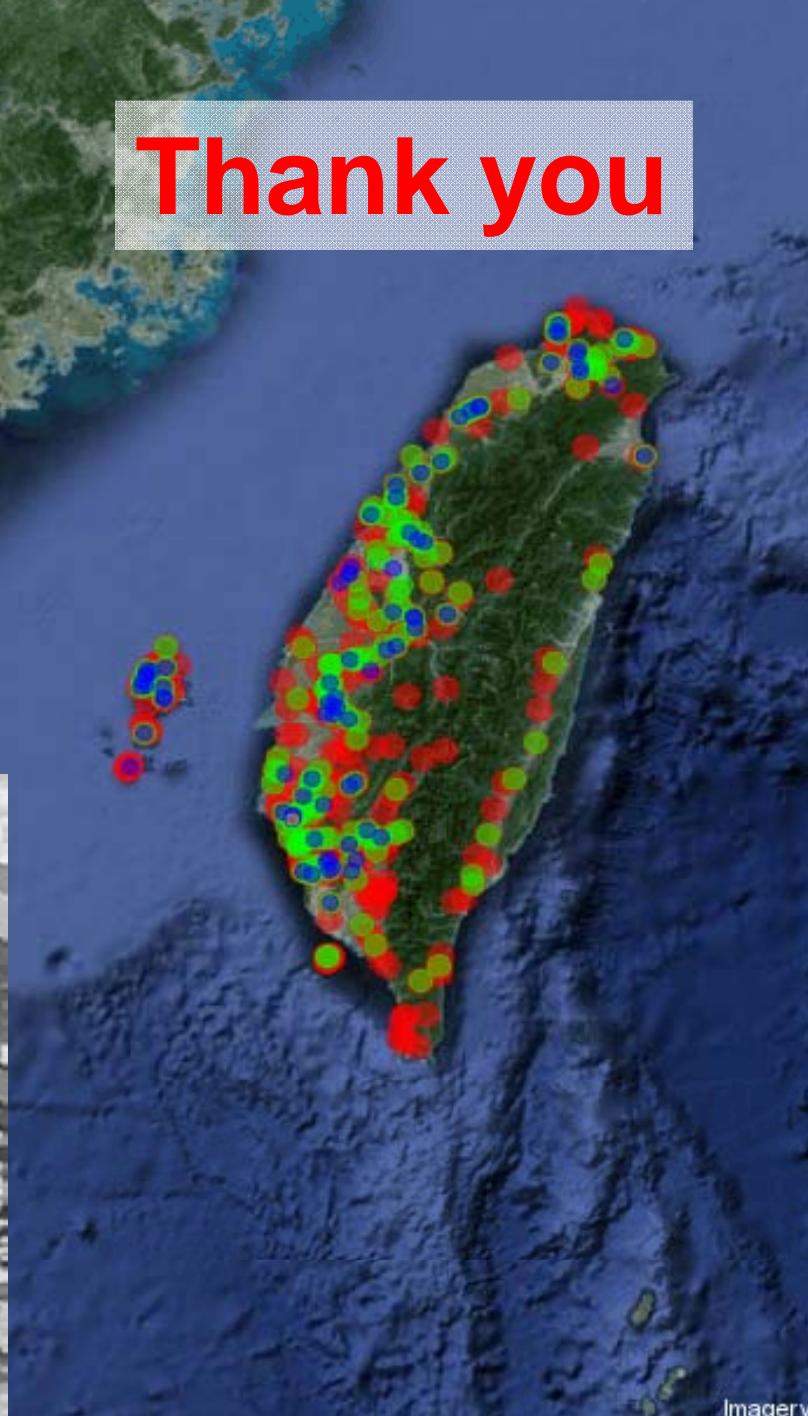
2015/04/03 09:59:50











Imagery ©