



Traditional Knowledge systems and their storage – how the study of ancient cultures contributes to biocultural diversity

Agnieszka Hamann, Faculty of Artes Liberales, University of Warsaw

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Research problems

- ▶ Can documenting traditional knowledge and ancient language / culture support revitalization efforts?
- ▶ What portions of an ancient traditional knowledge system may be retrieved?
 1. Ways of controlling their environment, interaction with the landscape and resources of the region
 2. Managing ecosystems, responding to weather and climate patterns, developing agricultural practices, plant selection for culinary and medicinal purposes
 3. Maintenance and diffusion of traditional knowledge systems (TKs)

Where

- Southern Mexico
- Guatemala
- Belize
- Northern Salvador
- Western Honduras



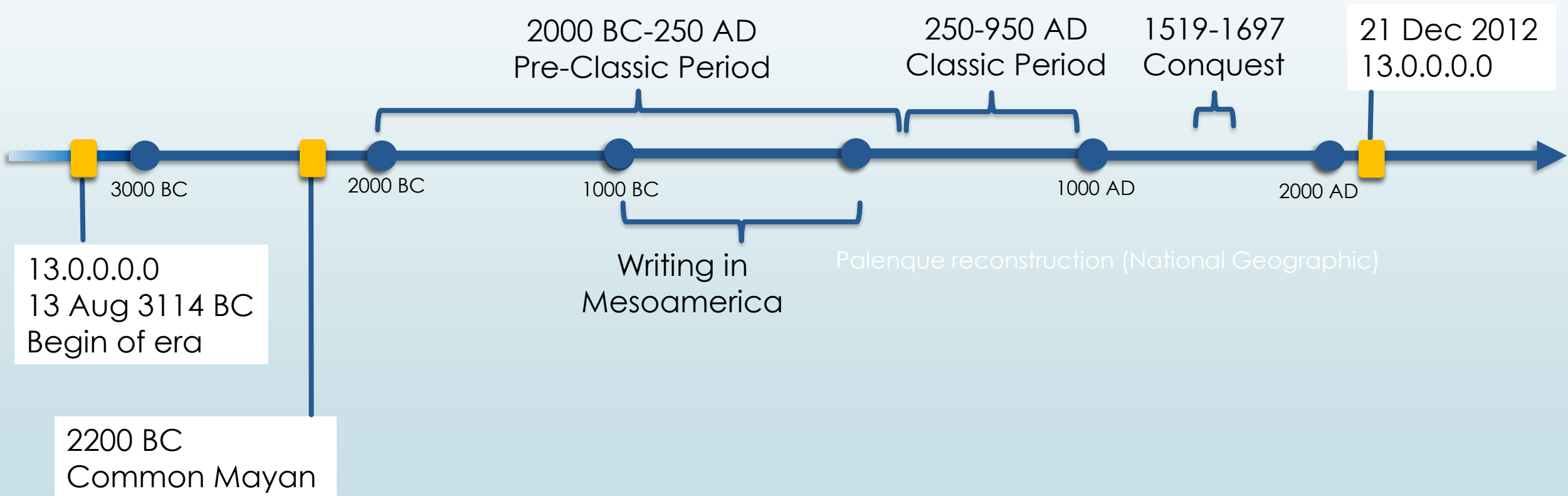
Mayan lgs today

Colour - closely-related groups
Font size - relative number of speakers:

- Largest size = over 500,000
- Large size = over 100,000
- Medium size = over 10,000
- Small size = under 10,000



Maya timeline



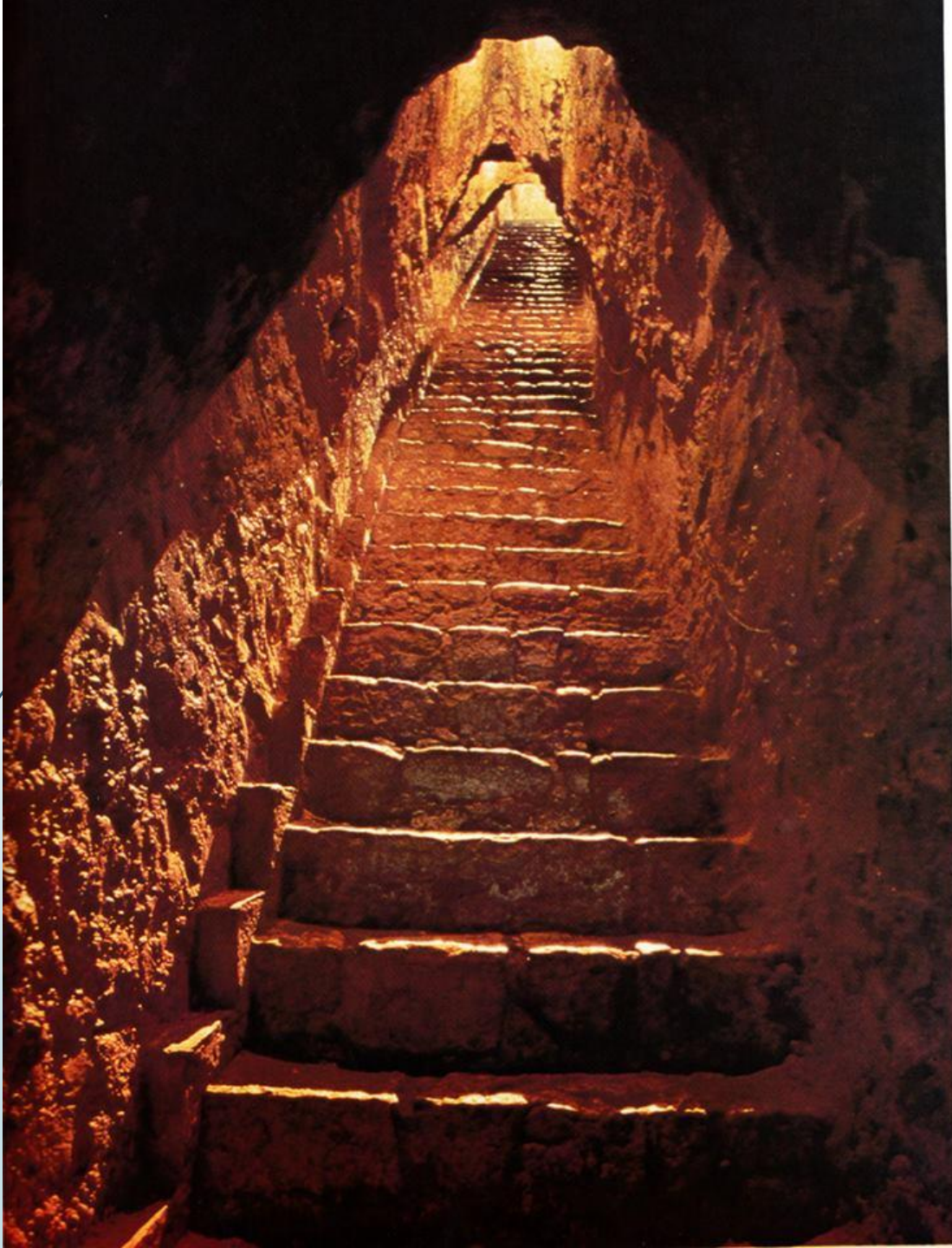


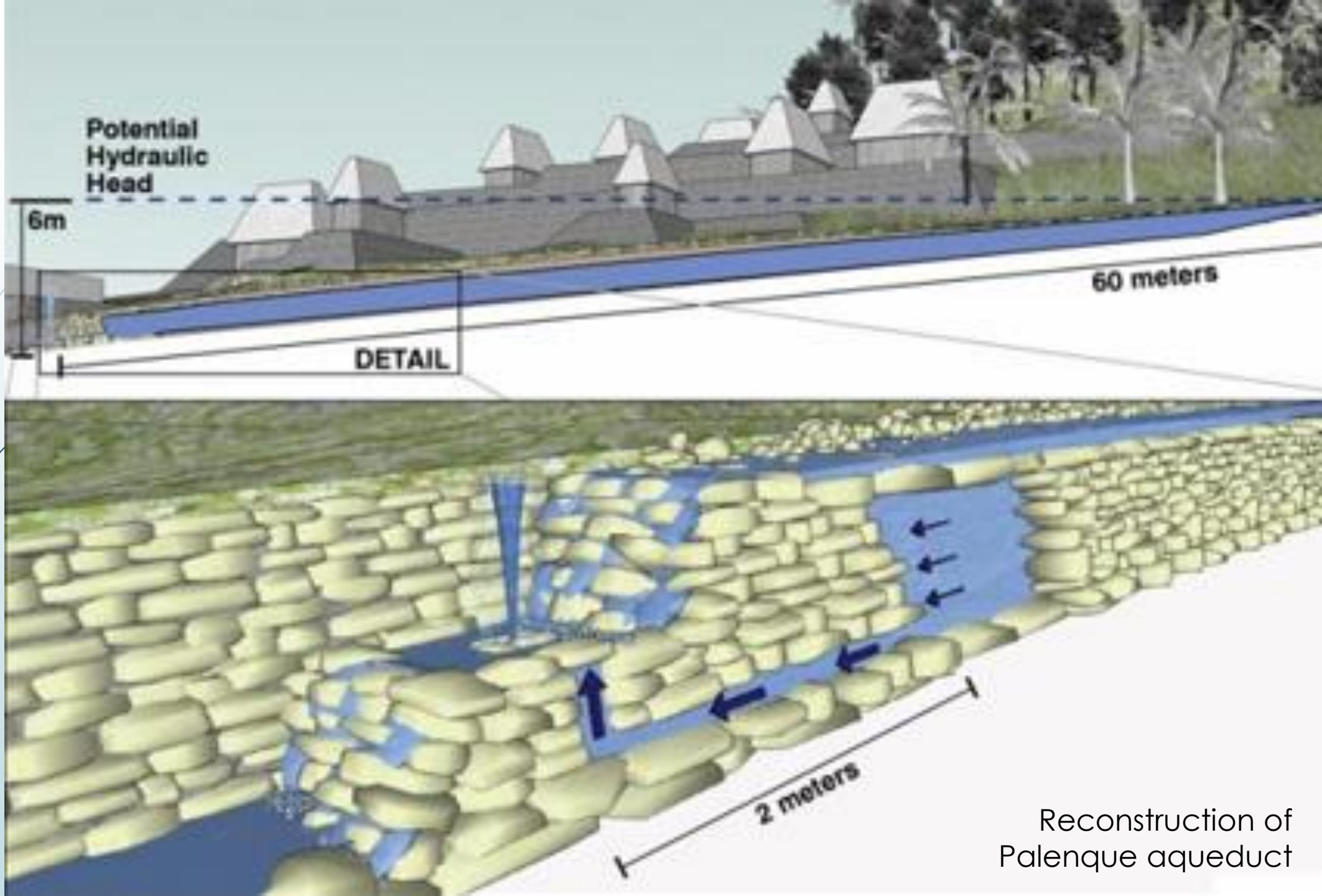
6

Controlling the environment

Palenque reconstruction 9 c. CE (National Geographic)



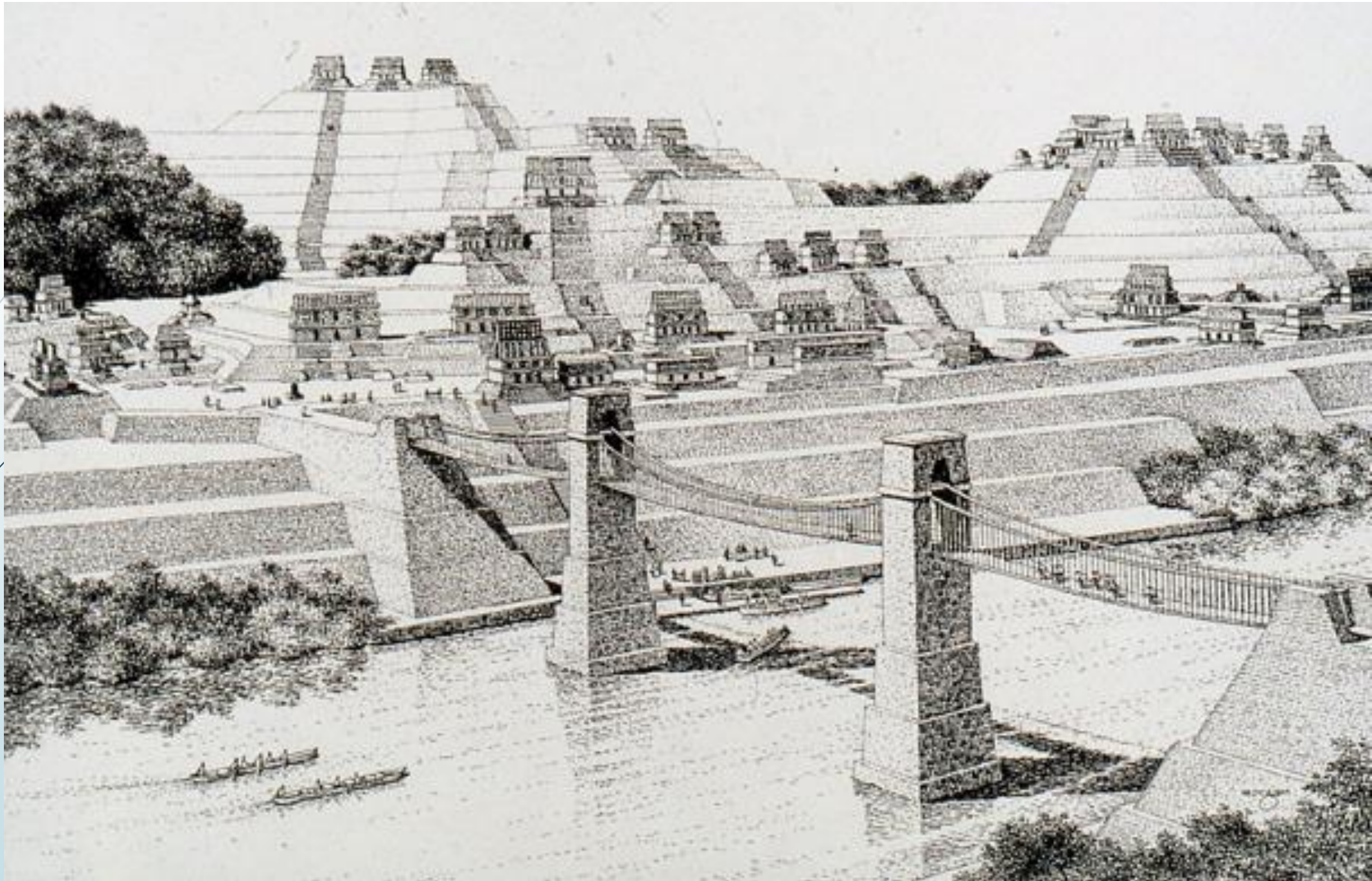




Reconstruction of
Palenque aqueduct

Yaxchilan bridge today





Reconstruction of Yaxchilan suspension bridge, the longest bridge in the world, until 1377

Other examples of water management

- Tikal - largest ancient dam by Maya: 79m in length, 10m high, held 75 mln litres of water in a human-made reservoir.

University of Cincinnati. (2012, July 16). Largest ancient dam built by Maya in Central America. *ScienceDaily*

- Xcoh, Puuc region: a cave system under the city with a network of cisterns and reservoirs

Xcoh Project Publications: farinco.org/publications.html

- Medicinal Trail, Belize: slopes, artificial terraces and water reservoirs that would have been utilized for farming and water management

University of Cincinnati. "Research holds revelations about an ancient society's water conservation, purification." *ScienceDaily*. *ScienceDaily*, 9 April 2013.



13

Agricultural practices

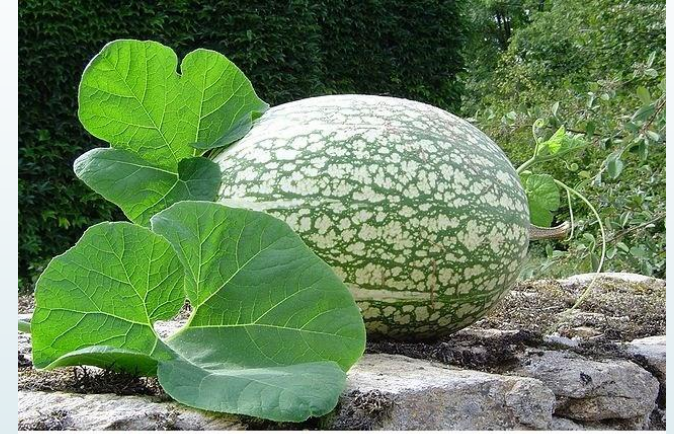
Plant domestication



Kukurydza zwyczajna (*Zea mays*)



Fasola zwyczajna (*Phaseolus vulgaris*)



Dynia figolistna (*Cucurbita ficifolia*)



Papryka (*Capsicum*)



Pomidor (*Solanum lycopersicum*)



Ziemiak (*Solanum tuberosum*)

Plants domesticated in Mesoamerica

- ▶ Maize
- ▶ Capsicum
- ▶ Squash
- ▶ Pinto bean
- ▶ Tomato
- ▶ Potato
- ▶ Avocado
- ▶ Chicle
- ▶ Chocolate
- ▶ Vanilla
- ▶ Black raspberry
- ▶ Pineapple
- ▶ Nopales
- ▶ Tunas
- ▶ Jicama
- ▶ Papaya
- ▶ Guayaba
- ▶ Huautli
- ▶ Cherimoya
- ▶ Mamey
- ▶ Sunflower seeds
- ▶ Cassava
- ▶ Chaya
- ▶ Tepary bean
- ▶ Tobacco

Milpa: maize, beans & squash



Chinampas: artificial islands



Terrace farming



**Itza Maya Terrace Complex
Lake Atitlan. Guatemala**

Forest gardens



Maya land management

- ▶ met human needs: food, shelter, and medicine
- ▶ sustained biodiversity and animal habitat
- ▶ Huge body of knowledge
- ▶ Maintenance and diffusion of knowledge?
 - ▶ Schools? Apprenticeship? Oral tradition?

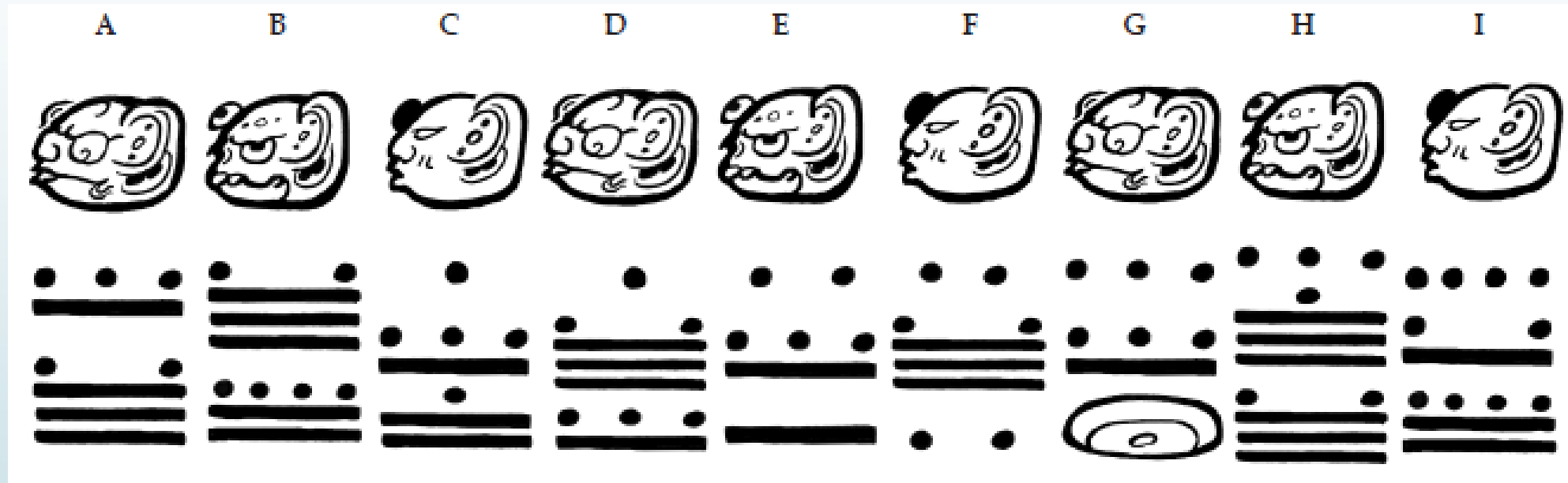


Six pages of Dresden Codex showing eclipses, calculation charts and a flood (photo Wikimedia Commons)



A replica of Madrid Codex on display in the Museum of Americas, Madrid (photo Wikimedia Commons)

Xultun: scribal workshop



Fragment of reconstructed Xultun lunar table. Drawing by David Stuart.
 2012 Mesoweb: www.mesoweb.com/reports/Xultun.pdf

Aragón: figurine workshop



Joya de Ceren: various workshops

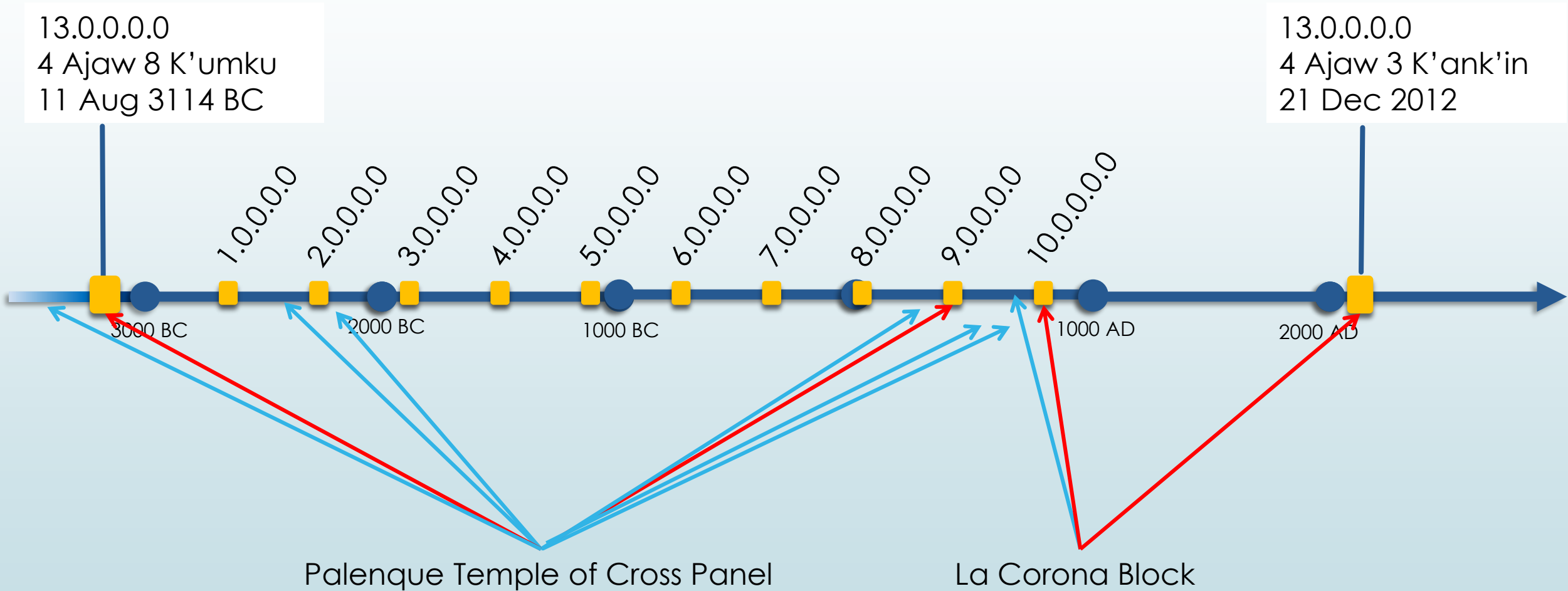


Written historical records



Yaxchilan Lintel 15

Anchoring historical events in PEs



Blue – events, red – Period Endings



The reconstruction of San Bartolo murals, 100 BC, Heather Hurst (Saturno 2009: Figure 1)

Maya blue



Bonampak murals' reconstruction, 8th c. AD (by Heather Hurst and Leonard Ashby)

How can this NOT contribute?

- ▶ Architecture, engineering, water management
- ▶ Mathematics, calendars, concept of zero
- ▶ Historical records for Central America, unique writing system
- ▶ Agriculture, plant domestication
- ▶ Crafts: stone-working, weaving, pottery

Cognitive research

- ▶ Cognitively, ancient Maya were people like us:
 - ▶ Cognitive metaphor / metonymy / blending, possessives as reference point constructions, complex verbal grammar – agency & participation, theme-oriented language
- ▶ Text/image pairings are multimodal products of human cognition with complex communicative goals):
 - ▶ layout - simplest image-schematic conceptual metaphors
 - ▶ pictorial signs in image, characteristic gestures or cultural artefacts
 - ▶ textual narrative with details (dates, places, names, extra-textual references)
 - ▶ revealing & hiding info depending on level of literacy?
- ▶ Complex understanding of time:
 - ▶ Event-based expressions, spatial conceptualization (TIME IS SPACE), non-spatial conceptualization (personification)

Relevance for modern Maya



Research + Development

Action Archeology

Archaeological Exploration

The Maya

Maya Forest is a Garden

- Planting the Seeds
- [The Ancient Maya House and Forest Garden at Tzunu'un](#)
- ▶ Maya Forest Gardens
- Kānan K'aax

Conservation Philosophy

Community Voice

Search this site:

Search

THE ANCIENT MAYA HOUSE AND FOREST GARDEN AT TZUNU'UN



The work on El Pilar's residential component began at an elite compound. The site is

Maya weaving and embroidery

https://www.facebook.com/3stonesplace/?fref=ts



3stonesplace



Agnieszka

Strona główna

Szukaj znajomych



3stonesplace

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Zdjęcia

Osoby, które to lubią



Lubisz to!

Wiadomość

Udostępnij

Więcej



Status



Zdjęcie / film



Organizacja



3stonesplace Hieroglyphic design was embroidered and worn in ceremonial events by the reina 2015-16, Verónica Dalila.

Lubię to! · Odpowiedz · 1 · 7 sierpień o 00:03



Glyphic workshops



Glyphic workshop, 30 April 2015, Kikil, Tizimín, Yucatán



Workshop for the elders, 20 May 2015, Santa Catarina Ixtahuacán, Sololá, Guatemala



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7 Ajaw 3 Kej (10 de noviembre de 2016): Ojer Maya Tz'iib' y Rub'ajnikil Tinamit Kaqchikel

Posted on **noviembre 10, 2016**



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I Support Mayas Teaching Mayas the Ancient Hieroglyphs and Calendar | *Apoyo que los mayas enseñen a otros mayas los antiguos jeroglíficos y el antiguo calendario*



The above yellow button is to donate through Paypal. You can also donate by writing an old-fashioned check, made out to





Belize Yucatec Maya

@Belizeyucatecmaya

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Obserwowanie

Udostępnij



Belize Yucatec Maya jest w mieście San Jose Succotz, Cayo, Belize.

18 godz. · 🌐

Villagers of San Jose Succotz Village (Cayo) celebrate first Maya Day. Villagers had on displays cultural food and handicraft and other Maya artifacts.

They also crowned their first Maya Queen for the Village of San Jose Succotz.

Pictures by Ricky Cunil

Belize Yucatec Maya: The Cultural awakening has come for us Maya of Northern and Western Belize . Many will try to discourage us but we need to resist and continue moving forward.

#belizemaya #belizecayomaya #sanjosesuccotzmaya #mayaculture





Brussels street art graffiti by aprofetariu
<https://hiveminer.com/Tags/glyph%2Cmaya/Timeline>



39

Thank you