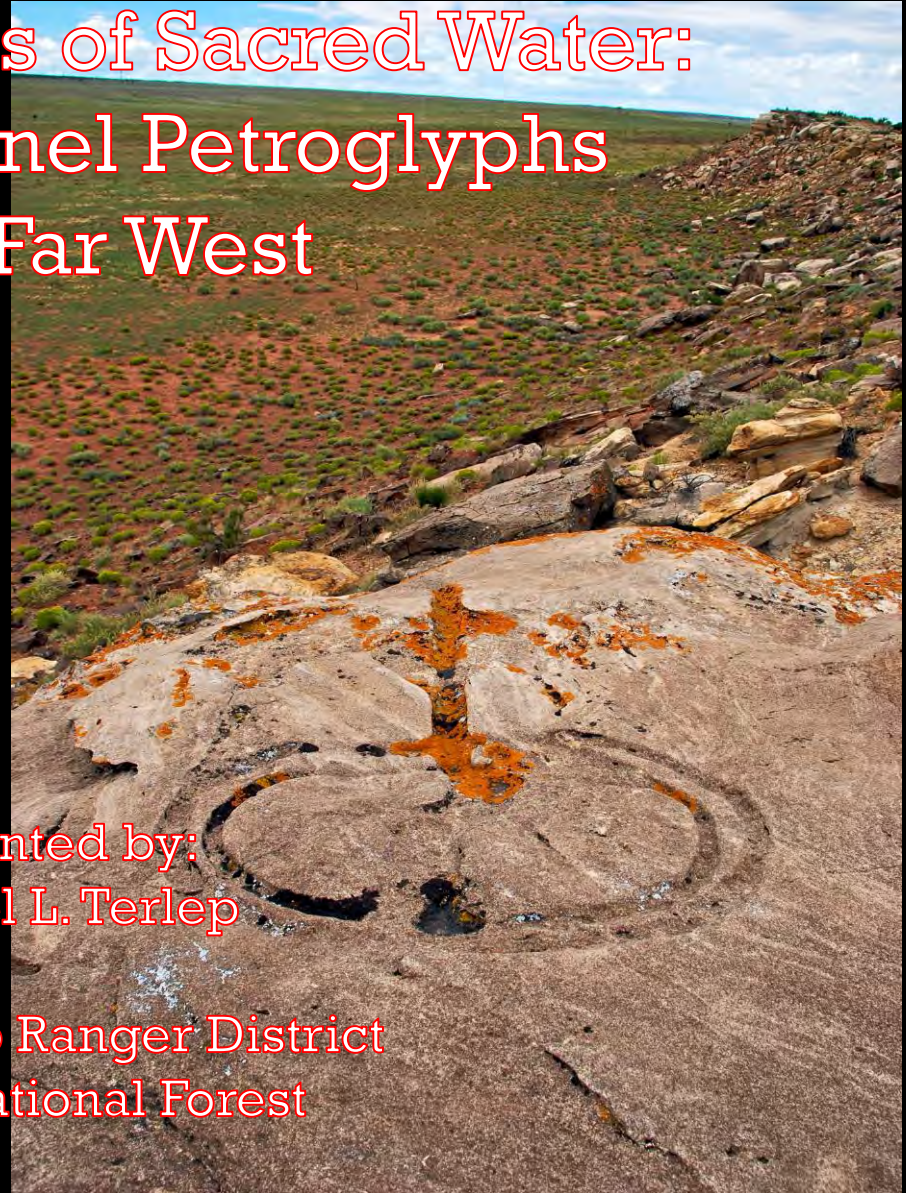
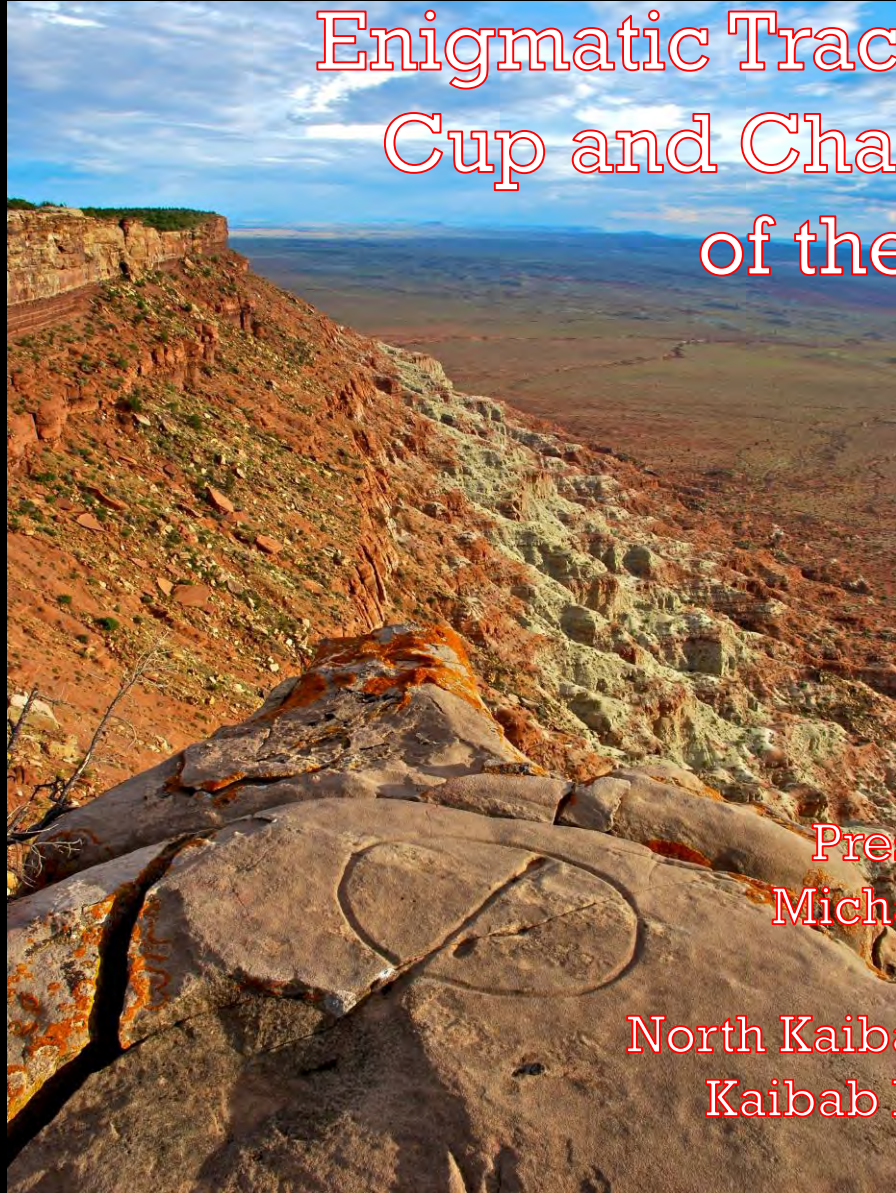


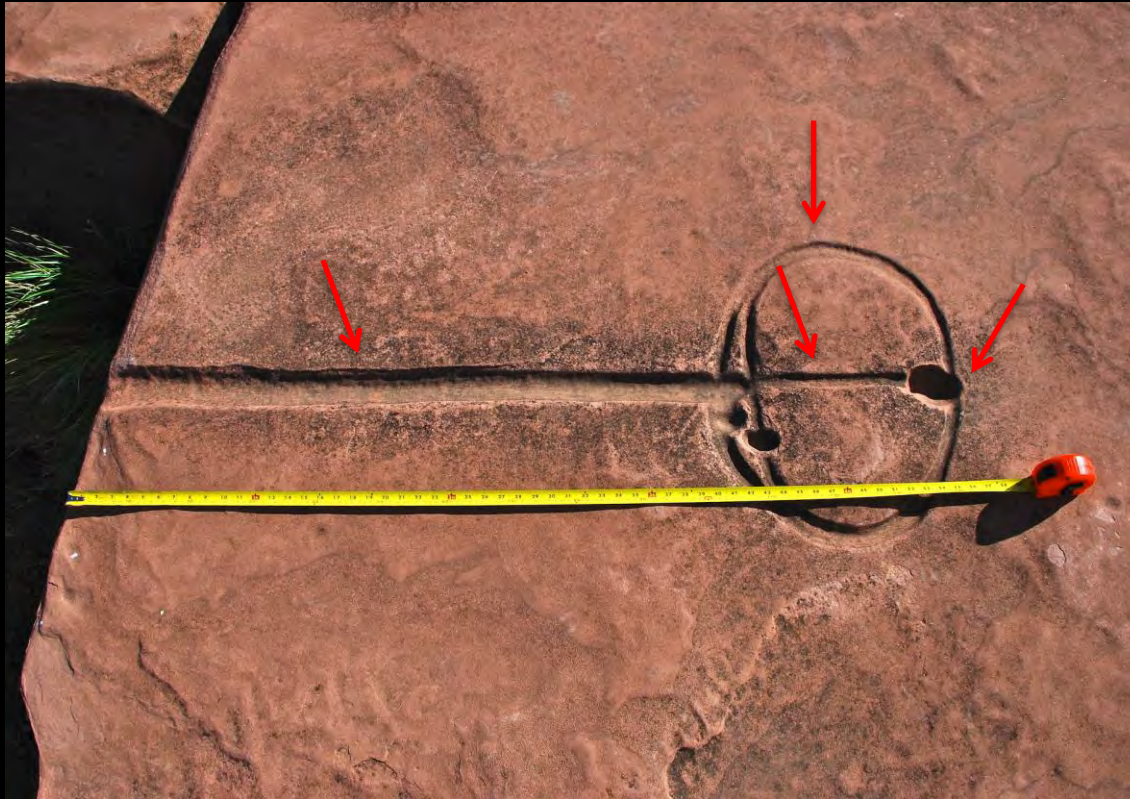
Enigmatic Traces of Sacred Water: Cup and Channel Petroglyphs of the Far West

Presented by:
Michael L. Terlep

North Kaibab Ranger District
Kaibab National Forest



Cup & Channel Petroglyphs



- Circular element
- Linear element
- 1 to 4 cupules
- Horizontal surfaces
- Prominent points above/
near perennial or
seasonal water sources

Previous Research

- Ford et al. 2005
 - Waterglyphs
 - Navigational
- Mejia 2001
 - Astronomical



Previous Research

- Ford et al. 2005
 - Waterglyphs
 - Navigational
- Mejia 2001
 - Astronomical
- Malotki 2007
 - Tar burners



Photo Courtesy:
Tommy Charles



Courtesy of Foxfire Museum
and heritage Center

Fig. 4. Zucaina. Loma del Cañuelo.

Fig. 5. Zucaina. Torre de la Casalta,
plataforma I

Fig. 6. Zucaina. Mas de Montón,
plataforma I.

Previous Research

- Ford et al. 2005
 - Waterglyphs
 - Navigational
- Mejia 2001
 - Astronomical
- Malotki 2007
 - Tar burners
- Allen 2004
 - Sacrificial alters



Previous Research

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Cultural History



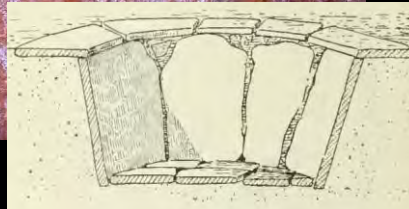
○ Paleo and Archaic

Cultural History



○ Paleo and Archaic

○ Early Agricultural
-1000 B.C.-A.D. 500

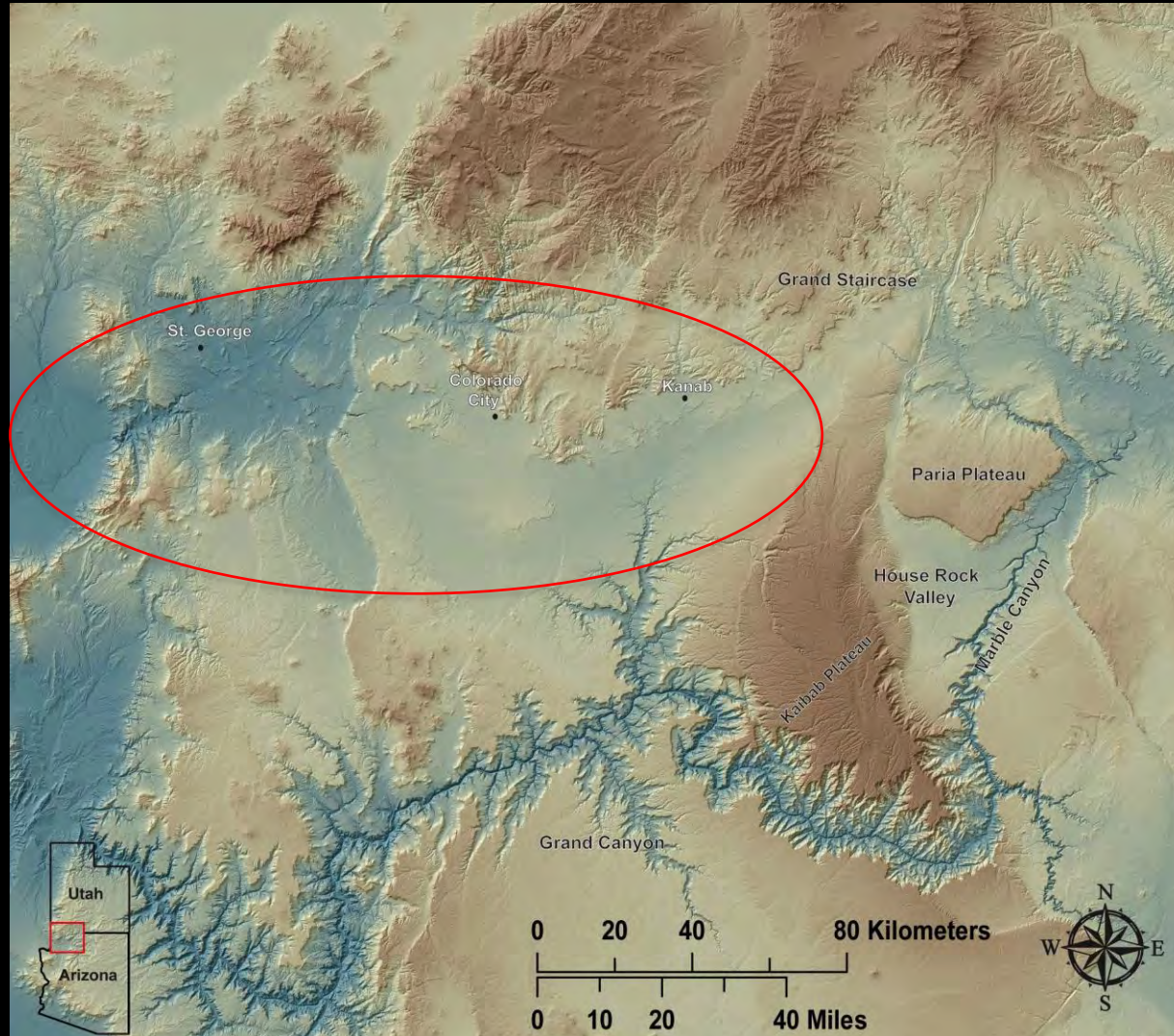


Cultural History



- Paleo and Archaic
- Early Agricultural
-1000 B.C.-A.D. 500
- Formative
-BMIII A.D. 500-750
-PI A.D. 750-950
-PII A.D. 950-1150
-PIII A.D. 1150-1300
- Pueblo II
-Kayenta intrusion

Distribution



- Northwest Arizona
Southwest Utah
Eastern Nevada
- Core area 150 km (93 mi) by 60 km (37 mi) with a few examples beyond

Stylistic Variation

- Multiple cups, circles, and lines
- Use of natural cups, grooves, & basins
- Similar depth and form



Stylistic Variation

- Multiple cups, circles, and lines
- Use of natural cups, grooves, & basins
- Similar depth and form
- Clusters



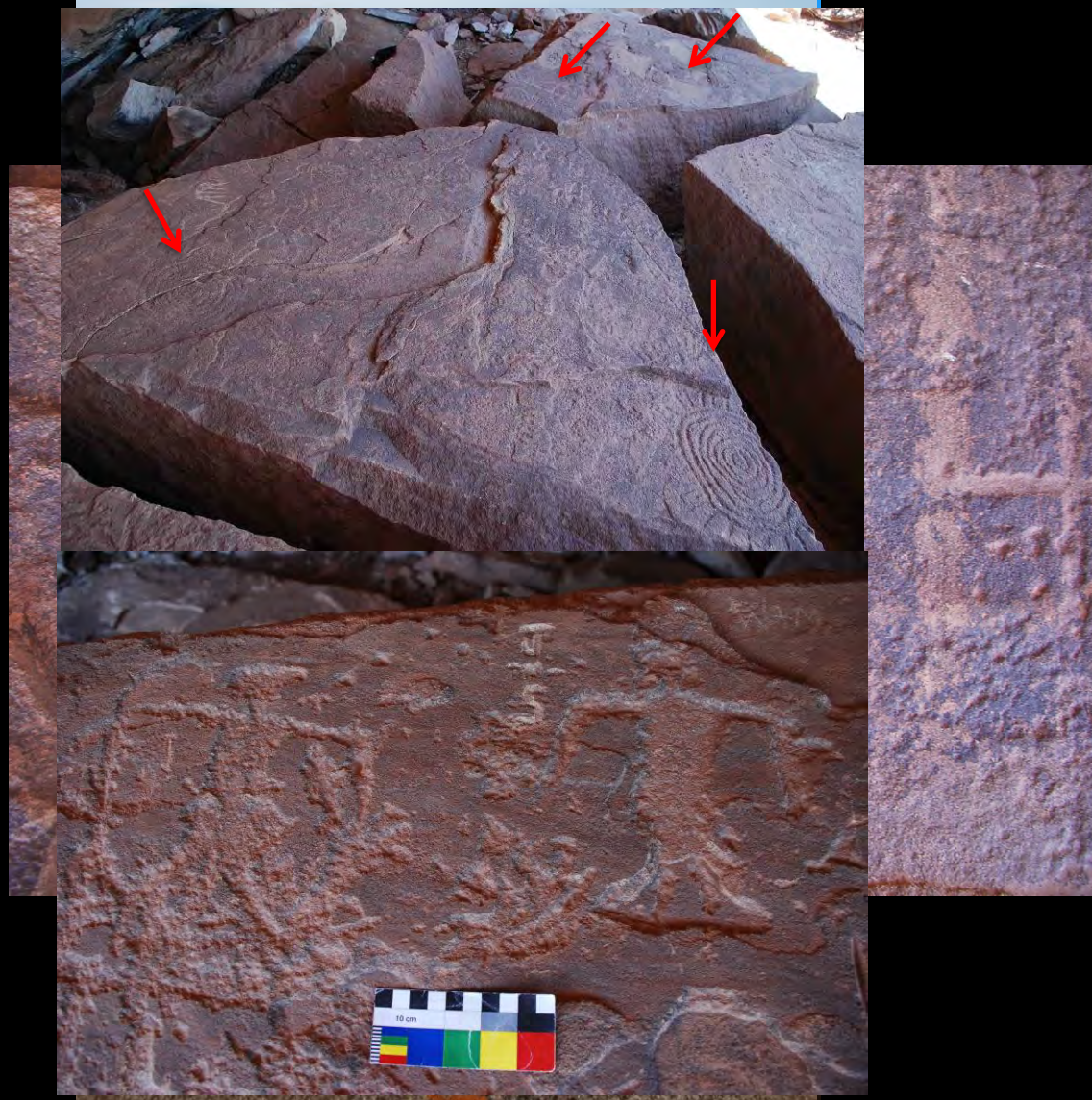
Stylistic Variation

- Multiple cups, circles, and lines
- Use of natural cups, grooves, & basins
- Similar depth and form
- Clusters
- Little Colorado River Valley

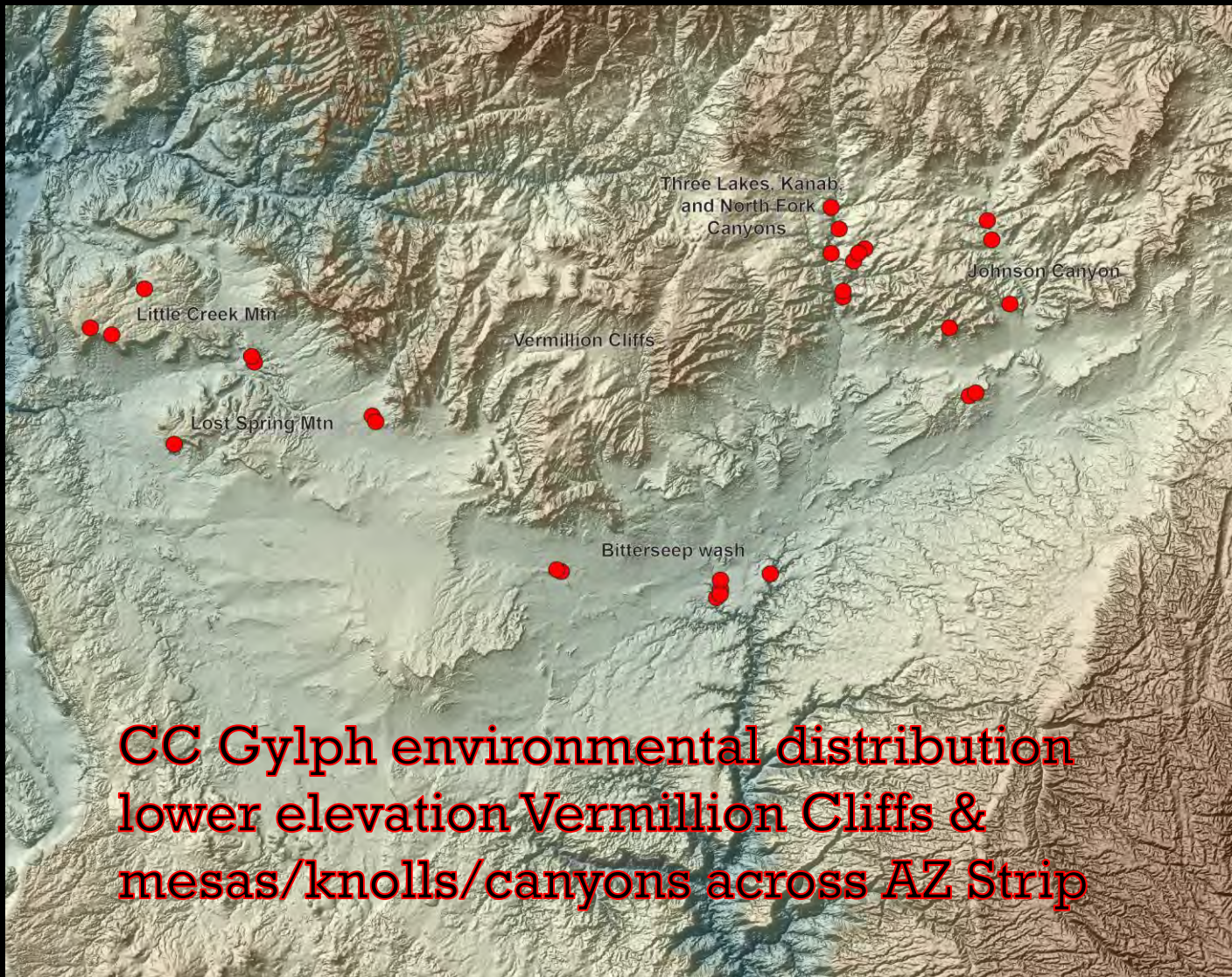


Measuring Age

- No Absolute Dating
- Lichen Growth
 - *Caloplaca trachyphylla*
 - 50 year life
- "Miniature" CC Glyph & associated rock art
 - Pueblo II (AD 950-1150)
 - BMII (1000 BC-AD 500)



Measuring Age



Measuring Age



Environmental Patterns

- Vertical surface=
High visibility
Wider audience
- Horizontal surface=
Low visibility
Smaller audience



Environmental Patterns

🔍 Crevice



Environmental Patterns

- Crevice
- Basin



Photo Courtesy:
Doug Page

Environmental Patterns

○ Crevice

○ Basin

○ Ledge



Ethnographic Data

- ↳ Cupules
- Fertility
- Zuni



Ethnographic Data

- ↳ Cupules
 - Fertility
 - Zuni

- ↳ Cupules
 - Rain Making

“Rain, or rather an aspect of rain, is the source of life & creation and thus a prayer for rain is above all a prayer for the creation of the world.” Loftin



Ethnographic Data



Photo Courtesy:
Sally Cole



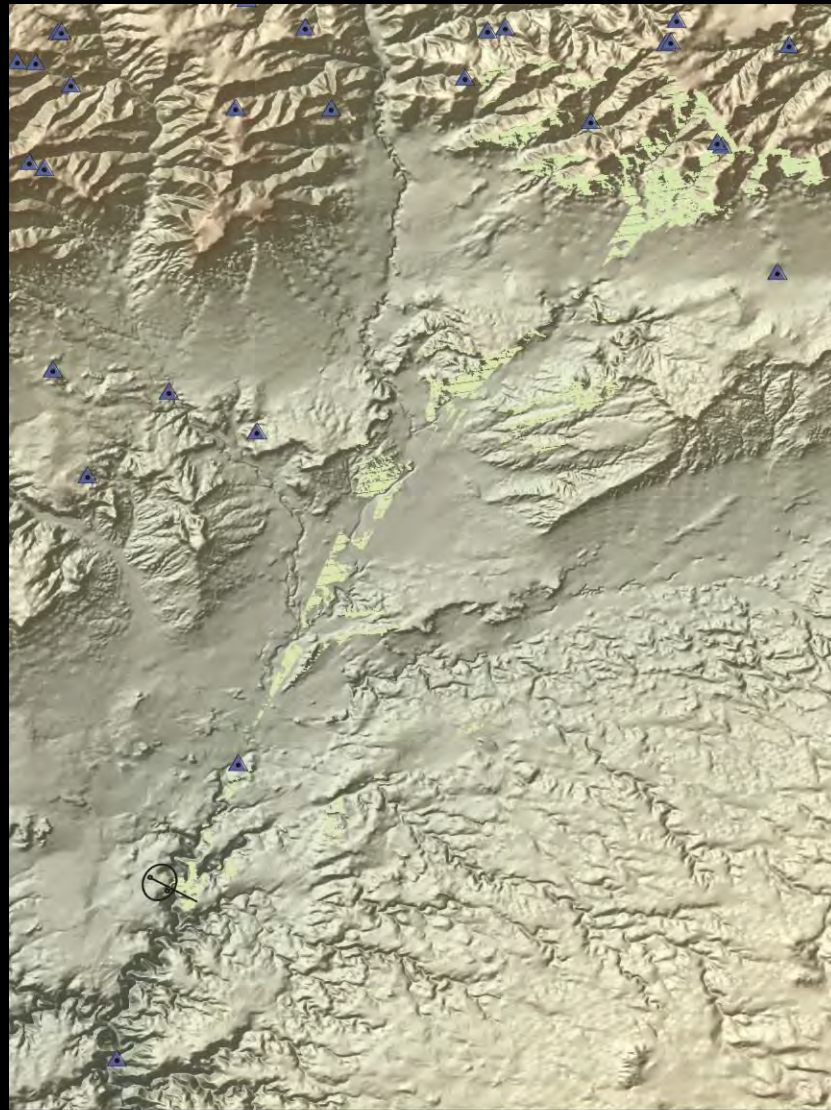
Photo Courtesy:
Sally Cole

Discussion

“I have prided myself on being able to grasp and retain in my mind the topography of a country; but these Indians put me to shame... They know every rock and every ledge, every gulch and canyon, and just where to wind among these to find a pass” Powell

Photo Courtesy:
Marc Toso

Discussion



Legend

Viewshed from AZ:B:120

Springs

Cup & Channel site

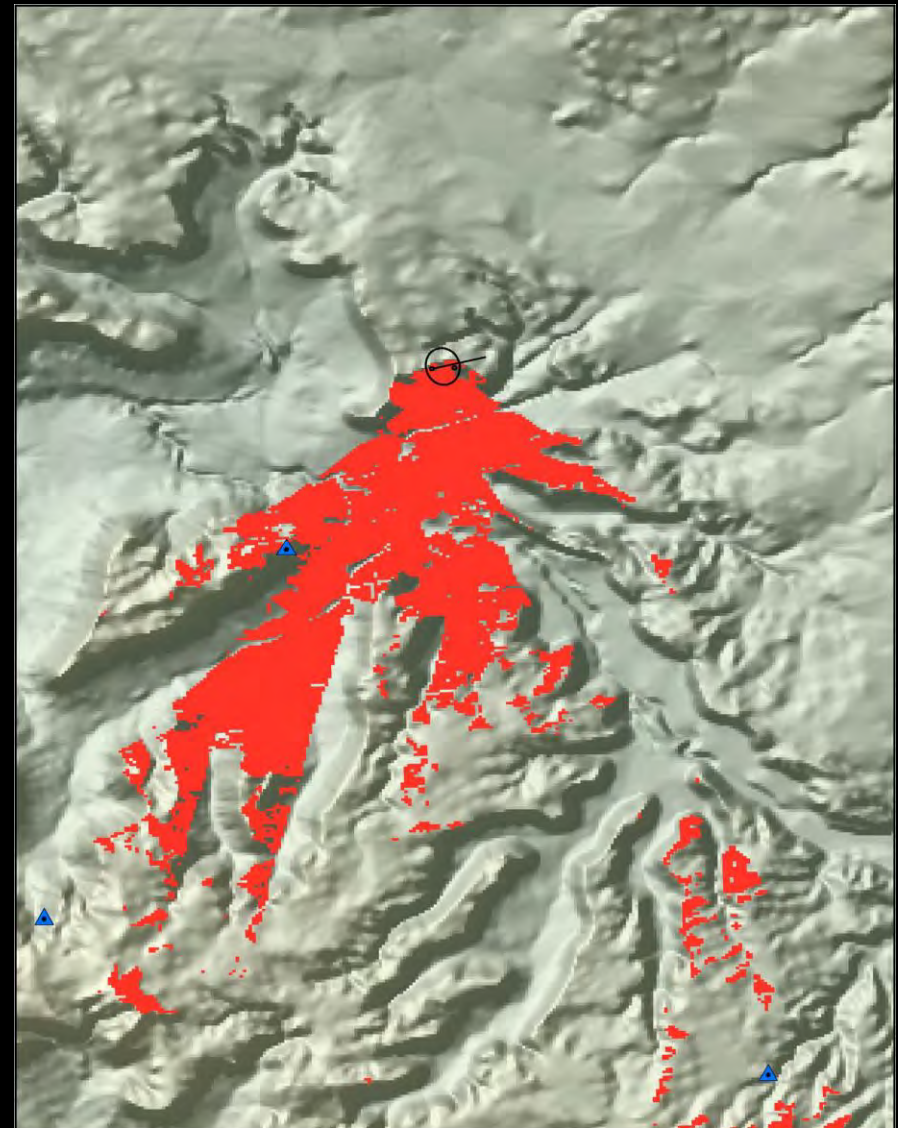
Elevation (meters)

High: 3447

Low: 347

0 1.25 2.5 5 Kilometers

0 0.5 1 2 Miles



Legend

Viewshed from Apple Valley Site 2

Springs

Cup and Channel site

Elevation (meters)

High: 3447

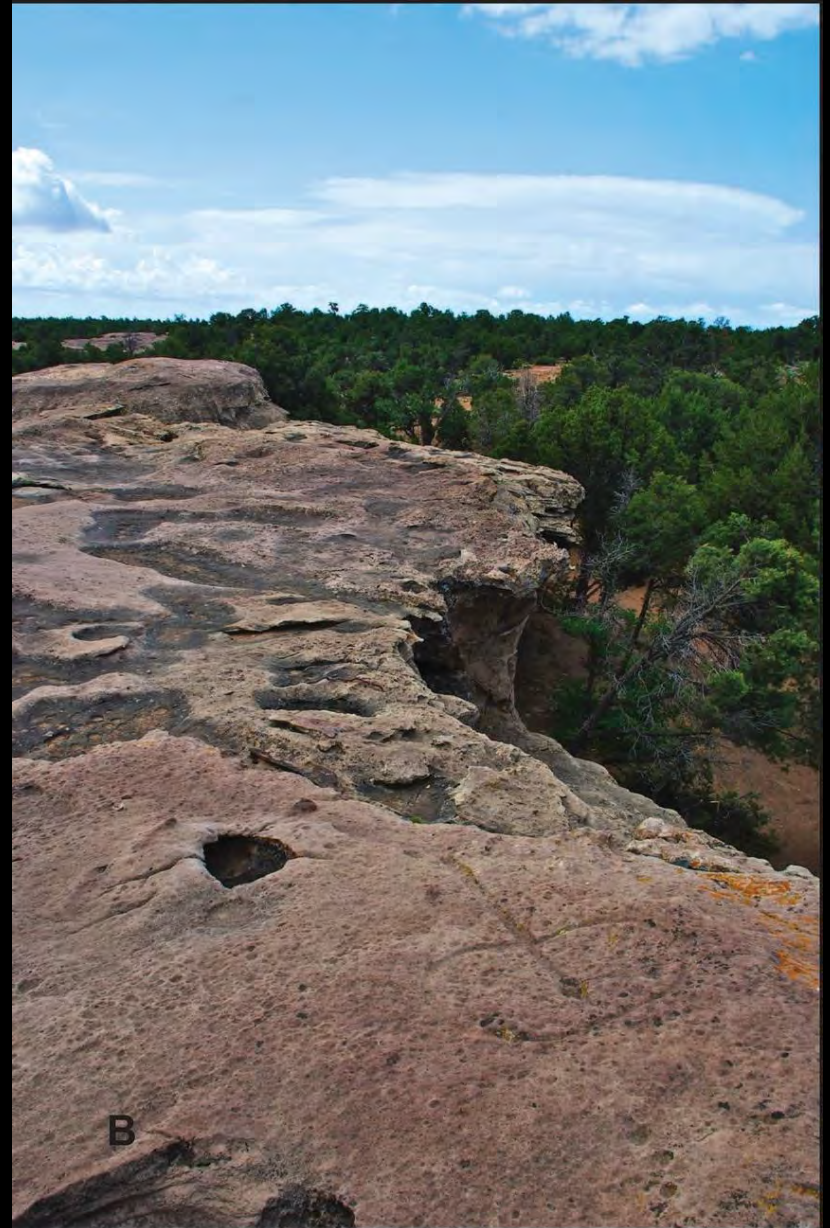
Low: 347

0 0.45 0.9 1.8 Kilometers

0 0.25 0.5 1 Miles



Discussion



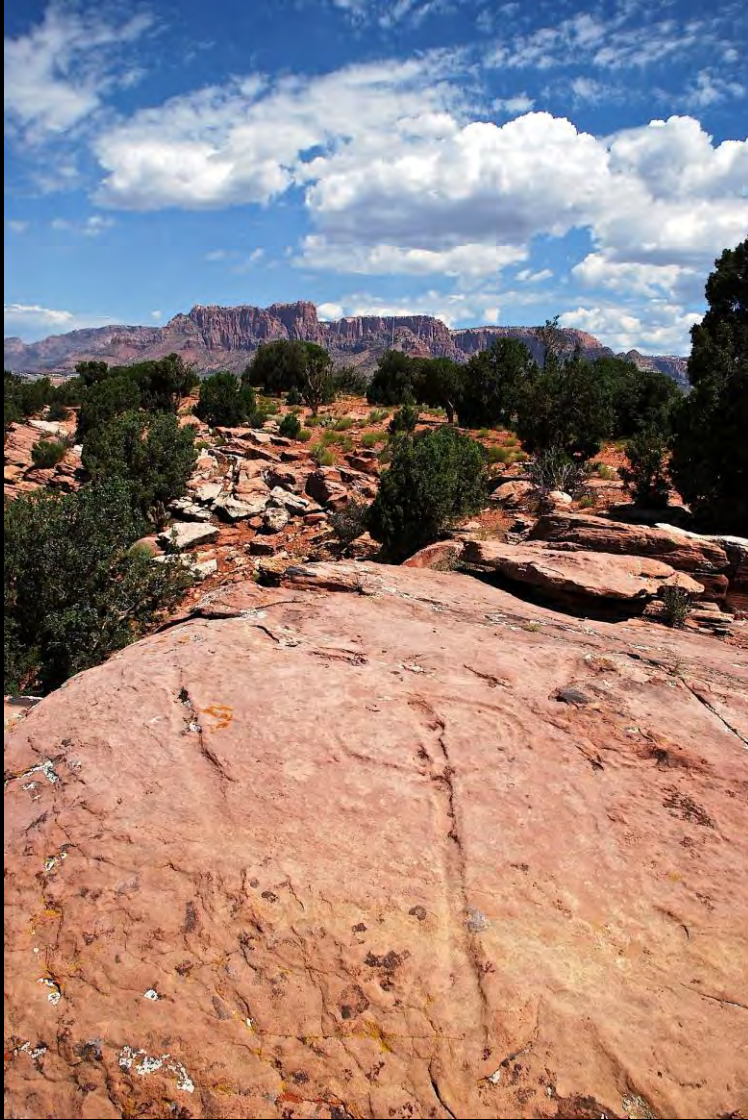
Discussion



Photo Courtesy:
Marc Toso

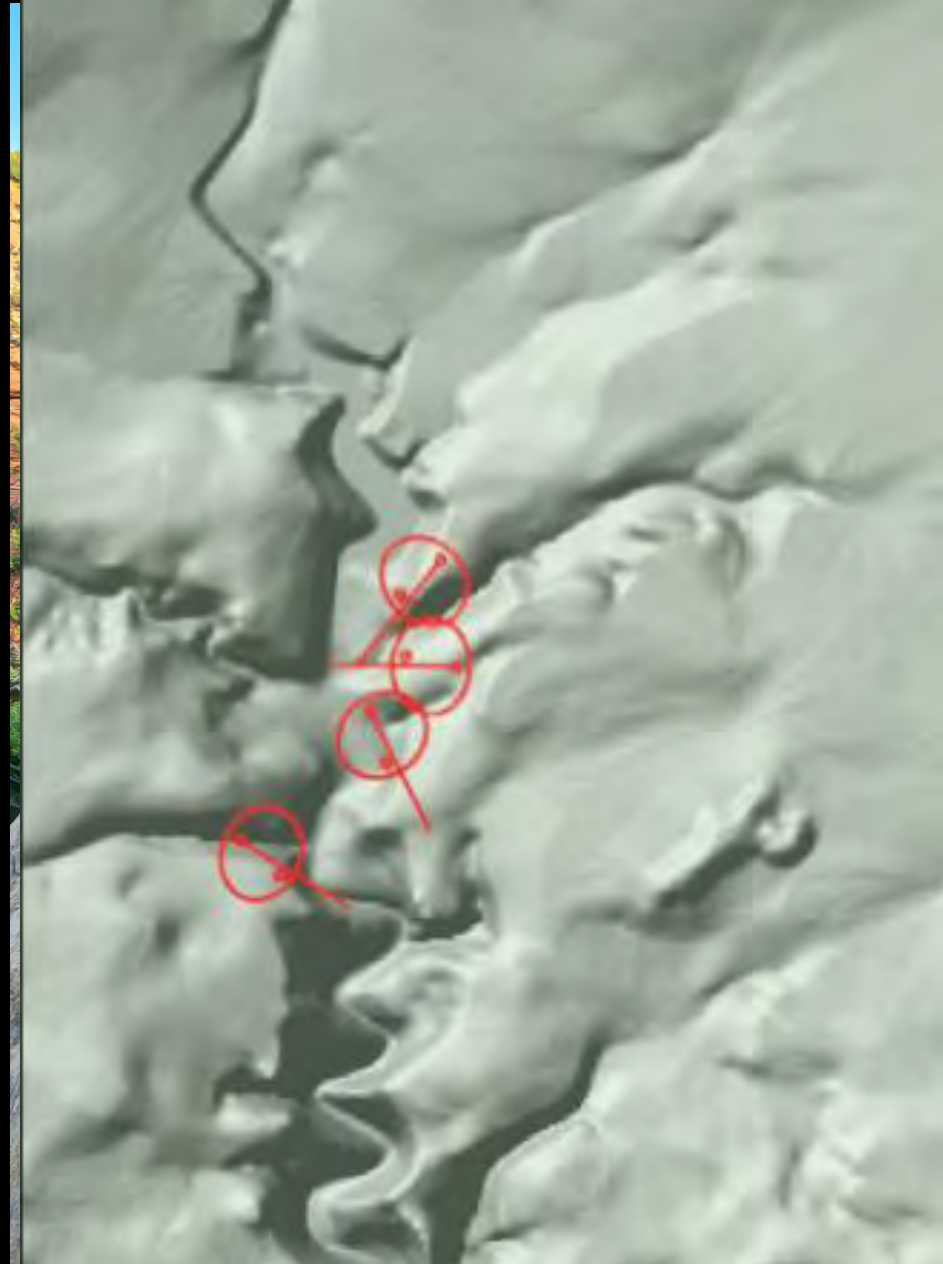
Discussion

- Function = Water shines/
ritual water channels



Discussion

- Function = Water shines/
ritual water channels
- Variation and clustering =
Family Units and Community
Ceremonial procession



Discussion

- 🔑 Function = Water shines/
ritual water channels
- 🔑 Variation and clustering =
Family Units and Community
Ceremonial procession
- 🔑 Physical function may change
through time becoming a
symbol of the people



Discussion



Discussion



Discussion



References

- Allen, Mary
2004 Mysterious Waterglyphs in *Vestiges*. 24 (1):15
- Ford, Robert, Dixon Spendlove, Cody Spendlove, David Maxwell, and Gordon Hutchings
2005 Waterglyphs: Ancient Cartography of the Arizona Strip. In *Utah Rock Art, Papers Presented at the Twenty-Fourth Annual Symposium of the Utah Rock Art Research Association 2004*, edited by Carol B. Patterson, pp 29-42. Utah Rock Art Research Association, Salt Lake City
- Loftin, John D.
1986 Supplication and Participation: The Distance and Relation of the Sacred in Hopi Prayer Rites. In *Anthropos* Bd 81, H. 1/3. pp 177-201.
- Malotki, Ekkehart
2007 *The Rock Art of Arizona: Art for Life's Sake*. Kiva Publishing, Walnut Creek
- Mejia, Cyrus
2001 Mysterious Marks: Geoglyphs in the Rocks Point the Way Through Time and Space. In *Best Friends Magazine*. July/August pp 46-47
- McFadden, Douglas
2002 Who's Who on the Monument? Virgin, Kayenta and Fremont Relationships. Paper presented at the 67th Annual Meeting of the Society for American Archaeology, Denver.
2011 The Basketmaker II Horizon: A View From the Grand Staircase. *Southwestern Lore* 77 summer/fall: 117-124
- Ross, Mairi
2001 Emerging trends in rock-art research: hunter-gatherer culture, land and landscape. In *Antiquity* 75(289) 543-548
- Schaafsma, Polly
1971 *Rock Art of Utah: A Study from the Donald Scott Collection*, Peabody Museum. Harvard University, Cambridge.
1986 *Indian Rock Art of the Southwest*. School of American Research, Santa Fe
- Coxe Stevenson, Matilda.
1905 *The Zuni Indians: Their mythology, esoteric fraternities, and ceremonies*. in Twenty-third annual report of the Bureau of American Ethnology, 1901-1902, 3–608. Bureau of American Ethnology