



"Rock Art" -ifacts: Cataloging and Contextualizing Collected & *in-situ* Cultural Materials at the Mesa Prieta Petroglyph Landscape, New Mexico



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Project Purpose

For over two decades, volunteers with the Mesa Prieta Petroglyph Project has cooperated with private landowners to record petroglyphs on a remarkable landscape at the confluence of the Rio Chama and the Rio Grande. Petroglyph data is systematically stored in a recently modernized geodatabase application (the "PDA"), however this app is optimized for petroglyph records, not artifacts or features. In 2022, the MPPP archaeologist initiated an effort to establish a comparable artifact database app, optimized to better catalog artifacts and track their disposition.

Scope

This small-scale artifact cataloging project is designed primarily to track artifact records for three broad categories:
1 - artifacts recorded on Mesa Prieta and left in-situ;
2 - artifacts volunteers delivered to the office for analysis;
3 - artifacts from any context donated to MPPP.

As the cataloging project is still in progress (and for additional reasons), the third category is presently excluded. Analysis currently focuses on the second category, plus a nonrandom sample of the first.

Database Methods

In addition to better classify archaeological objects, establishing a formalized artifact database importantly fulfills MPPP's obligations to link records with owner contact info, as well as to track chain-of-custody for any in the second category above. Two artifact database apps are in active development: a "main" app utilizing the Filemaker PDA's architecture, and an open-source (Base) clone. Both use a custom UI for data entry, with standardized landowner, repository, and classification values keyed to related tables. Hierarchical class values are selected from "drop down" boxes, and are exemplified in the chart below.

ArtClassKey	ArtClassTxt	ArtMaterial	ArtMatKey
0	Lithic - Flaked Stone	CCS: pedernal chert	0
		CCS: chert/chacony	1
		CCS: other silicate	2
		Volcanic: obsidian	3
		Volcanic: fine grain	6
		Volcanic: describe	7
		Other: sand, mica, etc (describe)	10
		Igneous: extrusive (volcanic)	11
		Igneous: intrusive (plutons)	12
		Metamorphic: describe	13
		Sedimentary: describe	14
		Utilityware - corrugated	15
		Utilityware - micaceous	16
		Other - incised (gray/mica)	17
		B on W - Santa Fe	18
		B on W - Bandelier A	19
		B on W - Bandelier B	20
		B on W - Wiyuu	21
		B on W - any other	22
		Polychrome - all	23
		Terra Cotta	24
		Porcelain	25
		Milk Glass	26
		Postcontact Pueblo(Apache)	27
		Other (describe)	28
		Avian Taxa	29
		Carnivora Taxa	30
		Lagomorph Taxa	31
		Lingulate Taxa	32
		Other or Unknown Taxa	33
		STCP WORK, IN LATE NAGPRA	34
		Wood: saw cut stump or object	35
		Wood: milled lumber	36
		Wood: moulding, furniture, toy, etc.	37
		Flute/Whistle/Tube (wood, reed, etc.)	38
		Fiber: basket, cradleboard, etc.	39
		Maize cob	40
		Sample: botanical	41
		Sample: pollen, phytolith, soil	42
		Cordage	43
		Fabric (cotton or other fiber)	44
		Hide: tanned	45
		Hide: untanned/rawhide	46
		Woven: Fur Blanket	47
		Other (describe)	48
		Clear	49
		Green	50
		Brown	51
		Amethyst	52
		Other	53
		Can	54
		Object	55
		Fastener(s)	56
		Hardware	57
		Copper: bells + all Precontact	58
		Other or oxidized conglomerate	59
		Photo: print(s)	60
		Photo: negative(s)	61
		Photo: slide/transparency	62
		Film reel for projection	63
		Book (published)	64
		Manuscript (unpublished)	65
		Field/Lab notes or memo	66
		Describe	67



Polychrome Glazewares



Incised micaceous sherd



Developmental Period Pottery Sherds



Axe with etching (scan QR for 3D)



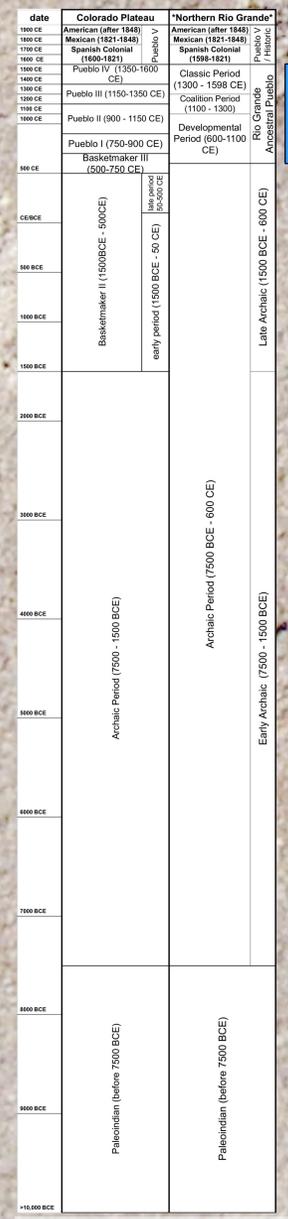
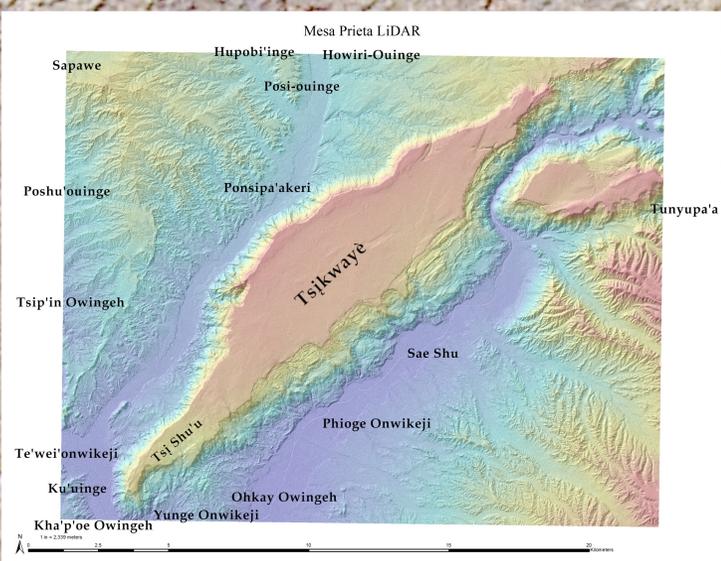
Axe with notches but no groove



Unusual axe, material matches Developmental Period object



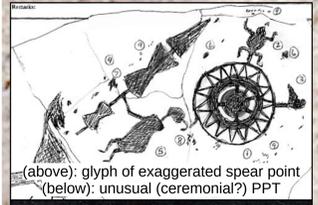
Axe with notches and groove



Artifact Frequencies:*



Small intentionally polished stone artifacts



(above): glyph of exaggerated spear point (below): unusual (ceremonial?) PPT



Archaic Period Projectile Points



Archaic Period obsidian knife



Paleoindian biface with distinctive flaking

Dataset Discussion

Preliminary results yield significant interpretive value for diachronic trends in ecology, ideology, and social relationships. For all periods, anticipated spatial patterns (e.g. slope, distance to water, etc.) for implied activities are unsupported and/or refuted. **Paleoindian:** Merely ~1% of the artifacts at the Mesa are Paleoindian. These are fluted point fragments, and "overshot" flaked bifaces. Spatially they span from low river terraces up to the rim, and along much of the Mesa's length. **Early to Middle Archaic:** Archaic nomads used Valles Caldera/Jemez Mountain obsidians. Lithics imply seasonal rounds included the Pajarito and Caldera. A gradual but constant increase in lithic frequency throughout the Archaic refutes any local Middle Holocene declines. **Late Archaic:** Reliance on Valles/Jemez obsidians remains consistent, implying some social and economic continuity. Gradual archaic frequency increase implies slow but consistent population increase. **Developmental:** The earliest arrow points mimic Late Archaic dart point forms and materials. Small household-scale settlements mark the onset of agriculture, but not community aggregation. Pottery is indicated. **Coalition:** A decline in artifact frequency may indicate sampling bias or decreased population. Affinities for Tiwa or Gallina are possible based on lithic sources, but unconfirmed due to a lack of temporally diagnostic pottery from this period. **Classic Pueblo:** Sharp increases in petroglyphs (75%) and artifacts (50%) reflect the Tewa migration. Pedernal chert points demonstrate strong and lasting ties with the Chama Basin. Pottery types and frequencies match surface finds at Phioge, Posi, and other nearby pueblos. Some Tiwa pottery types are also evident. Farming extends from the river banks to the top of Mesa. Ceremonial objects plausible. **Spanish Colonial (Misison):** A gradual shift from farming to livestock grazing is indicated, however temporarily diagnostic artifacts from this time are few. Metal projectile points in all stages of manufacture may be from this Period. **Mexican National (Rancho) & US Territory:** Excluding artifacts from the Taos Rebellion, most materials from these brief periods are glass. Dendrochronology of in-situ juniper lumber may be worth pursuing. Ranching is strongly inferred. **American Statehood:** A proliferation of early-to-mid 20th C glass shows rapid changes in consumption and discard practices. Grassland depletion across the Mesa leads to a collapse in ranching at the onset of Statehood times.

Acknowledgements

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Select References

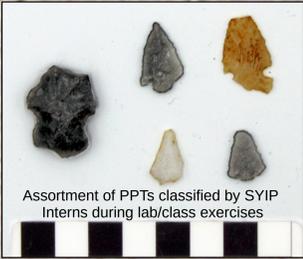
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Postcontact game piece made from Modified indigenous pottery sherd



Metal PPTs in various stages of production



Assortment of PPTs classified by SYIP Interns during lab/class exercises



07_015_066_057



*left (blue) also includes artifacts sorted no finer than "Postcon," "Pueblo," "Archaic," "Paleo"; *right (orange) excludes these "crude sort" time period values (except for Paleoindian).