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Aiming Beyond Categories: Rethinking Archaeological Partitioning Through S.H.O.T.s

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Charles cannot be present today = he's currently partitioning in Albania

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Abstract: Archaeological categories are necessary for organizing material evidence, but they can become limiting when descriptive distinctions also restrict comparison. Temporal, material, and technological divisions are often treated as fixed analytical boundaries, even when different artifact classes preserve evidence of comparable behaviors. Using data from the Greybull River Sustainable Landscape Ecology Project (GRSLE), this poster considers what becomes possible when those boundaries do not dictate what we can compare. Projectile points and modern cartridge casings are technologically and temporally distinct, yet both preserve S.H.O.T.s (Signatures of Hunting Over Time). Together, they reveal associations with big game migration corridors alongside differences in spatial patterning, highlighting both continuity and change. These patterns reveal how cross-category comparison can raise questions about behavioral continuity and change that remain difficult to see when datasets are separated. Ultimately, archaeological categories should organize evidence without limiting the questions we are able to ask of it.

1. When Classification Becomes Partition

- **Classification:** Archaeological categories organize evidence by age, material, and technology (Dunnell 1986; Bowker and Star 1999).
- **Analytical Boundaries:** Descriptive distinctions can restrict comparisons between artifact classes.
- **Selective Recording:** Categorical assumptions influence what gets documented, potentially excluding contemporary materials from archaeological datasets.
- **The GRSLE Approach:** Integrated recording preserves artifact distinctions while enabling cross-category spatial and contextual comparisons.

Categories become limiting when the boundaries created for description also become boundaries on comparison.

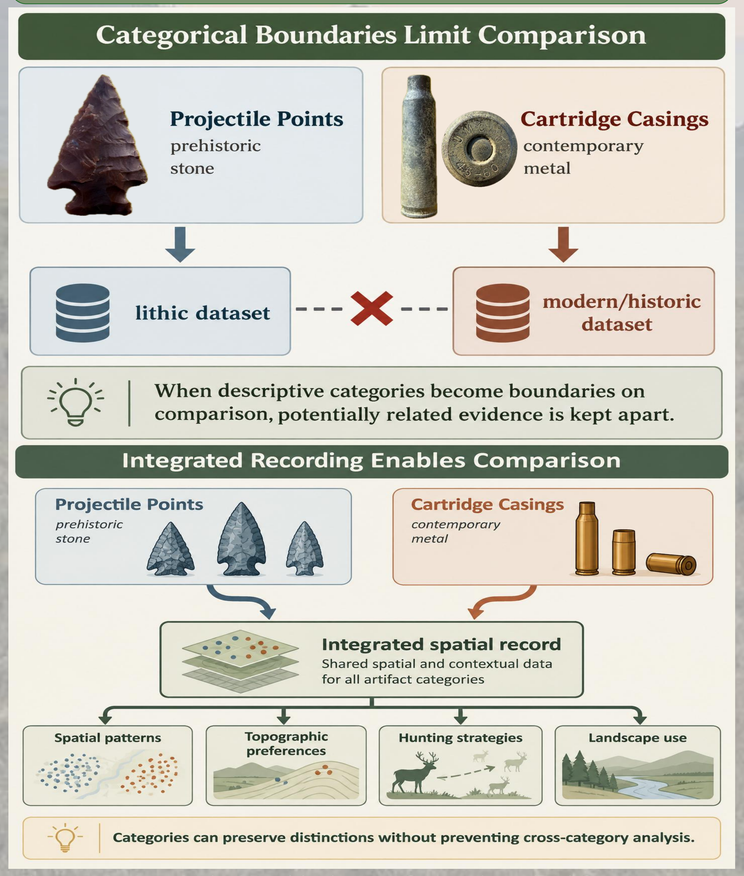


Figure 1. Archaeological Partitioning and Comparison. (Top) Categorical separation restricts comparison. (Bottom) Integrated GRSLE recording enables cross-category analysis.

2. Crossing the Partition: S.H.O.T.s

- **S.H.O.T.s (Signatures of Hunting Over Time):** Examines prehistoric projectile points and contemporary cartridge casings as distinct material signatures of hunting activity.
- **Cross-Category Comparison:** Despite temporal, technological, and cultural differences, both artifact classes provide spatial evidence for investigating hunting-related landscape use.
- **Expanded GRSLE Dataset:** Building on previous spatial analyses (Orngard et al. 2026), additional 2026 field records expand the mapped distributions of hunting signatures alongside modern elk GPS movement data.

Integrated recording enables comparisons across categorical boundaries while preserving distinctions between artifact classes.

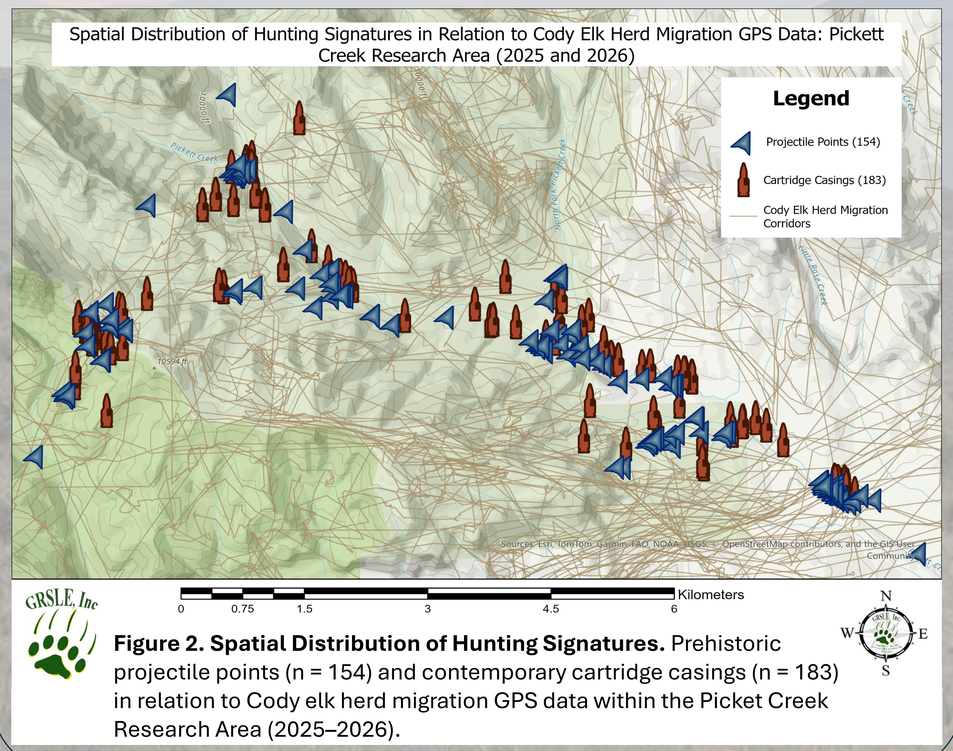


Figure 2. Spatial Distribution of Hunting Signatures. Prehistoric projectile points (n = 154) and contemporary cartridge casings (n = 183) in relation to Cody elk herd migration GPS data within the Picket Creek Research Area (2025–2026).

3. What Becomes Visible?

Cross-category comparison opens new avenues for investigating hunting landscapes:

- **Spatial Patterns:** Where do hunting signatures overlap or differ?
- **Landscape Palimpsests:** Do cartridges within prehistoric hunting blinds indicate repeated use?
- **Topographic Preferences:** Have hunters favored similar landforms over time?
- **Hunting Strategies:** How have technology and mobility shaped hunting locations?
- **Selective Recording:** What evidence is overlooked when categories restrict documentation?

Integrated records expand archaeological inquiry beyond categorical boundaries.

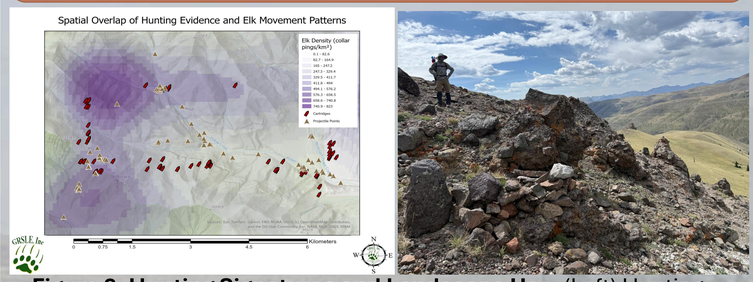


Figure 3. Hunting Signatures and Landscape Use. (Left) Hunting signatures relative to elk GPS density in Picket Creek. (Right) Prehistoric stone hunting blind in GRSLE.

4. Beyond Categories: Broader Implications

Archaeological classifications should organize evidence without restricting its documentation or comparison. As S.H.O.T.s demonstrate, GRSLE's integrated artifact-based recording enables cross-category analysis while preserving temporal, technological, and cultural distinctions.

What archaeological relationships remain invisible when descriptive categories become analytical boundaries?

References:

Bowker, Geoffrey C., and Susan Leigh Star
1999 *Sorting Things Out: Classification and Its Consequences*. MIT Press, Cambridge, Massachusetts.

Dunnell, Robert C.
1986 Methodological Issues in Americanist Artifact Classification. In *Advances in Archaeological Method and Theory*, Vol. 9, edited by Michael B. Schiffer, pp. 149–207. Academic Press, Orlando.

Orngard, Charles, Lawrence C. Todd, Daniel Dalmas, and David Rapson
2025 From Segregated to Integrated: Rethinking Big Data with GRSLE. Poster presented at the Plains Anthropological Conference.

Orngard, Charles, Lawrence C. Todd, and Daniel Dalmas
2026 Every S.H.O.T. Counts: Hunting Signatures Across 12,000 Years. Poster presented at the Annual Meeting of the Society for American Archaeology.

Todd, Lawrence C., and Daniel Dalmas
2026 Time, Context, and Marginal Archaeology: Landscape Taphonomy in the Greater Yellowstone Ecosystem. *Quaternary Science Reviews* 388:110082.

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