Two Million Years of Art in Human Evolution

AH 224 Paleolithic Art, Spring 2012

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originsnet.org (pleistocenecoalition.com)
MYTHO-STRATIGRAPHY

Mythic III
Eurasian
‘shamanic’

Mythic II
‘Southern Route’

Mythic I
‘Khoisan’

Complex Idea Modeling

Conceptual Symbolic Modeling
### 4 Meme Model: 2MY Evolution of Art, Symbol & Myth

<table>
<thead>
<tr>
<th>Era and Techné</th>
<th>Four Meme Model (James Harrod)</th>
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</thead>
<tbody>
<tr>
<td><strong>Oldowan</strong></td>
<td>'Rudimentary Symbolic' = 2.0-3.5 yrs // human = great ape cognition (A. Russon 2004)</td>
</tr>
<tr>
<td>EO  ~2.6 to 2.0 Ma</td>
<td>= <em>Australopithecus</em> (similar cognitive level by triangulation to common great ape ancestor)</td>
</tr>
<tr>
<td>‘Classic’/MO  ~2.0 to 1.4 Ma</td>
<td>First ‘art object’: ‘animacy in stone’; ‘animated spirit that inhabits the body’</td>
</tr>
<tr>
<td>Developed/LO  ~1.7 to 1.2 Ma</td>
<td>Conceptual-Symbolic Modeling = <em>Homo habilis/rudolfensis</em> <em>(out-of-Africa)</em></td>
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<td></td>
<td>First Metaphor = ‘core-seed-sustenance-essence in interpersonal interaction’; ‘rhomboids of the mind’</td>
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<td>First Ethos = carnivore axis</td>
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<td>First Joke: ‘hit the baboon head’ anvil (drill cupules)</td>
</tr>
<tr>
<td><strong>Acheulian</strong> (sensu lato)</td>
<td>Complex Idea Modeling = <em>Homo erectus/ergaster</em> <em>(out-of-Africa)</em></td>
</tr>
<tr>
<td>EA  ~1.7 to 1.0 Ma</td>
<td>Biface pairing of complementary shapes <em>(contraria sunt complementa</em>, Niels Bohr; <em>coincidentia oppositorum</em>, C. G. Jung; ‘co-poiesis’, Bracha Ettinger)</td>
</tr>
<tr>
<td>MA  ~1.0 Ma to 500 ka</td>
<td>Sheath, the Womb Source of Animacy (Life-Giver) &amp; Vehicle, Cutting Spirit, Energy of Initiative (Death-Giver)</td>
</tr>
<tr>
<td>LA  ~650 to 200 ka</td>
<td>colorants, marking traditions, mortuary practice, adornments, anthropomorphs &amp; zoomorphs</td>
</tr>
<tr>
<td>FA  ~300 to 150 ka</td>
<td><strong>Middle Paleolithic / Middle Stone Age</strong></td>
</tr>
<tr>
<td>EMP  ~300 to 40 ka</td>
<td>Mythic I &amp;II = archaic <em>Homo sapiens</em> / MMP = <em>Homo sapiens sapiens</em> <em>(out-of-Africa)</em></td>
</tr>
<tr>
<td>MMP  ~150 to 60(100) ka</td>
<td>Beings of the Dreaming, Creatrix of Life-Forms, stone arrangements, landscape art, image representation, mortuary practices with grave goods; geometric ‘signs’</td>
</tr>
<tr>
<td>LMP  ~60 to 30/35 ka</td>
<td>I. ‘Gaia’ (M. Witzel) = Khoisan</td>
</tr>
<tr>
<td></td>
<td>II. ‘Gondwana’ (M. Witzel) = ‘Southern Route’ Africa to SE Asia &amp; Australia</td>
</tr>
<tr>
<td><strong>Upper Paleolithic / Later Stone Age</strong></td>
<td>**Mythic III = <em>Homo sapiens sapiens</em> <em>(out-of-SW-Central-Asia)</em></td>
</tr>
<tr>
<td>EUP  ~150 to 60 ka</td>
<td>‘Eurasian’ (Y. Berezkin) ‘Laurasian’ (M. Witzel) = Shamanic</td>
</tr>
<tr>
<td>MUP  ~40 to 20 ka</td>
<td>6 Worlds Shamanism; Soul Journey, Soul Retrieval; Mother-of-Animals, Master-of-Animals;</td>
</tr>
<tr>
<td>LUP  ~25 to 10 ka</td>
<td>Geometric Protolanguage, UP(E) array of 12 female and 12 male spiritual transformations (J. Harrod)</td>
</tr>
</tbody>
</table>

Templeton (2010, 2002): genetics = 3 waves out-of-Africa – 1.9 Ma; 650 ka; 130 ka; 1 out-of-Asia (recent)
‘Techné’
‘Religion’

Did God invent religion or did religion invent God?
“Maybe someday we could set aside a cave just for art.”
‘Art’

“No word meaning ‘art’ occurs in Aivilik (Inuit), nor does ‘artist’: there are only people. Nor is any distinction made between utilitarian and decorative objects.

The Aivilik language has no equivalents to our words ‘create’ or ‘make’ which suggest the imposition of the self on matter. The closest Aivilik term means ‘to work on’.

As the carver holds the unworked ivory lightly in his hand, turning it this way and that, he whispers, “Who are you? Who hides there?” And then, “Ah, Seal!” He rarely sets out, at least consciously, to carve, say, a seal, but picks up the ivory, examines it to find out its hidden form and, if that’s not immediately apparent, carves aimlessly until he see it, humming or chanting as he works. Then he brings it out: Seal, hidden, emerges. It was always there: he didn’t create it; he released it; he helped it step forth.”

Chimpanzee Death Rituals

• **One of four domains of chimpanzee religion:**
  – ‘Rites of passage’ for birth, death, consortship, reverence for life/nature

• **Chimpanzee experience of death:**
  • without a (known) set of beliefs
  • but with a set of rituals, i.e., paradigmatic and syntagmatic pattern of behaviors
  • involving communicative gestures
  • and experience of transcendent dimension or transcendence
Gallery of grief as beloved Dorothy borne to her burial
Sanaga-Yong Champanzee Rescue Center, Cameroon
(Photo Monica Sczupider, Visions of Earth, National Geographic, November 2009)
## Pattern of Chimpanzee Death Ritual

<table>
<thead>
<tr>
<th>Observance</th>
<th>Piety</th>
<th>Holy</th>
<th>Numinous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Announcement: non-ordinary wraaa or ‘non-threatening’ social fear scream calls</td>
<td></td>
<td>Non-ordinary ‘absolute silence’</td>
<td></td>
</tr>
<tr>
<td>Gazing, staring, looking</td>
<td>Guarding: approach permission by rank</td>
<td>Frisson, ‘mock’ aggression display</td>
<td>Sniffing, inspecting</td>
</tr>
<tr>
<td></td>
<td>Grooming, touching</td>
<td></td>
<td>Tapping, tugging for ‘indication of life’</td>
</tr>
<tr>
<td></td>
<td>Wail, whimper, soft hoo calls (lamentation)</td>
<td></td>
<td>Glancing-back non-ordinary (‘not-follow-me’) ‘farewell’ gesture</td>
</tr>
</tbody>
</table>
**Chimpanzee Death Ritual: Metaphoric Communicative Behaviors**

<table>
<thead>
<tr>
<th>Communicative Behavior</th>
<th>Everyday Signal</th>
<th>‘Non-Ordinary’ Signal (Proto-Metaphor)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wraaa call &amp; ‘non-threatening’ social fear scream call</td>
<td>Alarm, danger, fear of strangeness &amp; social fear, anger</td>
<td>Signal for flight converted to ‘gather around to witness the lethal and uncannily strange’</td>
</tr>
<tr>
<td>Silence</td>
<td>(if in foreign territory, not in social group)</td>
<td>‘Absolute silence of the dead’</td>
</tr>
<tr>
<td>Aggression display: hair bristling and charging</td>
<td>Dominance aggression</td>
<td>‘Frisson of transcendence’, ‘inability to dominate death, the indomitable; ‘mock’ aggression</td>
</tr>
<tr>
<td>Glance-back gesture</td>
<td>Request ‘follow-me’ or ‘come here’ with affiliative or maternal sense</td>
<td>Reverse = ‘farewell’ (may even sit turned away from corpse); ‘never again to follow’; finality, final termination of bond</td>
</tr>
</tbody>
</table>
Oldowan
... there literally is art in every artifact, and vice versa, in every work of art there lies the shadow of an artifact or tool.

George Kubler, *The Shape of Time*

(Austin: University of Texas Press)
Homo habilis / Homo rudolfensis

Johanson, Donald & James Shreeve. 1989. Lucy’s Child: cover
Chimpanzee nutcracking palm nuts
Liberia

Oxford Scientific, photo Clive Bromhall
Chimpanzee nutcracking palm nuts
Liberia

Oxford Scientific, photo Clive Bromhall
Chimpanzee mother nutcracking, infant watching, Republic of Guinea

Tetsuro Matsuzawa, Kyoto University
Kenya, Rift Valley

photo James Harrod
Giraffes, Kenya Rift Valley
photo James Harrod
FxJj50, Koobi Fora, Kenya

Classic Oldowan and Developed Oldowan, 1.65 Ma
Stone shattered animal bone shafts for marrow
Microwear on unretouched flakes = cutting soft animal tissue
soft plant material; scraping and sawing wood (Keeley)
photo James Harrod
in situ core, FxJj50, Koobi Fora, Kenya

Classic Oldowan and Developed Oldowan, 1.65 Ma
photo James Harrod
Oldowan Toolmaking

Right: Lokalalei 2C, Kenya, 2.34 Ma;
Pelegrin 2009 in Beaune, Coolidge and Wynn 2009 after Delagnes & Roche 2005
<table>
<thead>
<tr>
<th>Nearbyness</th>
<th>Separation</th>
</tr>
</thead>
<tbody>
<tr>
<td>contiguity, contact, overlap,</td>
<td>apartness, standing apart</td>
</tr>
<tr>
<td>proximity (cf. trimming)</td>
<td>usually by means of boundary</td>
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</table>

<table>
<thead>
<tr>
<th>the Pair</th>
<th>Alternation</th>
</tr>
</thead>
<tbody>
<tr>
<td>set of two or four</td>
<td>this side/that (other) side</td>
</tr>
<tr>
<td>similar knapping actions, marks</td>
<td>(cf. bifacial flaking)</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Sequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>sequence of elements chained into series or an order</td>
</tr>
<tr>
<td>= nearbyness + separation + constant direction</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Sequence Reversal, e.g. ABCD → DCBA</td>
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<table>
<thead>
<tr>
<th>Container/Content</th>
<th>Core/Surface</th>
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</thead>
<tbody>
<tr>
<td>‘lithic container’</td>
<td>pith/shell; core/flake</td>
</tr>
<tr>
<td>matrix, matter, womb, source</td>
<td></td>
</tr>
<tr>
<td>inside/outside a boundary</td>
<td></td>
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Dialectic of Oldowan Toolmaking Spatial Concepts (topological basis for symbolic imagination)

Wynn (1979:17) suggests sequence reversal does not appear until Acheulian bilateral symmetry; I suggest it is intentionally applied on the Oldowian pitted and grooved anvil.
Oldowan Hammerstones
(‘Spheroids and Subspheroids’)

Olduvai Gorge, BK Upper Bed II, Developed Oldowan B, 1.48 Ma
photo Mary Leakey (1971: pl. 24)
Oldowan ‘Light Duty Tools’ – intentional tools made by tools

FLK North Sandy Conglomerate, Bed II, Olduvai Gorge, ~1.6 mya – Developed Oldowan A
Illustration: Mary Leakey (1971: fig. 55)
Chopper Cores – by-product or residual (might be used)

1 sole example of unifacial chopper at DK; 2 massive bifacial chopper
Olduvai Gorge, DK Lower Bed I below Tuff 1A, Oldowan, 1.976±.015 Ma

illustration Mary Leakey (1971: fig. 4)
Oldowan Chopper Cores

1-8 end choppers; 9 two-edged; 10-12 pointed
Olduvai Gorge, FLK North, Upper Bed I below Tuff 1F, Oldowan, 1.74±.007 Ma

illustration Mary Leakey (1971: fig. 39)
Chopper Core Typology

Typo-morphological varieties of Soanian choppers. Chauhan PR. 2003. fig. 4
Chimpanzee Digging Sticks

Ugalla, Tanzania, tubers as 'fallback food';
Oldowan Worked Bone Tools – ‘Diggers’ // Digging Sticks

Swartkrans, Members 3 to 1, 1.0-1.8 Ma; all levels Developed Oldowan (most bone tools Member 1, 1.0 MYA); also bone tools at Drimolen for termite foraging and // marula fruit processing; others probably tuber extraction d’Errico and Blackwell 2009. Photo Shipman 2001: fig. 1; comment on Blackwell and d’Errico 2001.
| Cut, slice; shear, split off, separate linearly (intentional) cut meat, fruit; bone, husk, shell, leaves | Pierce, puncture, dig, drill, peck (by-product) make a hole, dent (cf. cupule) | Dialectic of Oldowan Instrumental Gesture-Movement-Forms Informing Symbolic Behavior |
| Flake, scraper – sharp edge | Digging stick Pointed chopper core; awl |
| Bound, bend, curve, turn, circle (by-product or intentional) nest, bedding, shelter, windbreak, ? net-bag, ? bark tray, container; ? grass, twig plaiting or twining | |
| (intentional) food processing Chopper core | Flake, scraper – sharp edge (Hands) |

Dialectic of Oldowan Instrumental Gesture-Movement-Forms Informing Symbolic Behavior

in ‘art space’ – semi-permeable, interactive, co-poiesis, animate, dialogical/dialectical conversation and struggle, agon, both subjective and objective, ‘imaginal space’, ‘space of individuation or ontogenesis’, ‘space of re-vivification’

Harrod 2012; for Oldowan tool use wear or residue analysis see ‘cutting grass, fibrous tubers and other plant material’, Kanjera South, 2 Ma (Lemorini et al 2009); also ‘cutting soft plant tissue and scraping and sawing wood’, plus ‘cutting soft animal tissue’, Koobi Fora, 1.5 Ma (Keeley and Toth 1981)
<table>
<thead>
<tr>
<th>‘Classic’ (Middle) Oldowan Symbolic Behaviors</th>
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<tbody>
<tr>
<td><strong>Exotic tools + geometric artifacts</strong></td>
</tr>
<tr>
<td><strong>Pecked, abraded, incised, serrated or notched objects</strong> + Marking traditions (‘cupule’)</td>
</tr>
<tr>
<td><strong>Marking traditions (cupule, pair sets, linear sequence and sequence reversal of motifs)</strong> + Image and representation</td>
</tr>
<tr>
<td><strong>Spoken language (circumstantial evidence)</strong></td>
</tr>
<tr>
<td><strong>Mortuary practice</strong></td>
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# 1st Meme of the Evolution of Art, Symbol & Myth

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<th>Era and Techné</th>
<th>1st Meme: Conceptual-Symbolic Modeling = Homo habilis/rudolfensis</th>
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<tr>
<td>Oldowan</td>
<td></td>
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<tr>
<td>Early</td>
<td>~2.6 to 2.0 Ma</td>
</tr>
<tr>
<td>‘Classic’</td>
<td>~2.0 to 1.4 Ma</td>
</tr>
<tr>
<td>Developed</td>
<td>~1.7 to 1.2 Ma</td>
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</table>

#1A: First Metaphor: animate core-seed-sustenance-essence in interpersonal interaction; the animate spirit that inhabits the body; rhomboid of the mind (mind-space)

(Oldowan 1.9 Ma)  
Neural substrate: Medial Prefrontal (Harrod 2009 manuscript, reanalyzed neural substrates of Oldowan knapping in Stout, Toth et al 2008, to highlight overlooked activation of neural substrate for intuiting biomotion-in-social interaction including ‘perceive animacy in interaction of two moving objects’, ‘perceive social interaction of animated geometric shapes versus inanimate objects and tools’.)

#1B: First Joke (Carnival Game): ‘hit the baboon-head anvil’ – how to cope with ‘baboons’ (emotive-expressive, dramatic, art-object space)

(Olduvai Gorge, FLK North 1, ~1.8 Ma)  
Neural substrate: Anterior Insula

#1C: First Ethos: the carnivore-human-prey axis, hierarchical nodes of competition & beneficence, distributive justice/share (‘human niche’ space)

(Blumenschine 1987, 1995; Carvallo & Blumenschine 1989; Arribas 1999; Domingues-Rodrigo 2001; Boehm 1999)  
Neural substrate: Amygdala
cores, FxJj1, Koobi Fora, Kenya

Classic Oldowan, 1.88-1.95 Ma
Basalt cores, tools associated with porcupine, pig, gazelle, waterbuck, hippo bones
photo James Harrod; courtesy National Museums of Kenya
FxJj1 #302, cast, core with rhomboid
Koobi Fora, Kenya
Classic Oldowan, 1.88-1.95 Ma
photo James Harrod; courtesy National Museums of Kenya
FxJj1 #302, cast, core with rhomboid
Koobi Fora, Kenya
Classic Oldowan, 1.88-1.95 Ma
Basalt cores, tools; porcupine, pig, gazelle, waterbuck, hippo bones
photo James Harrod; courtesy National Museums of Kenya
Rhomboids, Ede II, Netherlands

Chopper Chopping-Tool Complex, 200-800,000 BP
Tabular quartzite and pegmatite crystal, 3 cm to 28 cm sizes
Collection - M. Franssen; photo Ad Wouters
Wouters, Franssen and Kessels (1981); Peeters, Musch and Wouters (1988)
FxJj1 #302, cast, core with rhomboid
Koobi Fora, Kenya
Classic Oldowan, 1.88-1.95 Ma
Basalt cores, tools; porcupine, pig, gazelle, waterbuck, hippo bones
photo James Harrod; courtesy National Museums of Kenya
Meme #1A Oldowan: The First Metaphor or Diaphor
from Australopithecine to Homo habilis

core-seed-essence-sustenance plus animacy in interpersonal interaction
the animate spirit that inhabits the body -- rhomboids of the mind
Decorated, Marked ‘Anvils’

&

First Joke
First Carnival Game Entertainment
‘Hit-the-Baboon-Head’
Pitted anvils with artificially pecked depression and/or ‘cupules’

(top) FLK North, Level 1-2, Upper Bed I, Olduvai Gorge, below Tuff 1F, Oldowan, 1.74±.007 Ma–Classic Oldowan;
Conical block, vesicular basalt, dia. 9-10cm, pit 29x17mm, depth 9mm [same site as pecked and grooved anvil ‘baboon head’]

(bottom) FLK North Sandy Conglomerate, Bed II, Olduvai Gorge, ~1.6 mya – Developed Oldowan A;
Subspherical cobblestone, 3 areas of circumference, pitted and battered, ave. dia. 9.4mm; one one face, pit 35x24mm, depth 5mm
Photo Mary Leakey (1971: pl. 17)
Oldowan, grooved and pecked cobble
‘perhaps anvil, vaguely like a baboon head’

Olduvai Gorge, FLK North, Upper Bed I, ~1.75 Ma,
Artificially grooved and pecked phonolite cobble, cortex fully removed, pecked with four pits in row, 3-4mm deep + 2 pits 0.5mm deep on lower side and linear groove encircling the cobble, possibly for suspending by thong; overall shape ‘vaguely resembles a baboon-head’ (LM1971; LM1976; ‘apparent cupules on either side’ (BR2003).
photo Mary Leakey (1971: pl. 18)
**Oldowan, grooved and pecked cobble**
Olduvai Gorge, FLK North, Upper Bed I, ~1.75 Ma,
Artificially grooved and pecked phonolite cobble, cortex fully removed, pecked with four pits in row, 3-4mm deep + 2 pits 0.5mm deep on lower side and linear groove encircling the cobble, possibly for suspending by thong; overall shape ‘vaguely resembles a baboon-head’ (LM1971; LM1976; ‘apparent cupules on either side’ (BR2003). photo Mary Leakey (1971: pl. 18); annotated Harrod J, 2012.
‘Baboon and Macaque Heads’ possibly used as anvils

Pampau, Germany, Mindle glacial moraine gravels, ≥ 400 kya
Collection - Ursel Benekendorff; photo Ursel Benekendorff
'Macaque and Baboon-Like Heads’, Pampau, Germany  ≥ 400,000 BP

Groß Pampau, Germany, Mindle glacial moraine gravels,  ≥ 400 kya
Collection - Ursel Benekendorff; photo Ursel Benekendorff
Meme #1B Oldowan: The First Joke
‘Hit the Baboon-Head Anvil’ or ‘How to Cope with Baboons’
Joke interpretation: Jan Evert Musch; Mythic interpretation J. Harrod; compare Khoisan baboon myths)

‘Flee into the Tree Top’
into head

‘Become Stone’ = ‘Hit the Baboon-Head Anvil’ = ‘Hit the Innocent’
‘contact reality, space co-poiesis, witness, compassion’

‘Hit the Baboon’

5 nodes:
• Passive / Flee into the tree tops; ‘into head’; ‘dissociate’; amygdala fear -- versus -- Grounding (Compare San baboon myth variant)
• Passive / Become like stone, dead, inert (inertia), not-feeling, cold, cold-hearted, cruel; even turn against self -- versus -- Compassion
• Active / Hit the baboon, provoke self/o ther to retaliatory revenge (acting out, acting in fantasy) -- versus -- Witness, neither retaliating nor provoking; gavel, validate, eye-witness, voice, testify to experience of suffering (predation, predatory victimization), for compensatory justice. Compare mass slaughter of 90 Theropithecus oswaldi baboons at Olorgesailie, ~800ka, killed by blow to skull, possibly prey specialization or ritualized killing (Shipman et al 1981).
• Active / Hit the vulnerable, retaliatory displacement (Freud, ego defense), hit the innocent other, scapegoat – versus -- Contact reality, opacity of stone, hardness of this suffering life
• ‘Hit be Baboon-Head Anvil’ = ‘the evolving Human & the human Pathos. First joke (Freud, sublimation of retaliation) + Listen to the ’command, which says: evolve beyond sting of command’, and the primal horde (Freud) and collective pack against the individual (Canetti) and slaughter of the evolving ‘daughter-species’ (Goodall 1986); toward rights and social justice (festal share, powder dust as ‘the salvific residue); toward creative response (hold, cradle, make) possibly by ritualized dance combining staccato beat and sway, percussive and lyric movement, perhaps as ‘spin, rotate, spiral’ (Gabriella Roth). Compare apparent mythic survival, Bushman baboon myths on consequences of provoking the baboons.
Evolution of the Oldowan Foraging Niche

Gathering (fruit, nuts, seeds, insects, marine, etc.)
Passive and Active Scavenging
Hunting
The Hunter-Scavenger-Prey Niche’

cheetah, vultures

Photo Y.A. Bertrand; @ Sapra, M.M
Hominin as the Prey of the Predator (Leopard Kill)

Oldowan Adaptive Innovations: The Forager Ethos

- Predator value ambiguity (gift of life / gift of death)
- Complex psychodynamic of identification and disidentification with predator and prey
  - Windfall surplus of meat from predators and especially top predators, *Homotherium* and *Megantereon* (gift of ‘higher’ niche predators, tree and bush caches; ‘gifts from above’)
  - Predator deterrence for active scavenging (implies flail sticks, bones; threaten, shout & whistle or simply vocal request to depart or stay away) (Louis and Richard Leakey using giraffe long bones for protection drive off hyenas and vultures from zebra kill for about 10 minutes, long enough to obtain some meat; Rensberger 1974)
  - Predator mimesis (monitor carnivore scavenger movements, act as if vulture, jackal, hyena; use flakes as if carnivore slicing teeth, stones as if hyena jaws)
- Social distribution of surplus of meat, tubers and fruits, sharing (Boehm 1999 *Hierarchy in the Forest*)
- Egalitarian solidarity to neutralize dominance hierarchies
  - ‘dominance hierarchy reversal’ (Boehm 1999 *Hierarchy in the Forest: The Evolution of Egalitarian Behavior*)
- Gender equity in foraging and tool-making (compare Goodall 1986; O’Connell et al 1988; Dahlberg 1981)
## Meme #1B Oldowan: The First Ethos—Value-Axis in Predator/Prey Niche

### Hypothetical

<table>
<thead>
<tr>
<th>Carnivore Pecking Order</th>
<th>Prey</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Homotherium</strong></td>
<td>Elephant, hippo, giraffe, buffalo, wild hogs, zebra, wildebeest, impala, other antelopes</td>
</tr>
<tr>
<td>Scimitar-tooth cat, long-legged pursuit predator, presumably left large amounts of carrion → lion</td>
<td></td>
</tr>
<tr>
<td><strong>Megantereon</strong></td>
<td>Small or medium-size ungulates, e.g., wildebeest, impala, gazelle, deer, wild goats, pigs; monkeys and baboons; hare, rodent, birds</td>
</tr>
<tr>
<td>Dirk-tooth cat, short powerful forelimbs; ambush, drag &amp; tree cache, left large amounts of carrion → leopard</td>
<td></td>
</tr>
<tr>
<td><strong>Vulture</strong></td>
<td>Carrion</td>
</tr>
<tr>
<td>Scavenging bird</td>
<td></td>
</tr>
<tr>
<td><strong>Canis etruscus</strong></td>
<td>Hare, rodents, reptiles, birds, insects; carrion; rare: gazelle</td>
</tr>
<tr>
<td>Small, hunter-scavenger → jackal, coyote, wolf</td>
<td></td>
</tr>
<tr>
<td><strong>Xenocyon falconeri</strong></td>
<td>(pack hunting) Duiker, impala, gazelle, zebra, wildebeest; (solitary) hare, rodents, etc.</td>
</tr>
<tr>
<td>Large hunter-scavenger, large packs → African wild dog</td>
<td></td>
</tr>
<tr>
<td><strong>Pachycrocuta</strong></td>
<td>Medium-size ungulates, excess killing, esp. wildebeest; rodents, eggs, fruit, insects; carrion, including dead crabs, fish, seal</td>
</tr>
<tr>
<td>Giant bone-crushing scavenger, leaves nothing (or excess killing) → hyena</td>
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</tr>
</tbody>
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Meme #1C Oldowan: The First Ethos—Value-Axis in Predator/Prey Niche

**Carnivore Pecking Order**

- **Homotherium**
  scimitar-tooth cat, long-legged pursuit predator, presumably left large amounts of carrion → lion

- **Megantereon**
  dirk-tooth cat, short powerful forelimbs; ambush, drag & tree cache, left large amounts of carrion → leopard

- **Vulture**
  scavenging bird

- **Canis etruscus**
  small, hunter-savenger → jackal, coyote, wolf

- **Xenocyon falconeri**
  large hunter-savenger, large packs → African wild dog

- **Pachycrocuta**
  giant bone-crushing scavenger, leaves nothing (or excess killing) → hyena

**The “Human” Between Predator/Prey:**

- **Ruler (Female or Male)**
  Providence and Justice
  Solar

- **Healer - Passage thru Night**
  Initiatory Healing, Lunar
  Bringer of Rain and Fertility

- **The Seer**
  Co-Poiesis, Trans-Species Symbiosis
  Self-Offering Sustenance

- **The Trickster**
  Lord of the Dance

- **Psychopomp**
  Hungry Ghost / War Realm

- **Devourer of Bones**
  Realm of Demons
  Androgyne (Gender Fluidity)

**Prey**

- Elephant, hippo, giraffe, buffalo, wild hogs, zebra, wildebeest, impala, other antelopes

- Small or medium-size ungulates, e.g., wildebeest, impala, gazelle, deer, wild goats, pigs; monkeys and baboons; hare, rodent, birds

- Carrion

- Hare, rodents, reptiles, birds, insects; carrion; rare: gazelle

- (pack hunting) Duiker, impala, gazelle, zebra, wildebeest; (solitary) hare, rodents, etc.

- Medium-size ungulates, excess killing, esp. wildebeest; rodents, eggs, fruit, insects; carrion, including dead crabs, fish, seal

<table>
<thead>
<tr>
<th>Developed (‘Late’) Oldowan Symbolic Behaviors</th>
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<tbody>
<tr>
<td>Collection/manuporting of exotic objects</td>
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<tr>
<td>BK North, Upper Bed II, ~1.48 Ma, Olduvai Gorge curated, 2 lumps of non-local manuported red volcanic tuff, could have been used for pigment but no evidence of use (HR1976; LL1958; not red ochre, but welded tuff, OK1981; BR2003);</td>
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<tr>
<td>Pecked, abraded, incised, serrated or notched objects + Marking traditions (cupules, stroke marks, etc.)</td>
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<tr>
<td>Kozarnika Cave, Oreshetz, Bulgaria, Layer 12, ~1.4-1.6 Ma Mode 1 ‘core and flake’, not pebble tools; bovid tibia, 4 sets of regular parallel stroke marks, 4th set incomplete; [? JBH 3 sets of 2, 4, and 3 marks]; cervid bone with 27 marks along its edge; not cutmarks, no meat on this bone; ‘symbolism’ (GA2004; SN2010)</td>
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<td>FLK North Sandy Conglomerate, Middle Bed II, ~1.5-1.66 Ma, Olduvai Gorge ‘pitted anvil’; sub-spherical cobblestone, 3 areas of circumference, pitted and battered, ave. dia. 9.4mm; one one face, pit 35x24mm, depth 5mm (LM1971; LM1976), could be cupule or nutcracker?</td>
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<tr>
<td>Image and representation</td>
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<tr>
<td>Wilson Site A1, Colne Valley, UK, ~OIS22-23 ~860-900 ka, min. Cromerian ~450 ka worked flints, choppers, pecked ‘figure stones’, interpreted as ‘mammoth, elephant, bison, horse, goat, seal, ?walrus, stickleback fish, bird, goose, Homotherium, lion, Macaca, homo portrait face, masks, polymorphs’ (WR2010)</td>
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<td>Mortuary practice</td>
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<td>Gran Dolina, Atapuerca, Spain, ~780-858 ka Homo antecessor remains butchered similar to animals, ‘suggesting cannibalism for consumption, not ritual purposes’ (FY1999)</td>
</tr>
</tbody>
</table>
Oldowan out-of-Africa, ~1.8-2.0 Ma, and routes into Western Eurasia

(SN2010)
Incised bone, ‘4 sets of parallel stroke marks’ (Kozarnika, Bulgaria ~1.4-1.6 Ma)

Kozarnika Cave, Oreshetz, Bulgaria, Layer 12, ~1.4-1.6 Ma; ‘Core-and-Flake Industry’ ['Late Oldowan' – JBH] bovid tibia, 4 sets of regular parallel stroke marks, 4th set incomplete; [? JBH 3 sets of 2, 4, and 3 marks]; cervid bone with 27 marks along its edge; not cutmarks, no meat on this bone; ‘symbolism’ (GA2004; SN2010)
Sculpture 1. What is this? Check your Pareidolia

Wilson site A1, Colne Valley, Hertfordshire, UK
Mode I Developed Oldowan

Highest Bytham River terrace; profile similar to neighboring Gerrards Cross gravels, OIS22-23 ~860-900 ka (Bridgland 1994; Catt 2010, 2009), min. pre-Anglian ~450 ka
(Richard Wilson 2010; Photo: Richard Wilson; collage James Harrod)
Homotherium / Mammoth polymorphic sculpture 1
Wilson site A1, Colne Valley, Hertfordshire, UK
Mode I Developed Oldowan

Highest Bytham River terrace; profile similar to neighboring Gerrards Cross gravels, OIS22-23 ~860-900 ka (Bridgland 1994; Catt 2010, 2009), min. pre-Anglian ~450 ka
(Richard Wilson 2010; Photo: Richard Wilson; collage James Harrod)
Homotherium / Mammoth polymorphic sculpture 2  
Wilson site A1, Colne Valley, Hertfordshire, UK
Mode I Developed Oldowan

Highest Bytham River terrace; profile similar to neighboring Gerrards Cross gravels, OIS22-23 ~860-900 ka (Bridgland 1994; Catt 2010, 2009), min. pre-Anglian ~450 ka
(Richard Wilson 2010; Photo: Richard Wilson)
Analytical Comparison: Design in Colne Valley polymorphic sculptures #1 and #2

Colne Valley, Hertfordshire, UK, Wilson site A1, Mode I Oldowan, probably OIS22-23 ~860-900 ka, min. pre-Anglian ~450 ka (Wilson R 2010)

Top L: Photo: Richard Wilson; annotated J. Harrod, collage James Harrod. Bottom: Sculpture #2, Richard Wilson

‘Figuration on stone #1 consists of 3 areas – it has a middle area between the animal figurations – white, with blackish crisscrossing lines that suggest tusk but are clearly part of the overall design (Jerrica Demers, personal communication, 2012); thus both designs are triptych-like; black lines are frost cracks; the white patina appears due to hard hammer percussion ‘between’ ‘predator and prey’ and thus is central in more ways than one to the design of the figure stone and to interpreting its multiple significations (J. Harrod)
Oldowan