[Supplementary material]

The first technical sequences in human evolution from East Gona, Afar region, Ethiopia

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	Raw	Category	Measurements		
Refit type	material	number	(mm)	Refitting components	Description
Broken flake	Basalt	75	$34\times 30\times 13$	Flake fragment	Five fragments of a trapezoidal flake with a
(taphonomic?)		730	$34\times 30\times 14$	Flake fragment	cortical platform and an invasive transversal
5 items		731	$33 \times 20 \times 7$	Flake fragment	removal. One lateral edge displays localized
		732	$44\times22\times18$	Flake fragment	irregular retouch.
		738	$46\times35\times17$	Flake fragment	
Broken flake	Trachyte	45	45 imes 32 imes 7	Distal flake proximal	Fragmented cortical flake with multiple
2 items		50	$48\times 34\times 11$	flake	breakage planes.
Broken flake	Trachyte	1200	$70\times40\times26$	Proximal flake fragment	Two fragments of a large-sized oval flake
2 items		1113	$43 \times 44 \times 17$	Distal flake fragment	with proximal and lateral cortex and two
					converging removals. The platform is thick,
					partially cortical and has one removal. A
					portion of the distal edge presents restricted
					areas of flat, irregular retouch.
Knapping	Trachyte	81	$43\times 34\times 8$	Siret flake	Two fragments of a large-sized trapezoidal
accident		512	$64\times37\times18$	Siret flake	flake with proximal and lateral cortex and two
2 items					longitudinal removals.

 Table S1. Refitted lithic artefacts from East Gona EG 10: broken flakes, knapping accidents and knapping sets.

Knapping	Basalt	1513	$30\times22\times7$	Siret flake	Split, short, trapezoidal Siret flake with a
accident		1518	$38\times35\times7$	Siret flake	cortical platform and lateral edge and four
2 items					unidirectional removals.
Knapping	Basalt	1187	$33 \times 22 \times 6$	Siret flake	Split flake with divergent triangular contour,
accident		1252	$32 \times 27 \times 7$	Siret flake	punctiform platform and latero-distal cortical
2 items					planes.
Knapping	Rhyolite	28	$34\times28\times14$	Broken flake	First flake: non-cortical dorsal surface with
set		1124	$30\times24\times13$	Broken flake	one removal and a cortical platform.
2 items					Second flake: non-cortical with three
					orthogonally oriented removals and cortical
					platform.
					Both flakes were sequentially knapped from
					the same cortical platform.
Knapping set	Trachyte	2061	$31\times 20\times 11$	Flake	First flake: non-cortical with five mainly
2 items		2119	$36\times 20\times 11$	Broken flake	unidirectional convergent removals.
					Second flake: non-cortical, struck from the
					same platform, two unidirectional removals.
Knapping set	Trachyte	194	$49 \times 46 \times 20$	Flake	First flake: with six centripetal removals, a
2 items		204	$40\times24\times7$	Broken flake	cortical platform and some distal cortical
					residue.

					surface cortex.
Knapping set	Trachyte	1126	$40\times31\times12$	Broken flake	The first flake is oriented transversally to the
2 items		1539	$38\times 34\times 13$	Flake	second; both were struck from the same
					cortical platform of a rounded cobble.
					First flake: four bidirectional removals, two of
					which correspond with the second flake.
					Second flake: four small removals from three
					directions and a larger, deeper negative
					corresponding to the distal part of the first
					flake's ventral surface.
Knapping set	Trachyte	888	$33 \times 28 \times 12$	Broken flake	The first flake is oriented transversally to the
2 items		113	$46\times 26\times 14$	Siret flake	second; both were struck from the same
					cortical platform of a rounded cobble.
					First flake: four bidirectional removals,
					proximal and lateral cortex.
					Second flake: fragment of a Siret flake with
					proximal and lateral cortex and three

Second flake: knapped from distal extremity

of the latter, four removal negatives and

					first refitted flake.
Knapping set	Rhyolite	188	54 imes 37 imes 15	Flake	Both flakes follow the same knapping axis
2 items		733	$30\times28\times14$	Flake	and were struck from a cortical platform.
					First flake: two longitudinal convergent
					removals and partially cortical platform.
					Second flake: two longitudinal removals.
Knapping set	Trachyte	212	66 imes 43 imes 18	Broken flake	Flakes and broken flakes successively
14 items		2177+721	35 imes 25 imes 7	Broken flake	removed from a preferential cortical platform
composing 11		714+2229	$45\times23\times5$	Broken flake	with a recurrent gesture. While the core is
refitting flakes		216	$34\times28\times10$	Flake	lacking, flake orientations indicate a small-
		190	$43\times 36\times 11$	Broken flake	sized, rounded cobble. Flake breakage,
		2568	$15\times15\times5$	Flake	including Siret accidents and platform
		2603	$20\times 10\times 5$	Flake	fractures are present (Figure 2).
		569+191	58 imes 38 imes 14	Broken flake	
		631	$38 \times 16 \times 10$	Siret flake	
		2056	$39 \times 33 \times 12$	Broken flake	
		3011	$46 \times 40 \times 13$	Flake	

removals, one of which corresponds to the