

EARLY MOVEMENT OF SHEEP ACROSS SOUTHERN AFRICA



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Several Basic Principles

1. Domestic sheep cannot travel by themselves – need protection or strategies to deal with predation (both animal and human)
2. There is a minimal herd size required for successful herd maintenance (off-take and breeding)(at least 60 animals among recorded nomadic herders)
3. Animals (and people) entering new environments will have to learn to deal with local conditions (e.g. poisonous plants, epizootic diseases). Therefore husbandry skills crucial

In addition we must also consider:

4. The source of the domestic stock

5. Skill acquisition of animal husbandry
(and from whom)

And: If hunters were so keen to take on the responsibility for looking after domesticates, why did they not domesticate the wild animals of Africa (e.g. eland or buffalo)?

Also: Why bother with domesticates when they had plenty of wild game at hand? Why want the responsibility?

Historic attempts in the 18th century to make herders of hunters failed

Nyae Nyae Cooperative 1986, with outside help from John Marshall to acquire stock and build lion-proof bomas. Where are they today?



Zeder (2015) says: that domestication existed “...in order to secure a more predictable supply of a resource of interest...”

Therefore responsibility has to be balanced against easy access to other resources (in this case wild game). Is it worth it?

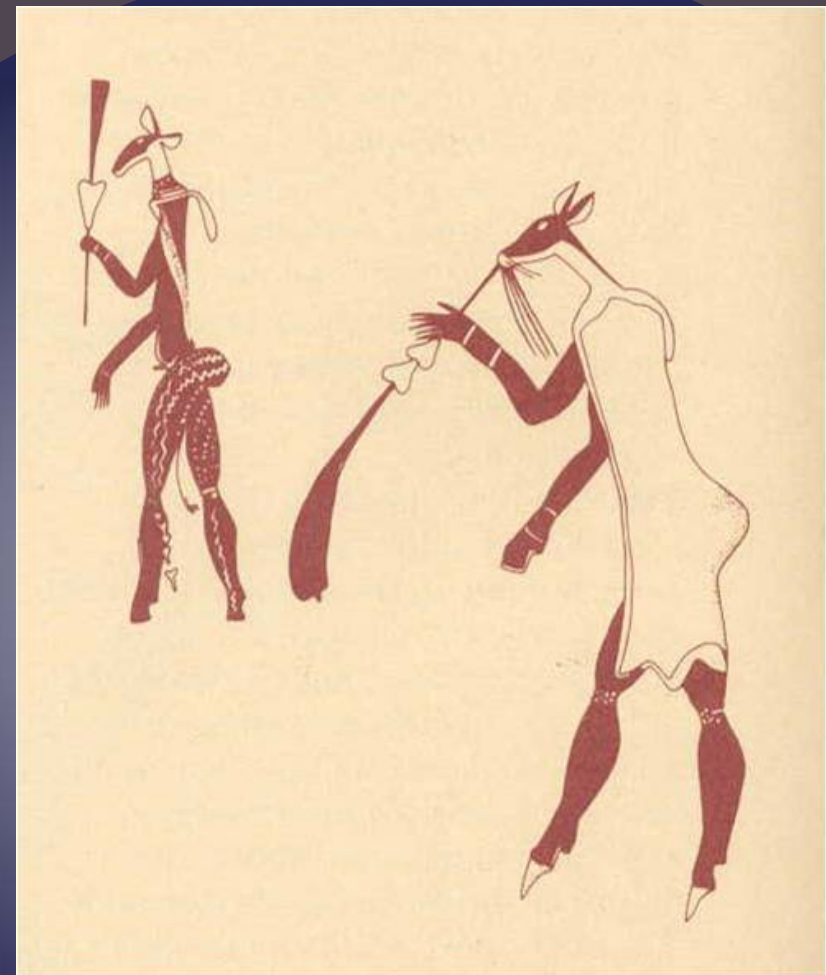
Hunting is a culturally enhancing way of living. Hunters just don't hunt, they live the animals, and tell stories which enhance their status and well-being.

Thus the domesticates taken on by hunters would have to provide far greater social and economic returns than prey animals (and be less work over the long period)

The problem of re-stocking, if the resource declined, would be a significant factor in herd maintenance



These were hunters



No evidence that Khoekhoen were ever involved in this kind of spiritual dimension with their animals

Logistics of movement of Sheep across Southern Africa

Using Sampson's (1988) estimates of Kalahari Bushmen territories:

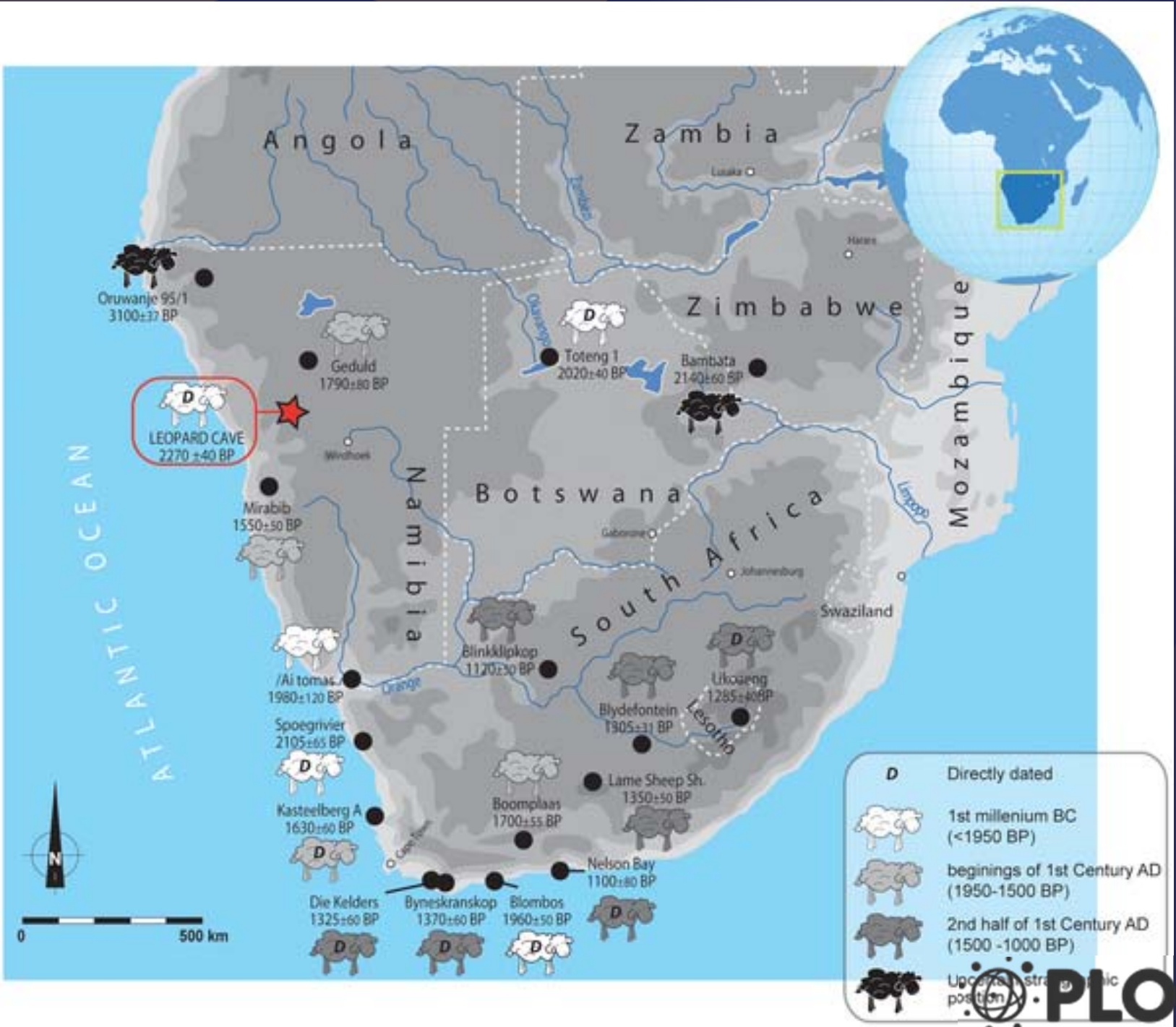
---The range across varied between 20 to 35 km.

---distances traversed: N. Kalahari 1200 km, West Coast 1720 km (Total 1920 km)

Number of territories crossed @ 35 km = 34.3 (N. Kalahari); 49.1 (West Coast): Total 83.4

Number of territories crossed @ 20 km = 60 (N. Kalahari); 86 (West Coast): Total 146

My guess would be the latter (good water along N. Kalahari river systems; abundant coastal resources on West Coast Benguela up-welling)



PLOS ONE

Chronology of Movement

Estimated arrival of Sheep N. Botswana after 2500 BP

In N. Namibia (Leopard's Cave) 2270 BP*

Namaqualand (Spoegriviermond) 2105 BP*

South Coast (Blombos) 1960 BP*

---sustainable herds of sheep moving through new lands, crossing ± 140 independent hunter territories within 500 years to get to the Cape (200 years down West Coast across 86 territories = 1 territory every 2.3 years), but movement could not be continuous, as time needed for breeding.

WHAT IS THE ARCHAEOLOGICAL DIFFERENCE BETWEEN HUNTER AND HERDER SITES?

USING TWO PARAMETERS TO SEE THE
VARIATION:

- 1) Use of fine-grained stone (mostly silcrete);
- 2) Percentage of formal tools in the stone assemblages



WITKLIP: hunter site

Witklip Stone	Unit 1: 500-300 BP	Unit 2: BSWFS	Unit 3: 800-1400 BP	Unit 4: 3000 BP
Debitage	511	285	1448	658
Ochre	55	21	165	48
Cores	12	7	34	15
p. esquillé es	7	5	15	13
Total	19	12	49	28
Utilised	19	13	19	11
G'stone (upper)			1	
G'stone (lower)				
G'stone (fragment)		1	1	
Notched			1	1
Total	19	14	22	12
Convex scr	5	7	12	13
Backed scr	5	2	5	4
End scr			2	1
Bk'd blade		1	3	2
Bk'd point		2		
Segment	1	1	2	
Bk'd misc	2	1	7	5
Drill			1	
Adze	12	4	43	12
MRP	7	3	9	
Truncated flake	1		1	
Total	33	21	85	37
Grand Total	637	353	1769	783
% Formal	5.1%	5.9%	4.8%	4.7%
% Silcrete	28.9%	27.8%	25.6%	28.2%

Witklip Stone: Silcrete 30%, Formal 5.0%



KASTEELBERG: herder sites

KBB:stone raw material																
unit	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Quartz	4035	5566	1419	1120	387	61	23	70	101	67	67	26	51	25	122	188
Silcrete	26	40	13	32	13	8	1	13	12	12	29	11	25	9	67	81
CCS		3													1	
Granite	60	106	32	52	68	19	7	41	21	26	17	9	23	16	73	27
Quartzite	520	621	547	2101	1588	310	218	624	430	259	359	70	31	6	20	20
Other	190	414	192	345	188	80	52	353	269	261	432	110	267	125	200	121
Total	4831	6750	2203	3650	2244	478	301	1101	833	625	904	282	397	181	447	437

Total no. pieces = 25,664

Silcrete = 392 (1.5%)

Table 4.9: KBB: stone artefacts.

KBB: stone																
Unit	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Chips	2204	2832	1044	1519	885	109	51	243	168	96	181	64	29	16	53	86
Chunks	727	2280	529	1113	602	185	100	235	192	104	130	55	61	26	87	105
Flakes	1593	1139	359	591	560	112	91	155	141	107	152	19	43	19	92	123
Blades	1	40						2		3				2	1	2
Fl. cobble	26	34	49	95	20	4	6	86	60	51	45	1	10			
Manuports	7		3		2				1			1	3		4	1
Total	4558	6325	1984	3318	2069	410	240	721	562	361	508	140	146	63	237	317
Ochre	87	205	176	272	127	44	41	317	234	243	374	132	228	111	181	91
Cores	85	113	23	20	15	8	3	4	3		1	1	1	1	2	2
P. esquillee	48	26	1	1												2
Core rej. flk	37															
Total	170	139	24	21	15	8	3	4	3	0	1	1	1	1	2	4
Utilised	4	23	1	1			2	25	14	3			2	1	10	4
Gr/st upper	1	6	4	1	8	7	3	6	4		2	1	3		4	5
Gr/st lower		5	8	6	2	2	1	8	5	3	3		1		4	
Gr/st frags	4	19	2	6	4		1	1		6	11	2	4	3	5	3
H/stone	1	4	1	2	1	1	1	3	1		1	1	1			
Grooved st		3														1
Bored stone	3			2	2				1	1						
Total	13	60	16	18	17	10	8	43	25	13	17	4	11	4	23	13
Scr. Convex		2											1			2
Scr. Backed								1								
Scr. Side	1										1				1	
Backed bld.													1			
Backed pt.																
Segments		1														
Bkd Misc.	1															
Drills					1											
Adzes		1										1			1	1
M.R.P.	1	10			3	1	1	1	2	3	2	1	3	1	2	7
Total	3	14	0	0	4	1	1	2	2	3	3	2	5	1	4	10
Abrasive		6	3	21	11	5		14	7	2	1	2	6	1	2	1
Notched		1			1							1				1
Grand Total	4831	6750	2203	3650	2244	478	301	1101	833	625	904	282	397	181	447	437

Table 4.4: KBA: stone artefacts.

KBA Stone										
Number of Squares Analysed	46	43	41	40	31	12	2	1		
	0-10	10-20	20-30	30-40	40-50	50-60	60-70	90-100	Total	%
Chips	64	49	30	13	43	41	6		246	5.9
Chunks	360	252	216	263	344	245	35		1715	41.0
Flakes	385	245	216	251	389	307	45	7	1845	44.1
Blades			2	3	2	1			8	
Flaked cobble	10	13	9	8		7			47	
Manuport	4	3	10	3		6	1		27	
Core	24	21	23	35	43	27	2		175	4.1
P. esquillee	7	1	5	2					15	
Core rejuv. flake.	1	1		2		2			6	
Ochre	13	10	2						25	
Total Waste	868	595	513	580	821	636	89	7	4109	98.1
Utilised	4	5	5	6	7	2			29	
Upper G/stone			3		1				4	
Lower G/stone			2						2	
G/stone. frag.	1	2	5	2		1			11	
Grooved frag.	2		1		1				4	
Hammerstone		1	2	1					4	
Bored stone. frag.		2							2	
Total utilised	7	10	18	9	9	3			56	1.3
MRP	2	2	2	3	5	1			15	
Adze			1	1	1				3	
Scraper				1		1			2	
Total formal	2	2	3	5	6	2			20	0.5
Grand Total	877	607	534	594	836	641	89	7	4185	

KBC: transitional
 hunter to herder site:
 lower
 c. 2100 BP, upper c.
 1200 BP

Table 4.15: KBC: stone artefacts.

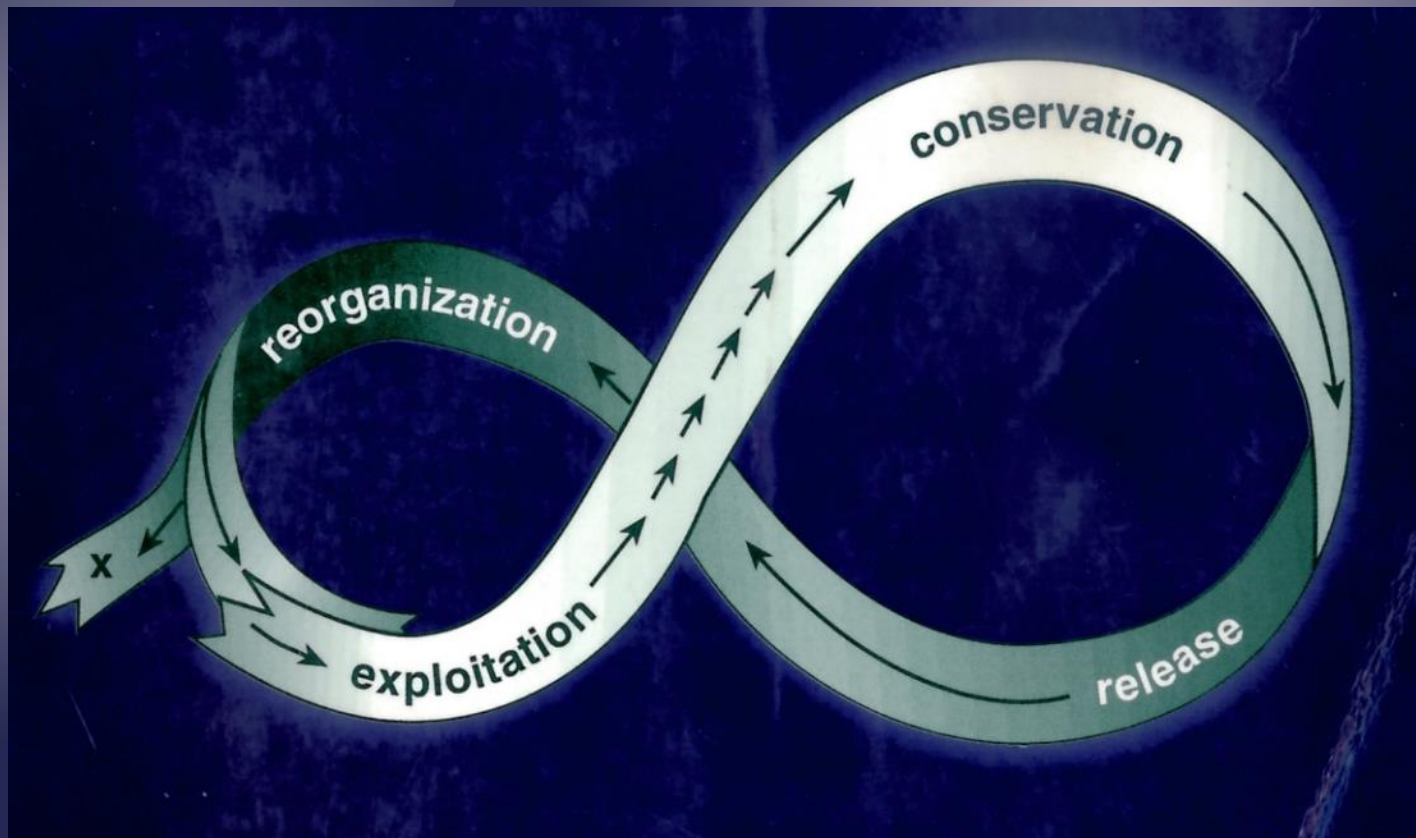
KBC:stone			
Level	Top	Middle	Bottom
Chips	49	65	1890
Chunks	88	96	1222
Flakes	103	154	1479
Blades		1	11
Bladelets	5	19	322
Flaked cobble			4
Lithic manuports			2
Total	245	335	4930
Cores	15	7	106
Bi-polar cores	4	5	80
Total	19	12	186
Utilised	19	18	186
G/stone frags			6
Total	19	18	192
Scrapers:convex	2	6	30
Scrapers: backed			1
Obliquely truncated bladelet			1
Backed blades	1	5	18
Backed points	1	1	5
Segments		1	6
Misc. backed		2	19
Adzes			7
MRP	1	2	16
Ground & utilized			1
Total	6	17	104
Grand Total	289	382	5412

Table 4.16: KBC: fauna.

KBC fauna	<30 cm	>30 cm
Lepus sp(p).	1/1	
Bathyargus suillus	1/1	
Hystrix africaeaustralis	1/1	1/1
Canis sp(p).	5/1	2/1
Mellivora capensis	1/1	1/1
Herpestes pulverulentus	2/1	
Arctocephalus pusillus	17/1	8/1
Orycteropus afer	1/1	1/1
Sylvicapra grimmia	2/1	
Raphicerus sp(p).	6/2	8/2
Ovis aries	38/4	
Bovidae:		
small	26/2	105/3
small medium	269/7	12/2
large medium	3/1	3/1

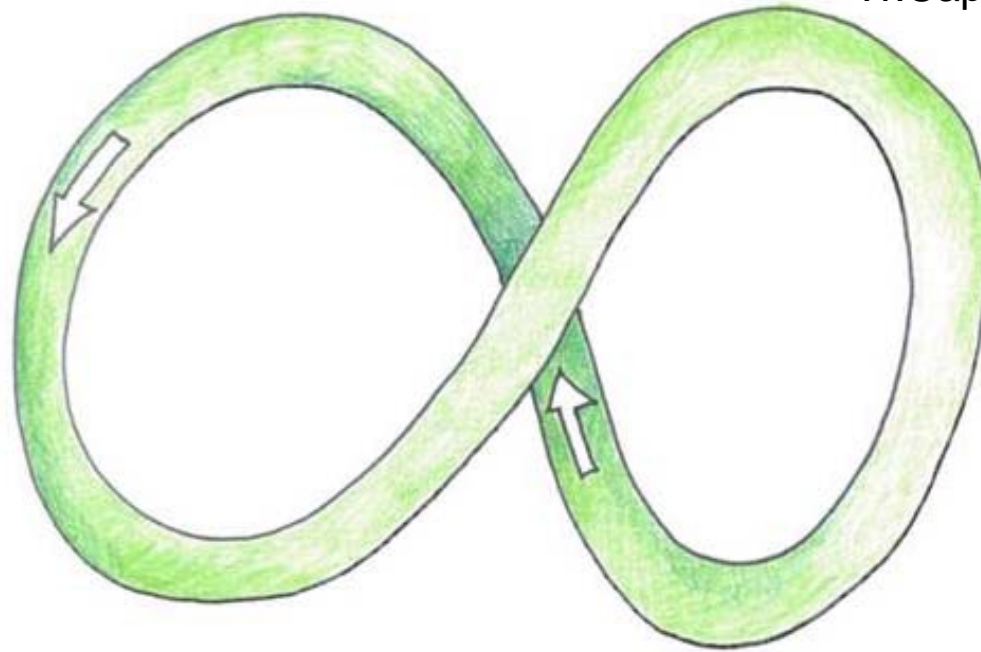
KASTEELBERG	WITKLIP
Open air site	Small rock shelter
c. 1800 – 800 B.P.	c. 3000 – 350 B.P.
Cultural Material	Cultural Material
<ul style="list-style-type: none"> ▪ Very few microlithic tools – 0.2% formal ▪ Coarse grained rocks ▪ Potsherds: 750/m³ ▪ Grindstones ▪ Ostrich eggshell beads – large > 5mm 	<ul style="list-style-type: none"> ▪ Microlithic tools ▪ Fine-grained rocks ▪ 4 % retouched ▪ Potsherds: 10/m³ ▪ Ostrich eggshell beads: small <5mm – increase in size after 500 B.P.
Economic Material	Economic Material
<ul style="list-style-type: none"> ▪ Low % small bovids ▪ High % seals ▪ High % sheep 	<ul style="list-style-type: none"> ▪ High % small bovids ▪ Low % sheep ▪ No seals

release by external agents
reorganization of resources
exploitation (growth or colonisation)
conservation (stability or consolidation)



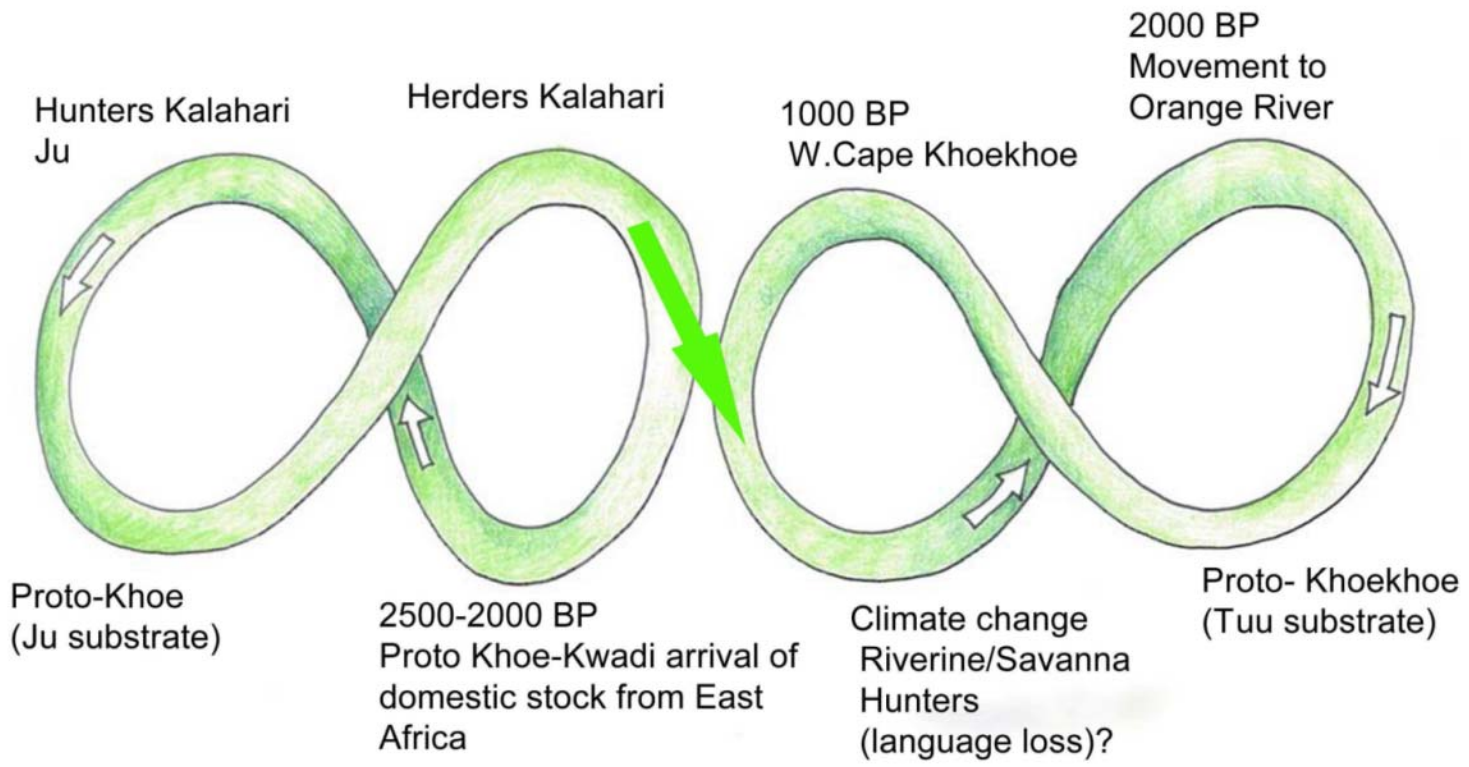
2500 – 2100 BP
Proto-Khoe
Colonisation N. Kalahari & W.
Cape

1000 BP
Khoe Khoe
Consolidation on
Orange River &
W.Cape



Proto-Khoe Khoe
Adaptation to N.
Kalahari riverine
areas (exclusive of
savanna hunters)
2100 – 1000 BP

East Africa
Proto-Khoe-
Kwadi
3000-2500
BP



Herders (PN)
Farmers (Urewe)

