Re-Excavation of Kansyore Island

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Abstract

This paper contributes to a better understanding of the archaeology of Kansyore Island and the Kansyore phenomenon at the type site. The Kansyore site has abundant and highly decorated ceramics of Neolithic and Early Iron Age traditions. The Neolithic pottery are similar to those which have been identified in several other places, such as southern Sudan. Theories such as migration, and diffusion have been used to explain this cultural similarity or affinity, basing on pottery decorations. This paper goes beyond pottery decoration to show that cultural affinity existed at Kansyore during the Neolithic period. Accumulated data from field survey and excavation suggest for the existence of roulette in the Neolithic context, which implies that pottery traditions cannot be associated with ethnicities. The association of pottery traditions of different cultural periods like Urewe and Kansyore need parsimonious explanation than just being associated with post deposition disturbance.

Key words: Kansyore, cultural interactions, cultural affinity

Introduction and background of the study

The review of Kansyore Island is a result of fieldwork done between October 2010 and May 2011. Prior to this review, excavation at Kansyore Island had been done in 1961, by Chapman (1967). Chapman (1967) like Sutton (1974, 1977), Robertshaw (1982), and Ambrose (1990) identified similarity between Kansyore ware and the Early Sudan pottery, especially the internal decoration on the rim (Chapman 1967). Though the comparisons were quite precise, Chapman (1967) thought that it would be extremely unwise to make any conclusions because of the distance involved and the differences in the estimated dates between Kansyore ware (1000A.D) and Sudan ware (3300B.C). Basing on this, I (Kyazike 2013) made an archaeological examination of cultural interactions in the Upper Nile

Catchment areas to examine the nature and cause of such cultural affinity. In so doing, there was a need to re-examine the previous theories used, such as migration and diffusion to posit cultural links. The results from the re-excavation of Kansyore Island revealed that cultural affinity can be traced, not only in terms of pottery decoration, but also through considering other aspects of material culture, such as the lithics and faunal remains. Thus, this article intends to show new findings and interpretations of the archaeology of Kansyore Island.

The main objective of re-excavation of Kansyore Island was to establish evidence for cultural connections and affinity between Kansyore Island and Sudan. Specifically, this meant examining the forms of cultural and economic interactions that have existed using lithics, ceramics and faunal remains, and attributes that portray affinity. Another objective was to assess whether the Nile River facilitated cultural interactions. We do so by examining the theories that account for cultural similarities and interactions. This paper therefore, highlights the discoveries and new forms of interpretation that arose from the re-excavation of Kansyore Island.

Geographical Setting and Location of Kansyore

Kansyore Island (Figure 1), also known as Nsongezi Island, is situated on the Kagera River, the type site of Kansyore culture. Kansyore Island lies in South-western Uganda, 16 km east of Kikagati, on the border of Uganda and Tanzania. It is also located 1.6 km West of the Nsongezi Mobile Patrol Police Unit camp. Kansyore Island is composed of phyllite ridge covered, in some places, by indurated gravel composed chiefly of pebbles and small cobles (Nelson 1973) with the soils from 30-75 cm being gravel. The vegetation is highly influenced by natural factors and anthropogenic activities, especially farming. The vegetation is characterized by grassland, dotted by few trees, especially *acacia erthrina*, scatters of wild palm (*borassas* palm) and a few occurrences of artificially planted eucalyptus, especially on the upper terrace. The palms are interspersed with aquatic grasslands and herb swamps (Nelson 1973). The biggest portion of the island, at the time of fieldwork was subjected to cultivation of mainly food crops and cereals like sorghum, millet, maize, cassava, sweet potatoes, yams and sugar cane. The latter were found mainly along the banks in the swampy marshy part, close to the papyrus. The banks of the Island being marshy were dominated by

papyrus and occasional trees like *palmae*. The vegetation was generally poor, due to the thin, dark loam soil layers caused by the underground basement rock that also explains the growth of drought resistant species on the Island.

The diurnal range of temperature is -7°C to -4°C, while maximum day temperature is 24°C, increasing at times to 35° C (Colonial report 1949), but the mean annual temperature is 21° C (Baker 1958). This area lies within the Inter Tropical Convergence Zone (ITCZ) and therefore, rainfall depends on the movement of the sun that creates distinct rainfall seasons (Ojany 1968). The rainfall is marked by a double peak, with April and October as the wettest months, with an average rainfall in these months between 1016-1524 mm.

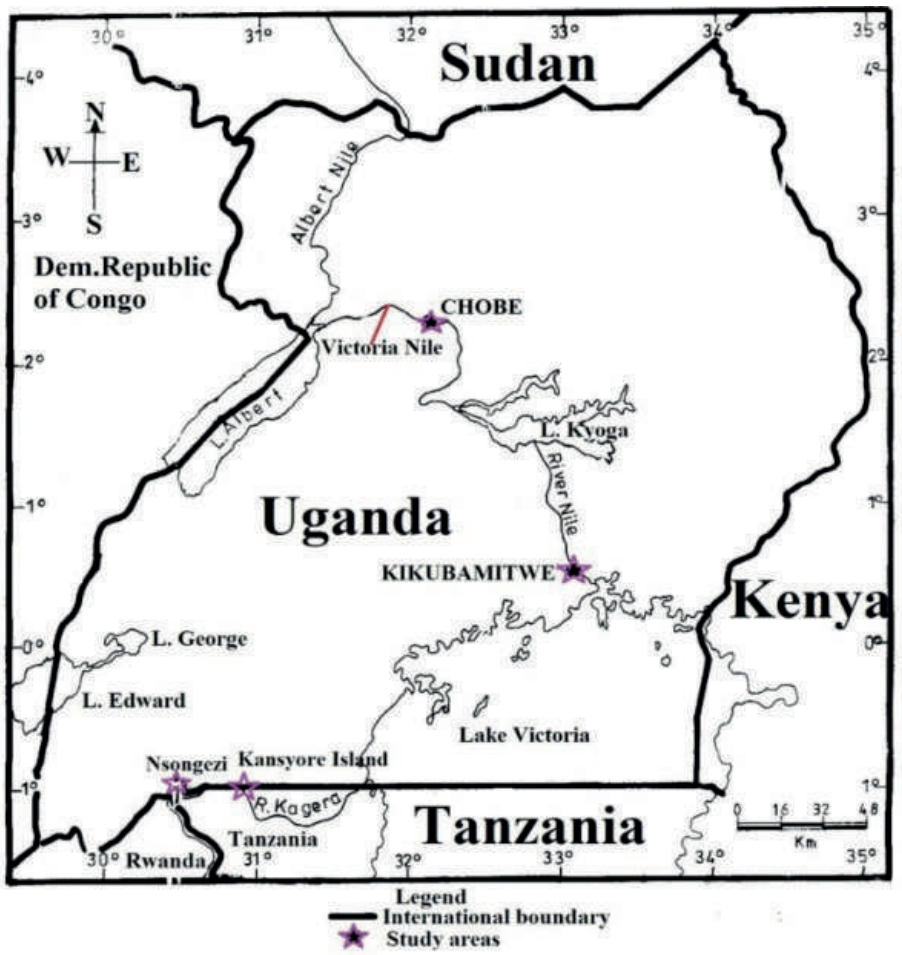

Figure 1: A map of Uganda showing archaeological sites in the Upper Nile catchment areas including Kansyore Island

Survey and mapping of the site

The surveyors walked around the Island in the areas outside the former hotel foundation. The reason for circling the house foundations was the desire to avoid areas where Chapman worked in 1961, and the likely cultural material disturbances that could have been caused by the hotel construction. Survey therefore entailed systematic pedestrian walks (Plate 1) carrying out surface collections, recording densities of artifacts, and detailed physiographic and environmental data on standardized survey forms. It also involved setting up one test pit. Topographic mapping of Kansyore Island map was done, and the area surveyed was mapped using a Geographic Position System (GPS) instrument (Figure 2).

Plate 1: Survey at Kansyore Island

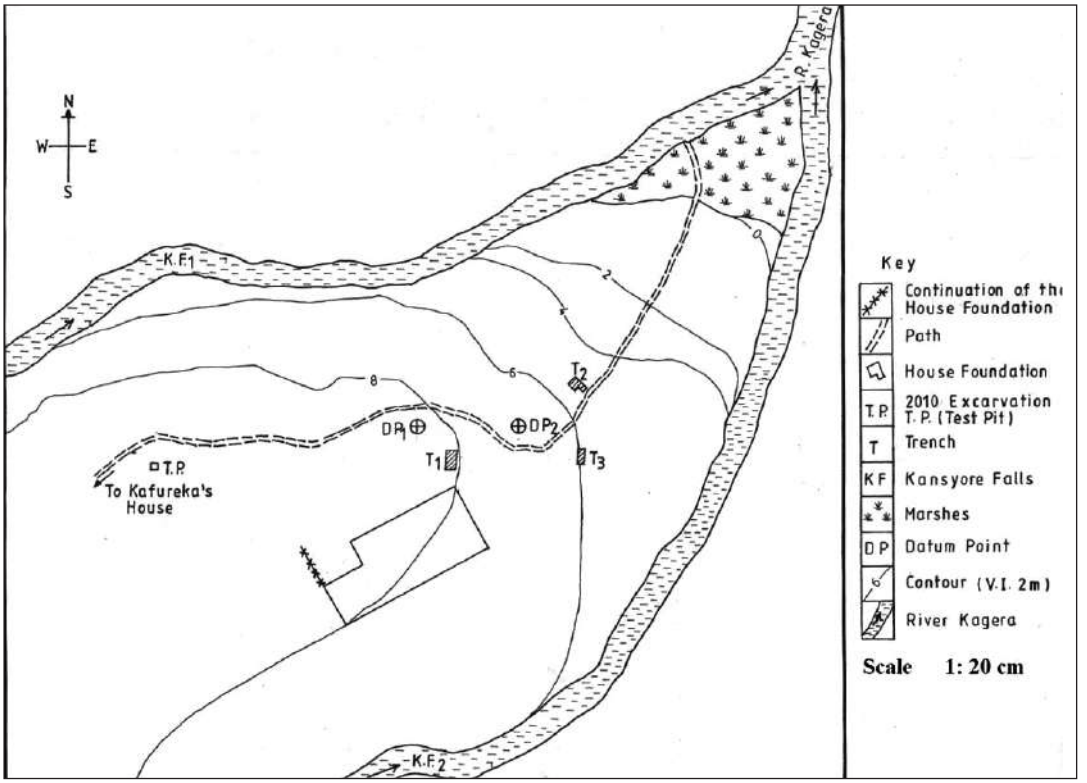

Figure 2: Map of Kansyore Island indicating the distribution of excavation units

Test excavations

Three trenches were set up. Excavation was done using 10 cm arbitrary spits. The secretariat were employed due to the need to have a better control of material recovery, monitor the sequence, and map out in-situ artifacts, and to examine the trend for cultural and economic change and/or interactions over time and space.

The first trench was established at 01^0 00' 05.2" S and 030^0 44' 32.1" E South of the datum point (Figure 2). It was sub divided into two units alongside the East and West and each measured $1\times4m^2$. Thereafter, excavation continued on the eastern part in order to have adequate control of material recovery. The eastern sub-unit was also later divided into 2 equal portions, because the southern part of the eastern sub-unit was suspected to have been disturbed. The eastern sub unit of Trench I yielded dense archaeological remains, including pottery, lithic, faunal remains, metal objects and red ochre (Table 1). At a depth of 30-45 cm

was a concentration of fish bones. This layer was referred to as the aqualithic horizon (Figure 3). Excavation was done up to 80 cm below surface, at a point when the trench became sterile. It yielded 1481 artefacts that included: lithics 1207 (81.5%), pottery 26 (1.8 %), faunal remains 246 (16.6%) and metal objects 2 (0.1%) (Table 1).

Stratigraphically, Trench I had four layers along the western wall (Figure 3). Layer 1 had very dark loose grey (HUE 7.5YR) soils, the second layer was of loose gravel black (2.5/ HUE 5Y) soils, the third was the aqualithic layer, while the fourth layer had reddish brown soils (5/3 HUE 2.5YR) that were loose sandy, mixed with pebbles.

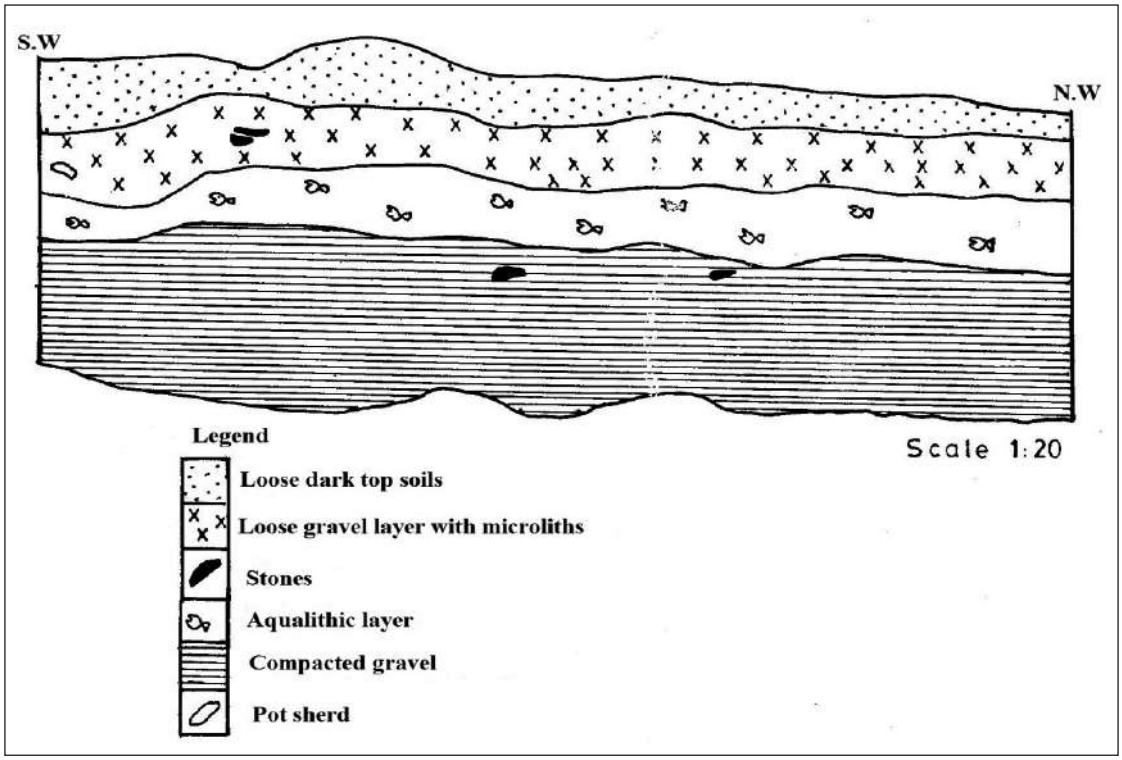

Figure 3: Western Wall profile of Trench 1

Level/Depth (cm)	Pottery				Lithics	Faunal Remains	Metal Objects	Total
	Kansyore	Channel	Urewe	Un-diagnostic				
Surface					13	1		14
1(0-10)					219	20		239
2(10-20)	4	1	14		323	48	2	392
3(20-30)	1			2	317	90		410
4(30-40)			2		86	61		149
5(40-50)			2		56	20		78
6(50-60)					193	6		199
Total	**5**	**1**	**18**	**2**	**1207**	**246**	**2**	**1481**
Percentage (%)	0.3	0.1	1.2	0.1	81.5	16.6	0.1	100

Table 1: The distribution of archaeological materials in Trench 1

The second trench was located at 01^0 00' 05.0" S and 030^0 44' 32.7" E, North-East of the first trench. The trench was established here due to the areas' deeper stratigraphy, identified during survey and owing to the surface scatters. Since the second trench had a clear stratigraphic sequence, it was extended and subdivided into two units, namely; Trench IIA and IIB. Trench IIA was located on the eastern side of the initial trench (Trench II) and covered about 3m^2, while Trench IIB was extended towards the North-East and northern corner, covering about 2.5m^2 (Figure 4). Excavation proceeded to about 70cm in the western corner and about 85 cm in the eastern corner, at a point when the entire trench was covered with bed rock. Trench II was extended several times due to the need to find out whether the stratigraphy and the findings obtained could be replicated in Units IIA and IIB, and the desire to expand the sample size.

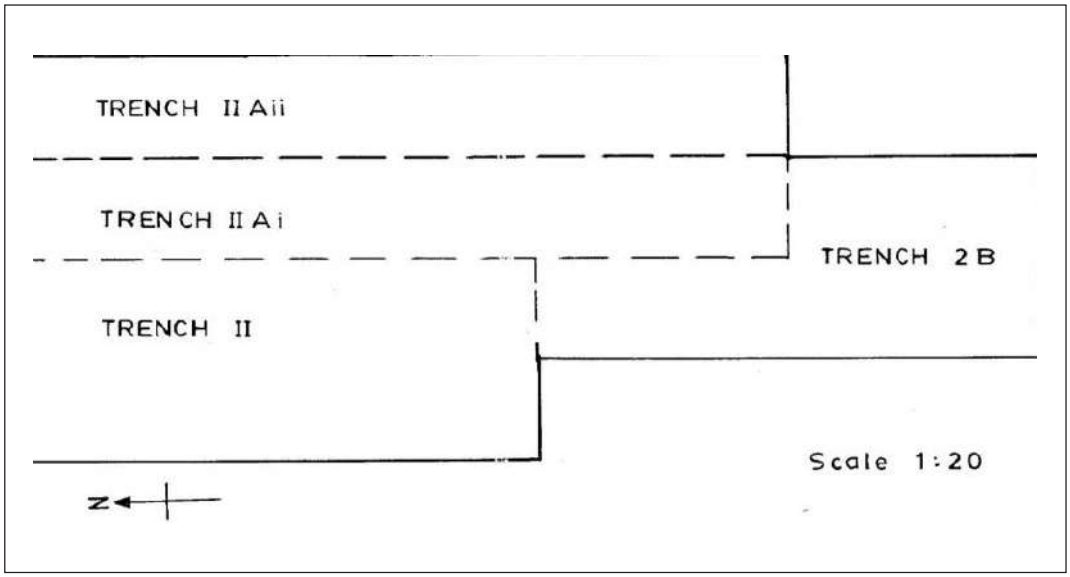

Figure 4: Trench II and its extensions

The stratigraphy of Trench II was drawn from the southern wall (Figure 5). The first layer was found characterized by light brown (6/3 HUE 7.5 YR), while the second layer was composed of light gray (7/1 HUE 5YR) very loose sandy soils. The third layer was characterized by dark, grayish brown (3/2 HUE 10YR) compacted, fine loam soils and the fourth layer had yellowish red (5/8 HUE 5YR) gravel and stony soils (Figure 5). In terms of material remains, it yielded lithics (81.5%), pottery (14.4%), metal objects (2.7%) and faunal remains (1.4%) (Table 2).

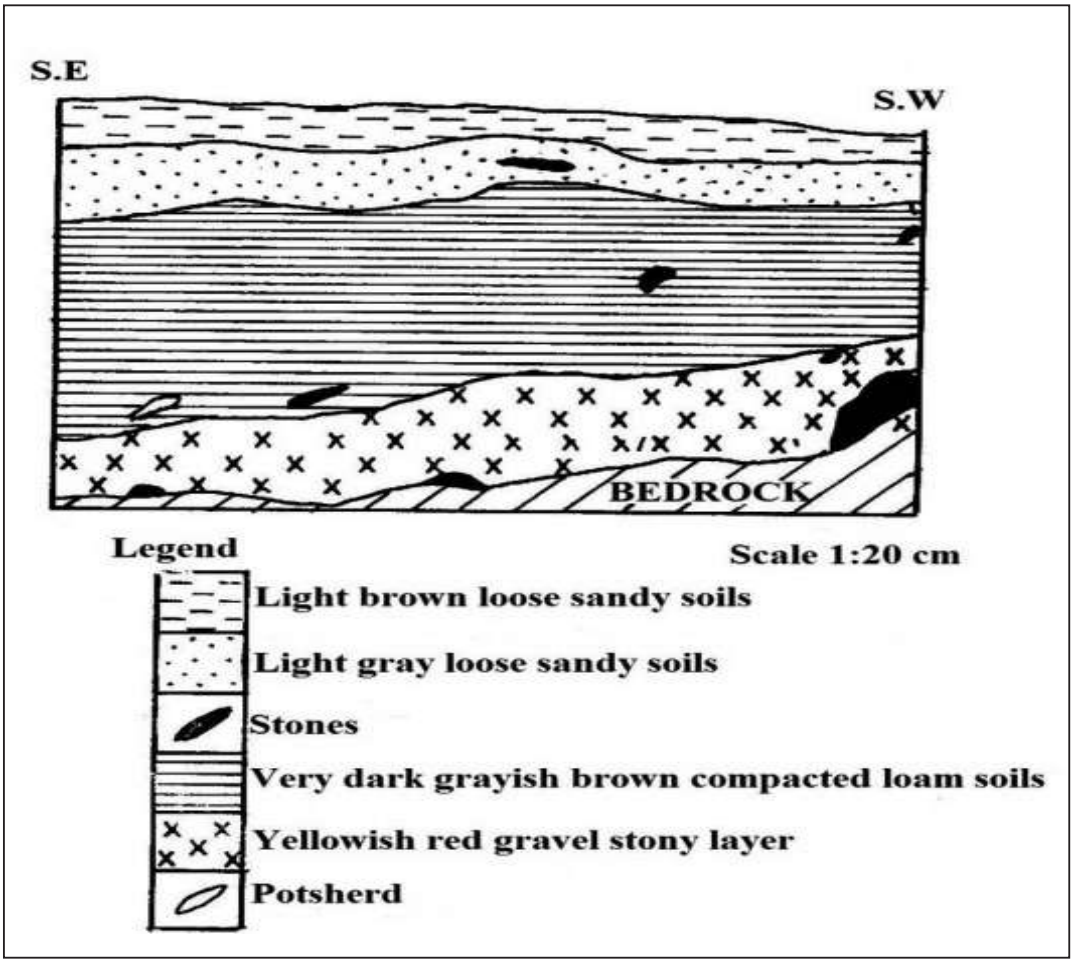

Figure 5: Southern wall profile of Trench II

Levels in cm	Lithics	Pottery						Fauna	Metal objects	Total
		Roulette	*Urewe*	*Bourdine*	*Channel*	*Kansyore*	*un-diagnostic*			
1(0-10)	25	1					9	2	6	43
2(10-15)	22					1	20	1	27	71
3(15-20)			1							1
4(20-25)	21	2		2			6		3	34
5(25-30)	67		1				4			72
6(30-35)	142	3	15			1	25		1	187
7(35-40)	545					4	65			614
8(40-50)		2	5		2	1	23			33
9(50-60)	207					1	1	16		225
10(60-70)	93					2	2			97
Total	1122	8	22	2	2	10	155	19	37	1377
Percentage (%)	**81.5**	**0.6**	**1.6**	**0.1**	**0.1**	**0.7**	**11.3**	**1.4**	**2.7**	**100**

Table 2: Material Inventory of Trench II

At the end of level 4 (25-30) cm, Trench IIA was divided into two sub-units of 3× 0.5 m^2 each. The eastern side was regarded as Trench IIAi, while the western side was Trench IIAii. The division was based on the desire to have systematic material recovery, that could be used to examine the sequence observed in Trench II, and that could further illuminate cultural connections in the upper Nile catchment. The subunit or Trench IIAi yielded a total of 1566 artifacts (Table 3). Initial typological analysis indicates that lithics account to about1236 (78.9%), pottery 150 (9.6%), faunal remains 172 (11.2%), metal objects 4 (0.3%) and charcoal 1 (0.1%) (Table 3). The stratigraphy was drawn in the western wall and it was found to be composed with four horizons (Figure 6). The soil texture, color and material composition of the upper layers (Layer 1-3) were identical to those of Trench II (Figure 5).However, layer 4 that starts at about 55 cm below surface was composed of yellowish gray soil, with a lot of gravels (Figure 7) and wavy line pottery (Plate 3b). The radiocarbon date from the charcoal sample taken at (65-70) cm below surface, yielded a date of 2710± 44 BP (WK- 31384) that was associated with rouletted pottery (Plate 2).

Table 3: Material Inventory of Trenches IIAi and IIAii

Level/Depth (cm)	Lithics	Pottery					CK	FR	MO	Total
		Diagnostic Pottery				*Un-dia.*				
Trench IIAi		*ROT*	*UR*	*BOD*	*KAS*					
0 (5-10)	3	3	1			1			1	9
1(10-15)	17					5				22
2 (15-20)	8					2			2	12
3 (20-25)	8									8
4 (25-30)	13					2		2		17
Trench IIAii										
5 (30-35)	18					3				21
6 (35-40)	8							1		9
7 (40-45)	47		2	1	1					51
8 (45-50)	7					10	1	4		22
9 (50-55)	15	1	6			12			1	35
10 (55-60)	49	1	1		1	44		4		100
11(60-65)	151	1	8		1	14		8		183
12 (65-70)	637		2		3	15		103		760
13 (70-75)	255				8	1		53		317
Total	1236	6	20	1	14	109	1	175	4	1566
Percentage (%)	**78.9**	**0.4**	**1.3**	**0.1**	**0.9**	**7.0**	**0.1**	**11.2**	**0.3**	**100.0**

Key for Table 3:

TR = trench
ROT = roulette
UR = Urewe
BOD = bourdine
KAS = Kansyore
un-dia = un-diagnostic pottery
CK = charcoal
FR = faunal remains
MO = metal objects

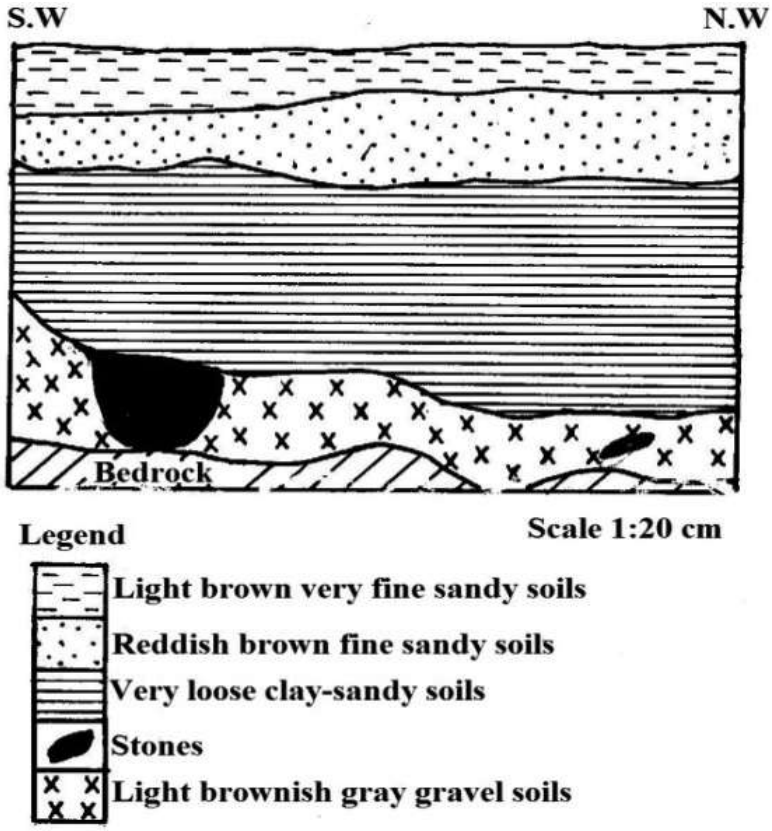

Figure 6: Western wall profile of Trench IIA

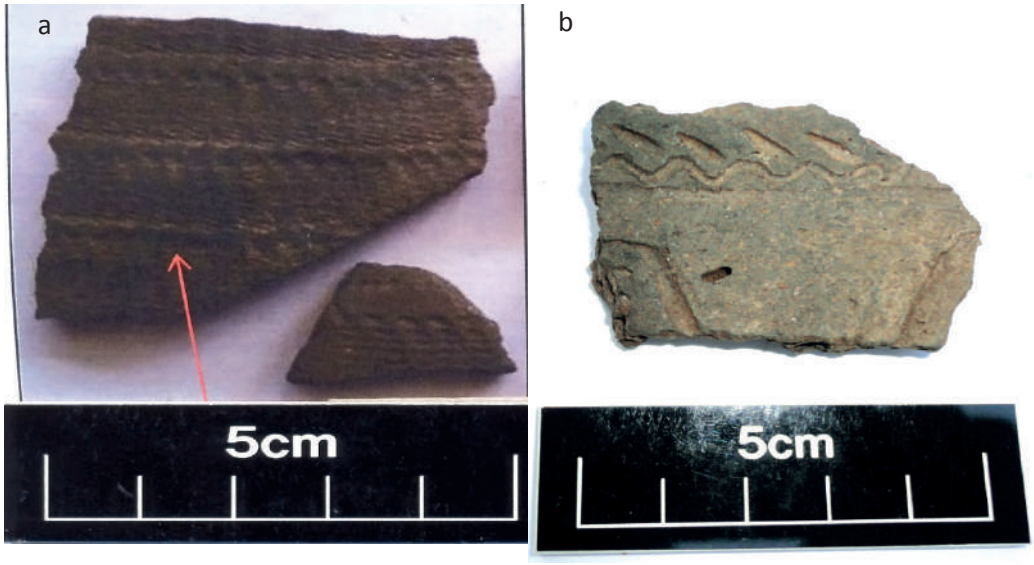

Plate 2: (a) Neolithic roulette *(b) Wavy line pottery*

Subunit IIAii yielded lithics 1142 (78.8%), pottery 99 (6.8%), faunal remains 207 (14.3%) and red ochre 1 (0.1%) (Table 3). Excavation ended at 85 cm below surface, having encountered the bedrock. In general, excavation units IIA, IIAi and IIAii had five stratigraphic horizons (Figure 7). Culturally, the lower horizons below 50 cm deep were composed of a mixture of roulette, Urewe and Kansyore potsherds.

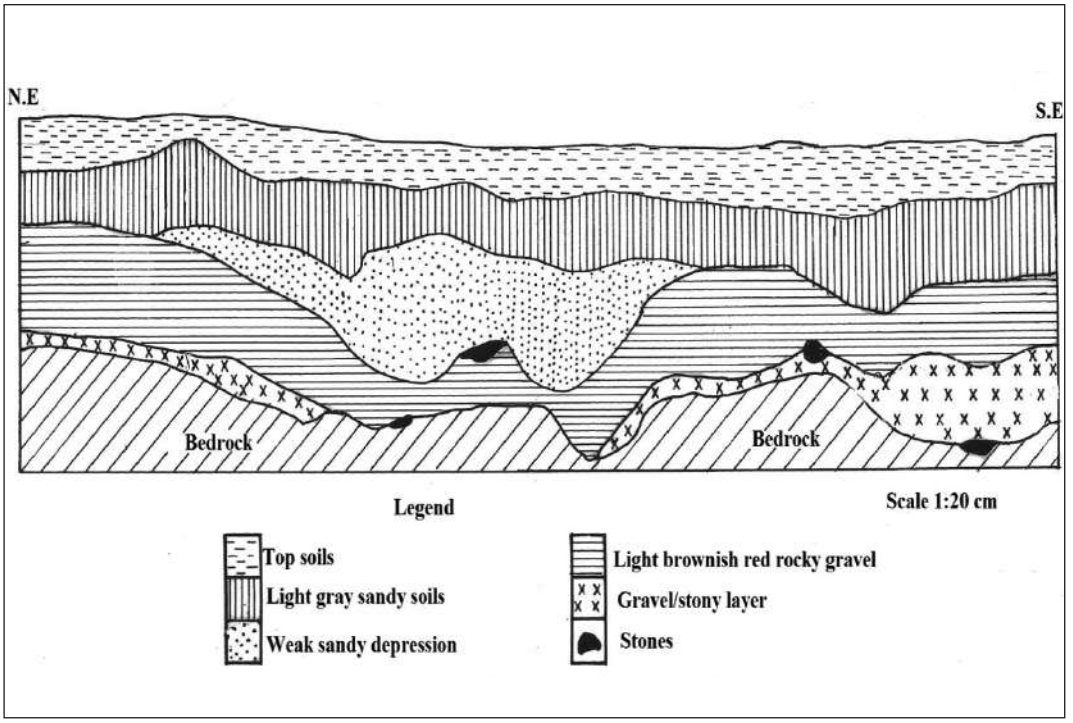

Figure 7: Stratigraphy of Trench IIA

The subunit IIB was an extension of Trenches II and IIA in the northern and North-Eastern directions. Extension aimed at examining the progression of cultural sequences. A total of 2331 cultural materials were obtained in Trench IIB that included pottery, (309), lithics (1715), faunal remains (307), metal objects (2), and red ochre (1) (Table 4).

Level (Depth) cm	Lithics	Pottery					Charcoal	Faunal remains	Metal objects	Red ochre	Total
		Roulette	Urewe	Channel	Kansyore	Un-diagnostic					
1(0-10)	27				2	5					34
2 (10-15)	24		2			5		4			35
3 (15-20)	2					2		2			6
4 (20-25)	15					2		1			18
5 (25-30)	17	1			2	4		3	1		28
6 (30-35)	19					9					28
7 (35-40)	12		2		1	10		1			26
8 (40-45)	37	8	2			25		4			76
9(45-50)	75	4	3		1	29		3			115
10 (50-55)	279		5		2	28	1	26	1		342
11 (55-60)	626	6	13	1	8	99		124			877
12 (60-65)	431		3		2	19		129		1	585
13 (65-70)	132					4		11			147
14(70-75)	14										14
Total	**1710**	**19**	**30**	**1**	**18**	**241**	**1**	**308**	**2**	**1**	**2331**
Average (%)	**73.36**	**0.82**	**1.29**	**0.04**	**0.77**	**10.34**	**0.04**	**13.21**	**0.09**	**0.04**	**100**

Table 4: Material Inventory of Trench IIB

The charcoal sample obtained at about 50-55cm was radiocarbon dated to about 1671± 44 BP (WK31383) and it was found associated with Urewe and Kansyore potsherds and geometric stone artifacts. Such association may imply that the coexistence of Iron Age and Neolithic pottery traditions should not be simply dismissed as disturbances, but could probably also imply interactions and coexistences. This therefore calls for examination, in future, of the transition from the Neolithic (Kansyore) to the Iron Age period in this area. But disturbance cannot be entirely rejected either, given that layer 3 and 4 (30 – 70 cm) was very loose sandy soil.

Trench IIB had three productive layers, along the southern wall (Figure 8). Layer 1 (0-30) cm had dark grayish brown, (4/2 HUE 2.5 Y) loose sandy soils with lithics, pottery, faunal remains and a metal object. While Layer 2 (30-50) cm had dark gray (N/4 HUE 2.5 YR) compacted sandy loamy soils, yet Layer 3 (50-75) cm was characterized by olive brown (4/4 HUE 2.5 Y) gravel soils. At 50-55 cm, a charcoal sample obtained dated 1671± 44 BP (WK-31383) was associated with a metal object that suggests the Iron Age.

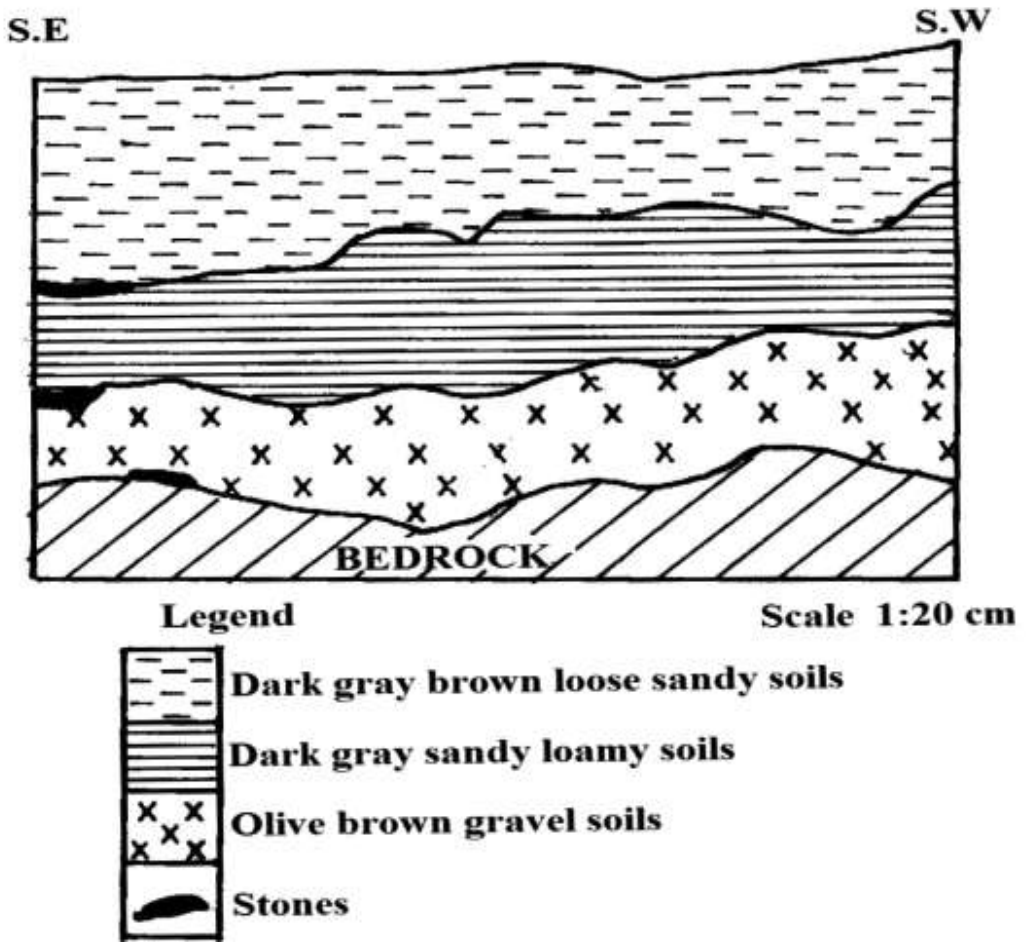

Figure 8: Southern Wall Profile of Trench IIB

The third trench of 3 m² was located at 01º 00' 05" S and 030º 44' 32" S on a gently sloping surface, parallel to the second trench and on the eastern side of Kansyore Island. It had a wide representation of cultural remains including lithics, potteries and fauna (Table 5).

Level/Depth (cm)	Lithics	Pottery					Metal objects	Total
		Diagnostic				*Un-diagnostic*		
		Roulette	*Urewe*	*Channel*	*Kansyore*			
Trench surface	7					1		8
1(0-10)	55					10		65
2(10-20)	685	2	9	1	2	71	2	772
3(20-30)	438		2	1		19		460
4(30-40)	175					1		176
5(40-50)	104							104
Total	1464	2	11	2	2	102	2	1585
% Age	92.4	0.1	0.7	0.1	0.1	6.4	0.1	100.0

Table 5: Material Inventory of Trench 3

Results from test excavations

A wide range of materials were recovered, and these included pottery, which was classified as Kansyore (Plates 3-5), Urewe (EIW), channel ware, Bourdine (Chobe ware), and roulette. The faunal remains included both bones and shells. The bones were classified as either mammalian, avian or fish bones with some having secondary modifications, such as cut marks. Fish bones were dominated by fish vertebrae (Plate 6a). The shells were for both water and land species, such as *Limicolaria* and *Burtoa and Edouardia* land species (Plate 6b and 6c) and Pilla ovata fresh water gastropod, *Etheria* (Plate 7). House daub, red ochre and a clay mace were also obtained at Kansyore Island. The lithics were typical LSA as they were mainly microliths and geometrics.

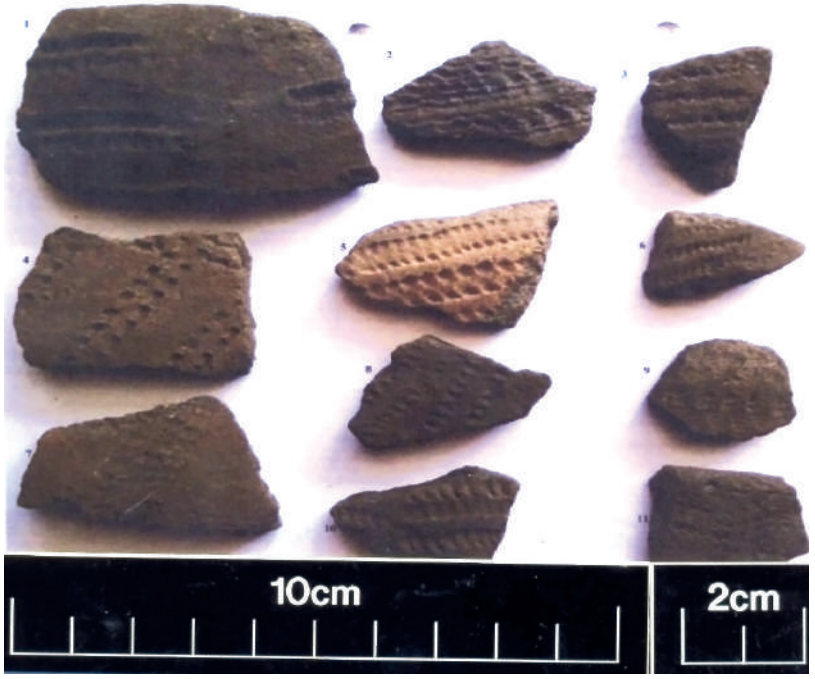

Plate 3: Kansyore pottery with varieties of banded motifs

Plate 4: Kansyore pottery dotted line motifs

Key for Plate 4: Interlocked Vertical and Horizontal Dotted Lines (1-3) and Rocked Horizontal Vertical and Horizontal Line (4), Impressed Vertical Dotted Lines (5) and Impressed Horizontal Dotted Lines (6-8)

Plate 5: Kansyore pottery with rows of horizontal and impressed lines

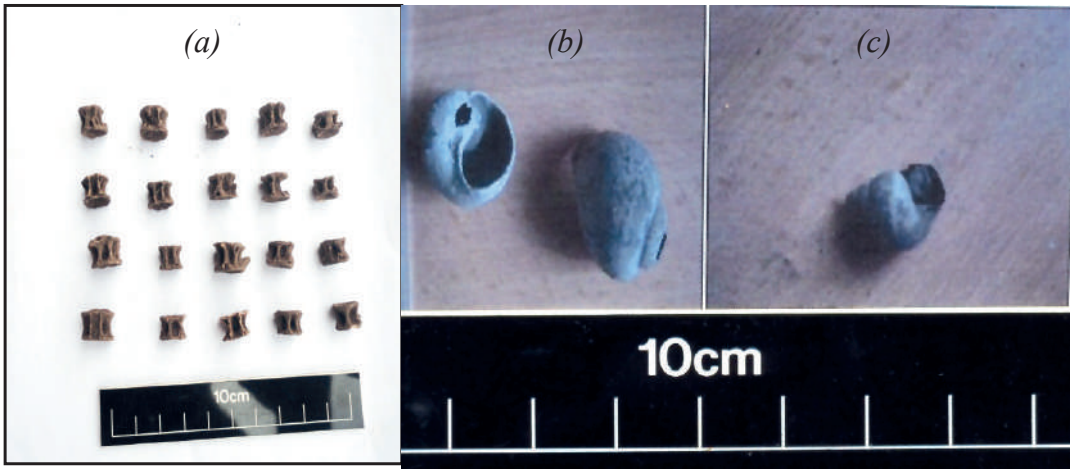

Plate 6: (a) Fish vertebrae, (b) Limicolaria shell and (c) Edouardia shells

Plate 7: Ethreria shells.

Discussion and conclusion

Accumulated evidence suggests the new trend and review on our previous interpretations and theories about the early habitants of Kansyore Island. For instance, it appears that roulette pottery were present at Kansyore during the Neolithic period, at about 2710±41 BP (WK-31384). The discovery of roulette pottery tradition contradicts with the idea raised by Soper in 1985, that such potteries were not abundant in the East African Neolithic culture. Their presence also implied that there was no correlation between race/ethnicity and pottery traditions, therefore it is no longer plausible to attribute Kansyore pottery to the Sahelians, Urewe to the Bantu speakers, or roulette to the Luo speakers, since the existence of roulette for instance, in the Neolithic, meant that it was used much earlier than the Luo existence.

Though earlier on recognised by Chapman (1967) that similarities existed between dotted wavy line in Sudan and Kansyore pottery, she was cautious to press a connection because of the long distance involved and lack of comparable finds. However, the occurrence of similar pottery decoration elements, decoration techniques, inclusions, surface finishing (Plates 3-5); faunal remains (Plates 6-7) and economic practices like fishing, established by this study and those reported in Sudan (Arkell 1953), supports the argument that a ceramic LSA was not limited in the eastern East African Rift Valley regions as suggested by Phillipson (1985, 1993) cited in Chami (2007:9). Instead it was made and used in many areas including in the Lake Victoria Basin. This then implies that the Nile was not a cul de sac. Evidence from Kansyore indicates that Urewe tradition evolved from Kansyore tradition as the former superimpose the lattery without hiatus. In some cases the pottery is mixed in the same context.. This coexistence of Neolithic (Kansyore) and Iron Age (Urewe) materials may also suggest that the two traditions are of the same people, the latter being offspring (Chami 2006)?. Some scholars have argued otherwise , that the LSA tradition was replaced or absorbed by the Iron Age agro-pastoralists (Kessy 2005). Mabulla (2007) suggests that the coexistence of hunter-foragers and herders and farmers reveal a complex co-existence and interaction, implying that maybe the LSA then were neither replaced nor absorbed as Hadza hunter-foragers, who are still in existence during the 21st century. Evidence from Kondoa shows evidence of interaction and a possibility of the LSA adopting the Iron Age cultures through acculturation (Kessy, 2013). Data from this research suggests co-existence and interaction.

Despite the enormous faunal remains, none were for domesticates. David (1981) was of the view that, any study interested in examining the similarity between the Sudan Neolithic and Kansyore tradition, should account for the absence of domesticates at Kansyore sites. To Robertshaw, (1982), lack of domesticates may be a product of tsetse fly distribution, as far as the Lake Victoria sites are concerned. The evidence from this research supported the earlier suggestion by Chami and Kwekason (2003), that the existence of Neolithic pottery suggested evidence of domestication. It challenges the earlier assumption that prehistoric people south of the Sahara relied on only hunting and gathering before the Iron Age. Neolithic pottery is evidenced by Kansyore pottery, characterised by

dominance of impressed motifs that are dotted (Plates 3-5), and the use of the coiling method, one of the oldest pottery making techniques.

The debate on the absence of domesticates and direct evidence for agriculture at the Kansyore Neolithic sites will form the basis of future research. Reid and Young (2000) advocated for alternative methods of making inferences about agriculture, such as the recovery of grain impressions from walls of ceramics from Sudanese sites (Haaland 1995). That, in case of failure to obtain direct evidence, alternatives could be sought from those that were used in the preparation of the food stuffs or containers used for their storage, grinding stones and harvesting knives, pits and packed stone features identified with storage functions or storage vessels (pots). For instance, in the preparation of African grains, the constant stirring of the grains or flour during heating, heats the vessel walls and not the base, leading to heavy abrasion of the interior. This could be used to recognize grain preparation in antiquity (Reid and Young 2000). At Kansyore Island abraded pottery was obtained, which was an indirect evidence of domestication, hence Neolithic.

Though aware of the debate concerning the definition of Neolithic, just as earlier on suggested by Arkell (1953) the Kansyore Island site can be classified as Neolithic, despite the absence of domesticates. Arkell suggested that this showed people who were food gatherers but who were not aware of agriculture. For instance, despite the limited occurrence of grinding stones, they infer farming though some were also used for grinding ochre for personal adornment, rather than corn (Shinnie 1950). However, though no direct evidence of cultivation was recovered from Kansyore Island, the subsistence option cannot be ruled out (Gifford-Gonzales 2003). This dismisses views that existence of both LSA remains and dimple-based pottery suggest that the pottery appears later than the stone industries, and thus Iron Age (Soper 1967). Suggestions like these are dismissed on the grounds that they are racist views, established in 19th century Europe, reasoning that Africa South of the Sahara was populated by people who could not have innovated, and hence remained hunter-gatherers until innovations were spread by immigrants (Chami 2009; Harris 1971). This is because cultural similarity had been attributed to either linear transmission or diffusion between cultural units (Binford and Binford 1968).

The presence of the varied molluscan assemblage (Plates 6b, 6c and 7), indicated that during the Holocene there was shallow fresh water, and since the fauna show close affinity with those of Neolithic Sudan, then it suggests that during the Quaternary, there were links with the Nile system (Mohammed-Ali 1984). The shallowness of fresh water is supported by the presence of species like Limicolaria (Plate 6b) that favoured swamps and seasonally flooded grasses. The fresh water shells (Plate 7) also indicate that during the LSA occupation effective participation must have been greater and less seasonal (Harvey and Grove 1982). Therefore, cultural affinity and correlations existed in the Upper Nile catchment areas (Kyazike, 2013). Archaeological data from Kansyore Island, therefore, suggests the existence of cultural co-existence and interaction and not admixture of the LSA and IA.

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