

MULTIDISCIPLINARY APPROACHES TO THE STUDY OF THE PAST



THURSDAY 1 NOVEMBER 2018

SECOND UJ PALAEO-RESEARCH SYMPOSIUM in combination with the **THIRD PALAEO-TRACKS SYMPOSIUM**

Venue: Kerzner Building (STH buildings), University of Johannesburg's School of Tourism and Hospitality, Bunting Road Campus, Auckland Park, corner of Bunting Road



The Future
Reimagined

	Speakers	Affiliation	Title
8:30-9:00	ARRIVAL AND TEA		
9:00-9:20	Marlize Lombard	University of Johannesburg	A holistic model for human origins research
9:20-9:40	Nonny Vilakazi	University of Johannesburg	The Bolt's Farm cave system, Cradle of Humankind, South Africa
9:40-10:00	Matt Caruana	University of the Witwatersrand	Re-examining technological trends in the Oldowan industry of South Africa: recent experimental insights and future directions for research
10:00-10:20	Stephanie Baker	University of Johannesburg	Taking a bite out of the competition: the carnivore co-evolution feedback that steered the <i>Australopithecus</i> to <i>Homo</i> transition in southern Africa
10:20-10:40	Daniel Tasker	University of the Witwatersrand	Raw material sourcing and economy from the Acheulean open-air site of Maropeng, Cradle of Humankind, South Africa
10:40-11:00	Bontle Mataboge	University of the Witwatersrand	A microtomographic study of the StW 669 hominin molar from Milner Hall, Sterkfontein, South Africa
11:00-11:30	TEA		
11:30-11:50	Charné Nel	University of Johannesburg	Monkeying around! Chacma baboons, a proxy for understanding hominin behaviour
11:50-12:10	Maryke Horn	University of the Witwatersrand	Micro-photogrammetric and geometric morphometric reconstructions of carnivore tooth marks
12:10-12:30	Shannon Perucatti	University of Johannesburg	Three hundred thousand years of being sapient
12:30-12:50	Joshua Kumbani	University of the Witwatersrand	Archaeomusicology in South Africa
12:50-13:10	Justin Bradfield	University of Johannesburg	Methods of identifying pervasively modified bone
13:10-13:30	Charlotte Visagie	University of Johannesburg	The Gods inside: can gene-culture co-evolution explain their persistence?
13:30-13:50	Frikkie de Beer	University of the Witwatersrand	Necsa and the palaeosciences
13:50-14:50	LUNCH		
14:50-15:10	Tebogo Makhubela	University of Johannesburg	Critical evaluation of cosmogenic nuclide results at the Cradle of Humankind
15:10-15:30	Jan Kramers	University of Johannesburg	Palaeoclimatic data and thoughts on <i>H. sapiens</i> migrations
15:30-15:50	Anzel Veldman	University of Johannesburg	The rise and fall of <i>izingxotha</i> : A biography of Royal Zulu armlets from KwaZulu-Natal, South Africa
15:50-16:10	Charmaine Hlongwane	University of Johannesburg	Rehabilitating the juvenile delinquent: the case of Diepkloof Reformatory School, 1934-1948
16:10-16:30	Mark Hackney	University of Johannesburg	Building the grid: system building in the electrification of South Africa
16:30-16:50	Thandeka Madi	University of Johannesburg	The history of Johannesburg as an urban forest
16:50-17:00	Dipuo Kgotleng	University of Johannesburg	The Centre for Anthropological Research: looking into the future
17:00-18:00	OPEN BAR (snacks and two drinks per person)		

Marlize Lombard (mlombard@uj.ac.za)

Centre for Anthropological Research, University of Johannesburg

A holistic model for human origins research

A key aspect of human origins research is understanding the evolution of the human mind (our unique way of thinking). Whilst the discovery, dating, analysis and description of fossils and artefacts worthwhile and at times exiting and pursuits, to grow from discovery and empiricism, to understanding the processes involved in human cogni-behavioural evolution requires theory. From an archaeological perspective, what makes us 'human' is our ability to generate technology and other material culture within the context of specific social and ecological settings. 'Culture' here is understood as social learning, and although we are not the only ones to have material culture, we produce and use it most prolifically and have become dependent on it for our survival. Theoretical archaeologists explore, infer or interpret social culture and aspects of human behaviour through the lens of the material individuals or groups left behind in the past. In the model I present here argues that the human body serves as interface for the conceptualisation, production, use and sharing of material culture in all its forms. Exploring human evolution from a body-culture co-evolution (BCCE) perspective therefore has theoretical relevance.

Nonny Vilakazi (nvilakazi@uj.ac.za)

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Bolt's farm cave system

The Cradle of Humankind in South Africa, recognized as World Heritage by UNESCO since 1999, contains fossil sites which have yielded hominid remains and/or non-human primates (Cercopithecoidea). Bolt's Farm (or BFCS) being one of the sites around the Cradle, has more than twenty fossiliferous localities. Research at BFCS was accomplished in several phases, with Robert Broom being the first to prospect the area in 1936. Research only became regular in 2006 with the creation of the HRU (Hope (Human Origins and Past Environment) Research Unit). BFCS is best known for yielding remains of large cats, yet some fossils of Cercopithecoidea discovered at BFCS are considered to be references in palaeoprimatology: BF₄₂ (*Cercopithecoides williamsi*) and BF₄₃ (*Parapapio broomi*). Waypoint 160 at BFCS yielded the oldest remains of nonhuman primates in the Cradle of Humankind dating to the Pliocene. The present challenge is to obtain the maximum amount of data concerning palaeobiodiversity, including the microfauna which is being extracted from breccia by acid preparation techniques. Incorporating the age of the discovered fossils will help with the palaeo-environment reconstruction of the site.

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Re-Examining Technological Trends in the Oldowan Industry of South Africa: Recent Experimental Insights and Future Directions for Research

Over the past twenty years, the Oldowan industry of southern African has been analysed through descriptive and typological approaches. This has produced a comprehensive literature on Oldowan technology within this region, which is dominated by quartz artefacts manufactured through both freehand and bipolar techniques. However, comparisons between the two largest assemblages in this region, Sterkfontein Member 5 (Oldowan Infill) and Swartkrans Member 1 (Lower Bank) have revealed variability in raw material profiles and the frequency of knapping methods. While Sterkfontein is largely comprised of quartz materials (90.5%) produced through freehand knapping, only 62% of artefacts from Swartkrans are made on quartz with a higher proportion of bipolar products. To investigate both inter-site commonalities and variability, quantitative methods are employed here to assess why Oldowan hominins likely preferred quartz as a lithic medium and the ramifications of using freehand versus bipolar knapping techniques. Results complement previous research and increase our understanding of South African Oldowan technology through experimental and statistical means. Lastly, future directions in quantitative approaches seek to situate Oldowan tool-making behaviours within a landscape-scale of analysis to provide perspective on the ecology of early Pleistocene tool use in southern Africa.

Stephanie Edwards Baker (stephanieb@uj.ac.za)

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Taking a bite out of the competition: the carnivore co-evolution feedback that steered the Australopithecus to Homo transition in southern Africa.

The Gelasian Age (~2.6 - 1.8 million years ago) preserves arguably the most dramatic changes in human ancestry. In southern Africa, we have at least three species of gracile Australopithecine, all of whom go extinct at the termination of the Gelasian. Two species of early Homo take their place, the earliest evidence of which in southern Africa is from Drimolen at ~2.21 Mya (Martin et al. forthcoming). There is also the evolutionary deadend *Paranthropus robustus*, the megadont cousin of *Australopithecus*. Alongside these hominin transitions there is what appear to be corresponding changes in the apex Carnivora, for example: an increase in large true and false sabre-tooth cat extinctions (e.g., *Dinofelis barlowi* and *Homotherium problematicum*; Werdelin & Peigné 2010); increases in modern taxa (e.g. leopard and lion); as well as a turnover of diurnal to nocturnal predators (Werdelin & Peigné 2010). By tracing the fossil record in the geographically constrained Cradle throughout the Gelasian Age this paper serves to track the correlative forces that these events had on one another with the main aim of understanding the driving force behind the dramatic hominin changeover.

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Raw Material Sourcing and Economy from the Acheulean Open-Air Site of Maropeng, Cradle of Humankind, South Africa

Maropeng is the only published Earlier Stone Age, open-air site within the Cradle of Humankind, which preserves a palimpsest of Acheulean stone tool materials. Quartzite predominates this assemblage at 65.4% and initial observations have revealed that at least two varieties of this raw material were used for tool-making. The lithological properties of quartzites may link to differences in flaking properties, further revealing selection behaviours. To test this hypothesis, outcrop sources of different quartzites will be investigated through geochemical testing to determine raw material sources and transport distances at Maropeng. A survey study is currently underway to establish all primary and secondary locations of quartzites within a 5km radius and has so far revealed multiple sources and variants of quartzite outcrops on the surrounding landscape. These data will be compared with reduction intensity measures calculated from 36 Large Cutting Tools and 60 cores. In turn, statistical correlations between outcrop distance and reduction intensity will be used to interpret mobility and landscape-use behaviours. This will provide a deeper understanding of Acheulean tool manufacturing and early hominin behaviour in this region.

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A microtomographic study of the StW 66g hominin molar from The Milner Hall, Sterkfontein caves, South Africa

The Sterkfontein Caves, South Africa, are one of the richest early hominin fossil-bearing sites in the world. Recent excavations have revealed the potential of the Milner Hall locality to contribute to the Sterkfontein hominin fossil record through the discovery of one right upper first molar, StW 66g. StW 66g was excavated from deposits that consist of a mixture of sediments from Member 2 and Member 5 of the Sterkfontein Formation. Accordingly, the deposits have the potential to contain remains of *Australopithecus*, *Paranthropus* and *Homo*. By using micro-computed tomography, we assess dental tissue proportions, absolute and relative enamel thickness, enamel thickness distribution and enamel-dentine junction (EDJ) morphology to discuss the taxonomic attribution of StW 66g. We compare our results to those of *A. africanus*, *P. robustus*, *H. erectus*, *H. neanderthalensis* and extant *H. sapiens* from published literature. Our results suggest that StW 66g shares quantitative and qualitative affinities with first upper molars of early *Homo* and extant *Homo sapiens* in terms of tissue proportions (i.e., 49% of the crown is enamel in StW 66g and 38-53% in *Homo*),

enamel thickness (i.e., average enamel thickness is 1.30 mm in StW 66g and 0.84-1.58 mm in *Homo*) and enamel thickness distribution (i.e., thickest enamel at cusp bases). However, the EDJ morphology of StW 66g is more similar to that of *A. africanus* than to *Homo* based on its rectangular shape and relatively high dentine horns. Further quantitative studies, such as geometric morphometric analyses, would be crucial for clarifying morphological affinities of StW 66g with early hominin taxa. Pending additional morphometric evidence, our preliminary data exploring the tissue proportions, enamel thickness and enamel distribution tentatively suggest an attribution of StW 66g to early *Homo*. Our results are significant considering the taxonomic context of Sterkfontein, as the presence of the genus *Homo* at the site has been contentious.

Charné Nel (charnen.213@gmail.com)

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Monkeying around! Chacma baboons, a proxy for understanding hominin behaviour

Comparing hominin and non-hominin primate behaviour is a long-standing approach to inferring hominin behaviour on the African landscape during the Plio-Pleistocene. In order to assess the potential overlapping characteristics between these two groups, actualistic research is conducted. Similarities between these different genus groups are likely due to comparable environments and evolutionary patterns. However, some researchers find this approach flawed and problematic. Actualistic research in itself can be considered inherently biased, as parallels are drawn between species that have since evolved, or comparisons are made between different groups based on the assumption that there were and continues to be similarities in their behaviour. This poses the question as whether modern chacma baboons can be an analogue to understand early hominin behaviour due to the similar environmental pressures or whether this analogy is problematic. I will present the positive and negative arguments to using chacma baboons as an analogue to understand hominin behaviour.

Maryke Horn (marykehorn@yahoo.com)

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Micro-photogrammetric and Geometric Morphometric Reconstructions of Carnivore Tooth Marks.

The role of carnivores in the accumulation and modification of faunal remains has been the subject of ongoing debate and is particularly relevant to human origins research, as palaeoanthropologists strive to understand the lifeways of our hominin ancestors and their interaction on the landscape with different carnivores. Various carnivores have been implicated in the accumulation of faunal and hominin remains around the world, including the hominin-bearing caves of the Cradle of Humankind, where leopards have been

suggested to be a significant accumulator of hominin bones. Classically, differentiation of bone-accumulating carnivores has been limited to a small range of studies, such as the measurement of tooth pit dimensions. This can be used to determine carnivore size classes, but cannot identify specific carnivore species. The introduction of micro-photogrammetry and geometric morphometric reconstructions of carnivore tooth marks has made it possible to differentiate between carnivore species through a neotaphonomic approach. This project focused on testing these techniques on carnivore tooth marks, most significantly a tooth pit, found on a baboon bone recovered from a leopard den site by Bob Brain. The focus remained on one pit as learning the methods employed for this study was time consuming. The morphology of this tooth pit was compared to that of lions' and hyenas'. The preliminary analyses yielded inconclusive results of the tooth pit morphology differentiation, owing to the small sample size, but the application of micro-photogrammetry and geometric morphometric reconstructions proved effective in capturing the necessary details and information needed for this study.

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Three hundred thousand years of being sapient

Because brains do not fossilise, the only direct source of information about the brain and brain evolution comes from endocranial casts (endocasts) — a natural, artificial and/or digital reconstruction of the internal morphology of the neurocranium and external morphology of the brain. A number of studies have used endocasts to reconstruct the brains of extinct human species, to examine endocranial morphological differences and similarities, to have a better understanding of the relationship between the braincase and brain, as well as infer possible brain functions. Herewith I shall review the current understanding of cranial anatomy and possible neurology between Neanderthals and *Homo sapiens*.

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Aerophones or pendants? Four Holocene artefacts from Matjes River

Four tear-drop to oval shaped artefacts with drilled holes were recovered from Matjes River site in the southern Cape of South Africa. The artefacts are dated to 7000-5000 years ago and they are from layer C associated with the Wilton industry. These artefacts have been described as pendants and it is assumed that they could have been used as jewellery.

Morphologically the pendants resemble a type of musical instrument, known as a bullroarer. A bullroarer is frequently a flat, oblong, piece of bone, wood or stone with a hole at one side. The bullroarer is spun in complete revolutions using a string tied onto the implement and it produces a whirring sound. To test the hypothesis that these artefacts could have been used as bullroarers an experimental study was undertaken. The four implements were replicated using sheep and giraffe bones and were strung with leather and organic strings. They were spun by hand and they all produced sound. The replicas were then spun for 15 hours each using a 40 Watt electric motor with the speed adjusted such that each produced sound. The use-wear results that developed on the replicas are compared with the use-wear on the archaeological artefacts.

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Methods of identifying pervasively modified bone

Bone tools that are pervasively modified so as to remove all anatomical markers that would allow one to identify what skeletal element they were made from and from what animal species they derive, are regularly found in archaeological deposits. We know from rock art depictions and ethnographic studies in many parts of the world that certain animals were held to be ideologically important among societies. Whether and to what extent such ideological connotations may have manifested in the technological repertoire of southern African hunter-gatherer and early farmer societies is an open question at present. I explore two different methods used to identify the animal taxa used to make bone tools from Middle Stone Age and Iron Age sites in South Africa. The parallel considerations of mechanical suitability and ideology in raw material selection strategies are discussed.

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The Gods Inside: Can Gene-Culture Co-evolution Explain Their Persistence?

Despite advances in modern science, religion still persists. There is no shortage of literature on religion and various questions regarding its origin, spread and persistence. However, I have asked whether it is possible to explain the persistence of a predisposition towards religion. Wilson describes a predisposition to create religious phenomena as: "...a powerful force in the human mind and in all probability an ineradicable part of human nature". This human predisposition to supernaturalise, I have termed entheogenism. Entheogenism describes a causal factor that expresses as religion, supernaturalism, ancestor worship and so forth. Using existing literature, I have built a hypothesis that gene-culture co-evolution may explain the persistence of entheogenism and by extension certain types of religion.

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The South African Nuclear Energy Corporation (Necsa) SOC Ltd

Necsa and the Palaeosciences

One of the activities of Necsa, as State Owned Company, is in applied Radiation Sciences with the liaison and collaboration with partners in the safe application of radiation technologies. Apart from the focus of the Radiation Science Department within the R&D Division in nuclear material research, Necsa also supports the Cultural Heritage research community. The Radiography and Tomography Section makes its radiation beam lines and instrumentation available to the research community through a User Program / Office in the support of researchers and post graduate students. The extensive support Necsa's instrument scientists offers begins with experimental design and ends with peer review of articles and thesis's. An important initiative to host a chemical and mechanical palaeoscience preparation laboratory on Necsa's site with addition of a repository is in the planning stage with the involvement of the main stakeholders in the palaeoscience community as well as the support of the DST. This presentation will highlight the activities and output in palaeoscience research from the Necsa based RADTOM laboratory and the introduction of the concepts and status of the proposed Pelindaba Fossil Preparation Laboratory.

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Critical evaluation of cosmogenic nuclide results in the Cradle of Humankind

In situ-produced cosmogenic nuclides are an important tool for quantifying landscape evolution and dating fossil-bearing deposits in the Cradle of Humankind (CoH), South Africa. Previous studies have assumed a simple, unidirectional exposure history when using cosmogenic 10-beryllium (^{10}Be) in river sediments to estimate denudation rates. In burial dating studies, they assumed the ratio of 26-aluminium (^{26}Al) to ^{10}Be ($^{26}\text{Al}/^{10}\text{Be}$) in the sediments prior to their burial was indistinct from the surface production ratio. Here, we hypothesize that soils in landscapes underlain by dolomite experience prolonged near-surface residence and undergo complex exposure histories. We used in situ-produced ^{10}Be and ^{26}Al concentrations in bedrock and soil to constrain the exposure history of soil on the surface above the Rising Star Cave. Using a simple simulation model, we demonstrate that ^{10}Be and ^{26}Al results are consistent with soil that experienced near-surface transient burial and storage of up to 1.5 Myr. The results show that soils in karst landscapes can have long and complex exposure histories that need to be taken into account when using cosmogenic nuclides. We show that applying a blanket approach to cosmogenic nuclide dating of

sediments in the Rising Star Cave would lead to overestimation of the burial age of *Homo naledi*.

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Palaeoclimatic data and thoughts on *H. sapiens* migrations

The two principal known migration routes for *Homo sapiens* migration out of Africa are (i) down the Nile valley and along the coast at Suez (the northern route), and (ii) down the Awash valley of Afar, and then across to the southern tip of the Arabian peninsula (the southern route). The speleothem record reveals major periods of moderate rainfall and vegetation cover during 220-200 ka and 139-120 ka for the northern route, and during 220-180 ka and 130-120 ka for the southern route. These two periods were thus windows of opportunity for migration out of Africa, with later one being more relevant to *H. sapiens*. The period 130-120 ka coincides with a major deglaciation following Marine Isotope Stage, MIS, 5.5), and the older period falls within interglacial MIS 7.1-7.3. Northern hemisphere ice ages are mostly found to coincide with dry periods globally. However, the record from the Tswaing crater indicates low rainfall during the 130-120 ka deglaciation, and several periods of moderate rainfall occurred during the preceding glaciation. While no global climate and ecosystem reconstructions for the Eem glaciation exist, they are available for the last glacial maximum (LGM, ca. 30-18 ka), and these show tropical grassland over most of sub-Saharan east Africa, down to South Africa, and tropical savannah over almost all the area currently under tropical rain forest. In addition, extensive coastal plains existed due to the sea level being up to 120 m lower than at present. Translated into sustainable population densities for hunter-gatherers, the paleo-ecology for the LGM yields high figures (3000-3400 per 10,000 km²) for most of sub-Saharan east Africa. The expanded Sahara rendered this space fully isolated from habitable regions in north Africa, southern Europe and Asia. Similar analyses for the potential vegetation of today (cancelling out human interference) show a lower hunter-gatherer sustainability (around 1000-1500) for East Africa, but a habitable corridor along the Nile, and continuity with southern Arabia. If similar differences characterized the transition from the Eem glaciation to the MIS 5.5 interstadial, then the combination of the lower sustainability in east Africa with connectivity towards the Levant and south Arabia could have driven migration of *Homo sapiens* out of Africa during the given time windows of opportunity.

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The rise and fall of izingxotha: A biography of Royal Zulu armlets from KwaZulu-Natal, South Africa

Based on a combination of oral tradition, ethnographic, museum accession, archaeological, historical and archival sources, I created a biography for brass armlets, known as 'ingxotha' in isiZulu. Using the biography approach, I illustrate that the meaning of the adornment transformed through time for isiZulu-speakers due to socio-political changes. Izingxotha were worn during the 19th century throughout the reigns of Zulu kings Shaka, Dingane, Mpande and Cetshwayo. These objects were bestowed upon loyal subjects of the king and served as status ornaments within Zulu society. They were made from imported Portuguese, Dutch and British brass and re-smelted by local metal smiths. As an object of prestige, the armlet mirrors the turbulent beginnings and ultimate demise of the Zulu kingdom in the colonial past of South Africa.

Charmaine Hlongwane (charmaine.hlongwane@gmail.com)

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Rehabilitating the juvenile delinquent: The case of Diepkloof Reformatory School, 1934-1948

Juvenile and youth delinquency is a worldwide social issue whose meaning has shifted over time and differs in urban and rural areas. Often considered an effect of economic migration, delinquency is also a result of rapid urbanization. By the 1930s, Johannesburg was 'swamped and overwhelmed' with migrant workers who regarded themselves as townsmen; their children born and bred in the city's townships. A large number of African children which were present in urban spaces caused the rise of a 'native problem' which was conveyed by the increase in urbanization, the breakdown of tribal life and family ties. The 1936 Census stated that urban townships had more than 334 700 African children, of which the majority of school-going age were out of school and roamed the townships, also turned to delinquent behaviour due to unfavourable home conditions and lack of supervision by parents who worked long hours during the day for low wages. In this paper, I aim to explore the efforts of the city's authorities in dealing with the growing 'issue' of juvenile and youth delinquency in Johannesburg. Also, the attempts of the magistrate courts in sending juvenile delinquents to reformatory schools will be explored by examining the (un)successes of reformatories and assessing whether delinquents were reformed or not, the Diepkloof Reformatory School (1934-1948) will be used as a case study. This paper not only builds on the literature on juvenile and youth delinquency studies in pre-apartheid South Africa, but it also includes the making of juvenile delinquency by the assessing 'urbanized Bantu family life' in the Witwatersrand townships where the 'issue' was more rampant. This paper also discusses the outcomes and recommendations of the major

conference on the 'Urban Juvenile Native Delinquency' which was held on 10 – 12 October 1938 in Johannesburg and was attended by city authorities, academics, social workers and educators to discuss ways in which the municipality would curb the growing 'native problem' of juvenile and youth delinquency in Johannesburg.

Mark Hackney (sinjinza1984@hotmail.com)

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Building the grid: system building in the electrification of South Africa

The analysis of South Africa's state-run enterprises, also known as the parastatals, has typically focused on the relationship between capital and labour, with especial attention to the ways in which the country's racial segregation and capitalism created and entrenched a system of racial capitalism. These analyses have been influenced by Neo-Marxist trends in South African historiography, which intended to critique the overarching racial social engineering of apartheid through case studies of the systems and organisations that were created to foster the growth of industry and a "modern" South African state. Central to the establishment of secondary industries was the development of a national electrical grid that could provide the cheap electricity to drive industrial growth. Far from being a simple process of building and connecting a series of power stations, the Electricity Supply Commission had to engage and compete with existing suppliers, including municipalities and private companies, in order to construct a nation-wide, interconnected electrical grid. This research examines the process of building Escom's National Grid from a 'systems building' perspective, which takes a non-deterministic view of how social factors and technology influence each other to construct a large, complex technological system. By introducing the systems building theoretical and methodological framework, this research seeks to determine what factors, aside from the relationship between capital and labour, shaped the formation of the National Grid.

Thandeka Madi (thandekamadi4@gmail.com)

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Johannesburg's urban citizens' response to incorporation of street trees in Johannesburg: The case of Park Town 1920s & 1930s and Soweto 1970s & 1980s

Johannesburg is often regarded as the world's largest human-created forest because it has a large number of trees. Street trees were planted from as early as 1880s in different suburbs in Johannesburg. There were economic as well as non-economic reasons behind tree planting in Johannesburg. Economic reasons include the demand for timber in the mining sector and non-economic was basically beautifying the newly established suburbs. The Parks Department together with the municipal council promoted the street tree planting initiative. Trees were firstly planted in North-eastern suburban areas like Doornfontein and Park Town and only during 1970s was the street tree planting scheme introduced in townships like Soweto. The municipal council used Arbor Day which was

celebrated in South Africa for the first time in 1930 as a platform to encourage local residents in suburbs to play a role in tree planting. Suburban residents had different attitudes towards street tree planting, some were in full support of the notion while others raised a lot of complaints. Most complaints were based on the tree species selected for planting which were mostly exotic trees rather than native trees. The rise of environmentalism and changing conceptions of national identity, both in terms of race and nature during 1970s and 1980s triggered residents to argue against planting exotic trees and for natives in white and African suburbs.

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The Centre for Anthropological Research: Looking into the future

The Center for Anthropological Research (CfAR) at the University of Johannesburg (UJ) has shown significant growth in the past 5 years. Its evolution towards being the centre for palaeo-anthropological research in the country is enforced by UJ's current investment in human resources as well as research support from the public and private sectors. In addition, strong local and international collaborative efforts have led to the production of high impact factor outputs which have become the cornerstone of research in the Centre. Based on the Center's historical outputs, and considering its current input growth, the CfAR is set to become the hub for palaeo-sciences research and training in the SADC region and in the African continent. This potential is anchored in a strong ethos of decolonisation and indigenisation of knowledge generation and dissemination of South Africa's heritage. The future of the CfAR embodies the phrase, palaeo-sciences business unusual!