

# Digital Anthropology

# 2016

First prize  
3D Printer for  
winning school

Second prize  
High resolution  
print of final  
design

AZA16



PPC

# scale:

31.08 - 03.09

A SABA EVENT  
CO-HOSTED WITH

WITS SCHOOL OF ARCHITECTURE  
PLANNING

## s'fanakalo

[we make]

[ digital fabrication lab ]



Asen, Benin. Standard Bank African Art Collection (WAM)

[Click Here for Online Entries Before 8 August 2016](#)

*" We need to rediscover the essence of the meaning of 'the use.' Architecture is, above all, here for a better living. Every gesture, every shape must be justified by various reasons that would reinforce their reason to be, their use, and will give more sense to their beauty. "*

Christian de Portzamparc

Background :

There is often a disconnection between Wits - as place of knowledge - and Braamfontein. The everyday user of Braamfontein is unaware of the knowledge that is housed within the boundary of Wits, for example, the often unseen artefacts that are safely and securely stored within the WAM (Wits Art Museum) archive. These can be seen as existing outside of their intended purpose and often the cultural contexts from which they originate no longer exist. Interrogating this disjunction is the springing point of the project. Thus we want to explore the possibilities of creating a connection. The archived artefacts emerged as a response to their original socio-environmental contexts through choice, selection and availability of natural materials, economic and ecological circumstances, as well as religious and political purposes. Therefore, we will investigate the potentials of an additional evolution and customisation through the use of 3d printing / scanning. By readapting these artefacts to a new social and cultural context we seek to suggest the possible connection of Wits to Braamfontein.

In the last two decades, Architects have been challenged by new computational tools that have generated a new source of inspiration, a new way of creating particular shapes, changing the parameters and language of contemporary architecture. This exploration of new possibilities and methodologies is encouraging architects and students to experiment with new strategies and architectural solutions. Among other digital tools, 3D printers have become part of this new resource for design, rapid prototyping and manufacturing. In recent years, its use in architecture has increased exponentially as a tool for developing and exploring ideas through prototypes and form-finding strategies. These new technologies have the ability to extend and complement the traditional design process, creativity, conventional manufacturing and prototyping.

Teams should consist of 3 participants: 1 Postgraduate and 2 undergraduate students. Required Team skills should include proficiency in 3d Modelling software and Graphic Representation.

Brief:

The competition will be run over 3 days; in which you will be working together in your teams.

Schedule Day 01:

- A site in Braamfontein will be assigned to you which you will be required to analyse and represent.
- We will visit the Wits Art Museum and together with the curator, will visit the store room to get a sense of the nature of the archive.
- You will then choose appropriate artefact to work with for the duration for the project
- This artefact will then be 3d scanned
- Lunch
- An introduction lecture to 3D printing and laser engraving.
- 1st test print of the artefact though which you will learn how to use the machines.

#### Schedule Day 02:

- Critically assess your 3D print/s from Day 01 and re-modify the object through digital and tactile manipulation.
- Crit and presentation to assess your designs, address printing problems
- Lunch
- In response to the crit continue with the Design development of the artefact (scan, modify, print)
- Briefing for the final design requirements and presentation procedure will take place,
- Develop your final presentation.

#### Schedule Day 03:

- Print the final high res 3D object and laser engrave the poster.
- Submit projects for judging and exhibition at the AZA Conference.

The s'Fanakalo makerspace is located in the School of Architecture and Planning at the University of Witwatersrand. Fanakalo is a lingua franca that is used in the mines of Johannesburg which serves as means to facilitate communication between different languages and cultural identities. "fana" in Zulu means being the same; the "s" in front of "Fanakalo" signifies that this is our language; we speak.

The s'Fanakalo makerspace promotes and encourages students, to explore design technologies and fabrication methodologies. s'Fanakalo is a place for makers, supporting open source initiatives, self-learning through manufacturing processes and experimentation of linking digital and analogue techniques together. The makerspace aims at making the space and the technology easily accessible to all social and cultural groups, so that all to feel comfortable with a sense of home.

#### Judging Criteria:

The development of the artefact  
Clarity of the representation  
Clarity of the narrative and the meaning / use of the object.  
Successful reinterpretation of scale.  
Quality of the final 3d print  
Re-adaptation of the artefacts functional use to Braamfontein

#### Rules:

1. The competition will run over three days at the University of the Witwatersrand from 29 – 31 August 2016. All work must be produced by the group in the studio during the competition during the competition.
2. A group will consist of three individuals, one postgraduate and two undergraduates.
3. A proficiency in 3D modelling software and design as well as a group member proficient in graphic representation is recommended.
4. Ability to attend all sessions on all 3 days is mandatory.
5. Only students of Architecture from Universities in the South Africa are eligible.
6. Each institution may put forward 1 team for participation in the competition.
7. All submitted work must be anonymous.
8. Work must be submitted on or before 13:00pm on 31 August 2016 in the stipulated format and location in order to be eligible.
9. The deadline for receiving entries for the competition is final. No entries received after the given date will be considered.
10. The judge's decision is final and no correspondence will be entered into. Entrants will be deemed to have accepted these rules and to agree to be bound by them when entering this competition
11. Only one entry per team will be accepted.
12. The Prize will be awarded to the architecture school of winning team.
13. All work produced for the competition will remain the property of the s'Fanakalo makerspace
14. Winners will be contacted personally

#### Submission Requirements:

- All prototypes that explore the process
- 1 x final high res 3D object to stipulated format
- 1 x A3 laser engraved poster

#### Queries:

-----  
All queries must be submitted to [brigitta.stone@wits.ac.za](mailto:brigitta.stone@wits.ac.za) by 20 August 2016, with the subject line, '3D Printing Master Class.'

\* Please note, the competition will be filmed for research purposes.