

**INTERROGATING MOBILES: A STORY OF NIGERIAN
APPROPRIATION OF THE MOBILE PHONE**

by

Toluwalogo B. Odumosu

An Abstract of a Thesis Submitted to the Graduate

Faculty of Rensselaer Polytechnic Institute

in Partial Fulfillment of the

Requirements for the degree of

DOCTOR OF PHILOSOPHY

Major Subject: Science and Technology Studies

The original of the complete thesis is on file
In the Rensselaer Polytechnic Institute Library

Examining Committee:

Ron Eglash, Thesis Adviser

Langdon Winner, Member

Kim Fortun, Member

Atsushi Akera, Member

Tarleton Gillespie, Member

Rensselaer Polytechnic Institute
Troy, New York

August 2009
(For Graduation August 2009)

ABSTRACT

This dissertation examines the recent adoption of mobile communications in Nigeria. The single question that this dissertation seeks to illumine is why, in the midst of so many other failed technological systems in Nigeria, have mobiles been so successful? The dissertation begins with the emergence of the GSM standard. Contrary to popular conceptions of mobile phone technology as the result of universal engineering optimization, we see that GSM was strongly influenced by the multi-state politics of the emerging European Union, and that, conversely, the creation of the union was facilitated by GSM (Jasanoff's "co-construction"). Thus Nigeria adopts a technology with "legacy shaping." However, these scripts and engineering imaginaries are not fully determinative of the future of the system; there is a "secondary shaping" in which new cultural influences can be exerted (Ito).

The existing literature concerning secondary shaping can be characterized as theories of appropriation (Eglash, Bar, Von Hippel); however it primarily concerns laypersons and individuals. The dissertation argues for an extended theory of appropriation, one which can include Nigerian engineers *and* laypersons, one which includes appropriation at the societal level in addition to individual.

The dissertation applies this "constitutive appropriation" framework to several exemplars: a phone-based financial credit system and flashing, both of which illustrate individual appropriation, mobile network redesign, which demonstrates appropriation by mobile engineers in Nigeria, and the quality of service debates and resulting Telecommunications Parliament (TCP), both of which are cases of societal constitutive appropriation. Cultural-specific influences include the historical background of

corruption, which inspires Nigerians to seek informal alternatives, the Igbo democratic tradition, which is linked to the TCP, and a tradition of cultural appropriation in music, drama, literature, film and (unfortunately) internet scams.

It is thus argued that an understanding of these situations wherein Nigerians take ownership of the design, use and architecture of mobile telephony technology is vital to an understanding of the success of mobiles in Nigeria, and illuminates what it means to be Nigerian.