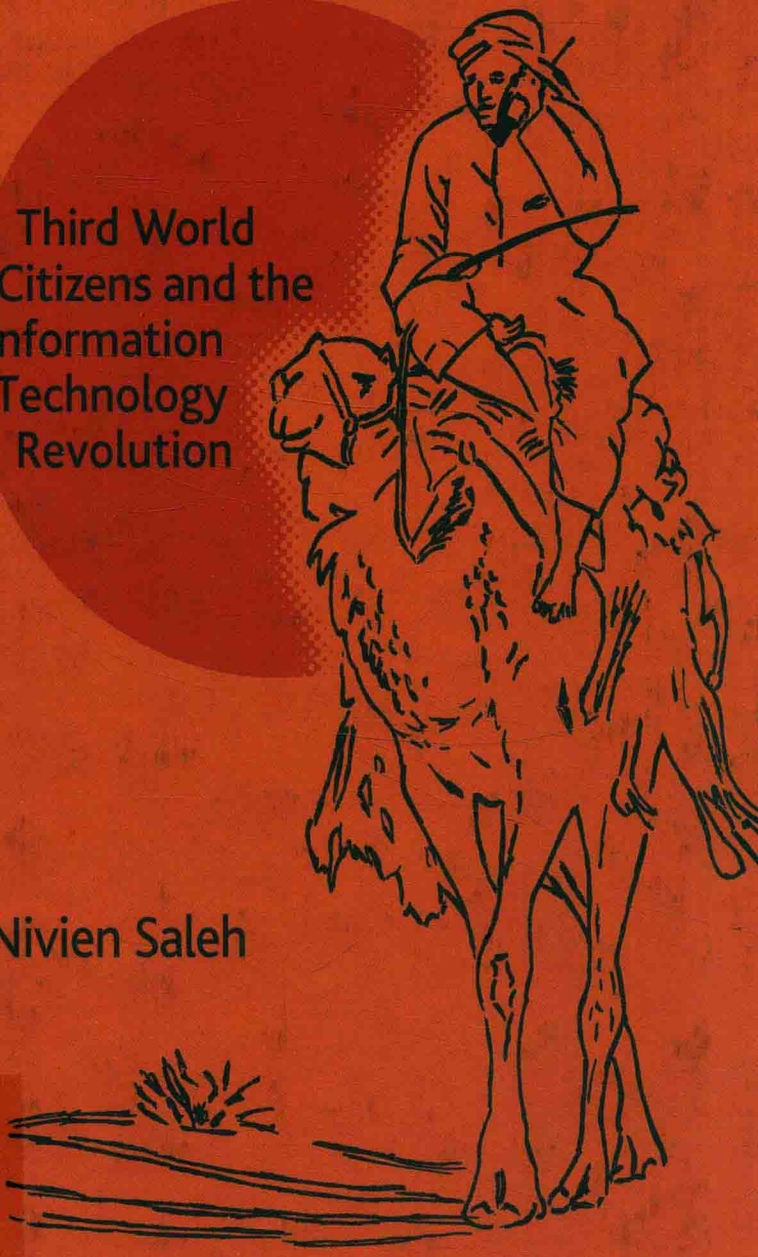
Third World Citizens and the Information Technology Revolution



Nivien Saleh

Information Technology and Global Governance

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Nivien Saleh

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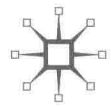

THIRD WORLD CITIZENS AND THE INFORMATION TECHNOLOGY REVOLUTION
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by Nivien Saleh

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For my parents Abdel Halim Saleh and Elfriede Saleh, and for my brother Tilman

Illustrations

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Acronyms

AFESD	Arab Fund for Economic and Social Development
ARENTO	Arab Republic of Egypt National Telecommunication Organization
ARPA	Advanced Research Projects Agency
AT&T	American Telephone and Telegraph
BBN	Bolt, Beranek and Newman
BTA	Basic Telecom Agreement
ccTLD	country-code top-level domain
CSI	Coalition of Service Industries
CSNet	Computer Science Net
DCA	Defense Communications Agency
DNS	domain name system
EARN	European Academic Research Network
EC	European Community
ECES	Egyptian Center for Economic Studies
ECMS	Egyptian Company for Mobile Communications
EIEF	Egypt's International Economic Forum
ETUF	Egyptian Trade Union Federation
EU	European Union
EUN	Egyptian Universities Network
FCC	Federal Communications Commission
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GBDe	Global Business Dialogue on Electronic Commerce
GDLC	Global Distance Learning Center
GDP	gross domestic product
GIIC	Global Information Infrastructure Commission
GNI	gross national income

gTLD	generic top-level domain
IAB	Internet Activities Board
ICANN	Corporation for Assigned Names and Numbers
IDSC	Information and Decision Support Center for the Egyptian Cabinet
IESG	Internet Engineering Steering Group
IETF	Internet Engineering Task Force
IIPA	International Intellectual Property Alliance
ILPF	Internet Law and Policy Forum
IMF	International Monetary Fund
IP	Internet protocol
IPR	intellectual property rights
ISE	Internet Society of Egypt
ISI	industrialization through import substitution
ISP	Internet service provider
IT	information technology
ITU	International Telecommunication Union
MCIT	Ministry of Communications and Information Technologies
MENA	Middle East and North Africa
MIT	Massachusetts Institute of Technology
MoT	Ministry of Transport and Communication
NGO	nongovernmental organization
NSF	National Science Foundation
OECD	Organization for Economic Cooperation and Development
PPP	purchasing power parity
PTT	post, telephone and telegraph
RFC	request for comments
RITSEC	Regional Information Technology and Software Engineering Center
TCP	Transport control protocol
TCP/IP	transport control protocol/Internet protocol
TNC	transnational corporation
TRA	Telecom Regulatory Authority
TRIPS	Agreement on Trade-Related Aspects of Intellectual Property Rights
UK	United Kingdom of Great Britain and Northern Ireland
UNCITRAL	United Nations Conference on International Trade Law
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Program

UNESCO	United Nations Educational, Scientific and Cultural Organization
USAID	U.S. Agency for International Development
USIPO	U.S. Investment Promotion Office
USIS	U. S. Information Service
W3C	World Wide Web Consortium
WIPO	World Intellectual Property Organization
WTO	World Trade Organization

Preface

Does the information technology (IT) revolution empower Third World citizens? If you answered "yes," you are in good company.

Most development experts and academics and most U.S. and European government officials sincerely believe that the IT revolution has brought enormous, unmitigated benefits to the people of the Third World.

Consolidating six years of research, this book challenges that consensus. It shows that First World governments and transnational corporations dominated the rule-making processes of the IT revolution. With this, they boosted their own economic competitiveness as they moved from the rigid production patterns of Fordism to flexible accumulation, emphasizing corporate mobility, organizational decentralization, and outsourcing.

After forging a new IT regime for themselves, these actors imposed it on Third World societies.

Examining how this process took place inside one Third World country, Egypt, this work documents how the World Bank, the European Commission, the U.S. government, and transnational corporations reconfigured power relations within poor economies with the allurement of technology and how they reinforced social injustice by denying ordinary citizens the right to choose their own political institutions. The book's analysis shatters the myth that the new technologies significantly diminish economic hierarchies.

The present study is written from the vantage point of critical realism, a philosophy of social science that specifically searches for power relationships and the play of power. Critical realism is vibrant in European academia but is still largely unknown in the United States, where positivism prevails. It is a premise of this book that positivism blinds scholars and policymakers to the destructive effects of First World power on human autonomy in low-income societies.

In sum, *Third World Citizens and the Information Technology Revolution* shows what happens when repressive Third World elites enrich themselves in

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cooperation with European and American corporations and governments. For those who wonder why some people in the world's periphery become attracted to violent oppositional visions, such as radical Islam, this study may be an eye-opener.

This analysis has been a long time in the making. The preliminary investigations began in 1999, when I was a PhD student at American University in Washington, DC, and scoured the field of comparative politics for a suitable dissertation topic. As every doctoral candidate knows, dissertation advisors exert strong influence over their students and often put their own mark on the works they supervise. I was lucky in that regard. As chair of my dissertation committee, Diane Singerman allowed me to truly follow my own intellectual inclinations while giving me the guidance I needed. Without her support, my work could not have become what it is today.

Edward Comor, who served on the dissertation committee until his return to Canada introduced me to the work of Gramscian international political economists, several of whom were affiliated with his alma mater, York University. Jon Anderson of the Catholic University of America contributed his expertise on information technology in the Middle East, read my chapters with a critical eye, and provided excellent substantive suggestions. Mireya Solis joined the committee after Edward's departure and helped me carry my dissertation to a successful defense.

Thanks are also due to over thirty policy experts in Washington, New York, and Cairo, who contributed their time and expertise by granting me in-depth interviews that complemented my archival research in the United States and Egypt, as well as the participant observations in Egypt.

Generally, I benefited from the heavy technology focus that prevailed at American University during my time as a graduate student there, and that manifested itself in faculty hires, technology-focused courses, and strong IT support for members of the campus community. I had the opportunity to work with Erran Carmel, an expert on the management of global information technology who taught me invaluable lessons about the economics of outsourcing business services. By offering me a position at the Social Science Research Lab, where I assisted students with their statistical research, maintained hard and software, and supported distance learning courses, Assen Assenov and Professor James Lee enabled me to acquire a very practical understanding of IT.

While I wrote up my results, my friends Tony Payan—now a professor at the University of Texas in El Paso—and Ayşegül Ateş—now a professor at Akdeniz University in Antalya—lived with me through the up and downs of writing a dissertation. So did Else Ward and John Hounsell of Washington, DC.

Over the last few years I have learned that writing an academic book is like a sculpture. You begin with a block of stone—the data you have gathered—and work to move it closer to the perfect shape that forms your vision. If you are an inexperienced sculptor—and I was—that vision itself evolves as you interact with your raw material. After weeks of labor, a figure emerges. You marvel at the progress you have made, see perfection in your sculpture, and put down your tools, afraid that further manipulation diminishes the beauty of what you have created. You then invite others to admire your creativity. If they are good friends, they will praise your effort but realize that your figure can be strengthened in its size, proportions, detail, or character, and tell you so.

I had many persons who did this for me by reading and commenting on my work: Mark Brawley of McGill University, Peter Katzenstein of Cornell University, Sheryl Lutjens, Cathy Small, Jacqueline Vaughn, Astrid Sheil, David Schlosberg, Zach Smith, Chris Gunn, and Susan Nyoka of Northern Arizona University in Flagstaff, where I worked as a visiting professor, Sandy Thatcher of Pennsylvania State University, and Elisabeth Muhlenberg, a doctoral candidate at the University of Illinois in Chicago and dear friend.

Since 2007 I have been an assistant professor at the Center for International Studies at the University of St. Thomas in Houston. My colleagues at the University—and especially the Center—have given me an intellectual home that allowed me to improve my manuscript. It saddens me that Gustavo Wensjoe, the director of the Center for International Studies and a wonderful, hospitable spirit, passed away a year ago in an accident. He would have been very proud of this book.

I met Jimmy Engineer, Pakistan's national artist, at an interfaith dialogue at the University of St. Thomas. Ever since our first encounter he has kept in touch, calling from Dubai, Karachi, or Berlin, to inquire into my progress. Amit Kumar, my Indian friend who works for the United Nations, has done the same.

Two persons remain to be named: Sandy Sheehy, a seasoned journalist and friend, helped me by suggesting edits to the manuscript that improved its flow. Terry O'Rourke, a creative attorney from Houston and adjunct professor of international studies at the University of St. Thomas, has read each chapter with enthusiasm and a sharpened pen. For this and the sketches that he has contributed to this book I am truly grateful.

I now place the sculpture on which I have worked for so long in your hands.

Nivien Saleh
September 2010

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