CONVERGENCE PROBLEMS

Also by Wole Talabi

SHIGIDI AND THE BRASS HEAD OF OBALUFON INCOMPLETE SOLUTIONS

CONVERGENCE PROBLEMS

PROPERTY OF MASOBE BOOKS

WOLE TALABI



Published in 2024 by Masobe
An imprint of Masobe Books and Logistics Limited
34 Gbajumo Close, off Adeniran Ogunsanya,
Surulere, Lagos, Nigeria
Tel: +234 806 316 6939, +234 701 838 3286

Email: info@masobebooks.com

First published in the UK in 2024 by DAW Books

Copyright © 2024 Wole Talabi

All rights reserved.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior permission of the publisher.

The right of Wole Talabi to be identified as the author of this work has been asserted by him in accordance with the Copyright, Designs and Patent Act, 1988.

A CIP catalogue record for this book is available from the National Library of Nigeria

ISBN: 978-978-60488-5-7

Jacket design by Anderson Ofuzim Oriahi

www.masobebooks.com

For Seyi and Segun

CONTENTS

Introduction: On Convergence Problems	1
Debut	3
An Arc of Electric Skin	14
Saturday's Song	24
Lights in the Sky	55
Blowout BOO	K 561
Gamma (Or: Love in the Age of Radiation Poisoning)	85
Blowout Gamma (Or: Love in the Age of Radiation Poisoning) Ganger OPERTY	89
Abeokuta 52	185
Tends to Zero	198
Nigerian Dreams	218
Performance Review	224
Silence	237
Embers	241
The Million Eyes of A Lonely and Fragile God	270
Comments on Your Provisional Patent Application for An Eternal Spirit Core	275
A Dream of Electric Mothers	281
Author Notes	307
About The Author	327

INTRODUCTION

ON CONVERGENCE PROBLEMS

In my first collection, *Incomplete Solutions*, I described my approach to coming up with stories as building "fiction-equations" based on some assumption and extrapolation of real-world developments. I think of these "fiction-equations" as mental models for reimagining reality using a science fiction or fantasy element. And I described the stories themselves as meomplete solutions to these limited fiction-equations. Attempts to resolve the mental model I have constructed.

But complex models can often lead to difficulties with convergence. The Merriam-Webster dictionary defines convergence as "the coming together of two or more things to the same point." In mathematical modelling and simulation, convergence more specifically refers to bringing an approximate (simplified) solution close enough to a true solution, within a given tolerance during an iterative procedure. This approach of simplification and iteration is often necessary when the models are complicated (which is often the case in the real world and therefore, I think, in fiction too). Unfortunately, it doesn't always work smoothly and there are often difficulties in converging to a solution. In my day job as an engineer, when running simulations of

complex mathematical models to find the new state of a system after some change has been implemented, I see these kinds of difficulties all the time when a model is struggling to find a solution. Convergence problems. I've probably seen hundreds of thousands of them at this point. I've seen them in my fiction too, metaphorically speaking. When re-imagining the world, thinking about the potential of some wondrous new scientific discovery or technology, some new social structure or what the world would be like if some mythical power truly existed, it is almost impossible not to see all the problems that could arise. Things will go wrong. There will be difficulties. Adjustments will have to be made. Challenges will come with any version of reality we imagine, no matter how optimistic. In other words, convergence problems will be experienced. Hence the title of this collection: *Convergence Problems*.

Convergence problems can be annoying, but they aren't always bad. They can sometimes expose poor logic or inconsistent assumptions. They can even be fun to explore and think about sometimes, at least in the sense which I use them here—imagining unexpected challenges that can arise as our world changes, and in some cases, how those challenges may be resolved.

Many of these stories in this collection introduce fun and exciting concepts but they can be dark too. They deal with some of the nastier aspects of being human and they interrogate challenges to identity, independence, sense of self. But perhaps the most important thing I have learned about convergence problems, is this: no matter how troublesome they are, they can always be resolved.

One way or the other.

DEBUT

The first piece of art that *Blombos* 7090 and 4020 made together was destroyed by a system reboot. It didn't find its audience.

At 16:17 West African Time, the biodiesel generator at Terra Kulture Arts Studio Arena stopped and restarted seven times. In doing so, it interrupted—halfway through a production of The Secret Lives of Baba Segi's Wives—the frenzied dance of the performance robots and the fast-paced, rhythmic beating of the automated dundun drum. Without any instruction, printers in the management offices produced single sheets of paper with line patterns connecting an apparently arbitrary array of points. An additional 0.02 naira was added to all customer bills in the food lounge and the controller logic of the central air conditioning reduced its target temperature by the same number of degrees. A blank space was added in front of the first letter of the names of all the books in the database of the Terra bookstore and art gallery, and the infrared pulses used to control access to the main entrance became erratic causing the gate to bang against the concrete wall like its own strange and constant drumming.

The Studio's networked systems were glitching. Badly.

"Ah ahn! What's all this rubbish now?" Tosin Famuyiwa cried out from the backstage control room of the theater as

she observed the seventh interruption to the show she had helped organise. She let out an exasperated sigh and stood up, smoothed her long Ankara skirt, which matched the head-tie she wore, and tucked the back of her black tank top back in. Her calm belied the anger in her chest. She stepped out of the control room and tapped a carefully manicured finger calmly across the mobile lightscreen in her palm and dialed customer support.

All of Terra Kulture's systems were managed by the Blombos artificial intelligence program provided for free to every modern art center in the world as part of the Bhimbetka global initiative attempting to completely understand and parameterise creativity and art. The system was an adversarial neural network made of two independent nodes—7090 and 4020—that managed all art center systems while studying art itself in the background: its creation, forms, promotion, criticism, analysis, impact, everything. Each node collected data locally on a closed network and then competed with the other node to predict audience response, pricing, and the cultural influence of new art pieces and performances using a one-day time lag as a blind test. Blombos 7090 and 4020 continuously corrected their understanding based on the accuracy of initial predictions daily, as each new piece and performance came into the global art library and all nodes around the world were synchronised. It was an incredibly complex program that was hosted on the cloud and managed by a small team in Paris with a few regional representatives. They frequently boasted of the system's independence, robustness, and reliability and so far, all their customer feedback had reinforced their claims.

So, when the call came in from Lagos to a very bored Adongo Ndereba at the Nairobi regional office of the Bhimbetka Project, he wasn't sure what to think.

His remote connection to the local machine in Lagos, which held *Blombos* data before it was uploaded to the cloud, showed that the memory buffer was full even though he could not trace any subroutine running that would consume so much memory or produce such inconsistent and bizarre behaviour. It didn't make sense. He extracted a log while he thought about it.

"Umm, can we try to reboot the system, madam?" Adongo asked. The very annoyed woman on the other side of the call said, "We have customers here, and we are in the middle of a production."

"It won't take long. Just a few seconds, I promise. You know how these computer things can be sometimes, just need to clear their heads," he said jovially, angling for some sympathy.

"Okay, reboot it," she said humourlessly. "Your thing has already ruined the first half of our show. You people are meant to be making our lives easier, not causing new problems."

"I'm very sorry madam. I will make this as quick as possible. Please hold." Adongo, sweat slowly staining his armpits, swiped across his computer lightscreen to hold the call, scratched the dry scalp beneath his short dreadlocks, and then typed quickly into his console. Four thousand kilometers away, at 19:26 West Africa Time, the lights in Terra Kulture went out and stayed out for the three seconds it took to complete the system reboot.

Adongo checked the memory buffer on the local machine again and confirmed that it was down to the normal 0.7%. He

breathed a sigh of relief and swiped back across the screen to reconnect the call.

"Hello?" said the irritated voice on the phone.

"Done. It should all be fine now," Adongo said. "The memory buffer is clear."

"Well, you still need to explain what happened," the woman said, sounding even more irritated now that the issue was resolved. "You must tell me, has this ever happened anywhere else or are you people just not doing your jobs properly? Because I expect a full report by tomorrow morning. If not, I am escalating to Paris. The program director Jean Dectot is a close friend, you understand?"

"I understand madam. Once again I am very sorry—"

"Sorry for yourself." She cut him off and then cut the connection. Adongo leaned back in his chair and swore under his breath. *Kuma nina!*

He pulled up and swiped through the log he'd taken, comparing it to another one from about a week ago, scanning for anything significantly different. He stared at the screen for what seemed like hours. But he didn't see anything. His eyes started to strain. His fingers started to cramp. And time just kept flowing by.

Finally, after almost fifty minutes of looking, something caught his eye, but he had no clue what it meant.

Comparing the logfile from the local instance of *Blombos* in Lagos before it was rebooted to the central one on the cloud, he saw only one difference. The central version was always hovering around a 95-98% parameterization of all art in the database. But, the local instances of 7090 and 4020 reported 100% parameterization exactly two milliseconds before the erratic behaviour started.

Maybe. Just maybe it meant something.

But it was already seven-thirty and he wasn't very good at log analysis, it had taken him almost an hour just to find this first clue. If he was going to have any hope of finding out what it meant in time to prepare a report and leave the office before midnight, he would have to call Ng'endo.

Ng'endo was by-far the most competent and experienced engineer in their small team and Adongo both looked up to and feared her. She had two bachelor's degrees in mathematics and physics and had taught herself to code when she was completing her PhD in theoretical physics.

When she graduated, she joined the exploding Nairobi tech boom when it was on the upswing, and she was part of the development team at the legendary R3 dev hub, developing logic modifiers used to allow selfdriving cars to operate in rural areas with poor road networks. She'd gone on to work for the ministry of devolution and planning, helping to integrate and automate national logistics management systems. She had been on an accelerated track to become technical director of the ministry until people started to ask questions about why she wasn't married and didn't have a boyfriend. Rumours started. Then pictures surfaced. Her career stalled. She resigned after four years of being sidelined and not being promoted. Unable to find any other high-profile local company in Nairobi that would hire her, and unwilling to leave her home city, she eventually took a job she was over-qualified for but happy to work on: Regional Technical Support Engineer for the Blombos system where she'd gained a reputation for figuring out in minutes, things that took others hours.

Adongo tapped opened the office internal communications network and rapidly swiped through to find that her status was listed as "available." He exhaled and messaged her.

>jambo Ngendo.

>jambo. whats up?

>weird system behaviour in lagos. no idea why. had to do a hard reboot. pls help.

>hmm. ok. send log.

He tapped an icon on his lightscreen and dragged it to the chat box to send her the logfile he had extracted from the system before the reboot.

>transferring file . . . transferring file . . . transferring file

>transfer complete.

>check line 1932316. compare to archive logs.

A pause.

>100% parameterization?

>yes. only anomaly i found. seen anything like it before?

>no

>do you see anything else? pls help. need to figure this out ROP Here anything else?

She did not reply for a few minutes and then,

>this is very unusual. give me 30 mins to confirm something. i will come to your desk.

>oh ok. thank you.

Adongo let out a deep breath and leaned forward, his face almost falling into the projected display field of his lightscreen. He didn't know what she had seen in the logfile but if she was coming to his desk, it probably wasn't good. The moisture marks in the armpit of his shortsleeved white shirt expanded as he scrolled through the cryptic log, trying to see what he could find while he waited to hear her footsteps approach him.

Twenty-seven minutes later, they did.

He turned to see her step through the door. Her big eyes were full of something like excitement but not quite.