

EDITORIAL

Special Issue: Women in Contemporary Science in Africa

Rethinking the impact of cultural norms and gender roles on African women's success in science

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INTRODUCTION: BETWEEN DEFINITION AND MEANING

When I was approached with the request to write an editorial for this volume of ASFI Research Journal, I had mixed feelings not just because of personal misgivings about the conversations around gender, but also because of its conceptualisation into feminist tropes^{1,2}. Yet, I quickly realised that even my dissent has to distinguish between definitional ambiguities and the imperative to appraise a specific performance feat in as much as the further need to valorise the achievements of female scientists in Africa requires. Reflecting on gender roles as such against the impact of cultural norms, it became clear to me that the overlaps between the two notions can actually be enabling to the work of our female scientists in the 21st century depending on how we handle the intricacies involved.

Clearly, cultural norms are as fluid as gender roles remain contestable in the proximity between gender as a social construct and feminist advocacy. Since every culture abides by a certain ideology, its norms will consequently presuppose a relative uniqueness that ideally relates with other cultural norms convivially. This is however not often the case because of a tendency in more powerful—and consequently arrogant—cultures to apply Darwinian logic in what transforms into their osmotic relationship with those who are condemned to continuously evolve on the periphery of global cultures.

Any reflection on African women's success in science must therefore consider the roots of some key terms in this inquiry. These are “cultural norms”, “gender roles”, and “science”. Obvious as these seem, they have been so streamlined in our collective imagination according to contemporary exigencies that the risk of either subsuming relative meanings into normative usage or even reviving the

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binary tensions of conceit and subsequent control may lead us into a false consensus. It is important to signal this danger here because of a recurrent temptation to ease into the apparently sophisticated rubrics of cultural gloss in especially a global North-oriented determinism which means that the global South often jumpstarts almost every notion of cultural continuity.

That “cultural norms”, “gender roles”, and “science” can easily become umbrella terms in definitional indoctrination for the African scholar, generally, can best be appreciated by simply asking what we mean by culture here. Understandable as this worry appears, it poses a significant challenge today about the agencies of voice and identity which have been animating debates around glocal interstices and the accompanying pushback in anti-establishment gesticulations.

Heterogeneous standards are collapsing at the same time that Africanist arguments about the need to re-centre the hijacked consciousness in a multiplicity of evolutionary trends are gaining ground. The way “cultural norms” have simultaneously confounded and begun the liberation of the debate is viewed in the confinement of gender to social constructs of materialist convenience. “Gender roles” inevitably have to succumb to pressures from views that associate globalist advocacies with suspicious goodwill, having sanitized “primitive” cultural mores into the acceptable mood of the “civilised”. Yet, scholars and writers like Torgovnick^{3,4}, Nzegwu⁵, Butake⁶, and Omwueme⁷ are dewriting that biased space in representative ways—and I use “dewrite” against the cliché of “writing back”⁸. Consequently, “Science” must be relativized from its base of attempting to rationalise knowledge in every culture before aligning these, whenever necessary and possible, with complementary trends that should not impose exclusive complexes that sustain hegemony. If we define science only according to Western prescription, then we miss the point because of the danger of following stated hypotheses. A representative example is the designation of Mary Magdalene as a prostitute by Pope Gregory I in 591 AD. That this view still lingers in Catholic conversations about female representation despite the Church

recanting it in 1969 indicates the pervasive role of ideology in shaping collective consciousness in matters of faith and application in social praxes. The data that validated the stigmatisation of Mary of Magdala was skewed in the convenience of an othering Christianity and its polarised outrage relegated “science” to a place where falsehood accommodated a similarly falsifying discourse.

More specifically, the combination of “cultural norms”, “gender roles”, and “science” for the female African in science has suffered from the same binary constructs that rode on the mutual back of colonialism and Christianity and gave the African man a false sense of power. Such a bloke, in the African novel at least, is personified by Okonkwo and his cowardly manhood⁹, his grandson Obi whose frustration at the crossroads of cultural shifts is symbolised as a broken inheritor by the fact that he cannot even eat a fat and juicy toad¹⁰; Chief Nanga, MP, and the ruinous populism that transformed what was supposed to be democratic leadership into a continental template for the emergence and consolidation of totalitarian messiahs¹¹; Professor Okong whose hypercorrective mannerism fails to save him and his kind from slavish pauperism coated in linguistic hypercorrection in the service of the successors of Chief Nanga¹²; and Cary’s Mr Johnson who at the point of being executed still heaps plebeian praise on the very force that orchestrates his demise¹³. The “scientific” construct that enabled the “monster” of manhood is embodied in Armah’s title¹⁴, which implies and associates both the need and imperative of the messianic birth to the female, who personifies the root, the pathway, and the sustainer.

INTERROGATING THE COSMOLOGY OF SCIENCE

Worldview is thus a significant determinant of the three rubrics under consideration here—how we acknowledge or deny it as a result of the influences that condition our growth and awareness. Such a cosmivision is always place-determined, otherwise it is burdened by alien mediations that subsume the local colour into its furling gestures. In the urbanised African lifestyle today, for instance, an expedient fallacy of “green tea” health ethics has been hyped into

a global brand by the consumerist trap with a dominant Orientalist linchpin. Even mega brand names in the West which “manufacture” a variety of these beverages have been accommodated by the intoxicating campaign of fair trade which, needless to say, Africans constitute the collateral bloc in the opportunity cost of healthy living. How else can this be otherwise when, in our enthusiasm to participate in the globalist worldview, we ignore the abundance of greenery in our backyard for the preservatives-spiced variants from the Chinese “Grand Mall”, French “Carrefour”, and Turkish “Mahima”? Having so terminally conditioned our taste buds, the local is finally resorted to under duress, often because of the intervention of an expert in “alternative medicine”. As such, the failure to relativize “cultural norms” will hamper the necessary movement back into the future where the grandmother in the village is no longer permitted to prepare a concoction of local herbs that (re)activates the child’s appetite simply because a multiplicity of vitamins can be prescribed from the nearby drugstore with the guarantees of exorbitant profits for global pharma. Our female scientists need to reconnect with their roots-worldview more pragmatically in order to pre-empt fiscal exploitation in the guise of health benefits, and therefore remain relevant in an era where various forms of conquest threaten to dilute every organic endeavour in science.

For us to appreciate this roots perspective comfortably, it will be necessary for me to point out, even at the risk of provoking a debate that is beyond this brief writeup, that gender as a roles-construct is also the distortion of existing worldviews and their associated identities which harbour aspirations that are ironically associated with, but never attained as a factor of, social mobility, and only console a few cheerleaders who perpetuate the lie as the ultimate hope of sustaining their privileges. Omwueme’s *Tell It To Women*¹⁵ debunks this false narrative in which a “civilised” lifestyle is introduced in the rural community by two female indigenes who are well educated and respectable civil servants, and instead use their positions and influence to distort the traditional worldview; but also indicates a possible new and inclusive future by the end of the play in which demographics interact not according to the ismatic propaganda of top-down development but as a

recourse to the original, non-deterministic mutuality that manifested in the bonding of male and female in precolonial times.

Faced with this tricky situation, the fundamental question to the African female scientist is: whose world, then, is she embracing and projecting simultaneously in her research endeavours? The pull of apparently embodying ideologies is today a neoliberal strategy that targets the roots of our strength as implied in my discussion so far—the African woman’s consciousness that was never compromised by the “Massa”-conceit as heir of the colonial master’s falsification of male status—and she cannot, should not, surrender to the mirage. She should know and do better, especially that her complicity in a holistic subscription to the centripetal discourse is a worrying concern for the future. This is so because, as it is already becoming obvious, the cushions of funding and the rush into technological determinism as symbolised by *Artificial* Intelligence, will replace our memory plate through prefab expertise.

It will not be possible for me to conclude this discussion without alluding to the role of feminist scholarship in compromising gender discourse and its impact on the progress of science. If precolonial Africans discriminated against the female, it was not because the social structure was exclusively binary, but because the nature of division of labour in the community was conditioned by biological and geographical conditions. While childbearing for example, inhibited the female from active participation in some activities within specified periods, the difficulty of navigating the physical environment also privileged the male who became synonymous with risk-bearing. What de Beauvoir¹⁶ describes with habitual bias as the “animal nature” of the male is not a unique tag; the problem is that centuries of perverse masculinity in what became the West had phased out the female’s animality and instead accorded her a supple personality that has been universalised in the image of the Virgin Mary as the standard for all women. But the African female, from Sheba to the Umuada in Igbo civilisation¹⁷ never felt inferior in her relationship with the male, whether as son, husband, or father. The falsified narrative will lead to titles like Afuh’s *Born Before her Time*¹⁸ and Emecheta’s *Second Class*

*Citizen*¹⁹ in which the discrimination which the female child suffers results from the exclusive nature of colonial education and the complementary influence of Christianity. Saadawi's own title²⁰ suggests that the female has internalised exclusion "at point zero" and only relies on a form of feminist advocacy in Ba's *So Long a Letter*²¹ to attempt a conditioned form of resistance.

This is the background to probably all the roadblocks to the full participation of the female African scientist in a field that is naturally more aligned with her multi-layered constituency. In advocating for their place in the aftermath of institutionalised binaries, gender relations have been abstracted into something else: women still see themselves as objects, doubt their natural potentials, and ultimately reduce their participation in society as role-playing in the performative constructs. We have to return to the bible to source evidence of how women were their own undoing, thanks to this politicization of gender. While it is not really clear why there was such a low level of education in Jewish communities at the time of the prophets (Ehrman estimates "in the ancient world, only 10–15 percent of the population could read and write"²²), it is also true that most, if not all of recorded literature was initially oral, and even so dominated by male voices. It is possible that a form of social Darwinism was in place and what can be described as pre-capitalist division of labour in domestic and social roles was acceptable. In the evolution of society, marked by multicultural influences that resulted from war, trade, agency in advocacy shifted predominantly in favour of the male whose physique suited the changing atmosphere and its expectations. Even so, we still have significant female voices in what was politically categorized as the "Old Testament" from which a complementary and non-hegemonic representation of communal reality was obtained.

Women who featured in the "Old Testament" of the Christian Bible were never intimidated into silence and it will seem that their apparent compliance was culturally expected (polygamy and the culture of mistresses for instance were not problematic) just as their control of the male (Sarah and Abraham) was not to be viewed as a sign of manipulating the male even if this was at a domestic level. A woman like Deborah

reminds us of female leaders in precolonial Africa who founded nations and asserted their authority in engaging ways. It was only the coming of Roman imperialists that changed the picture by not only editing women out of Jewish history but also universalizing the subordination of womanhood into performative constructs. The poetry of Carol Ann Duffy²³ speaks to the ideological fallacies that staged universal silence as a norm in female presencing, and how "The World's Wife" is a systemic misnomer that targets cultural histories and their relative focus. As a result of this vested mediation, Mary the mother of Jesus personifies a curious reductionism in formal representation, her voicelessness celebrated as the mark of piety, a behavioural template for the female who wishes to be endorsed by the male-certifying gaze. I suspect that most female African scientists adhere to one of the foreign religious outfits and endorse their exclusive purview even as they struggle to make their voices heard.

This is the mercurial background from which gender is misunderstood and therefore misrepresented by formative ideologies in the West. Because these were masculinist, and woman was strong before ideology, has remained so even after ideological strongholds try to displace her from the pantheon of power, and she herself becomes complicit in the self-degradation that is internalised, our female scientists need to also play the fire fighter today by using their metier to suture the rifts of ideology. Otherwise, their plaintiff voice will continue to seek sympathy and understanding from the very forces that are responsible for their exclusion.

INSPIRATIONAL CHEELEDERS

The above discussion is watersheded by three female African scientists whose contributions, as contained in the papers in this volume, allay fears that African science with a feminist touch—"Femalism" being a coinage which to me represents female advocacy more aptly because of its universal nativism without ideological interferences²⁴—can be overwhelmed or stymied by foreign models and their masculinist programming. Fombele and Ndjudje frame the image of Professor Leke against a the background of the "underrecognized role" of African women in multiple

sectors “in shaping the scientific landscape of the continent”²⁵.

Amongst the “systemic obstacles” that limit the agency of the female is “leadership opportunities”. Evidence from “existing literature [which] highlights both the persistent gender gap in African science and the transformative impact of female scientists who overcome barriers to drive innovation and mentorship” is mendable once the “transformative impact” is legislated through the help of a female groundswell during every election in Africa. The “entrenched cultural, institutional, and systemic obstacles” are the ironic “achievements” of the naughty son who, because he is king, ignores and even trivialises the supremacy of motherhood. The difficulties in overcoming those barriers are symbolic, and as Fombebe and Ndjuidje suggest, Professor Leke’s contribution can be inspirational in the hope for us to attain a state of parity, and even surpass the systemic privileging, in gender representations as far as scientific input in Africa is concerned.

Just like Fombebe and Ndjuidje who highlighted the underrepresentation of the female African scientist in their field, Oladejo et al²⁶ analysed female contributions in the areas of medicine, environment, and technology and focus on the “underappreciated” fate of the researcher. The familiar trend of causal factors including “historical biases and limited educational access, combined with societal pressure” account for this lethargic appreciation. The Sisyphean ability of these researchers, emblematised by names like Dr. Wangari Maathai and Prof. Okeke, testifies to the female’s primaeva identity across time and space. This identity is intimately associated with the rock not just in terms of the Greek myth, and in its ability to stabilise racial egos as used in the inauguration poem, “On the Pulse of Morning”, by Maya Angelou²⁷, but also in affirming the incontestable anchor of Mother Earth and the Earth Goddess, whose values have been cheapened by ideological constructs. In a sense, these scientists underscore the fact that the female is the nucleus of life, culminating in research concessions today that favour the Mitochondrial Eve.

The final paper by Fominyen²⁸ addresses lapses that threaten female participation and visibility in the

Cameroonian film industry. Admittedly, this is an area which is in vogue and ironically, the fate of the female still mirrors that of her predecessors in the industry in early American productions, culminating in the commodification of the female. The iconic face of Marilyn Monroe seemed to have been a prophecy of what the female actress goes through in Africa, and is expected to perform extra hard in order to be “seen” and accepted. Collywood, the Cameroonian customization of the American brand is exceptional in all the adaptations in that it is situated at the crossroads of linguistic shifts that are caught in a subtle form of internal colonialism. Still the inspiration is relieving, and pioneers in the Nigerian industry, Nollywood, notably Liz Benson, can provide the clue to aesthetic beauty and valorisation. Of course, this will have to be accompanied by institutional restructuring and more education both in directorial roles and audience participation to curb certain flaws that feed the negative propaganda against the industry.

CONCLUSION

In conclusion, this editorial contributes to the revivalist momentum in Africana as a whole, which is being spearheaded by African females. It is my conviction that the cloak of marginalisation is a distraction which the female, as the contributors here have implied, can overwrite, based on how focused and committed she is.

CONFLICT OF INTEREST

None declared

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