DOUGLAS LIVINGSTONE, POET OF A PLANETARY AGE DECENTRING OURSELVES TO RE-CENTRE OURSELVES

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Abstract: Douglas Livingstone – poet and marine bacteriologist – remarked that he was into the "pollution game before it became fashionable". Having decentred ourselves in our abuse of the Earth, how do we recentre ourselves? Or, as his poetry pursues the question, how in the era of the Anthropocene do we retain symbiosis between our biological and our cultural selves? With comparative reference to Chakrabarty, Ghosh and Pope Francis, the article considers Livingstone's collection A Littoral Zone as poetry of a planetary age.

Keywords: Livingstone, poet, bacteriologist, planetary age

1. Introduction

Douglas Livingstone remarked, back in 1986, that he was "into the pollution game before it became fashionable" (qtd. in Chapman 2016: 116). I wish to return to Livingstone's collection of poetry, A Littoral Zone (1991), in the context of more recent manifestations of "green" concerns, as captured in Dipesh Chakrabarty's article of 2009 and expanded in his book, The Climate of History in a Planetary Age (2021). Chakrabarty enters the domain of the earth scientists, a domain perhaps less than familiar to many of us, in literary studies. Before turning to Livingstone, therefore, let me remain briefly with Chakrabarty.

If, as scientific consensus has it, global warming is a real, primarily human-induced condition, then what might this mean for our future? Whereas the COP (climate change) conference struggles to square technocratic and ideological parameters, earth science, as Chakrabarty (2009: 197-222) summarises, has "upscaled" its arguments from that of the "nation-state to a planetary dimension" (ibid.). While it has long been assumed that the physical environment did change, the change was assumed to be so slow as to be almost meaningless. Paul J. Crutzen and Eugene F. Stoermer (2000) suggest, however, that we recognise a "new geological era": an era, coined the "Anthropocene" (Crutzen 2002: 23), in which human action has become the key determinant of life on earth. Instead of humans identified simply as biological agents, we humans began to assert a physical force upon the planet. On a scale hitherto technologically impossible, we cut down trees, caused the ice to melt, and the climate change. Our imposition on the natural world began to alter – continues to alter – the chemistry of the atmosphere.

At this point, Walter D. Mignolo's (2011: 273) "decoloniality project" might interject: "we" is being used too loosely; the identifier "we" must be directed at colonial/capitalist Man, together with his profit-greedy, industrial pursuits.

However, Chakrabarty (2009), a historian, is not talking of which country, or which political system, is the chief polluter: there is no principled difference between the use of fossil fuels in a market economy and a state-centralised economy. Rather, he is invoking an evolutionary timespan. To illustrate, he cites the shift from huntergathering to agriculture. It was a shift made possible by a degree of planetary warming, partly the result of an orbital tilt in the relationship between Earth and Sun. The temperature of the planet stabilised within a zone that allowed grasses to grow, including barley and wheat. Such changes heralded not only an agricultural, but a cultural revolution as well. As Crutzen (2002: 23) phrases it, we "stumbled" into the era of the Anthropocene. Even as we became the dominant species on Earth, we set about disturbing the conditions necessary for our own survival.

Is this crackpot science? The human being reduced to a species! Yet, as earth scientists remind us, a species is not a stable entity but, according to Darwin (1860), a species adapts and evolves. As Chakrabarty (2009: 201) puts it, many earth scientists maintain that we must be prepared to distinguish between "recorded history" and "deep history", the latter measured in the genetic and cultural changes that have led to the development of forms of life. Noting intellectual and imaginative categories that are often in conflict with each other – nature and nurture, say, or biology and culture – Chakrabarty distinguishes between the global (the human being, now) and the planetary (the human species, then and now).

Such conflicting categories of thought and imagination also inform Douglas Livingstone's poetry. As a scientist, he registered both a heightened anthropocentric and a heightened anthropogenic awareness, the former regarding humankind as the most important element of existence, the latter pointing to pollution as originating chiefly in human activity. As a poet, he said – almost in contradistinction – "Poetry can't save the planet. It can draw us back into reciprocity with the natural world [....]. Its range, resonance, and sinewy-ness of language can be a major civilising force" (Livingstone 1983: 11). Also, in an earlier comment: "I hope my animal poems are at the same time civilisation poems. But we poets, we have our own calling. We try to entertain" (Livingstone 1977: 21):

After the floods, debris heaped higher than two men. On one high peak, (a pain for the SPCA if ever there was one!) A roughed-up bantam stands.

This teapot, whose rage is written too large to be cooped within one pygmy chanticleer, surveyed amazed by gulls and gannets, trumpets his fractious challenge. Tempting to dub the din thanksgiving; or more: life triumphs even on no longer trusted planets.

("Scourings at Station 19", in Livingstone 1991: 47)

A bantam, a teapot, a pygmy chanticleer, thanksgiving, and a flood. The juxtaposed, heterogeneous images stamp poetry as a style even as the thought lingers in its implication: "life/triumphs even on no longer trusted planets" (ibid.) Of *A Littoral Zone*, in which "Scourings" appears, a critic asked how it is that a book, "sad about our condition in the world, nonetheless unflinchingly affirms life" (Sacks 1992: n.p.). I shall return to *A Littoral Zone* but, first, who was/is Douglas Livingstone?

2. A poet of planetary awareness?

Attached as a marine bacteriologist to a scientific research unit in Durban, South Africa, Douglas Livingstone (1932-1996) devoted over thirty years to clean water in both the arid hinterland of KwaZulu-Natal province –

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... to sample herd-soiled, suck-
hooved, and human drinking water –
("August Zulu", in Livingstone 1978: 14)
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and along the Indian Ocean coast. His doctoral thesis in biological sciences was published as *Microbial Studies of Seawater Quality off Durban* (1990), while his 6 collections of poetry attach his scientist's observations and curiosity to the 'art' of the word:

Bwana Coelacanth*, in royal blue, still trundling about the Camores in your casque, your jointed cranium.

What awes me – fish from long ago – is not the muddying of your chaps when waves clawed 200 metres up or below today's makeshift shores, nor your changeless chinless lineage, but your fathers squirting on eggs to sire everyone I know.

("An Address to a Patrician at Station 8", in Livingstone 1991: 24) (*Coelacanth, an ancient lobe-finned fish, long thought to be extinct until, in 1938, a specimen was found in a catch of local fishermen on the Indian Ocean coast of South Africa.)

As Livingstone put it to me over lunch, in the mid-1980s:

Like "August Zulu", my 'coelacanth' poem, at bottom, is a political poem. My kind of political poem. Local, African, yes! But a politics of the planet, on which all of us, whatever our lifeform, have no option but to serve out our time. This 'green' thing! Yes, we're poisoning the atmosphere. We'll see increases in extreme weather conditions, more allergens, decreases in food production, increases in foodand water-related diseases, decreases in coarse-grain crops. This is supra-politics, because all of this will lead to displaced populations, conflicts over scarce resources, and wide-spread social breakdown.

Yet I'm not apocalyptic. We'll still be using coal – at least, in the Third World – well into the 21st century. But we have opportunities for First World/ Third World co-operations. Advances in carbon capture and storage, in converting coal waste to high-value carbon products, are being explored, applied, even now. So, don't always listen to doomsayers. Whatever the role of the scientist, the role of the poet is to open the vistas of our imagination including any metaphysical impulsions. Science and poetry, or is it poetry and science! (qtd. in Chapman 2016: 120-121)

The twin influences of science and poetry have encapsulated Livingstone's poetry from 1964, the date of his first significant collection, to *A Littoral Zone*, the last collection that he published before his death from cancer:

The first sputnik blipped above me where I worked 12 meters down at the jaws of dam construction in an outraged Zambezi; hearing the broadcast about it that evening, recalled a light cord tied at my back which strung the man groping in mud to sometime starmen, knotted under my ancient aqualung.

("Spinal Column" in Livingstone 1978: 37)

In a paper delivered to the scientific body, the Royal Society of South Africa, Livingstone (1986: 107) concluded his address with the following comment: "Einstein observed that the most beautiful emotion we can explore is mystical. The source of all true art and science".

A poet of a planetary age?

3. A Littoral Zone

In his "Notes" to the collection, Livingstone (1991: 62) defines a littoral zone as "that mysterious border that shifts restlessly between the land and sea. It has, to me, always reflected that blurred and uneasy divide between humanity's physical and psychic elements". With an epigraph from Cervantes's *Don Quixote*—"I have always heard, Sancho, that doing good to base fellows is like throwing water into the sea" (idem: 6)—we, the readers, accompany Livingstone in his quixotic quest for clean water. But if he is Quixote, he, like all of us, is also Sancho, a "clown of creation" (idem: 46). The opening poem, "A Darwinian Preface", alerts us to the trope of the journey. It is a journey to each water-testing station, which seeks to fuse a language of poetry to a language of science. Or is it the obverse?

The crab, the clot, the muzzle or the knife: patiently, the nocturnal terrorisms stalk. Even the brave know hardly of rest, aware a body's little but a glove stretched from metatarsals to neocortex on a stiffening frame...

(idem: 7)

Like "A Darwinian Preface", "An Evolutionary Nod to God, Station 4" plays skilfully on the sonnet form. The scientific/ratiocinated voice simultaneously compresses and releases our human capacity for emotional and intellectual contemplation:

Perhaps creationists are nearly right:
an enigmatic principle formed cells
- evolving scientific law by night informed with more ahead than heavens or hells.
Irradiating slime-flecks day by day,
it watched (with love?) rash chromosomal loops
unwind, reform, transform their DNA
to struggle up from primed primeval soups.
(idem: 18)

In the crisis years of apartheid, in the 1970s and 1980s, Livingstone, like J.M. Coetzee, faced accusations by critics of both liberal and Marxist persuasion that his central concern was not the then national issue of apartheid. The publication of *A Littoral Zone*, nonetheless, coincided with what in the 1990s was called the *greening* of the humanities (see Parini 1995). With the term "ecocriticism" traced to a coinage by William Rueckert (1978), eco-criticism provided fertile ground for a turn to a green Livingstone. The environment is not typified as a framing device or an objective correlative of the human mood, but as an integral presence in which human history is inextricably bound to natural history. As a subset, a key adjustment towards an environmental politics includes Terry Gifford's (2002) reformulation of the nature/nurture dichotomy. Nature and culture interact upon each other, so that

natural images in poetry only work because nature *is* culture, and poetry, in particular, plays upon the instability and variability of our constructs. But the converse realisation that culture itself is natural provides a vital opportunity for the poetic imagination. (Gifford 2002: 60)

Despite such an imaginative reformulation of poetic possibility, greening in literary discussion led to an overlay of interpretative contestation ranging from the scientific to the aesthetic and including what has come to be dubbed ideology critique: that is, suspicious or diagnostic readings against the grain of authorial intent, whether in the "-isms" of postcolonialism, feminism, or indeed environmentalism itself. Ian Glenn and Ed Rybicki (2006) applied a "scientific" reading to Livingstone's "Cells at Station 11":

Past the backline, a blackened corpse tumbles slowly...

My microscope awaits elsewhere. Will this bottle include a cell from that out there? Miraculous cheek at prying probe, like some damned god's voyeuristic telescope: cilia spun from spirochaetes, chloroplasts from bacteria.

But he and year-old invaders

– the silent mitochondria –
propel our mobile towers, shared cells
sparking, colonised by vandals:
a fifth column of DNA
in interstellar sequences,
bland in their promiscuity.

(Livingstone 1991: 35)

With the help of Rybicki's disciplinary training in the sciences, we follow the authors' elaboration:

The microscope reveals almost too much of evolution and sexuality, it seems. The cilia are little hair-like protrusions that can beat along like oars and are derived from spirochaetes, which are also bacteria. The mitochondria are the powerhouses of cells

and the result of an ancient intercellular parasitism that became symbiosis and originated eukaryotic organisms, those which contain their DNA in a chromosome in a nucleus, and thus most 'higher' forms of life. They propel our 'mobile towers' – a repeated Livingstone metaphor for human life. (Glenn, Rybicki 2006: 86)

To summarise Glenn and Rybicki, we are "bound together promiscuously beyond our ego in complex cellular structures" (idem: 85): "We think we choose, but are most true/to interned energies" (Livingstone 1991: 35). Such energies embody the live planet Gaia, the endlessly adaptable organism of James Lovelock's (1991; 2000) hypothesis, which in our ignorance we are bent on destroying. Our responsibility should be to our kinship with all of creation as we struggle to tilt the windmills of our idealism against our own selfish gene: the drive, interned in our DNA; interned in the deep constants of our cellular being. The paradox, however, is that having evolved the capacity for an ethical nature, having invested value in our "uncommon humanity" (Livingstone 1976: 144), we remain tied to our baser instincts. Ours is a stor' of division, whether in intimate relationships, politics, science, or art.

While Glenn and Rybicki seek to clarify Livingstone's specialist terminology, a disciplinary-rigorous science reading might be tempered by Livingstone's (2006: 115) remark – he was referring to T. S. Eliot's "The Waste Land" – that "great poetry can be appreciated before it is fully understood". In "Cells at Station 11", the biological terms, whatever their precise meaning, emphasise in contrast a poetic drive: imaginative truth vies with foundational truth; individual autonomy struggles against determining account, as in the poem itself, where the laws of metrical structure (the 8-syllable line count) cannot always check the burst of expression across the run-on lines ("Miraculous/cheek at prying probe, like some damned/god's voyeuristic telescope", idem: 35).

Rather than a "science" reading, Wendy Woodward (2003) applied the by now well-worn postcolonial vocabulary of the Self and the Other. This is distinct, according to Woodward, from a more eco-feminist "we" and "another": "those beings who are neither Self nor Other in any absolute dichotomy, but are familiar, related, and connected to us" (idem: 50). Woodward's argument was that Livingstone – a male scientist-poet – invariably invoked a male gaze in his depiction of both human animals and non-human animals. The result was an ongoing tyranny of dualism in which the "you" or the "that" (the human woman or the non-human creature) occupied a secondary, at times a supine, position in relation to the dominance of the male poet-speaker.

Mariss Everitt (2005), for her part, saw in such an approach the imposition of an abstract idea onto the texture of the poems, in which precariousness is embodied as a non-dualistic attitude to both Self and Other. It is a "clown of creation" (Livingstone 1991: 46) – not a domineering male gaze – that "enacts in [the water-sampler's] own body the whole evolutionary history [even as] his own split personality precludes him from knowing this" (Everitt 2005: 65). In short, we humans, whether men or women (or, to adopt planetary terminology, we human species, whether male or female), struggle to synthesise our reason and emotion; we struggle to attain a non-dualistic and, therefore, an ecologically holistic vision of the world. Even so, our cellular biology compels us to continue to strive towards symbiosis a little above our "ditherings", our "slime", our "ebbs and flows" (Livingstone 1991: 46).

This paradox is explored quite profoundly in two papers, one by the South African critic, Tony Morphet (1997), the other by the US-based critic Peter Sacks (1992). To return to an earlier point, both ask in different ways how it is that, while *A Littoral Zone* is much concerned with death, we are invigorated by its capacity to push us up against the tides of life. Morphet grants Livingstone his endnote comment to the collection: "Ideally, the sequence could suggest one long poem, the record of a day-long mythical sampling run" (Livingstone 1991: 62). What language, Morphet (1997: n.p.) asks, might encompass such a single poem that "pushes and pulls within an imagined totality of biology and culture"? If an imagined totality, then not in any easy conception of a unified sensibility. The cultural lattice stretches from the "essence of a parenthesised beauty" (in "Coronach at Cave Rock") to the "loosely controlled gothic artifice" of "Descent from the Tower".

A lament for the German composer Anton von Webern, "Coronach" (Livingstone 1991: 29-30), implicitly links the 12-tone score of Von Webern's compositions to Livingstone's 12-syllable line, the suggestion being that "culture properly tempered through the practices of art", to quote Morphet (1997: n.p.), "achieves transcendence". In Von Webern, silence is sought beyond the very raison d'être of music: beyond sound. In Livingstone, meaning unfolds beyond the grammar of language, in the essence of our being:

For me, my bagatelle enfolded essence: variation and space counterpoint and silence never developing beauty parenthesised. (Livingstone 1991: 29-30)

The almost impossible quest for "essence" in "Coronach", however, is balanced against the world of "Descent", an adult fable in which we encounter the paraphernalia of lake, island, tower, and magic stone as the props to a sparring match of naked man (the hapless poet) and his Muse goddess (the tigress, temping him):

Waiting for a traffic break; through the rear screen of the car ahead, a toy tiger nods.

From the mangroves on the left glides a man, a tigress from the right. The lake glints beyond: this turquoise mirage sustains a Gothic tower built on an island centred in its midst.

The man is naked, erect; the tigress, on all fours lifts her head, approaches slowly.

(Livingstone 1991: 50)

A "male" perspective, no doubt! But ideology critique rarely acknowledges the shaping power of convention in poetry. Morphet's point (1997) is that, in its artifice, in its cultivated hyperbole, "Descent" simultaneously conjoins and separates the 'animal' and the 'spiritual' in our human nature. The bravura of the presentation seems to contradict both Von Webern's silence and Livingstone's own

symbolic response to Von Webern. Yet, if the juxtaposition of "Coronach" and "Descent from the Tower" opens a space for an evaluation of culture, such a space is incomplete without the addition of the biological trace which has its own furrows: the one runs through the biology of evolution; the other through the biology of consciousness. Juxtaposed within the one long poem of *A Littoral Zone*, "Coronach" and "Descent" build a language of biology and culture that seeks to reunify a dissociated sensibility: a sensibility that T. S. Eliot (1962 [1921]) identified in John Donne's 17th-century 'Metaphysical' imagination. It is an imagination which, in Donne, first experienced the intrusion of science into a classical-romantic matrix of culture.

To return to "A Darwinian Preface" (Livingstone 1991), we may note that this sonnet illustrates the author's language of re-unification within dissociation. The octet apprehends death, the night fears, the almost instinctive biological reaction: "a body's little but a glove... on a stiffening frame" (idem: 7). Yet even as death is grasped in the stark naming words of the octet ("The crab, the clot, the muzzle or the knife"), reflection is embodied in the sestet where Livingstone speaks to himself as another being, a being in culture whose armoured defence yields to openness and vulnerability in the tender, conciliatory images of the sestet:

Yet your heart wins armour from confronting life, yet stays unlatched, anticipating love. Each dawn claims thanks and welcome, and gets blessed. Perhaps the sea indeed did suckle you through all its prisms, its diurnal range. There is no help for it! Best buckle to.

(1991: 7)

If biology presents a threat to culture, then, at the same time and almost paradoxically, biology can grant culture a concomitant intensity.

Sacks (1992) also finds a purpose of vision in the force and counterforce of biology and culture between the heart's armour and its openness to love. Like Morphet, he ties form to meaning lest we forget that Livingstone is inseparably scientist and poet. At the level of form alone, the poems of *A Littoral Zone* include sonnets, ballads, syllabic stanzas, free verse, and an array of stanzas from tercets and quatrains to 18-liners. The biologist gathers samples from as many diverse waters of the sea, of the self, and of poetry. The result, Sacks observes, is a full report of a "zone" rather than a fixed point. But then, "how do we confront the apparent opposition of freedom and constraint, whether in poetic forms or forms of life?" (Sacks 1992: n.p.).

Here I return to "Cells at Station 11". The poem confirms Livingstone's range and flexibility of literary register from the opening stanzas of almost clotted scientific terminology ("cilia spun from spirochaetes, / chloroplasts from bacteria') to the rhetorical swell of the closing lines, in which two almost opposing states of mind – thought and emotion – are focused with imaginative force through lines of syntactical enjambement:

Sometimes we claim autonomy, yet a ruthless fidelity — to what self? — lies coiled at the heart of our needy faithlessnesses.

The betrayals affirm our lives

in death: a death unfazed by faith, life pumping through us anyhow?

We think we choose, but are most true to interned energies. The rest is scripture, decreed histories. Woe will betide, betimes, the man who kills his brother: burns shared cells – those bound lovers under the sun – lolling there in an unchecked sea. (Livingstone 1991: 35)

Having spotted a "blackened corpse", washed around by the tide, the water-sampler must undertake his scientific responsibility of collecting and analysing a sample of the water: a sample which, in his petri dish and given our common though complex cellular structures, might contain the traces of the body in the sea. It is an action, however, which the poet, if not the scientist, experiences as a violation of the essence of our shared human substance. It is a reminder, nonetheless, that even as we claim "autonomy", we are bound – in our culture – to our biological being: "We think we choose, but are most true/ to interned energies" (ibid.). The dilemma is unresolvable.

Yet, as Sacks affirms, "no moral high ground here",

only a dark admission and warning. Fidelity, yes, but to what self? To the cultural self that remains tied to its biological trace? [...]. Deeper and more multiplex than political orthodoxies allow, more honest than ideologies can employ, Livingstone's perspectives are both radical and conservative in ways that go beyond the conventional usage of such terms. (Sacks 1992: n.p.)

4. Conclusion

So, can the literary sensibility – a sensibility in which the human being features as an individual consciousness – decentre itself to re-centre itself in a planetary dimension? What might constitute such a manoeuvre? Chakrabarty does not pursue literature, but, as I noted at the outset, he raises the earth scientist's dilemma. Given the commitment of modernity to technological progress, how to develop and implement a world-wide, acceptable strategy for the sustainability of the eco-system?

In Chakrabarty (2021), such a question remains hypothetical; Amitav Ghosh, in contrast, seeks to attach what he calls "derangement" to the subjective, experiential, indeed the spiritual, world of people. His book *The Great Derangement* (2017), nonetheless, ends in despair: that climate change, refracted through the 2015 Paris Agreement (COP), locates the human being as a mere cipher in the business of nation-states; that the structure of power in our time was captured in a photograph of world leaders and corporate tycoons embracing each other in an almost grotesque show of technocratic utopianism and virtue-signalling. Ghosh slates the Paris Agreement in comparison with Pope Francis's *Laudato si*' (2015), his encyclical letter that calls for an integral ecology in which the holistic human being is placed at the centre of concern.

In *The Nutmeg's Curse* (2021), Ghosh revisits the story of colonialism: the subjugation of indigeneity and the unleashing of modernity. A commodity of 17th-

century Dutch, Portuguese, and Spanish trade, the nutmeg travels the world as the vitalism and animism of its original home are changed by the invading Westerncolonial power. As Shaan Kashyap (2002) observes, *The Nutmeg's Curse* despite its subtitle - "Parables for a Planet in Crisis" - "embodies its planetary parables within human parables". It is an observation that invokes the crux of A Littoral Zone. To reiterate, Livingstone hoped that his animal poems were at the same time civilisation poems. Accordingly, his bantam trumpets its "fractious challenge" of life "even on no longer trusted planets" (Livingstone 1991: 47). If this is the poet's affirmation, however, it is an affirmation necessarily qualified by the biologist:

We must show compassion for the fauna and flora. But what of ourselves? Can our awareness or consciousness draw us back into reciprocity with nature? If not, we ["clowns of creation"] deserve to go, allowing the planet to recover from our hubris, and gather its resources to prepare for a more symbiotic and less quarrelsome species. (qtd. in Chapman 2016: 116)

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