

CHAPTER FIVE

Native, Natural, Indigenous, Indigenised?



Scholars have long known that fishing eventually turns men into philosophers. Unfortunately it is almost impossible to buy decent tackle on a philosopher's salary.

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If people don't occasionally walk away from you shaking their heads, you're doing something wrong.

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In 2002 a letter from Richard Wood to *The Complete Flyfisherman* sparked enormous controversy. Although it was awarded Letter of the Month, the content itself was rather innocuous, simply calling for more concerted action on the part of flyfishers

and flyfishing magazines to work actively to conserve all fish species.

The controversy actually erupted over the response to the letter by the magazine's editor, P.J. Jacobs. Jacobs argued that the question of the conservation of fish species was complicated by the fact that several are 'so-called "alien" species'. In the case of trout he believed 'that they should be reclassified as "indigenous" as they have been here for more than a hundred years, much like what has been done with certain plant species'.³ Kas Hamman of Cape Nature Conservation wrote a sharp reply refuting the idea, leading Jacobs to comment that perhaps he had been 'somewhat off the mark'. But Hamman's argument had its own problems, of which more below.

In thinking through the question of trout in South Africa, and their status as 'alien', 'indigenised' or, to follow the argument of the magazine editor, 'now indigenous', I want now to look at how the terms 'indigenous' and 'indigenised' are used in some of the scientific literature, to see what light, if any, this may shed on these issues.

Before we look at the literature, however, some prior points need to be made. Plant and animal species move, not only through direct human intervention such as transportation, stocking or planting, but through habitat and climate change, which complicates simple arguments about indigeneity, endemism and the right to belong. The guinea fowl that are so widespread in the greater Cape Town region were not there historically – *Roberts Birds of Southern Africa* indicates that they probably did not occur historically further south than the Orange River – though their presence in the Western Cape now appears to be welcomed. They are apparently so 'charismatic' that when I first arrived in

Somerset West I was told that if I were faced with the alternative of knocking down a pedestrian or a guinea fowl in my car, I should choose the pedestrian! A woolly-necked stork once appeared on the fields of my son's school, far out of its natural habitat. Thankfully no avine purists appeared to chase it back to Mtunzini, but instead ornithologists captured the extraordinary moment on film. Bird-watchers recently celebrated the centenary of the chaffinch's existence in South Africa, introduced to Cape Town by Cecil John Rhodes in 1898. In fairness it must be added that similar celebrations were not held for the Indian mynah, the European starling or the Indian house crow, and I suspect much of the chaffinch's appeal is that it is, according to *Roberts*, a '[r]are example of an introduced bird which has neither become extinct nor expanded its range much beyond area of first introduction'.⁴



I am frequently asked by friends and colleagues to take their spouses or partners fishing with me, usually out of concern for their blood pressure or cortisol levels. I invariably agree. Some of them get it; some of them think they do, and end up with rod, reel, vest and net gathering dust in the spare cupboard. I can take them flyfishing, but I cannot make it anything but what it is. You will spend hours by, in or on the water. You may get cold, and very likely wet. We may or may not catch fish. It will not be glamorous, but it will be beautiful, often heart-achingly so. And if you think with the fish and the fly, it will be utterly absorbing.



At this point we need to move from the beautiful environs in which trout are found to the somewhat more prosaic locales in which vegetables are cultivated. Some of the complexities around notions of indigeneity in relation to plant and animal species – the language used by Cambray and others to argue against the place of trout in South Africa – can be exemplified in the scientific literature around plants, especially crops. When one unpacks the assumptions in these debates, some of the claims made in the name of indigenous animals, plants (and humans?) sound decidedly hollow.

In an article on leafy green vegetables in South Africa, M.C. Laker describes what he means by ‘indigenous’: ‘In the context of Africa, indigenous crops are crops that have originated in Africa ... These include a wide range of species that are consumed as human food.’ He points out that ‘present varieties have evolved over many centuries of survival under local environmental conditions and thus become adapted to these conditions’, including through the efforts of ‘dedicated local farmers [who] have aided the process by keeping only seeds from the best plants for planting during the following season’. Amongst the ‘the best-known indigenous leafy vegetables consumed in South Africa are *Amaranthus* species (“wild spinach”), melons and cowpeas’.⁵

Two observations before I continue. Firstly, this definition of ‘indigenous’ would include brown trout, which are native to Morocco and thus ‘originate in Africa’, though on a technicality they may be rejected, because the actual trout populations in South Africa do not descend from those in Morocco. And secondly, Laker’s definition of indigenous specifically also allows human intervention in the selection and propagation of

particular ‘strains’, something that is significant as we pursue these ideas.

As regards what may be referred to as ‘indigenised’, Laker says they are those species ‘within the context of Africa ... [that] ... originated in other continents, especially Asia and South and Central America ... but have become part and parcel of traditional African food culture and agriculture’. ‘Over long periods, often over many centuries,’ he argues, ‘local (“indigenous”) varieties of indigenised crops have evolved by means of similar processes as described for indigenous crops.’ Maize is probably the ‘main indigenised crop in South Africa’ while pumpkins and sweet potatoes, ‘which originated in Central and South America’ are amongst the best-known indigenised green leafy vegetables in South Africa.⁶ So, in these terms, imported fish species that have adapted to local conditions, and developed their own characteristics, could be called ‘indigenised’.

In an article co-authored with several other scholars, W.S. Jansen van Rensburg offers some enlightening discussion on these issues, and confirms a passing remark made by a colleague in the science faculty at my university, specialising in biodiversity, when I asked how long a species had to be present to be declared indigenous in his field of study: ‘About a hundred years,’ he replied. These authors indicate that they have adopted the term ‘African leafy vegetable’ to refer to the ‘collective of plant species which are used as leafy vegetables and which are referred to as *morogo* or *imifino* by African people in South Africa’. ‘Function’, they say, is ‘central in this indigenous concept, which is subject to spatial and temporal variability in terms of plant species that are included as a result of diversity in ecology, culinary repertoire and change over time’. ‘As a result, the concept embraces

indigenous, indigenised and recently introduced leafy vegetable species ...'⁷

Jansen van Rensburg and his co-authors then argue that 'indigenous leafy vegetables' may be defined as plant species 'which are either genuinely native to a particular region, or which were introduced to that region for long enough to have evolved through natural processes or farmer selection'. They specify that a 'leafy vegetable species is called indigenised in a particular region when it was externally derived but has since been incorporated in the local food culture'.⁸

Their definition is intriguing, because the concept of 'nativeness' coexists alongside human activity (farming) in defining indigeneity, while cultural practice (cuisine) is a factor in indigenisation. One could note, in this regard, that two key components of Italian cuisine and agriculture, tomatoes and basil, originate from South America and Asia respectively.

My purpose in digressing from fish into debates about crops and plant species is both to point to potential contradictions in definitions of indigeneity and indigenisation within scientific discussion, and to highlight the implications of declaring something to be indigenous or indigenised. Telling African communities that the specific *morogo* or *imifino* species they have been collecting or cultivating are not 'indigenous' and so are undesirable would likely be greeted with incredulity, rage or questions about the intelligence of the interlocutor – and probably a sharp, well-deserved blow to the head with a hoe. *Morogo* and *imifino* are valued additions to the human and biological landscape of South Africa. What about trout?

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Sunscreen, insect repellent, cap, polarised glasses. Into the bakkie go the Orvis T3, two Daiwa Ospreys, the Loomis and Franklin, the St Peter (hand-built) and the Xplorer and Deane 2/3 weights. Along with waders, fly vests, landing nets, spare clothes, rain gear, flyboxes, thermometer, priest, creel, float tubes, flippers – the bin of the Isuzu looks like a tackle shop. Food we grab from the garage shop. Backing out of the driveway I ask Mike to choose the CD.



In an article entitled ‘Ecology and Identity: A Comparative Perspective on the Negotiation of “Nativeness”’, Jane Mulcock and David Trigger untangle some of the complexities and contradictions in debates about ‘biodiversity’, ‘nativeness’ and ‘naturalness’. A key factor in their argument is that they approach these issues from the perspective of anthropology, whereas such debates are usually regarded as being the terrain of scientists and biologists. They point out that, in this regard, science and biology often present as ‘fact’ concepts and categories based on assumptions that are contestable and often contradictory, and then pose their ‘solutions’ as ‘ecological necessity’.⁹ Their argument, though slightly complex, is very illuminating for asking the question, ‘Are trout South African?’

Questions of biodiversity relate directly to what has the right to ‘belong’ in a place, and Mulcock and Trigger correctly begin their argument with an examination of this term. They cite one of the *Oxford English Dictionary* (OED) definitions for ‘belonging’: ‘[to] be rightly or naturally placed [... to] fit a specified environment, [to] be not out of place’. As they point out, a ‘key assumption here is that being “naturally placed” is synonymous

with being in the “right” place. According to this common logic, “natural” is “right” and to be in the “right” place is to “belong”.¹⁰

As ‘naturalness’ seems to be the key term that gives meaning and substance to ‘belonging’, they then proceed to unpack the assumptions of this term, which they note is ‘heavily loaded with moral values’.¹¹ Again their starting point is the OED. To be ‘natural’ is to ‘be pure, real, normal; to be unaffected, not artificial or constructed or cultivated’. ‘Natural justice’, they say, ‘is supposedly based on “innate moral feeling”, the instinctive sense of what is “right and fair”.’ But there is abundant evidence that notions of ‘rightness’ and ‘fairness’ are culturally and contextually specific. ‘Does it follow, then, that ideas about what is “natural” are also subjective and specific?’ they ask.¹²

To complicate matters further, the OED offers ‘native’ as a synonym for ‘natural’. Its definition for ‘native’ is ‘to belong to a particular place or country by birth’. We are on slippery conceptual ground here because, as Mulcock and Trigger argue, the OED then uses ‘naturalness’ to define ‘nativeness’, in that ‘native’ plants and animals are found ‘naturally’ in a locality; a ‘native’ quality is ‘innate, natural’, ‘belonging to a person or thing by nature or natural constitution’.¹³ What is ‘native’ not only ‘belongs to place’, but is also ‘natural’. The problem, they claim, is that “native” is a statement of fact, while “natural” is a value judgement laden with individual and cultural specificities’.¹⁴

Some, including myself, might question Mulcock and Trigger’s statement that “native” is a statement of fact’ but, to be fair to them, they do footnote the claim as follows: ‘There is contestation over the period of time it takes to “become” native with respect to naturalised non-human species, but in a technical sense to be “native” to a locality is to have evolved as part of the particular

ecosystem.’¹⁵ That footnote highlights a key question for my entire project: At what stage are trout in South Africa accorded the rights of belonging? And, as I indicated at the outset, behind that question lies a larger argument about human identity in South Africa or other societies marked by colonial histories. Think back to the conversation narrated by Antjie Krog, in which, despite the fact that she is undoubtedly ‘native’ in having been born in South Africa and choosing this as her ‘home’, to her black interlocutors she can never be either ‘native’ or ‘natural’ in this place: she is forever a ‘kangaroo’ – tolerated, even liked perhaps, but always ‘out of place’. In this respect I was intrigued to see that on the back cover of his novel, *Bloody Harvests* (2004), the white author, Richard Kunzmann, born in Namibia but raised in South Africa, describes himself as ‘a native South African’.

If your head is starting to hurt with the circularity of the argument (what is ‘native’ is ‘natural’ and ‘belongs’, and depends for its ‘belonging’ on the ‘natural’ qualities that guarantee its ‘nativeness’), don’t worry, so is mine. But the key point, as Mulcock and Trigger point out, is that conflating ‘native’ and ‘natural’ ‘effectively hijacks discussions about the belonging of a species by attaching a moral value to an empirical ‘fact’ (i.e. autochthony).’¹⁶ In other words, it results in the argument that a person or organism can only be ‘native’ or ‘natural’ by being an original or originary (autochthonous) inhabitant, or in direct lineage of such, and that – in a triumph of illogic – one’s guarantee of ‘origin’ is that one is ‘native’ or ‘natural’. It is a little like the reverse of Joseph Heller’s famous Catch 22, from the novel of that title: You can only be discharged from the army if you are mad, but the fact that you want to be discharged means you cannot be mad.

Mulcock and Trigger’s concern is (correctly) with the fact that

such problematic and circular cultural assumptions inform conservation and wildlife management strategies, especially those mounted in the name of 'biodiversity': what is to be valued and preserved is that which was thought to be there *ab origine*, and it is valued precisely because it was there, apparently, *ab origine*, so that aboriginality or autochthony is both a value and a guarantor of value. Of course, the notion of *ab origine* is impossible to define, because it refers to a period in time while also denying that this period can be determined (it is a time before time).

If, as I have argued, the history of the world is one of species migration, whether through habitat change, population pressure, continental shift, human or animal intervention, and those processes are ongoing, 'biodiversity' needs to be a more nimble concept than is frequently presented. In particular, notions of hybridity need to be understood, and we need to ask whether it is 'justifiable to dismiss the validity or value of hybrid landscapes or hybrid communities, for example, on the basis that they are "unnatural"'.¹⁷ As Mulcock and Trigger observe in a footnote to this statement, it is intriguing that the concept of hybridity, decried in some scientific domains, is valued in others, as in the concept of 'hybrid vigour', though I suspect this term is reserved for the domains of animal and plant propagation for agriculture or sport. The veterinary scientist J.C. Bonsma, who bred the hardy, hybrid strain of cattle known as Bonsmaras, apparently used to refer to '*basterkrag*'.¹⁸

There is a growing scientific field rather ominously known as 'invasion biology'. The website of the Centre for Excellence for Invasion Biology at Stellenbosch University defines the term 'alien' as referring to species that are 'introduced, exotic, non-native, or non-indigenous', 'animals or plants, or any other type of

organism, that are introduced to a new area by humans'.¹⁹ Species that expand their range through 'natural migration ... due to environmental changes' are not considered alien. Alien species can become 'naturalised' if they establish a 'reproductive population ... over at least 10 years without human intervention'. So trout in rivers in which they breed are okay; not so those in stillwaters without breeding streams.

But, the website clarifies, not all alien species are invasive, and many are 'highly beneficial to humans'. '[I]nvasive species are a sub-category of naturalised species [which] produce reproductive off-spring, often in large numbers ... and thus have the potential to spread over large areas.'²⁰ So maybe the stillwater trout are safe too, as they cannot breed, and so cannot be considered 'invasive'.

A key factor in all of this seems to be human intervention. Where plants and animal species spread 'naturally' – in other words, without human intervention – the term 'alien' does not apply, although, as mentioned earlier, with human impact on climate change, it would be difficult to present species movement through habitat change as unrelated to human influence. This assumption about 'alienness' being tied to human influence is echoed in the definition offered by Mike Picker and Charles Griffiths in their book *Alien and Invasive Animals* (2011):

For the purposes of this book we have considered alien animal species in South Africa to be those that have been deliberately or accidentally introduced through human intervention and that have subsequently established self-sustaining wild populations.²¹

The 'human/natural' distinction is echoed in the 'Guidelines for

the Preservation of Biodiversity Loss Caused by Alien Invasive Species' produced by the International union for Conservation of Nature (IUCN).²² The IUCN defines 'biodiversity' as the 'variability among living organisms from all sources ... includ[ing] diversity within species, between species and of ecosystems'.²³ While this definition does not link 'biodiversity' to 'nativeness', that link is established in the definition of 'alien species': 'a species, subspecies or lower taxon (non-native, non-indigenous, foreign, exotic) occurring outside of its natural range (past or present) and dispersal potential'. An 'alien invasive species' is one that 'becomes established in natural or semi-natural ecosystems or habitat, is an agent of change, and threatens native biodiversity'.²⁴

This is a model in which the spread of species through human intervention immediately renders them 'alien', and – as Mulcock and Trigger point out – assumes a distinction between the 'natural' and 'unnatural', which is 'difficult to sustain without denying the biological "naturalness" of *Homo sapiens* as a species'.²⁵ As I argued in relation to Cambray's position earlier, the model assumes that there is such a thing as a 'natural' world independent of human beings.

I would acknowledge fully that human interactions with 'natural' environments have largely been destructive and catastrophic. But I would argue that it is idiotic – not to mention counter-productive and disabling – to offer solutions that can only conceive of human engagement as negative, in which case mass suicide on the part of the human species seems the kindest thing for the 'natural world'.

Of course, someone like Cambray would probably consider his own action, say, of removing all trout from South Africa as a positive human intervention. But that action assumes that the

best solution is to 'restore' – the nostalgia for wholeness in the verb is telling – the environment to 'what it was before humans intervened', a 'natural' world apart from 'unnatural' human intervention. More recent environmental studies have rejected the 'balance of nature' argument, for example, for models of non-equilibrium, which insist that non-engagement is no longer an option, if it ever was, and that the question now becomes how to find 'more ethical forms of engagement'.²⁶

The complexities of these issues are illustrated by Mulcock and Trigger in a range of cases. By some reckonings, dingoes are not native to Australia because they arrived there from Southeast Asia about 3 500 years ago. Others claim they have 'served sufficient time to be counted as native',²⁷ the metaphor being rather ironic in terms of Australia's origins as a penal colony. In the campaigns to restore to the United Kingdom species that have become extinct through habitat degradation or over-hunting, the actual animals being reintroduced are sourced mostly from Europe, which complicates questions of their indigeneity.

Similarly in the United States, to solve the problem of white-bark pines being threatened by the 'exotic' disease 'white pine blister rust', genetically altered seedlings are being planted to 'restore' the forests.²⁸ Despite calls for a return to the environment of the past – including reintroducing to Australia creatures such as the Komodo dragon and Tasmanian tiger as part of the project to restore the environment to what it was apparently 60 000 years ago, prior to the arrival of aboriginal peoples²⁹ – few people are likely happy to share their abodes with large predators or animals that would consume them or their crops. Even nostalgia, it seems, has its limits, and human intervention may not always be such a bad thing.

Kas Hamman's response to the suggestion by the editor of *The Complete Flyfisherman* that trout should be declared indigenous falls foul of many of the problems identified here, and states as 'fact' many assumptions or premises (including that about dingoes) that others, including scientists, would question.

'In response to your suggested reclassification of trout,' he says, 'consider the following: in evolutionary or ecological timeframes a hundred or more years is insignificant.' Not so, say the leafy vegetable specialists referred to earlier. Hamman continues, 'Dingoes were, for example, introduced to Australia by prehistoric man between four and five thousand years ago. I can assure you that the scientific or formal conservation community does not consider these animals indigenous to Australia.' According to Mulcock and Trigger and the scientists they have consulted, the jury is still out on this issue (to continue the unfortunate penal metaphor), and many would also not classify human beings 4 000 to 5 000 years ago as 'prehistoric', a term that could be seen as offensive or racist in its evolutionary assumptions.

Hamman then introduces the human involvement argument: 'It is therefore important to note that no animal or plant species introduced outside its natural distribution range by man could be reclassified as indigenous to a particular area.'³⁰ As I have argued, this is a position that assumes humans are not part of the ecology, and imagines some kind of pristine, Edenic ecology uninfluenced by humans, which is then announced as scientific fact. Who or what the hell lived in this world, and what did they eat?

Hamman's position on the continued existence of 'alien' fish is actually a sensible one in that he recognises that they are 'important angling species and that they are here to stay'. What concerns me are the unquestioned, and potentially dangerous,

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assumptions that underpin his argument. If 4 000 to 5 000 years are not enough to qualify something as indigenous, and human activity is explicitly excluded as a factor, even that of what Hamman calls 'prehistoric' (let's say aboriginal/hunter-gatherer) peoples, I suspect we live in a world in which very little qualifies as indigenous, and the term has little meaning or weight.