

Introduction: The Changing Landscape of Tobacco Use in Lowland South America

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Introduction

The effects of the global spread of tobacco and its associated products are well documented, but relatively little recent attention has been paid to traditional modes of tobacco use amongst indigenous groups in what is its historical source area, lowland South America. The ways in which tobacco is viewed and used in this region are, cosmologically speaking, poles apart from the ways in which tobacco has been exploited by the forces of corporate and state-sponsored global capitalism, conditions which have proved so devastating for long-term human health and wellbeing.¹ The people who are the primary focus of this book often have a different perspective on tobacco. Our aim is to articulate some of these viewpoints, with the suggestion that their consideration might encourage new ways of thinking about the problems that commercially exploited tobacco has created in terms of human health and wellbeing.

Tobacco consumption around the world has increased exponentially since European explorers first observed its use and transported seeds of the plant from indigenous communities in the Americas in the 16th century.² Today there are an estimated 1 billion regular tobacco users worldwide, consuming (apart from other tobacco products) an estimated 6 trillion cigarettes per year (WHO 2010a: 17). Tobacco has come to occupy a prominent place in public health discourse, both nationally and internationally. Headline statements include 'the world's greatest cause of preventable death' (Kohrman and Benson 2011: 329), and that 'one in every two life-long smokers is killed by tobacco and most smokers lose many years of active life' (ASH 2008: 1). The prospect is that smoking will cause 1 billion deaths in the 21st century, 70-80% in low and middle income countries (WHO 2011). In response to the increasing volume of tobacco consumption and the widely

acknowledged health dangers, the world's first World Health Organization-mediated treaty, the Framework Convention on Tobacco Control (WHO 2003), has been established as a response to such a global threat. Much of the impetus for its success and ongoing development of this treaty has come from countries of the 'global South' as they seek redress against the machinations of the overweening power of this transnational industry (Russell, Wainwright and Mamudu 2014).

The role of tobacco amongst indigenous populations in lowland South America provides some fascinating comparisons and contrasts to its status in other parts of the world. In this Introduction we review the scholarship that has preceded this book and the different frameworks that can be used to understand the place of tobacco amongst indigenous groups in lowland South America from whence its status as a 'master plant' derives. These include ethnographic knowledge about the diverse uses of tobacco (in the context, sometimes, of other psychoactive drugs) as well as key developments in anthropological theory and emergent public health responses to indigenous forms of tobacco use. Our book fills an important gap in the literature about what has become a transnationally exploited commodity, and serves to portray this controversial plant in a more complex way, as an agent of both enlightenment and destruction.

Tobacco as a 'Master Plant'

Tobacco is oft described as a master plant by indigenous users in lowland South America, a status that seems intrinsically related to its potent toxicity and role in shamanism. Goodman (1993) comments on the ubiquity of narcotic plants used for shamanic purposes amongst indigenous societies in both North and South America, with at least 130 plants that could be categorised as hallucinogenic. In order to achieve the altered states of consciousness necessary for shamanic journeying to occur a range of plants may be used. *Datura*, mescal, peyote, coca, *pariká*³ and *ayahuasca* (or *yagé*, produced from the vine *Banisteriopsis caapi*) are some of the most well-known South American narcotics and stimulants in this regard⁴. What Goodman points out, however, is that

‘when one looks more carefully at what plants shamans actually used, one discovers a most remarkable phenomenon: regardless of location, the one plant used more than any other was tobacco. *Virtually every Amerindian society knew tobacco*’ (1993:24 [our emphasis]).

Given its ubiquity, the relative lack of scholarly attention to tobacco in lowland South American studies is remarkable. Miller talks of ‘the humility of things’ by which he means the ability of something like tobacco to ‘fade out of focus and remain peripheral to our vision and yet determinant of our behaviour and identity’ (2005: 5).⁵ It may be that the very ubiquity and long history of tobacco use in lowland South America has led to the naïve assumption that tobacco in Amazonia was ‘just there’, ‘so ancient as to be virtually meaningless at the level of concrete ethnohistorical and ethnographic data’ (Gow, this volume). Tobacco continues to litter contemporary ethnography, but it has rarely formed the focus of any concrete study or analysis.

Another reason for the relative paucity of detailed studies may be the ‘show stopping’ presence of one major work on the topic, namely Wilbert’s 1987 book, *Tobacco and Shamanism in South America*. This work combines anthropology, history, botany and pharmacology in a widely referenced *tour de force*. Wilbert pulled together pretty much all that was known about the subject at the time of publication – its bibliography alone constitutes 77 of its 294 pages, and much of the information it contains remains salient today. In *Tobacco and Shamanism* he looks first at the botany of the wild and cultivated genus *Nicotiana*. He points out that 46 of the 64 species identified are found in the Americas, 37 of these in South America, thus making it highly likely that lowland South America is the progenitor of tobacco worldwide.⁶ The commercial tobacco now used in most cigarettes, *Nicotiana tabacum*, is one of two cultivated species. The other, *Nicotiana rustica*, ‘hardier and richer in narcotic properties’ (1987: 6), has spread far beyond the tropical and subtropical belt.

Wilbert emphasises the tremendous diversity of methods for tobacco use in South America. This diversity (along with linguistic evidence) suggests a long history of regional engagement with

tobacco and its by-products. Chewing, drinking tobacco juice, licking, its use in enemas, snuffing and smoking – all are meticulously described and discussed in their multifaceted diversity, along with the paraphernalia associated with each. One striking observation is of a Yaruro shaman who ‘in the course of an all-night performance...was observed to have consumed forty-two industrial cigarettes and about one hundred native cigars’ (ibid.: 85). Wilbert also addresses the common scenario of out-sourced tobacco: ‘For the Warao of the Orinoco Delta [the group amongst which Wilbert himself had conducted fieldwork] tobacco is of utmost cultural significance despite the fact that they cannot grow it in their swampy habitat but rely on its importation from the island of Trinidad and from regions adjacent to the Orinoco Delta’ (ibid.:83). Many other groups in addition to the Warao use tobacco that has been imported either to supplement or instead of locally grown product.

Wilbert also looks at pharmacological aspects of tobacco use, its active ingredients and the modes by which these are absorbed, distributed and metabolised within the body. In his view, the physiological and psychological effects of tobacco (at least, of the species consumed by the respective groups in the quantities that they do) confirmed rather than shaped the ‘basic tenets of shamanic ideology’ (ibid.: 148).⁷ He suggests that shamanism preceded tobacco use, with South American hunter and gatherer groups relying ‘on endogenous and ascetic techniques of mystic ecstasy rather than on drug-induced trance’ (ibid.: 149). The use of tobacco for shamanic purposes apparently developed only amongst horticultural peoples.⁸ Since horticulture in lowland South America has a history of at least 8000 years, the diffusion of *Nicotiana rustica* and *N. tabacum* as cultigens, presumably for their hallucinogenic properties, must likewise be ‘of considerable antiquity’ (ibid.: 150).

Wilbert continues his theme of how the botany and biochemistry of tobacco provides empirical, experiential support for a number of shamanic practices (including initiations, near- and actual death experiences and other ordeals). Those using tobacco for these purposes are categorised by the umbrella term ‘tobacco shaman’, by which he means ‘the religious practitioner who uses

tobacco, whether exclusively or not, to be ordained, to officiate, and to achieve altered states of consciousness' (150, fn1). The frequent presence of *Nicotiana* species on recently disturbed ground such as graves has, Wilbert suggests, led to Amerindians 'etiologically identifying the plant with the ancestors and with ancestral deified shamans' (ibid.: 151), a fact also elucidated by myth. Butt Colson's (1977:53) account of a tobacco which the Akawaio call 'tiger tobacco' (*kumeli*) it also mentioned. Because its mottled leaves resemble a jaguar's markings, shamans are said to smoke it order to summon a type of jaguar spirit.⁹

Amongst other themes that seem near universal in their applicability across the Amazon region (albeit in varying proportions and different cosmological contexts) are the blowing of tobacco smoke (or tobacco spit), tobacco as shamanic food (and, by sublimation, a sacramental food of the gods or spirits), the analgesic properties of tobacco in creating shamanic insensitivity to heat and pain, the ingestion of tobacco products to contact the spirit world, and shape-shifting to become were-animals (particularly jaguars) - combative champions against 'evil spirits, sorcerers, sterility, sickness and death' (ibid.: 192). The chemical action of nicotine as an insecticide also leads to the use of tobacco as a fumigant for maize, fish and cassava (ibid.: 152), as a poultice against ticks and sand fleas and, by extension, for cleansing and curing and as a more general elixir for human vitality (ibid.: 154). Its analgesic properties are used to treat toothache (ibid.: 189).

The definitive quality of Wilbert's work may have contributed to a sense that tobacco in South America had been dealt with, and that there remained nothing more to be said about it. Twenty-five years later Barbira Freedman observed 'tobacco has received comparatively little attention in recent anthropological research on Amazonian shamanism' (2002: 136). It would be churlish to criticise Wilbert's monumental tome, but its approach is largely ethnological rather than ethnographic, concerned more with mapping than with meaning. In revisiting this topic nearly 30 years after the publication of Wilbert's book, we can see various ways in which the ethnographic record, aspects of anthropological thinking, and the wider political-economic landscape have

developed meanwhile. We shall go on to consider these issues and their implications for how we apprehend 'the master plant' today.

But why 'Master'? Barbira-Freeman (2010) demonstrates a pairing of plants amongst the Lamista Quechua into females and males, with each belonging to a different cosmological domain (female plants to the water domain and male plants to the upland forest). Tobacco is considered 'the male catalyst that enhances the effects of all other shamanic plants' and is the 'father of all plants' according to Lamista Quechua shamans, 'a male consort to the 'mother spirits' of all shamanic plants (ibid.: 151). In choosing the title of this book, however, we are not subscribing to an essentialized 'male' view of tobacco. Londoño Sulkin found 'differences between clans and language groups concerning the gender of tobacco itself: for some, the sweat-*cum*-seminal substance of the Grandfather of Tobacco was the origin of the Land of the Centre, of rivers, and eventually, of people. For others, the tobacco deity was the Mother upon whose shoulder the creator god created the land and placed it. In the myths of at least one Muniane clan...the creator deity made the first man out of tobacco paste and other substances, and brought him to life by blowing tobacco breath on him' (2012: 97-8). The Spanish translation of our title would necessarily be feminine, viz. 'La planta maestra', which resonates with Shakespeare's 20th sonnet 'Hast thou, the master-mistress¹⁰ of my soul...' (Echeverri, personal communication).

The androgyny implied in the Spanish and Shakespearean versions of 'master' is reflected in the androgyny Barbira Freedman suggests shamans need to acquire 'for the purpose of engineering balance between the polarized domains of the male/female, water/sky, this world, the underworld and the underwater world' (ibid.: 173). Following Wilbert's observation that, while women may know shamanism and most shamanic crafts, 'I have known but few practicing female shamans and am aware of none who were ecstasies who were initiated, like male shamans, by resorting to tobacco (nicotine) as a medium of trance' (Wilbert 1987: 22), Barbira Freedman reflects on 'the

paradox that in Amazonia women are often declared to have innate shamanic abilities, yet the large majority of shamans are male' (2010: 135).

Some scholars might consider the basis of the 'tobacco shamans = male' paradox to lie in the social and political dimensions of gender relations, but Barbira Freedman argues it is the result of cosmological epistemologies (ibid.: 149). Such a suggestion is easily grounded in regional ethnographies, since the bodies of women are seen as highly transformational in their reproductive potential, whereas men need to seek out such possibilities through shamanry (cf. McCallum 2001: 17). For women, combined shamanic and reproductive capacities may simply be too potent for a human person – that is, for a person who can also live well with her kin - to achieve with any degree of equanimity. This would explain why most female shamans tend to be sterile or over reproductive age, and are thus those who no longer draw on menstruation and their procreative potential as a source of transformation. For Viveiros de Castro, however, 'tobacco is a masculine plant important in shamanism, but women prepare the cigarettes for their husbands, hold the cigars of shamans in trance, and also smoke', (1992: 45), while for Londoño Sulkin, it is significant that 'tobacco, the quintessential constitutive substance of humanity, was transmitted via male lines only...People of the Centre also tended to attribute to tobacco virtues they particularly valued in men' (2012: 97).

Tobacco Epistemologies

Subsequent work on tobacco in lowland South America has tended to focus more on the relationship of tobacco to what McCallum (1996) calls 'ethno-epistemologies' (indigenous theories of knowledge). These investigations require approaches that are different, and in many ways more diverse and complex methodologically, semantically and idiomatically, than the ethnological mapping of people's behaviour. For a start, we may need to forego cherished linguistic distinctions and the ways they categorise the world as we know it. Hugh-Jones, for example, queries the tripartite division of 'food', 'drugs' and 'medicines' which he says is historically quite recent and

confined to non-Islamic industrial societies in which “drugs” are opposed to “medicines” supplied legally by doctors and chemists to specified individuals and used for supposedly beneficial and non-recreational purposes; on the other hand, they are opposed to “foods” which have to do with “nutrition” or “feeding” rather than with “curing”. “Foods” and “medicines” are used, “drugs” are “ab-used” (2007: 48). Yet these are analytical categories which, in other contexts, ‘might more profitably be discussed together’ (ibid). As a case in point, Hugh-Jones considers the case of the north-western Amazonian Barasana, noting the implicit distinctions they make between ‘foods’ (principally meat, fish, chilli sauce and manioc bread), ‘non-foods’ (coca, tobacco and manioc drink) and ‘snacks’. Ritual settings are marked by additional ‘non-foods’ - *yagé* (*Banisteriopsis* sp.), tobacco snuff and manioc beer. Amongst the Barasana tobacco snuff, cigars, coca and *yagé* constitute nurturing substances or spirit-foods, without the moral and political overtones of ‘drug’. The Yamomami, meanwhile, put tobacco into a ‘food’ rather than ‘non-food’ category (Reig, this volume).

Tobacco and the Experience of Multinatural Bodies

Tobacco is seen as a shaper and transformer of persons. This reflects Vilaça’s view that for many lowland South American groups, bodies are ‘chronically unstable’ (2005), determined largely by external influences. As McCallum, writing about the Cashinahua, explains, the body ‘is the place in which social and supernatural processes coalesce and is made by others in a constant flow involving nutrition, abstention, the application of medicines, body painting, baptismal rituals, and formal training’ (1996: 352). Tobacco offers a vital means for the ‘cooling, drying and firming-hardening’ of young bodies (Rahman, this volume), making them less likely to inadvertently slip out of their human bodily form and take on a different one. Sometimes the plant may be specifically chosen in order that some of its properties may be transferred to tobacco users – for example, the consumption of

tobacco juice by a breast-feeding mother as a way of establishing the shamanic agency of her child (Santos-Granero 2012: 197).

In north-western Amazonia, tobacco used in conjunction with ritual chants serves to 'cook the rawness' (as does sacred chilli pepper), 'dry the danger' and protect against 'the wasting sickness'. It sweetens initiates by removing their wetness as well as their saliva (Wright 1993: 9; 16; 17; 18). These are common Amerindian idioms used to talk about the effects of tobacco, as is the 'laboured breathing of intoxication' (Viveiros de Castro 1992: 220) and the production of phlegm (e.g. Goldman 2013: 313; see Brabec de Mori, this volume)¹¹. As Hsu (2010: 3) attests in her examination of the interface between ethnobotany and medical anthropology, 'the materiality of the plant is not primarily assessed in terms of chemistry, but is best described in terms of its phenomenal appearances through touch and smell.'¹² Tobacco thus affords a quality of lightness, widely valued across Amerindian societies, and has the ability to cook, harden, sweeten and cool, along with more specific qualities identified and articulated by different groups (e.g. Londoño Sulkin 2012: 99). Alert and wakeful states, useful when hunting, are another desirable characteristic associated with the plant (Wilbert 1978: 98). Words breathed into tobacco paste become the power whereby Witoto hunters may be successful in obtaining game (Echeverri 1996). The effects of tobacco thus fit with a schema of personal virtues, upheld and reproduced thanks to the application of plants, thereby demonstrating the way in which species manifest 'the affects and capacities of a diversity of other living beings' (Santos-Granero 2009a: 7; Rahman and Echeverri, *forthcoming*).

Schema derive from phenomena, and these phenomena also inform the structure of Amerindian societies (Descola 1992). Descola posits that nature is homologous to the system of social relations between members of society: Amazonians 'use the elementary categories structuring social life to organise...the relations between human beings and natural species as persons' (ibid.: 114). This is not a separation between society and the cosmos, but rather a *Society of Nature* (Descola 1994) in which the natural world forms part of, and is integral to, human sociality.

This fluidity of the body reflects a broader epistemological theme in lowland South America which has been characterized as its 'multinaturalism'. In contrast to the 'multiculturalism' which characterises western Enlightenment and post-Enlightenment thought - constituted by the sense of a universal 'nature' but multiple 'cultures' (Viveiros de Castro 2012: 46), the multinatural perspective posits a universal 'culture' but a multiplicity of 'natures'. However, 'culture' in this 'cosmological perspectivist' view of the universe is not quite the same as 'culture' in conventional western conceptions of the term. Instead, it is akin to a 'soul substance' (cf. Rivière 1999) that is found in diverse ranges of what may be counted as 'human' forms. As Vilaça (2005: 448) summarises it, 'in Amazonia...humanity is not restricted to what we conceive as human beings: animals and spirits may also be human, which means that humanity is above all a position to be continually defined.'

Tobacco and Agency

Thanks to their relationships with auxiliary spirits, shamans act as brokers between this and other worlds. They are persons who, with the ingestion of tobacco in hallucinogenic quantities, can traverse time and space and travel in both (da Cunha 1998). Sometimes as they do so shamans transform into other corporeal forms. At once worldly and otherworldly, shamans act as translators, world-makers (Overing 1990) and prophets in new worlds (Hill and Wright 1986; 1988). Their dangerous but necessary 'acts of crossing' empower them, both at home and away (Luedke and West 2006). Da Cunha gives the example of a Kaxinawá (Cashinahua) shaman called Carlos, living in the capital of Acre province, who combines Yawanaua, Katukina do Gregorio and Tarauaca techniques with those of Umbanda, learnt in the cities of Belem and Manaus (1998: 15). Another Cashinahua shaman, Inkamuru, travelled to the thriving metropolis of São Paulo in order to learn techniques of acupuncture (McCallum, personal communication). In these contexts, it is perhaps not surprising that the shaman's food – tobacco - 'is a two-way converter between life and death, and a

commutator between domains' (Viveiros de Castro 1992: 220). Tobacco, like the shaman himself, finds its place within a network of relations with the outside.

For this to happen, the practitioner needs to establish a relationship with the tobacco plant. This is usually premised on a set of behavioural and dietary proscriptions such as those followed by initiate shamans amongst the Araweté. These initiates 'eat tobacco' (i.e. smoke it) as what Viveiros de Castro calls an 'anti-food'¹³ which also takes away their hunger (1992: 131; 219).¹⁴ In order to develop other ways of seeing-knowing, Araweté men gather for collective smoking sessions, where they become 'killed by tobacco' and faint and convulse from intoxication and are said to 'die' (ibid.: 131). Initiates become 'diaphanous' (*mo-kiyaho*), 'smooth' (*mo-kawo*) and 'lightweight' (*mo-wewe*, ibid.: 131), qualities that render the connection between body and soul more pliable, allowing shamans to experience, commune with or transform into other beings (ibid.: 195) The resultant dreams, visions, or thought-streams are then subject to interpretation by shamans, who poetically describe and attempt to decipher their frequently uncertain hallucinogenic perceptions (da Cunha 1998: 13)¹⁵. This instructive capacity is shared by other 'master plants' (or 'plants which have mothers', above). Such plants have the ability to teach their users about the cosmos, developing complex relationships with them that command respect from their associates. Working with these plants, shamans' apprentices can see entities and, with practice, perceive them to be 'the owners of things', that is, as other beings who 'own' and care for still other beings in asymmetrical relations of power (Viveiros de Castro 1992: 8; 131; cf. Kopenawa et al. 2013). Tobacco then facilitates people's complex cosmological perceptions, allowing them to see other beings as persons and, sometimes, persons as beings.

More recent work has looked at the 'dark side' of shamanism. Brabec de Mori (this volume) points out that benevolent shamanic healing and malignant sorcery are two sides of the same coin since success in curing involves casting the problem back to its originator (i.e. the sorcerer). Dark and light shamans use their tobacco breath to harm and heal respectively (Whitehead and Wright 2004).

Wilbert describes the appearance of a Warao *hoarotu* ('dark shaman') during his night visits 'their paling yellow chests, tremulous hands, black lips, and furring tongues...fusty body odor and pronounced halitosis' (Wilbert 2004: 37). These less attractive characteristics of prolonged nicotine use combine with their fetid living places and habit of smoking cigars made of curdled human blood to create a much feared and deadly persona. *Hoarotu* contrast, Wilbert opines, with the 'light shaman' or *bahanarotu*, those who 'smoke or suck' (ibid.: 25).

For shamans, tobacco can be both an animating agent that brings artisanal objects to life, and a special food for their non-human auxiliaries. Santos-Granero writes that tobacco smoke, together with an offering of manioc beer and coca juice, activates the 'subjectivity and generative powers' (2009a: 15) of Yanesha panpipes. He reports barely noticing that each time a panpipe owner tried one, he blew tobacco smoke – as well as his coca-perfumed breath- into it (2009b: 114). Shamans similarly activate jaguar stones 'by blowing smoke on them and reciting some magical chants (ibid: 116; see also Fock 1963: 126). Shamans store their auxiliary spirits in baskets and other containers where they feed them with tobacco (Fausto 2012: 32). Walker details how otherwise predatory beings must be captured and then tamed: 'a shaman immediately blows tobacco smoke on the bowl and places it at the foot of the Brugmansia tree...where its cooperation is gradually enlisted through forms of ritual dialogue'. He goes onto to describe how the spirit is cared for at home and asked to serve his owner obediently, 'to respect his family and not to cause them harm, and to share its knowledge with him' (Walker 2009: 92). Tobacco is thus used to maintain and establish relationships of mastery over other beings.¹⁶

We should not forget (fn8) that several central Brazilian 'drug-averse' societies, such as certain Gé groups, have no tradition of tobacco or any other form of ritual drug consumption. Amongst them the importance of blowing indicates that preoccupations with the vitality inherent in breath and breathing might be an even more ancient and pan-South American phenomenon than the tobacco which, in smoked form, is its manifestation (Hill 2009; Hill and Chaumeil 2011). In the

Mundurucu tobacco myth, even the Mother of Tobacco, who created tobacco smoke *sui generis* and carried it in a calabash from which she periodically sucked her vital sustenance, died as soon as she ran out of the life-giving smoke (Kruse 1951-1952: 918). Even in the absence of tobacco, other substances are smoked that do not contain nicotine but which are still referred to as cigarettes, including the rolling papers themselves (e.g. Wilbert 1978: 85). Thus the ability to elucidate breath and blowing, of which Butt-Colson's work amongst the Akawaio (1956) is the single most comprehensive ethnographic work of its kind, appears as one of the most salient aspects of tobacco smoking.

In addition to healing and sorcery, shamans may also be called upon to blow tobacco smoke over crops as a form of protection (e.g. Wilbert 1987: 79), and to carry out rituals as part of the wider practice of weather shamanism that may involve 'blowing against the wind', 'chanting to the rain' and 'dancing away the clouds' (Wilbert 1996; 2004).¹⁷ Shamans, however, do tend to care for and cultivate their tobacco,¹⁸ and unlike staple crops, tobacco is predominantly cared for by men. Wilbert notes the careful attention paid to ensure that tobacco plants have sufficient light, drainage, and pest removal (Wilbert 1987: 8).¹⁹ On the other hand, rather than 'growing their own', many shamans obtain their tobacco from other indigenous groups (and commercial sources, in increasing quantities) and many have never had direct contact with tobacco cultivation.

As well as the shamanic agency they facilitate and produce, tobacco plants – from a phytological perspective - also have their own, independent, agency. For example, botanical research has established that tobacco plants exude a sticky scent which is attractive both to lizards and their caterpillar prey, thereby displaying a rather complex tactic of self-preservation (Baldwin and Stork 2011). Further, one of the most multifarious examples of light perception has been recorded in *Nicotiana longiflora*, which uses the perception of far-red light in order to predict the growth patterns of its neighbours, and to begin growth responses which lessen shading (Trewavas 2003).²⁰ This reveals tobacco as complex type of being, displaying what Ballaré terms 'illuminated

behaviour' (2009). Karban et al (2000) demonstrated increased resistance to insect herbivores in wild *Nicotiana attenuata* plants situated next to clipped sagebrush compared to those growing next to unclipped controls.²¹

Tobacco and Myth

Wilbert has gone on to say more about the mythic apparatus associated with tobacco (2004). He describes the cosmic centre of the Warao light shamans as an egg-shaped house (the self-contained cosmos) built by the Tobacco Spirit (a swallow-tailed kite, *Elanoides forficatus*, fathered by the avian God of Origin) (see Figure 4).

[Figure 4 here]

Figure 4 Zenithal house of the Tobacco Spirit (drawing by Noel Diaz, from Wilbert 2004:26); Image reproduced with the kind permission of Johannes Wilbert and Utah University Press.

The house, its contents and residents are made from the thickened smoke of flowering tobacco plants that border both sides of a rope bridge (also made from smoke) that links the house to the apex of the world. The original light shaman now lives in the Tobacco Spirit's house where his wife changed from a bee to a frigate bird (*Fregata magnificens*) to become a white female shaman specialising in curing nicotinic seizures. Four insects living in the house periodically 'gather around a gambling table on which they move specific counters to invade each other's spaces according to an arrow dice cast by the Spirit of Tobacco...Depending on which gambler wins, someone will live or die on earth' (2004:26).

Among the Arawakan Wakuénai of north-western Amazonia, Hill describes how during birth and initiation rituals: 'thick clouds of [tobacco] smoke transfer the chant-owner's poetic vocal sounds into the sensual realms of vision, touch, taste, and smell' (1993: 126). Wakuénai *málikai*

chants employ a musical and sensory repertoire that evokes myth and during which ancestral tobacco names are 'chased after', 'searched for' and 'heaped up'. Myth elucidates how the culture-hero Nhiaperikuli, at the mythic centre of the Hipana raids, pulls out all the people known by the Wakuénai. Nhiaperikuli confers them with rank according to their sequence of emergence from a large hole in the Hipana rapids, and bestows land, the sounds of their tobacco namesakes and sacred chilli pepper upon them. The first to emerge are the whites, indicating their relative power as the eldest brother (see variations of this emergence story among the Hohodene and Walipere-Dakenai of the Aiary River). They are followed by the Wakuénai sibs and then other regional ethnicities. The litany then involves searching for tobacco names. While the Wakuénai find names for their sibs, the whites are too numerous to be named, so their names are simply 'heaped up in a pile'. As such, despite their influence, they lack ancestral names and hence the power that comes from the tobacco spirits (ibid.: 111).

Another important aspect of indigenous mythology relating to tobacco concerns its role in the creation of landscapes. The Baniwa regard the headwaters of the Solimões River as one among several places from which they bring back tobacco (Wright 1993: 14). They consider tobacco smoke to have widened the course of the Içana river, with the wind-borne smoke creating its twisted path (Garnelo 2007). An itinerary of these topographic features is provided through ritual chants which maintain their prominence in Baniwa collective memory (also see the 'tobacco *garapés*' (Meira 1996: 180; Wright 2013: chapter 4). Reig (this volume) recalls that Yanomami myths actualised in agricultural practices connect tobacco to the transformation and human impregnation of landscapes.

For the Tukanonan people, tobacco has an even more progenitive role. Grandfather of the Universe tries but fails to create people by blowing cigar smoke over a gourd of sweet *kana* berries (*Sabicea amazonensis*) (Hugh-Jones 2009). Grandmother of the Universe therefore takes over,

blowing more smoke and spells on the gourd, which produces seven 'Universe People' (ibid.: 36-8) who between them encapsulate all elements of the known Universe.

[Figure 5 here]

Figure 5 Grandmother of the Universe creating the Umuari Masa or Universe People. ²²

Drawing by Feliciano Lana in Panlõn Kumuand Kenhiri (1980) and Hugh-Jones (2009: 38).

Image reproduced with permission of F. Santos-Granero and S. Hugh-Jones.

The Chapters in this Book

Hugh-Jones argues against making 'overly hasty generalizations about Amazonia and Amazonians' (2009: 35), and others caution against giving an impression of cultural homogeneity or of making sweeping generalizations that take us 'away from the nitty-gritty of indigenous real life' (Ramos 2012: 482). The chapters in this book are written either by social anthropologists or researchers in related disciplines, all of whom have had plenty of first-hand experience of the nitty-gritty of life in lowland South America. The key methodological contribution made by social anthropology is ethnography, the long-term study and writing about what has traditionally been a single small community or communities, but which now has expanded in scope to include virtually any aspect of social life within or across the global world system. The strengths of this approach lie in its descriptive richness and its ability to generate in-depth understanding based on a position that might be termed 'embedded' (Lewis and Russell 2013). This enables the disaggregation of general terms such as 'Amerindian' or 'Amazonian' and the fine-grained, nuanced appreciation of the heterogeneity within and between groups. The weakness of ethnography, of course, lies in its lack of generalizability and the danger of regarding groups as indigenous isolates. Multi-sited ethnography, such as that provided by Brabec de Mori in his use of Iskobakebo, Yine, Asháninka and Shipibo songs

(this volume), goes some way towards enabling comparisons to be made across 'ethnic' and linguistic boundaries.

The book is divided into three Parts. Part One commences by considering the variation in how indigenous peoples in lowland South America have used tobacco through time. Oyuela-Caycedo and Kawa present a 'deep history' of tobacco that introduces us to its origins, which extend back to the initial domestication of diverse wild plants in the Nightshade family (Solanaceae). They suggest that we should remain cognisant of the diverse functions tobacco has played in the region as well as its myriad forms of consumption and associated cultural materials. They also discuss the rise of tobacco as a valuable commodity during the colonial period, exploring its impact on both the regional and global economic systems. By looking at new techniques for recovering archaeobotanical remains while also examining human societies' attitudes toward plants through time, the authors present a new framework for understanding both the origins of tobacco and contemporary variation in how it is used. In Chapter Two, Peter Gow compares the use of tobacco by two Maipuran-speaking peoples of South-western Amazonia, the Piro-Manchineri (Piro) people and their eastern neighbours the Apurinã. His main concern is with a major change in the use of tobacco by the former since the nineteenth century, and he uses data from their neighbours the Apurinã (also known as the Hypuriná and Ipurina, amongst other terms) in order to better understand the Piro in their regional context. Gow originally intended to explore the incorporation of *ayahuasca* into earlier shamanic uses of tobacco. However, as he began to explore the data further, a much more complex and hitherto unappreciated system of tobacco use began to emerge. Gow uses an anthropological method known as controlled comparison to find out why one group (the Piro) adopted tobacco smoking while it was apparently rejected by the Apurinã, who continue to use snuff. To do this he focusses on the material accoutrements involved, namely snuff tubes and the emergent use of pipes. This, he argues, is not the result of ad hoc borrowings or non-borrowings by two socially and linguistically neighbouring peoples, but the result of 'structuralist diffusion', a neglected form of

explanation. In tracing the shifts in methods, modes, devices and orifices used to ingest tobacco, Gow provides evidence of the endless dialectics between systems in a constant process of transformation. It is significant, in similar vein, that the Piro have adopted *ayahuasca* shamanry²³ while the Apurinã reject it, despite being surrounded by enthusiastic non-indigenous users of *ayahuasca*.

Barbira Freedman's chapter takes the vantage point of another group, the Keshwa Lama of the Peruvian Upper Amazon. They, like the Piro, have been instrumental in the development of *ayahuasca* shamanism since the 18th century. Developing further Wilbert's arguments for the primacy of tobacco use in indigenous shamanism, she uses a combination of historical and ethnographic sources to show the continuity of tobacco use as well as its increasing reach via the more generic forms of non-indigenous shamanic medicine that evolved in colonial contact points in Western Amazonia. The use of tobacco smoke blown on patients' bodies for the treatment of illness has been documented in South America since the 16th century, both in and outside the Amazon region. Like Gow, she considers how relatively neglected both tobacco use and the 'tobacco path' as an adjunct to *ayahuasca* shamanism, have been in the anthropological literature on Western Amazonia. She sees the recent expansion of *ayahuasca* tourism as inseparable from a renewed use of local varieties of *Nicotiana tabacum*, smoked in pipes rather than as cigars, and of specific uses of tobacco juice for shamanic treatments not only in Amazonia but wherever *ayahuasca* healing has been exported.

The 'shifting perspectives' of Part Two pays tribute to Viveiros de Castro's work on perspectivism in considering the place of tobacco in a multinatural environment. A series of tobacco songs, or rather magical songs related to the use of tobacco, are analysed by Brabec de Mori in Chapter 4 in order to underline the fundamental historical importance of tobacco in the Ucayali valley of the Peruvian lowlands. Here tobacco is a medium of communication and transformation shared between human and non-human entities, the progenitor and carrier of healing, sorcery and

even love magic. The songs are not always sung out loud – the words can simply be whistled or thought, but concentration and focus is usually required. The songs' power lies in the way in which tobacco, song and physician become one (encapsulated in the Shipibo word *kano*, 'world-in-the-song'). The tobacco smoke carries the manifest power of the words (and the physician using them) through space into the spirit's world. Likewise songs from the spirit world can manifest themselves as powerful entities in this world (e.g. as thunder). There is a reciprocal relationship of tobacco with warfare and sorcery as well with curing and illness, which makes its role more morally ambiguous in the contemporary world. The more commercially oriented use of *ayahuasca* seems detached from such reciprocity and represents the 'good side' of what is probably a Christian dichotomy. Meanwhile the touristic potential of *ayahuasca*-based 'shamanism' makes it an attractive commercial proposition for younger Shipibo. The chapter ends with an *ayahuasca* healer complaining about Brabec de Mori's use of tobacco as 'an addictive drug'. The concept of 'addiction' is totally at odds with traditional Shipibo attitudes to tobacco and was probably assimilated while travelling outside Peru providing *ayahuasca* sessions for westerners. These myriad factors help to explain the decline of tobacco-oriented magic and the loss of its evocative songs.

Juan Alvaro Echeverri describes and analyses the uses and meaning of tobacco amongst the Witoto and neighbouring groups of south-eastern Colombia, collectively known as 'People of the Centre'. The main form of tobacco consumption found here consists of licking it in the form of a paste. The information presented in this paper derives from the author's own experience and information from two elders: Kɪnerai (Hipólito Candre), an Ocaina-Witoto man who lived by the Igaraparaná River, and Enokakuiodo (Oscar Román-Jitdutjaaño), who lives in the Middle Caquetá region. Echeverri commences by considering the indigenous belief that a man must use tobacco if he is to know the tobacco spirit. However, Kɪnerai's advice to Echeverri was that he should moderate his smoking habit in favour of tobacco paste. After describing the technical processes of heating and cooling involved in making the paste, Echeverri discusses the symbolism inherent in its two

constituents: tobacco juice (menstrual blood) and ash salt (semen). He goes on to consider the relationship of these and other substances (e.g. chilli sauce, meat, coca, cassava bread, and non-meat foods) along the two axes of what he calls 'culinary space': one that addresses relationships of seasoning (in the way that, for example, salt is the seasoning of tobacco paste) and one that concerns how meat and non-meat foods are combined (for instance, coca in combination with tobacco). He compares the opposition of dry tobacco and moist honey, as posited by Lévi-Strauss in his analysis of myths surrounding smoked and inhaled tobacco, with the opposition of dry salt and moist tobacco in the case of tobacco paste. He suggests that with the change in product a transformation of structural oppositions has taken place. Echeverri concludes by suggesting that the heating and cooling involved in making tobacco paste has the effect of transcending the culinary space and helps to define tobacco's dual character as both a hazard and a healing agent.

Part Two concludes with Elizabeth Rahman's chapter on tobacco's place in the formation of the infant, based on fieldwork conducted in northwest Amazonia between 2010 and 2011 along the Rio Xié, a small tributary of Brazil's Rio Negro. During fieldwork Rahman was struck by how much tobacco smoke and spell-blowing was used in perinatal care. Tobacco smoke blowing was frequently employed as both a preventative and a curative measure for the neonatal family. She explains how tobacco smoke-blown-blessings - *umutawari* – form part of a repertoire of techniques used to guide the emergence of the hot (*saku*), limp and humid neonate (*taina piranga* – literally 'red child') into more (but not exclusively) cool, firm (*santo*) and dry (*otipáua*, fluid-free) social and personal states. Tobacco smoke, among other virtues which are discussed in this chapter, affords a coolness and dryness that mediates the volatile state of extreme and leaky dampness that babies are in. These actions facilitate the growing engagement of the child with the others who care for him or her. Rahman suggests that tobacco-spell-blowing induces a specific 'somatic mode of attention', and that the primary effect of tobacco blessings is to direct and reorient the participant's attention to the present moment. As such, tobacco smoke blessings can be seen as a mindfulness-generating

technique. She argues that a consideration of indigenous ‘mindful’ techniques enables us to understand the potency of tobacco use in Amazonian healing practices in terms that are closest to local aetiologies and pathologies, and articulates this with regard to the health-promoting benefits of mindfulness recognised in the biomedical literature. She also suggests that early exposure to tobacco smoke and other sensory stimuli in ritualised contexts encourages an efficacious response to later shamanic interventions. Elucidating the ‘pragmatic efficacy of aesthetic forms’, Rahman provides us with a means of considering efficacy that moves beyond the importance of symbolism, placebos and psychosomatics.

Relationships are changing, but so is the broader political-economic environment, which is the primary focus of Part Three. In Chapter Seven Renzo Duin considers the place of commercial cigarettes and *pijai tami ale* among the Wayana in northern Amazonia. In a 1964 TV broadcast, *Voyage sans Passeport*, an actor hands out commercial cigarettes from a boxed packet to a handful of indigenous Wayana men in the Upper Maroni River region, on the frontier of French Guiana and Suriname. He lights the cigarettes with his lighter and a young Wayana boy intensely smokes a commercial cigarette. The voice-over claims that ‘Indians start smoking early’. Some young Wayana boys learn how to smoke cigarettes, inhale, and blow out clouds of tobacco smoke as a result of their father’s wishes that they might one day become shamans (*pijai*). Commercial cigarettes have not replaced the traditional long cigarettes (*tami ale*) used by *pijai*, however. *Tami ale* and some used cigarettes with charm leaves were both collected by the ethnologist Audrey Butt Colson in 1964. *Tami ale* are made from tobacco leaves (*Nicotiana* spp.) rolled inside thin sheets of an inner tree bark (*okalat*; *Couratari guianensis* Aubl.) and are still used by *pijai* despite the introduction of commercial cigarettes.

[Figure 6 here]

Figure 6 The bark of *Couratari Guianensis*, used throughout South America as rolling papers. Object number EBC 00000. Image reproduced courtesy of Economic Botany Collection, Royal Botanic Gardens, Kew. Photograph by Elizabeth Rahman.

Duin describes how during fieldwork in 1998 he suffered sunstroke (or so he thought), and in order to feel better went to lie in his hammock. The Wayana people, deeply concerned, concluded that '*sisi je*' (the mother sun) had poisoned his head. One of the Wayana standing by his hammock asked for a packet of commercial cigarettes which Duin happened to have in his backpack. After sunset a *pijai* arrived to visit him, the commercial cigarettes requested earlier having been used as an invitational gift. The *pijai*, though, had brought *tami ale* for curative purposes and, during his years of fieldwork and living among the Wayana, Duin witnessed *tami ale* being used in curing rituals on several occasions. Commercial cigarettes were rarely used in these contexts and were considered less powerful. He also observed younger Wayana occasionally smoking commercial cigarettes, a recreational use of tobacco that was not perceived as a shamanic act. He argues that the traditional role of the *tami ale*, using locally grown tobacco, has not been rearticulated or replaced by commercial cigarettes, nor has it affected the role of the *pijai*. Commercial cigarettes reflect a desire for 'western modernity', but their quality and power are almost always trumped by traditional *tami ale*.

Alejandro Reig takes a similarly ethnographic approach to tobacco use and exchange amongst a group of Yanomami villages in the Ocamo basin of the Venezuelan Amazon, making use of myths about tobacco and other foodstuffs to illuminate the role of these staples in the creation of what he calls 'landscapes of desire' in inter-group sociality. The Yanomami provide an example of a world in which tobacco is not used in rituals but is the object of everyday pleasurable consumption, and as such it forms a central thread in the weft of social life, and he suggests that it should be looked at together with other stimulants central to Yanomami sociality. It appears in mediations

with both the outside and the inside, including the initial sharing of substances with visitors, where it seems to perform an immediate welcoming procedure of 'making kin out of the other' (Vilaça 2002); the circulation of tobacco wads between kin inside the village; and the pressure to give away tobacco or have it stolen suffered by hard working gardeners from those with less gifted gardens . Tobacco craving configures a libidinised relation with places, and its scarcity may lead to downriver people travelling to upriver villages, or to upriver interfluvial people visiting other villages when their harvest is finished. Among the myths that account for the different staples given to people by the ancestors, that of the origin of tobacco stages a connection between need, landscape and a nameless but driving desire. Like the Wayana studied by Duin, many downriver Yanomami in permanent contact with national society have substituted the traditional practice of sucking the tobacco wad with commercial cigarette smoking, but this does not appear to have disrupted traditional usage. Following Londoño Sulkin's proposition that the 'Amazonian package' involves both the 'sharing of substances' and the 'incorporation of otherness', it is the latter which seems to be intensified in the use of tobacco by the Yanomani. It is interesting to reflect on the similarities between these approaches and how others embedded deep in late capitalism might use cigarettes, a notion well documented in current anthropological treatments.

Juan Pablo Sarmiento Barletti steps away from the prevalent analyses of the use of tobacco in ritual practice amongst indigenous Amazonians in Chapter Nine. Instead, he looks at the less explicitly 'mystical' everyday functions of the plant by discussing the various roles tobacco plays in the contemporary social lives of two different groups of Ashaninka people in Peruvian Amazonia. Groups around the Ene River have renewed dedication to planting tobacco as part of a much larger reconciliatory effort in the wake of the Peruvian internal war (1980-2000). In this context tobacco becomes a tool through which the Ashaninka seek to mend with the earth and spirits that were broken during the war years. Sarmiento Barletti then moves onto to look at the everyday uses of tobacco in the form of commercial cigarettes amongst those living by in the Bajo Urubamba River

area. He proposes (like Duin and Reig) that cigarettes are one of the objects used to define what it means to be both 'Peruvian' and a 'civilised' indigenous person. These two different uses of tobacco by people within the same society demonstrate how the plant, in its different forms, is key to understanding indigenous Amazonian notions of wellbeing.

Paolo Fortis attends to the tobacco smoking practices of the Kuna people of the San Blas Archipelago of Panama in Chapter Ten. He considers the association between tobacco and fermented ('bitter') and unfermented ('sweet') *chicha* (beer), an analysis which emerged from the careful analysis of Kuna explanations of their curing rituals. Drinking sweet *chicha* is an important form of conviviality and in the daily effort of making bodies, but bitter *chicha* provokes drunkenness and is mainly consumed in contexts where the presence of others - non-kinspeople or spirits - is key. Fortis argues that tobacco smoke corresponds to the sweet *chicha* of the *nuchukana* – auxiliary spirits – while tobacco ashes are the bitter *chicha* of the *ponikana* – animal spirits. Fortis analyses this tobacco and *chicha* nexus in the context of demographic growth over the past 100 years or so. The growing population has led to a lack of space on the San Blas islands for Kuna villages to split in response to internal conflict as they once did. In consequence, he argues, it is possible to trace a link between the metaphysical projection of violence and animosity in the everyday life of Kuna people, the proliferation of ritual specializations, and the increasing consumption of commercial cigarettes and pipes.

The chapters of this book provide original reflections supported by both long-term and recent ethnographic, archaeological and historical research. Translations from indigenous languages are the authors own, as are chapter photos, unless otherwise stated. In their sum, they reflect on and incorporate the themes of musicality, mythology, animist spirits, cultivation, exchange and power, healing and efficacy, and wellbeing at the local level and within global networks and nation-states. It opens up new vistas for further exploration concerning this remarkable plant.

Conclusions and Implications

Welcome, then, to a book which places indigenous cosmological, ethnobotanical and pharmacological perspectives, against a backdrop of the increasing power of the national and transnational tobacco industry. Its chapters offer some fascinating comparisons and contrasts with the ways in which tobacco is viewed, used and ab-used elsewhere in the world.

While the purpose of this book, and perhaps its greatest strength, is to explore the meaning and metaphysics of tobacco rather than questions of utility and intervention, the landscape of contemporary tobacco use in lowland South America is clearly changing rapidly. National and global tobacco industries have continued their transformation of the economic landscape of tobacco in many parts of the region, increasing the spread of commercially produced tobacco products (Stebbins 2001). Of course, the trade in tobacco between groups is nothing new and may well have been an important part of pre-colonial interethnic exchanges. However, with their increased availability and ease of use, cigarettes imported from elsewhere enable the potentially constant use of tobacco in casual everyday rather than formal ritual contexts. It would be irresponsible to ignore the increasingly clear evidence of tobacco's potential for harm, particularly when consumed in this 'fast food' fashion as products of the 'harm industries' (Benson and Kirsch 2010) which are in its thrall. Yet the focus of the tobacco control movement on the frequently nefarious activities of the transglobal tobacco corporations has meant that indigenous cultivation and use of tobacco has stayed largely 'beneath the radar' of contemporary concerns.

There is little collected data on tobacco consumption and health effects amongst the peoples we are considering in lowland South America. National data for the countries concerned – Venezuela, Guyana, Brazil, Peru and Panama – do not disaggregate into regions and ethnic groups, assuming such information could be readily collected. In the Amazon Basin there are still plenty of infectious and non-infectious diseases which at population level are likely to mask the effects of any

increased morbidity and mortality due to the increased and more regular use of commercially produced tobacco. There is, however, evidence that public health messages are reaching the ground, albeit subject to local interpretations that conflict with public health agenda. For instance, Xié dwellers with whom Rahman worked asked whether it was true that tobacco affected their ability to get an erection, a notion probably heard from visiting nurses and one otherwise contradicted by the widespread association they made between tobacco and virility. Both Echeverri and Brabec de Mori (this volume) note the infiltration –and interpretation- of messages such as ‘tobacco kills’.

Meanwhile discussions within tobacco control are also moving on from crude, total abstinence messages towards greater consideration of the potential for ‘harm reduction’ strategies, although these remain controversial (Hastings et al 2012; McNeill and Munafò 2013). Along with the prospect of substituting cigarettes for alternative nicotine-containing products, a renewed interest in mindfulness both as a feature of reduced tobacco dependence and in stop smoking programmes (e.g. Vidrine et al 2009; Brewer et al 2011) has been developing.²⁴ Rahman (this volume) suggests that the mindfulness associated with tobacco healing in lowland South America is an activity nurtured in childhood. Understanding first and judging later would seem to be the way forward.

Health promotion initiatives around tobacco amongst the indigenous groups living in the Americas aim to canvas these more nuanced understanding of tobacco use and abuse. Stimulants may be used in different ways and with more caution in their source origin, than when newly transposed and classified as ‘drugs’.²⁵ With this in mind, Alderete et al (2010:37) are optimistic that ‘indigenous worldviews that support respect and reverence for ritual use of tobacco can be integrated into smoking prevention programs’. The distinction Daley et al make between sacred and recreational tobacco use in North American populations is mirrored in an example from Amazonia when Rosengren, writing about the Matsigenka, argues ‘an important distinction must be made...between the tobacco that is locally cultivated and the industrially produced cigarettes that can be bought from local traders’. The former, he says, is for sharing with the spirits and its

consumption is limited to ritual events; the latter is 'consumed for the mere pleasure of the smokers'. 'Today practically all men smoke cigarettes when they have an opportunity. In contrast, the everyday consumption of locally produced tobacco is largely limited to senior men, who take it either as a finely grained snuff that is blown up the nose through tubes or ingested as a viscous 'syrup' known as *seri opatsa* (literally 'tobacco's turbid water') which is generally acknowledged to be so strong that only grown men can take it' (2006: 809). This might be a step forward in terms of health promotion work, but the relationship between 'ritual' and 'everyday', 'spiritual' (or 'sacred') and 'recreational', or 'indigenous' and 'commercial' are divisions frequently blurred.²⁶

Finally we should consider the metaphysical nature of tobacco as spirit in many parts of lowland South America, something which was completely lost in the transatlantic and transcultural shipment of the plant from 'New World' to 'Old'. Now tobacco companies are starting to market brands such as 'Natural American Spirit' ('100% additive free natural tobacco'). The 'Santa Fe Natural Tobacco Company' which produces this brand was purchased by RJ Reynolds Company in 2001, becoming a division of Reynolds American (42% owned by British American Tobacco) in 2001. They are cashing in on the concept of 'spirit', as well as that of 'natural' (McDaniel and Malone 2007); other companies are developing what they argue is 'organic' and 'additive-free' tobacco. However, the respect that goes with the cosmology of Wilbert's 'house of the tobacco spirit' is completely lacking in these profit-motivated language games and in terms of the health studies conducted thus far, the risks of long-term use of 'additive-free' tobacco compared to the tobacco found in 'normal' cigarettes can be compared to the choice between jumping from a 12th floor and a 13th floor window. If we are serious about reducing the health impacts of tobacco worldwide, maybe those working in tobacco control should consider the potential for refashioning tobacco, the 'master plant', as a 'master spirit' that is in need of greater respect and, perhaps, exorcism? This book presents a more dualistic – and certainly more nuanced – perspective on this controversial plant, presenting it as an agent of both enlightenment and destruction. Ultimately, it could be argued, the

historical and contemporary failure of the rest of the world to acknowledge the power and respect accorded tobacco amongst many indigenous groups in lowland South America has enabled the 'master plant' to master us all.

Notes

1. For authoritative accounts of the transformation of tobacco from plant to late industrial capitalist commodity, see Goodman (1993); Brandt (2007) and Proctor (2011).
2. The first known printed reference to tobacco comes from the Spanish explorer Oviedo y Valdes who in 1535 reported on the Caquetio of what is now northern Venezuela 'There is in the country an herb which they call *tabaco*, which is a kind of plant, the stalk of which is as tall as the chest of a man' (Wilbert 1987: 11).
3. 'Pariká is a crystalline powder made from the blood-red exudates of the inner bark of *Virola theidora* and *Ananenanthera peregrina* trees found in the Northwest Amazon region. Its active chemical principle is DMT (dymethyltriptamine). The more experienced pajés [shamans] sometimes use a mixture of pariká and another hallucinogen known as *caapi* (*Banisteriopsis caapi*)' (Wright 2013: 26).
4. Traditional forms of tobacco use generally involve very large quantities of tobacco and may reach hallucinogenic quantities. This use of tobacco is generally restricted to some men on certain occasions. Commercially produced tobacco on the other hand, is designed for more constant, low-level use, and is chemically engineered to enhance its addictive properties (e.g. Land et al 2014).
5. Santos-Granero suggests 'the Amerindian fascination with animals and the emphasis on people in recent theories of native Amazonian political economies have conspired to make the world of objects 'somewhat invisible' (2009a: 1).

6. Feinhandler et al (1979) dispute this, arguing that because tobacco is also native to Australia and the southwest Pacific it could have originated elsewhere,
7. Wilbert is struck by the fact that 'among Europeans and their descendants elsewhere it [tobacco] became a habit and an addiction but played no role in religion. But after tobacco reached Siberia, probably also in the latter part of the sixteenth century or at the latest in the seventeenth century, it is astonishing how quickly the tribesmen adapted it to shamanism, thus recapturing for it the religious meaning that it has always had for the American Indians' (Wasson 1968: 332 in Wilbert 1972: 56fn).
8. Some Gé and other non-Tupí horticulturalists in eastern and southern Brazil are largely 'drug-free' in their shamanic practices (ibid: 104).
9. This is an inaccuracy on Wilbert's part as Butt Colson actually says the Akawaio shaman drinks tobacco juice.
10. 'Master' also translates as S. *dueña(o)*, S. *ama(o)*, and as 'owner' in English.
11. Phlegm recurs in other tobacco references. Gow (personal communication) notes that, for the San Martín (i.e. Lamista) Quechua, phlegm resides in the shaman's stomach and is the source of knowledge that tobacco 'pulls up' as a rattling cough into his/her throat as s/he smokes. In Piro, it is called *yowuma koslewatachri*, which also means 'magnet'. It is generated by drinking *ayahuasca* and *toé*, but not apparently by tobacco, which activates or potentializes this.
12. Young (2005) for example, records how much the Pitjantjatjara of Western Australia, appreciate wild tobacco (*mingkulpa* – probably *Nicotiana excelsior* or *N. gossei*) for its rich greenness and strong odour.
13. 'Anti-food' is Viveiros de Castro's equivalent to Hugh-Jones' 'non-food' (above).
14. Many Shipibo and mestizo fishermen and hunters smoke and chew tobacco in order 'not to feel hunger'. Somehow, here, tobacco is 'food', because it 'feeds' the chewer - although not in the sense of nutrition. Those people who do this often are described as very thin but at the same time strong,

because they eat little (which resembles the 'diet' for shamanic growth, Brabec de Mori, personal communication).

15. Londoño-Sulkin (2012: 84) notes that among the Colombian 'People of the Centre', one indigenous friend, Emanuel, cites 'forest tobacco' (*Virola multinervia*) as the cause of strong hallucinations that inspired him to build a new longhouse, together with his more practical reason of crowding in an overly smoking environment. Other groups see the plants themselves as a source of divinatory information.

16. For more on the Amerindian category of master or 'owner', see Fausto (2008).

17. Among the Baniwa, tobacco séances by the celestial deities literally create clouds of smoke (Wright 2013: 81; 175) and the jaguar shamans sing to sweep them away ('brush away').

18. Wilbert (1987: 89) observes that among the Carib of Surinam (Cariña) 'To make the tobacco strong, the ribs and the leaves are punctured with a sting-ray barb.'

19. Such is the devastation on tobacco plants wrought by the caterpillar *Manduca sexta*, that the Yanomam (a subgroup of the Yanomami) sometimes refer to tobacco as 'caterpillar's vegetable food' (Albert in Wilbert and Simoneau 1990: 335, fn 361). Among the north-western Hupd'äh, shamans who also feed off this plant are seen to metamorphose in the same way as their caterpillar counterparts (Ramos 2013).

20. Trewavas (2003) pulls together a number of botanical studies evincing plants' awareness and active responses to a wide range of environmental factors, including touch, gravity, light, sound and chemical stimulation. Plants appear to assimilate knowledge in doing so and this comes to constitute part of their life history.

21. Tobacco plants near the clipped sagebrush increased their levels of what is possibly a defensive enzyme (polyphenol oxidase) in response to an airborne signal (methyl jasmonate) released by the sagebrush.

22. Seated on a ceremonial stool and smoking a cigar in her cigar holder, Grandmother Universe makes a new being appear - the Grandson of the Universe, creator of light, of the layers of the universe, and of humanity.

23. 'Shamanry' refers to the specific work of the shaman, the most gifted intermediary in the animist cosmos; 'shamanism' refers to the complex of esoteric animist knowledge or worldview, sometimes also shared with non-shamans.

24. See also <http://www.nydailynews.com/life-style/health/mindfulness-app-smokers-quit-article-1.1372697>

25. For example, see McGonigle (2013) on *khat* (*Catha edulis*) chewing; Tomlinson (2007) on drinking *kava* (*Piper methysticum*).

26. For example, Alderete et al (2010: 29) point out that in the Andean Pachamama ceremony, 'cigarettes have replaced tobacco leaves as offerings'. Both Gow and Fortis (this volume) query the ability to easily distinguish between religious/ritual and recreational tobacco use.