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Scentscapes: Understandings of Nature, Consumption, and Commodification through Agarwood

and Olfaction

A dissertation submitted in partial satisfaction of the requirements for the degree Doctor of Philosophy in Geography

by

Tuyen Bich Le

2018

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ABSTRACT OF THE DISSERTATION

Scentscapes: Understandings of Nature, Consumption, and Commodification through Agarwood and Olfaction

by

Tuyen Bich Le Doctor of Philosophy in Geography University of California, Los Angeles, 2018 Professor Lieba Bernice Faier, Chair

This dissertation explores the olfactory economies of agarwood, a high-value non-timber forest product prized for its unique fragrance and used in incense, perfumes, and traditional medicine. It is primarily derived from a genus of trees called *Aquilaria*, which is native to Southeast Asia and is traded globally. *Aquilaria* species are classified as vulnerable or endangered and are subject to regulations under the Convention on the International Trade in Endangered Species (CITES).

This project demonstrates how varied understandings of nature, consumption practices, and consumer preferences can create irregularities in a globalized production network. In contrast to scholarship on commodity networks that detail how trade and consumption patterns are formed, and how people and places become systematically enrolled into structured networks of trade and production, the production of agarwood shows how culturally and geographically specific meanings and preferences create a commodity network that is inconsistent, characterized as diffuse, disarticulated, flexible, and often obscured. I show this by tracing the "scentscapes" of agarwood, based on 15 months of fieldwork in Southeast Asia using ethnographic methods. Drawing from Appadurai (1990), I define "scentscapes" as the different economies of olfaction, production, use, and meaning across space and cultures. Each scentscape draws a path between places and practices of consumption, and corresponding places and practices of production. I detail the peculiarities of olfaction as a sense and olfactory practices as consumption, which contribute to the irregular form of agarwood's commodity network.

I define and contextualize agarwood's three main scentscapes: the domestic "homeland" of *Aquilaria*'s native range in Southeast Asia, the traditional export markets of the Middle East and East Asia, and the new market in the West. These scentscapes provide insight into how different actors value and understand nature within a context of commodity production, endangerment, and international regulation. Agarwood's diverse scentscapes and commodity characteristics make it resistant not only to consolidation in production, but to regulation as well: because CITES's fundamental valuations of nature and understandings of sustainability are predicated on traditional notions of commodities and production, it is mismatched with the diverse valuations that manifest and are expressed in these scentscapes.

The dissertation of Tuyen Bich Le is approved.

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University of California, Los Angeles

2018

For Má, Ba, Chị Hai, and Chị Ba, whose sacrifices, bravery, selflessness, and unconditional love enabled this work.

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VITA

Tuyen Le earned a B.A. in Geography and the Environment at the University of Texas at Austin in 2006. Upon graduation, she was employed in private industry, working for a software firm that creates environmental data management systems. She began graduate studies in the Department of Geography at the University of California, Los Angeles in the 2008, receiving an M.A. in 2011 and advancing to doctoral candidacy in 2012.

INTRODUCTION

Scene: In the Mekong Delta

The road leaving Sài Gòn¹ is slow and nearly static at times, with periodic bursts of twitchy movement: lines of large 18-wheelers, trucks, vans, and sedans are crisscrossed by an endless stream of motorbikes, sluggishly weaving about in the sea of traffic. We are westbound, heading towards the border with Cambodia.

It is commonly said—by Vietnamese nationals, foreign expats, and tourists alike—that the Mekong Delta is more laid back. My mother always said it was because the land was so fertile, not like in the harsher lands further north where living can be so *chua* ("sour"); the land is more giving, so the locals are less focused on survival. Perhaps this characterization is just an extension of how the Vietnamese imagine the languid flow of the silty, opaque waters that course throughout the Delta. Whatever the case, in my eyes, it most certainly is calmer than Sài Gòn, and less staid than Hà Nội. Several people, from family to acquaintances to a random woman next to me on the city bus, described Delta folk as distinctively friendly, honest, and welcoming. If, stereotypically speaking, those from Sài Gòn are animated, from Hà Nội more reserved, from Huế shrewd, then those of the Delta are warm and relaxed. We pass dozens of flat-bottomed boats drifting quietly through the many canals and channels, children yelling and jumping in the shallows, and homes on stilts dotting the edges.

We travel along the main highway, then onto a paved road, then a packed dirt road, on a ferry across the water, then another packed dirt road, then another ferry. I have given up attempting to track our specific path towards the border. As the presence of vehicles shrink and

¹ Though officially called Thành phố Hồ Chí Minh/Ho Chi Minh City today, I have chosen to use the name "Sài Gòn" here, as throughout Việt Nam, I would rarely hear it called "Thành phố Hồ Chí Minh." The majority of Sài Gòn residents I encountered, as well as Vietnamese nationals in general, called it "Sài Gòn."

we drive past old women peddling slowly on ancient bicycles and carts pulled by Ongole cattle or water buffalo, it feels like time has not exactly stopped, but slowed to a sleepier pace.



Figure 1. Passing local farmers on the way to Châu Đốc, near the Cambodian border. Photo taken by author, August 2013.

We stop and lodge for the night in the main border town of the region. Châu Đốc is a busy trade center due to its waterway access but, for the most part, is a place where foreign tourists float through on their way to Phnom Penh via ferry; few seek it out as a destination in and of itself. It is sizeable, with a population over 150,000, bustling markets, and many places of worship of various kinds. This reflects the city's hodge-podge demographics: mainly ethnic Vietnamese (primarily practicing Mahayana Buddhism and indigenous folk religions of several stripes), but with significant numbers of Khmer Krom (typically Theravada Buddhist), Chinese (Mahayana Buddhist and/or Taoist), and Cham (Sunni Muslim and Hindu). Yet even here in town, it is remarkably, almost disturbingly quiet for someone who is arriving from the constant noise of Sài Gòn. At night, when locals tend to stroll along the riverside, snack at one (or several) of the dozens of food carts, practice martial arts on the pavilion around the giant metallic basa catfish statue, or just socialize and chat in general, no one seems to be in a rush to do something or be somewhere else, so the atmosphere still feels subdued despite all the activity.



Figure 2. Statue of basa catfish in Châu Đốc. Photo taken by author, August 2013.

The next morning, we head for the mountains. The paved roads of town give way to more dirt roads. Homes become sparser, the security presence stronger; a military base sits just beyond town.² Eventually, the roads and canals give way to verdant rice paddies, reaching far out towards Cambodia and the southern end of the Annamite Range. Stretches of green are

² Though recent years have not seen widespread conflict, tensions between the ethnic Khmer Krom (meaning "lower", that is southern, Khmer) and the Vietnamese government spark into occasional confrontations regarding land disputes and various alleged human rights violations against the Khmer Krom. The southern regions of modern Việt Nam once belonged to Cambodia, and the Khmer Krom have lived in the Mekong Delta region for generations.

interspersed with patches of blue, where flooded paddies reflect the sky above. The Båy Núi ("Seven Mountains") area is a somewhat startling landscape: an expansive, incredibly flat plain of near-neon green with countless tiny streams and canals formed by generations of wet rice cultivation, interrupted with the sudden rise of rounded, weathered mountain peaks. Båy Núi has long been a region of spiritual significance and a popular site for yearly pilgrimages for various deities, Núi Cấm ("Forbidden Mountain") in particular housing several temples of different types of worship.

Bảy Núi is also home to a long history of agarwood extraction, cultivation, and trade. Agarwood, a precious, high-value non-forest timber product, is primarily derived from a genus of tropical trees, *Aquilaria*, which is now threatened or endangered³ and regulated under the Convention on the International Trade of Endangered Species (CITES). Agarwood consists of wood that has been permeated by resins, and can form anywhere in the tree (though the heartwood is generally preferred by consumers). Several species of *Aquilaria* are native to the area, and it is here that the founders of the Bửu Sơn Kỳ Hương and Hòa Hảo Buddhist sects, which especially value agarwood incense and often grow *Aquilaria* trees on the grounds of their temples, retreated for meditation.⁴ This place also happens to be where the first experimental agarwood cultivation plots by Western researchers in Việt Nam were established. Beginning in the 1990s, a non-governmental organization called The Rainforest Project (TRP) planted agarwood trees amidst forested lands, with the aid of the European Commission⁵ and a forest

³ Aquilaria consists of twenty species, some of which are classified as more endangered than others.

⁴ Hòa Hảo is considered a continuation or extension of the earlier Bửu Sơn Kỳ Hương ("Strange Scent of the Precious Mountain") religion, which is a millenarian Buddhist sect founded in the 1800s.

⁵ The European Commission is the administrative arm of the European Union.

pathologist from Minnesota.⁶ This is the purpose of the journey to the Delta from Sài Gòn: to check on the growth of trees that were planted, experimentally treated, and left with a group of local farmers to tend.

Though agarwood is fairly familiar to peoples across Asia and the Middle East, few are aware of its obscure history and complex trade networks, its current legal and environmental entanglements, and the literal blood, sweat, and tears involved in bringing it to incense, perfume, and traditional medicine shops throughout the continent. Agarwood is, oddly, both common and rare, mundane in some ways yet extraordinary in others. It most often takes the form of incense (either a whole, raw piece, or crushed and blended with other ingredients to make incense cones or sticks) or fragrant oil (extracted from solid agarwood via distillation). As "oud," it is a scent that accompanies daily routine and religious ritual in places such as Saudi Arabia, Yemen, and Oman, being part of the culture for hundreds of years. The term "oud" attests to agarwood's broad use throughout the Middle East; the Arabic word actually translates to simply "wood," but in the context of fragrance,⁷ it is used to refer to agarwood specifically. It is Hong Kong's namesake,⁸ and a familiar basenote⁹ for incenses throughout South, East, and Southeast Asia, burned in temples and household altars. It is used as a traditional medicine throughout the Asian continent for a variety of ailments. In Viêt Nam, it plays a pivotal role in the foundation myth of

⁶ Dr. Robert A. Blanchette, Department of Plant Pathology at the University of Minnesota.

⁷ A note on terminology: in this project, "fragrance" refers to all products whose function is to produce scent; that is, both perfumes applied to the body and incenses, which are burned to produce scented smoke.

⁸ "Hong Kong" is derived from the Cantonese phrase meaning "fragrant harbor" or "incense harbor." Hong Kong has deep historic ties with agarwood and the incense trade in general. It was once a source for raw agarwood, a major manufacturer of incense, and an important point of import/export of agarwood and other fragrant products (Piper, 2017; Rivett-Carnac, 2016).

⁹ A bassnote is the scent that lingers the longest in a perfume; basenotes are typically fixatives, compounds that "anchor" a perfume and prolong its scent and projection.

the Cham peoples, as well as in the assorted forms of Mother Goddess worship practiced throughout the country. Agarwood has served as an emblem of the deeply embedded cultural and economic processes linking Viêt Nam's dominant landscapes of highland forest and lowland coast in the creation of the state (see Chapter 1). In the Western fragrance industry,¹⁰ it is a niche note, considered "exotic," alluring, and novel, often used in a family of scents called "Orientals."¹¹ As a commodity, its often shadowy processes of extraction, production, and trade has been a point of contention in the international environmental regulatory community. At the same time, the sale of both real and counterfeit agarwood products occurs in open-air markets across Asia, and in dedicated boutiques in cities such as Sài Gòn, Bangkok, Hong Kong, and Singapore. Every so often, news blurbs appear in Southeast Asian media outlets, telling of a rural resident who struck it rich by stumbling upon a rare, high-grade piece of "wild" agarwood deep in the highland forests (see Chapter 2). It is called a "scent from heaven" (Al Jazeera, 2016) "more precious than gold" (Pengly, 2014). These epithets, commonly used by perfumers and fragrance enthusiasts to describe agarwood, attest to its unique position: a scent where "the natural" and "the spiritual" meet, a commodity with complex cultural and religious meanings and applications, created through economic and regulatory processes that link locations and peoples across the globe.

¹⁰ "Western" in this context refers to the fragrance traditions and industries of North and South America, Europe, Russia, Australia, and New Zealand (not including the cultures of indigenous peoples in these regions, who often have their own traditions with fragrance). This is in contrast the fragrance traditions of the "East," meaning the Middle East, South Asia, East Asia, and Southeast Asia. The use of "the West" and "the East" is, of course, not without its problems and issues, and I acknowledge the breadth, depth, and value of the scholarship which critiques these categorizations. However, in the context of this project, they are useful labels for differentiating regions and cultures with distinct fragrance traditions, where agarwood use has been deeply embedded for hundreds of years (the East) and where agarwood was not commonly used until recent times (the West).

¹¹ A rather obvious and old-fashioned term, the category of "Orientals" or "amber" scents in Western perfumery generally refer to scents that copy or are derived from/inspired by the fragrance traditions of the Middle East (South Asia and East Asia to a lesser extent). They are described as "warm", "heady", and "sensual", often composed of heavier woody, spicy, and sweet (but not fruity) notes such as sandalwood, cinnamon, vanilla, and various types of resins (such as frankincense) and musks.

Dissertation Argument: Understanding the Spatio-Temporal Worlds of "Scentscapes"

This dissertation demonstrates how varied understandings of nature, consumption practices, and consumer preferences can create irregularities in a globalized production network. In contrast to recent scholarship on commodity chains and networks of provision that detail how consumption patterns, shaped by global processes of trade, come together, and how people and places become systematically enrolled (or excluded) into structured networks of trade and production, the production of agarwood shows how culturally and geographically specific meanings and preferences create a commodity network that is inconsistent, characterized as diffuse, disarticulated, flexible, and often purposefully obscured.

As a product used primarily for its aromatic properties, preferences for agarwood are informed by the consumer's desired olfactory experience. Different olfactory experiences have specific cultural meanings, informed by understandings of spirituality, nature, luxury and leisure, and personal perspectives. It is these culturally and geographically specific consumption preferences/practices that have sustained a highly varied, diffuse, and obscured commodity network that pulls from many different areas and a wide range of actors, allowing trade to continue at and across multiple scales. Even as the agarwood industry is increasingly vertically integrating, modernizing, and becoming more economically efficient through systematic cultivation, the diversity and specificity of olfaction consumption practices allows large parts of agarwood's production network to remain unseen and obscured.

While the commodity and fragrance of agarwood is highly valued and considered unique by all participating actors, it is valued differently across various peoples and contexts. The valuations and understandings of producers, consumers, and regulators on agarwood's scent, "naturalness," rarity, sustainability, luxury, and economy creates varied conceptual

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"scentscapes" of agarwood. These different scentscapes, embodying agarwood's production, uses, and meanings across space and cultures, provides insight into how different actors value and understand nature within a context of commodity production, endangerment, and international regulation. Agarwood's diverse scentscapes and commodity characteristics make it resistant not only to consolidation in production, but to regulation as well. The Convention on the International Trade in Endangered Species (CITES), one of the largest and oldest bodies of international environmental regulation, is a global agreement between 183 countries monitoring the protection of thousands of plants and animals, from elephants to Aquilaria trees, and regulating the trade of goods derived from them, including agarwood. As a legislative framework, it is based on an economic cap-and-trade system in which trade in some species is banned and trade in others is limited to fixed amounts, depending on degree of endangerment. This framework's fundamental valuations of nature and understandings of sustainability, predicated on traditional views of commodities and production, are somewhat mismatched with these scentscapes, where understandings of nature and its value are in part economic and instrumental, in part intrinsic/non-instrumental and difficult to measure, articulate, or integrate into the regulatory system.

In defining the value of nature to society, regulatory bodies like CITES consider commodity/market prices, valuations of ecosystem services, and other types of "instrumental" value. International environmental organizations and governing bodies also often refer to "intrinsic," "intangible," or "non-instrumental" value of nature to humanity, a measure of value that implies a role in the formation of community, culture, and self (Chan et al., 2016). Agarwood has obvious economic value, and its increasing reliance on cultivation and emphasis on "sustainable production" to meet growing global demand provides a case study in the making of "green" economies and commodities. However, the making and use of agarwood also embodies understandings of nature not often described in scholarship on nature or political economy, one that is founded on the more "non-instrumental" form of value. Beyond its high market demand as a coveted non-timber forest product, agarwood is a commodity and "naturederived" good whose meaning and value is created through scent/olfaction. The peculiarities of olfaction as a sense and olfactory practices contribute to the irregular form of agarwood's commodity network. Olfaction in general has not been a focus in the scholarship on consumption, commodity production, or nature's meanings for a variety of reasons. These reasons and how they inform the creation of agarwood's various scentscapes are elaborated upon in the following chapters.

The Agarwood Commodity: Background and Context

Olfactory preferences and scent consumption are necessarily highly varied and contextdependent. Given agarwood's long history of use across many different cultures, it is an ideal case for providing insight into understanding these disparate conceptualizations of scent. Agarwood fragrance consumption, mediated by desired olfactory experiences, fall into two broad categories of use: secular/leisure and religious/spiritual. Usage for leisure is primarily motivated and characterized by a hedonic scale (pleasurableness; that is, a scent's value is measured by whether the individual consumer deems it good/interesting or bad), while spiritual uses of agarwood are aimed towards fostering some kind of contemplation or prayer. Particular scents, such as agarwood, are used in some contexts because they are said to be beloved by certain religious figures, gods, or spirits. There is a duality in agarwood consumption *and* production; unlike with food, where quality is associated with nature/the natural, quality in agarwood can entail a product that is destructive to nature (extraction from the wild) or a product that is aligned with "green" frameworks of preserving nature and environmental stewardship (an emphasis on cultivated trees, which is often equated or conflated with "sustainable/green;" see Chapter 4). The market is multifaceted, embodying both a globalized, mass consumption market and multiple segmented, specialized sub-markets.¹²

Throughout history, incense and other aromatic materials have been closely associated with holiness, spirituality, and ritual across many schools of faith, acting as an integral, material part of religious practice. In these contexts, incense typically functions as homage to spirits or deities, to accompany or "carry" prayers or spirits (in the case of death rituals) to heaven, to aid or enable contemplation and prayer, and to spiritually cleanse spaces or objects, serving as a medium, connection, or a focal point between divinity and self (Hyams, 2003; Peacock, Peacock, & Williams, 2006).

In many parts of the world, agarwood was, and still is, the most coveted form of incense. It is this spiritual association in conjunction with its rarity that has made agarwood—frequently referred to as "wood of the gods", "scent of heaven", and the "spirit of heaven/god" (Vietnamese: "linh khí của trời đất")—such a coveted commodity for millennia, and across the entire continent of Asia. Its unique scent is seen as ideal for facilitating prayer and for spiritually "purifying" the body or clothes. Its use is prevalent in rituals of both life and death, in settings of prayer, tribute, celebration, and mourning. In Buddhist contexts, agarwood is sometimes added to stoves used to prepare food offerings to the Buddha, as well as for the sangha (López-Sampson & Page, 2018). Some sculptures have been found to have agarwood (along with other precious goods) placed in the interior cavities, "which transform[ed] them into a consecratory

¹² This parallels works in agro-food studies (ex., Murdoch, Marsden, & Banks, 2000; Murdoch & Miele, 1999; Raynolds, 2002), though inversed: the "globalized, mass consumption" dimension is associated with and enabled by an "alternative system of provision", cultivation.

object" (López-Sampson & Page, 2018, p. 111). Agarwood is used in the cremation of important figures, both historically and today, in both Hindu and Buddhist ceremonies. Records by European explorers in the 1600s note that agarwood was used in the cremation of priests and princes in India, and in some texts, it is said to have been used in the cremation of the Buddha's body (López-Sampson & Page, 2018). In more recent times, four agarwood trees were selected (in accordance with specific size and quality criteria) for the royal cremation of King Bhumibol of Thailand, who died in 2016 (The Nation, 2016). In Islamic contexts, several hadiths state that Paradise would be perfumed with oud (López-Sampson & Page, 2018), which is one of the reasons why it is so favored for use in prayer today. Throughout Southeast Asia, agarwood is one of the highest offerings made to the mother goddess, as practiced in various forms of folk religion.

Outside of formal religious contexts, agarwood still carries an air of something spiritual or even magical; it can be evocative and transformative, a connection or node to a feeling, a memory of the past, or a vision of a future. It is used and interpreted by consumers in myriad ways, and in a sense, it interprets and acts upon the consumer as well. One agarwood consumer put it thusly: "Oud drives depression away. One has a feeling of joy... Each type of oud triggers certain memories... Each piece of oud tells its own story" (Al Jazeera, 2016). To hear a serious oud aficionado speak of the product is to hear oud discussed as if it were alive, active, and interacting with the people and world around it.¹³

Agarwood's religious/spiritual significance is wide-reaching. Its vast list of aliases throughout ancient texts reflects the global scope of use: : oud/oudh/aoud/ud (عود), agar, gaharu, gahlau, chenxiang (沉香), trầm hương, jinko (沈香), eagleswood, lignum aquila, aloes wood,

¹³ Some scholars might describe it as exhibiting agency or "non-human charisma" (Lorimer, 2007).

lignum aloes, just to name a few. Agarwood is mentioned in the sensual verses of the Song of Solomon, the stories of A Thousand and One Nights, medicinal texts of imperial China, Ayurvedic manuals, among myriad other historic texts (Antonopoulou, Compton, Perry, & Al-Mubarak, 2010; Wyn & Anak, 2010). Its value was of enough distinction to be given as tribute to imperial China from its Southeast Asian territories, and was used for "every sort of ritual and private purpose" in medieval China (Schafer, 1963, p. 164). The burning of agarwood incense is used in certain Islamic, Buddhist, and Hindu ceremonies, as well as various folk religions. It is often brought to Mecca by Malay Muslims on pilgrimage, and is a part of welcoming gestures for honored guests throughout the Arabian Peninsula. Agarwood is the main focus of the Japanese kōdō/koh-doh ("way of incense") ceremony that arose in feudal Japan, "a highly ritualized practice that was traditionally only accessible to imperial and high-caste (noble) families" with close associations to other artistic practices such as ikebana and Noh drama (Compton & Ishihara, 2004, p. 7). Agarwood pieces are also a collectable, made into artful carvings for altars and beaded jewelry throughout all of Asia (Barden, Anak, Mulliken, & Song, 2000; Wyn & Anak, 2010). Agarwood products are part of the traditional medicine pharmacopeias of East, South, and Southeast Asia, used as a sedative and to treat stomach issues, coughs, fever, skin issues, and rheumatism (Liu et al., 2013). It is also used simply for leisure, as a stimulating fragrance to be enjoyed and experienced in daily life.

In contrast, it is a niche fragrance note in high-end Western perfumery, though it has become increasingly popular in the last 10 years (see Chapter 4). The Western fragrance industry, as well as Western fragrance enthusiasts, frequently associates the scent of agarwood with the Middle East and its perfumery traditions, even though is sourced from "further away" (Southeast Asia and northeastern regions of the Indian Subcontinent). This reflects the historical patterns of trade for Asian aromatics and spices in general, such as cinnamon and sandalwood, which moved from or through India, to the Arabian Peninsula, and subsequently to what we now think of as the "West." In "Eastern" perfumery, broadly construed,¹⁴ there is widespread usage of blends and bold scents such as agarwood, saffron, rose, and ambergris. Eastern perfumes traditionally are heavier and lingering, in large part due to the fact that they are usually oil-based, as opposed to thinner, alcohol-blended liquids, as is typical with Western perfume sprays. Eastern perfumery is characterized as warm, with a strong presence of the musks,¹⁵ resins,¹⁶ spices, and fragrant woods that are native to Asia and the Middle East. These types of scents in Western perfumery are often lumped together in the fragrance category of "Orientals." European scents traditionally featured more floral, sweet, and "green" scents: the blossoms, leaves, and roots of vegetation such as sage, oakmoss, orris (rootstock of the bearded iris), and narcissus, reflective of the raw materials that were historically common to the landscapes of Europe.

Perfumery as an industry and craft has long been very global in nature, but literature on the international trade and manufacture of aromatics is sparse. This is partially because perfumery was historically an intensely insulated and secretive industry, and remains so today. Much of the trade history and skillsets of traditional perfumery are still primarily passed on orally. Secondly, the most basic forms of perfumery (simply combining raw aromatic products) requires few or no specialized tools, no advanced technology, and involves little in the way of

¹⁴ Primarily applies to the Middle East and South Asia, East and Southeast Asia to a lesser extent. East and Southeast Asia have long and rich histories of incense use, but not as robust body fragrance traditions. Though body perfumes have been used historically, it was not as common as in the Middle East and South Asia. Perfumes and deodorants are still not common today in most parts of East and Southeast Asia compared to the Middle East and South Asia.

¹⁵ The "musk" scent that is common in perfume names today was originally derived from glands of the musk deer. Musks in today's perfumes are almost entirely synthetic.

¹⁶ Resins include such classics from Antiquity as frankincense (derived from trees of the genus *Boswellia*), myrrh (from trees of the genus *Commiphora*), and benzoin (from trees of the genus *Styrax*).

artifacts that might have endured as archeological evidence, and aromatic materials themselves are ephemeral. Because of this, documented research on the early history of perfumery is quite lacking (Dugan, 2011; Jung, 2013). It also has a long association with cooking and medicine, and like these practices, perfumery was at first an informal "handicraft" that existed in some form before the advent of writing (Jung, 2013). Additionally, there is very little historic description or contemporary research done on specific sources of aromatic raw materials, their origins, processing, or manufacture in general (Persoon & Beek, 2008).

The opaqueness of agarwood's origins, means of formation, and trade, even to those living in the tree's native range, has contributed to the mystique and its rather legendary status that has built up over the centuries. It has only been since the late 1990s-early 2000s that publicly available research has been published, and the majority of this research is on "practical knowledge" (Jung, 2013, p. 104), meaning the biology, biochemistry, growth characteristics, and resin induction methods of the *Aquilaria* trees. This scholarship came in the wake of *Aquilaria*'s inclusion into CITES, when studies were conducted on behalf of the International Union for the Conservation of Nature (IUCN; listing in this legislation necessitated/demanded basic research). In recent years, literature on agarwood has increasingly been dominated by studies on genetic sequencing, chemical analysis, and possible medical applications and effects of extractions and compound derivatives as scientists seek to replicate the agarwood scent and discover other possible uses.

Agarwood's cultural history is more shrouded and difficult to understand. There are few historic texts on the product or its trade, both from the West and Asia, and those that exist are superficial in description; most note only its most basic usage or merely mention it as a highly valued commodity, lumped together with other aromatic woods and coveted, precious goods in documents such as trade manifests (Jung, 2011, 2013). Deeper trade knowledge is often purposefully obscured from outsiders to hide trade secrets (Burkill, 1966), and "Possibly, Westerners were sometimes told mythical ideas about the origin and production by foreigners or by indigenous people who either did not know better themselves, or else wanted to hide this crucial knowledge so as to preserve their personal source of income" (Jung, 2013, p. 105).

Attempts to understand agarwood's cultural history is further complicated by the fact that knowledge of the various groups historically involved in the aromatics trade network are typically second-hand, broad-stroke accounts by end consumers, in which they are undifferentiated from other regional populations even if they were distinct in practices, lifestyles, and language. Most of those that were involved in trade directly during ancient times did not leave historical accounts themselves.¹⁷ Contemporary research on agarwood's history, use, and commodity network are also sparse and mostly based on the same small body of initial academic research from 1990s and early 2000s. Understandings of agarwood's cultural role and use throughout history are thus necessarily gathered through "scattered oblique bibliographic hints" (Jung, 2013, p. 105), patched together from small scraps of historical account, inference, oral tradition, and extrapolation from current contexts of agarwood and the histories of related, more well-documented objects.

¹⁷ For example, the Nabateans, who were heavily involved in the incense trade according to surviving texts from Antiquity, are usually grouped together with other nomadic merchant middlemen and referred to simply as "Arabian tribes" in texts (Amar, 2003).

Agarwood's Biological Basics and Regulatory Framework



Figure 3. Native range of *Aquilaria* spp. is outlined in green. Range drawn by author as interpreted from IUCN data for *Aquilaria* spp. (IUCN, n.d.). Base map: *Google Maps* © 2018.

The complexity of the commodity network reflects the complicated process of agarwood's formation. The genus *Aquilaria* is native to tropical and subtropical South and Southeast Asia: from India, to southern China, to Indochina, into maritime Southeast Asia through to parts of New Guinea. They are large evergreen trees, growing best in direct sunlight and shallow, ferralitic or calcareous soils, and often in or near riparian landscapes (Harvey-Brown, 2018a, 2018b). They require a well-drained environment for optimal growth, preferring rocky or sandy soils. *Aquilaria* occurs most commonly in highland landscapes; in Việt Nam, it is primarily found in the central and southern regions. The majority of commercially traded agarwood is sourced from *Aquilaria*, though a related genus, *Gyrinops*, is also known to produce agarwood resins.¹⁸ *Gyrinops* is rarely cultivated in mainland Southeast Asia, though it is planted more extensively in India, Sri Lanka (which grows *Gyrinops* almost exclusively), and Papua New Guinea. *Aquilaria crassna* is the primary species in Việt Nam, Laos, and Cambodia (both naturally growing and planted), while *Aquilaria malaccensis* is more prevalent in India and Indonesia. Other species that are cultivated to a lesser degree include *A. sinensis* and *A. agollocha*. While the tree is typically slow-growing and has low regeneration rates in the wild, in greenhouse conditions, seeds germinate easily and grow at a faster rate.

Agarwood does not develop under normal circumstances; healthy trees will not produce the compounds that permeate the wood to create the coveted product. These resins only occur as a defense mechanism under pathological circumstances (by wounding or infection¹⁹), and thus occurs in very small quantities in the wild. Different "triggers" of resin production produce resins of varying qualities. The longer the infected tree is left alone, the denser and more complex, and in turn, more valuable, the agarwood becomes. As resin formation begins internally, trees often do not exhibit clear external signs of whether agarwood is present or its content. The difficulty in detecting marketable specimens in the wild, together with such high demand and the potential for very high profits, led to indiscriminate felling of *Aquilaria* trees throughout Southeast Asia. This depleted wild stocks, since in agarwood extraction, the trees are

¹⁸ The two genera were once classified as one. Most species of *Aquilaria* and *Gyrinops* look extremely similar to one another and often cannot be differentiated by the wood or leaves alone, which has contributed to the difficulties in understanding and monitoring population declines.

¹⁹ Resin production can be triggered by any type of infection (be it fungus, bacteria, and so on) or physical wounding (by knives, nails, drilling, and so forth). Basic wounding of trees by cutting or boring holes into the trunk has been a long-held practice in *Aquilaria*'s native range. Several agarwood farmers stated that ant infestations are a common form of "natural" wounding that can be further fostered by farmers.

often completely felled and uprooted, which kills the tree entirely.²⁰ Producers and consumers throughout Southeast Asia have long experimented with various methods of "quasicultivation"—using basic tools such as nails to encourage infection and resin production in naturally growing *Aquilaria*—and in small-scale cultivation, growing *Aquilaria* in private household or temple gardens. Agarwood resins are primarily composed of a multitude of different sesquiterpenes, organic compounds consisting of a 15-carbon base (Barden et al., 2000).²¹ This complex chemical structure gives agarwood its distinct scent, and also makes the creation of synthetic analogues difficult. High quality product can sell for tens of thousands of dollars per liter or kilogram (Barden et al., 2000). Much of the contemporary research on *Aquilaria* trees has focused on the development of methods to artificially induce resin production.²² This research has been conducted by a wide range of parties, from national governments such as Malaysia, to private perfume firms such as Ajmal.

It is widely agreed by CITES, the International Union for Conservation of Nature (IUCN), and TRAFFIC²³ that both genera are in decline in the wild across all range states (Barden et al., 2000; Newton & Soehartono, 2001). The IUCN publishes the annual "Red List" of threatened and endangered species, which is separate from CITES's own Appendices, though

²⁰ This, however, is not always the case. Some agarwood seekers strategically remove parts of the tree over time, which allows for the tree to continue growing. This is a more traditional method of extraction that is more labor intensive and requires deeper knowledge of the tree's characteristics and growth patterns.

²¹ Sesquiterpenes belong to a class of compounds called terpenes. Terpenes are often highly volatile (vaporize easily at room temperature) and have strong odors. The distinct smells of many familiar plants, such as pine and patchouli, are in part due to their terpene content.

²² Contemporary research on artificial resin induction has focused on formulating compounds, which are then injected into holes drilled into cultivated trees. These compounds are typically proprietary and often patented. These compounds may be blends of different chemicals, fungi, bacteria, and so forth.

²³ TRAFFIC is a program established by the IUCN and World Wildlife Fund to monitor the wildlife trade (see Chapter 4 for details).

there is collaboration between the two. *A. crassna* is listed as "critically endangered" in the wild by the IUCN, while eight other species are listed as "vulnerable." *A. crassna*, followed by *A. malaccensis*, were historically the most traded types of agarwood to come out of Southeast Asia, and remain the most sought after and the most commonly cultivated. The wild decline of agarwood-producing species is not very well characterized or understood; as ecological population counts are difficult and time-consuming to conduct, and population estimates have not been done in most range states (Barden et al., 2000). A few prominent agarwood sellers and government officials of some nations have claimed that certain species are not really endangered at all. This claim is difficult to reconcile with the fact that levels of general deforestation in *Aquilaria*'s range states is very high,²⁴ in addition to the high degree of targeted extraction.

In countries that have conducted population studies, such as Indonesia, *Aquilaria* populations were only counted at the genus level and not differentiated by species (Soehartono & Newton, 2000). In addition to targeted harvesting, deforestation and general land use change has contributed significantly to decline, and some have argued that this is probably the *majority* contributor to wild population loss (Harris, 2013; Wyn & Anak, 2010).²⁵ Escalating rarity and the significant increases in time and effort required to find marketable specimens of agarwood from the wild led to an overall trend in market value increases (Barden et al., 2000). These price increases eventually triggered the motion to place the trade in agarwood-producing species under

²⁴ Southeast Asia had the highest relative rate of deforestation in the world from the 1990s into the early 2000s (Miettinen, Shi, & Liew, 2011; Sodhi, Koh, Brook, & Ng, 2004). The UN Food and Agricultural Organization projected deforestation rates in Southeast Asia's lowland regions to remain high, but highland regions (where *Aquilaria* prefers to grow) to be negligible; however, a recent study published in Nature indicated that the FAO's highland estimates were likely a gross underestimation (Zeng et al., 2018).

²⁵ Most environmental scientists agree that the greatest driver of general population decline of threatened and endangered species and decline in species richness overall, at least on land, is landscape change (deforestation, desertification, etc.).

regulation in the 1990s. Wild extraction is generally of two types: small-scale, independent persons/parties who do not rely solely on agarwood for their livelihoods, and organized, professional parties who may or may not be involved in other types of wildlife extraction, trade in non-timber forest products, and organized crime rings. As economic value increased, what was once a low volume/high value trade conducted by a handful of small-scale harvesters transitioned to a high volume/high value trade as extraction rates escalated and wild stocks were depleted (Chua, 2008). The primary directive established by CITES is that a permit can be issued for trade in wild specimens when it has been shown that trade "will not be detrimental to the survival of the species in the wild," but what that actually means in practice is not defined by the legislation.

Aquilaria malaccensis was first proposed to be included under CITES Appendix II by India at CITES's ninth Council of the Parties, in November 1994.²⁶ India has a very long history as a major trade hub, producer, and consumer of both raw and finished agarwood products, and both producers and consumers were concerned with population decline by the late 1980s. It is likely that one or a collection of a few of the larger attar wallahs²⁷ brought the issue to the attention of the state. Traders I had spoken with in Việt Nam had said that by the early to mid-1990s, they also noticed significant declines in harvest and wildly fluctuating market values, and generally felt that "something was wrong." A report by TRAFFIC India and the WWF was published earlier in 1994 on the state of the agarwood trade. This is the first study on the

²⁶ CITES regulations operate under three Appendices: Appendix I, which effectively bans trade (with some exceptions) for species threatened with extinction; Appendix II, which monitors and restricts trade in threatened or endangered species to a pre-determinate amount; and Appendix III, which includes species that are not necessarily threatened or endangered, but are being monitored by at least one nation that is requesting assistance from other CITES member nations.

²⁷ Makers and sellers of attars, a type of traditional South Asian fragrance oil.

agarwood market, at least the first to be publicly available and internationally circulated. Under CITES, any member nation may submit a reservation to proposals for listings; no nations did so for *Aquilaria malaccensis*.²⁸ The motion passed without incident, taking effect on February 16, 1995. The status of *Aquilaria malaccensis* was assessed at the 1996 IUCN meeting of the Asian Regional Workshop in Việt Nam; it was placed on the IUCN's Red List as "vulnerable" overall, and "critically endangered" regionally within India.

The 1994 TRAFFIC report cites agarwood as being a "classic example of a natural resource, one that man has failed to duplicate so far, being extracted at unsustainable levels" (Chakrabarty, Kumar, & Menon, 1994, p. 1). Up to this point, individual states in north-eastern India had already banned the wild extraction of agarwood. It is notable that the TRAFFIC report states that banning *did not* ameliorate the issue. Illegal felling was still rampant as well as smuggling of agarwood across the border to Burma/Myanmar. Demand was great and increasing, and buyers were more than willing to pay. The report notes that these regulatory practices have not been successful in India, citing the trade in Asian elephant ivory as a prime example: "Such a paradigm has not worked so far in India; certainly it has not worked in the trade of wild flora and fauna. There is altogether too much mistrust on all sides: the government is convinced of the malfeasance of the traders, and the traders know of innumerable ways of by-passing regulations" (Chakrabarty et al., 1994, p. 2). In the case of ivory, African ivory was allowed for import with the assumption that this would reduce the pressure on Asian ivory, but in reality, poached Asian ivory continued to be bought and sold under the guise of African ivory.

²⁸ Though, strangely, Canada filed a reservation for all species in 2013 and withdrew the reservation in 2015, with no clear reason.

Interestingly, although the report very plainly and clearly points out that both banning and regulated trade have failed in the past to protect threatened or endangered species in India, it ultimately argues in favor of limited, regulated trade: "It may prove beneficial to give some of the leading traders in agarwood limited harvesting rights in return for their traditional knowledge and their cooperation in curbing unsustainable extraction and in enhancement of the species" (Chakrabarty et al., 1994, p. 2). The importance of traditional knowledge is emphasized as not only being important to an abstract concept of "mystery of nature," but most importantly has economic repercussions: "Above all, the trade in agarwood shows that traditional knowledge passed down from one generation to another still has a marketable niche—in this instance, worth more than \$40 million annually" (Chakrabarty et al., 1994, p. 2).

An Appendix II listing meant that permits were required to export or re-export. A specific import permit is not necessarily required, but member nations are required to confirm the validity of export permits before allowing import. Authorities in exporting states must "ensure that exports are maintained within levels that are not detrimental to the survival of the species, and that specimens to be exported have not been obtained in violation of the laws of that country" (Barden et al., 2000, p. 3).²⁹ There is no firm definition of "levels that are not detrimental to the survival of the species." Appendix II mandates the issuing of a permit should be contingent upon "non-detrimental findings," which is essentially a sustainability assessment for which there are no guidelines.

²⁹ Levels determined by an individual state may or may not be stricter that the broader CITES ruling; for example, some nations choose to further implement an export cap, such is the case with Indonesia and Malaysia with *Aquilaria*.
Contribution to the Literature

This dissertation builds upon scholarship on commodities, the valuation of nature and nature-derived commodities, and consumption. It draws from several bodies of literature: on global value chains, commodity networks of production and distribution; the commodification of nature and valuation of (nature-derived) goods; and on sensory studies. In tracing agarwood's scentscapes and modes of both production and consumption, I bring attention to how embodied, sensory experiences inform agarwood's olfactory economies.

Commodities

The concept of the commodity chain was developed by Hopkins and Wallerstein (1977) to understand "capitalism's territorial scope" (Bair & Werner, 2011, p. 988), tracing the inputs, labor, and other processes of production and exchange through space that go into the creation of a commodity. Wallerstein's theories on the world system division of labor and production was further developed by scholars such as Gereffi and Korezeniewicz (1993) into "global commodity chain" and "global value chain" frameworks of analysis.³⁰ Scholars such as Bair (2005) and Dicken et al. (2001) explore the role of specific places, territoriality, human agency, and the embeddedness of global commodity production. Leslie and Reimer (1999) explicitly take a "cultural geography view" of commodity chain analysis, using home furniture and the kinds of cultural spaces it creates as an example. While not dismissing traditional "vertical" analysis, their emphasis is on "horizontal" analysis, looking more at the contexts of commodity chains such as meaning of place, gender, and cultural/social practices that impact and help shape systems of provision. They draw attention to how commodity production is less "chain-like" and more along

³⁰ Gereffi and Korezeniewicz defined a commodity chain as "a network of labor and production processes whose end result is a finished commodity", consisting "of sets of interorganizational networks clustered around one commodity or product, linking households, enterprises, and states to one another within the world-economy" (p. 2).

the lines of non-linear "circuits" in which meaning and value is constructed and reconstructed multi-directionally, where not only "things" move through economies and space, but also "knowledges and discourses" (Leslie & Reimer, 1999, p. 416).

In contrast to the focus on territoriality in the works of Bair and Dicken, scholars such as Bestor (2001), Gereffi and Korzeniewicz (1993), Sassen (2000), and Appadurai (1990), have pointed to how one of the effects of global capitalism is increasing the separation between parties involved at different stages of the commodity chain, so that they become isolated from and ignorant of each other. This causes what Appadurai termed "de-territorialization" (1990), where commodity networks become so spatially dispersed that the products themselves are often not easily identifiable with certain places: increasingly "stateless", spatially discontinuous, and disaggregated. In his discussion on ethnoscapes (movement of people), financescapes (movement of capital), mediascapes (electronic movement and spread of information), and ideoscapes (movement of ideas), Appadurai proposed the concept of deterritorialized "imagined worlds," formed by the fluid movement, shifts, production, and spread of these various "scapes" around the globe. Researchers such as Cook (2004) point to how this enables exploitation of peoples involved at lower levels of the commodity chain (of goods such as papaya), often in the global South. Bestor (2001) explores how some commodities, like bluefin tuna, do not necessarily become "placeless", but they can enable places to become re-connected in different ways, creating "spatially discontinuous urban hierarchies" (p. 78). Elias and Carney (2005; 2007) have written on commodities from a feminist and political ecology lens, looking at how "green consumerism" has changed the production networks for certain non-timber forest product (NTFP) commodities, such as shea butter, due to increasing global demand, and how local and feminine knowledge systems influence their management and production.

In an in-depth study on the history and consumption practices of sugar, Mintz (1986) demonstrates that changes in social customs can greatly shape both production and consumption patterns of commodities. He explores how fluctuations in "chicness" of the modern vs. the traditional informed how sugar was consumed, and by whom.³¹ Mintz highlights cross-commodity and cross-human/labor linkages,³² showing how the commodity of sugar was very closely connected to (and bolstered by) other commodities,³³ and how all these consumables in turn played a major role in "fueling" the labor force.

I draw from this scholarship on commodities to interrogate the production and consumption of agarwood as a nature-derived good. Building on Appadurai's "scapes" concept and Bestor's work with bluefin tuna, I trace agarwood's scentscapes: its meanings and economy of olfaction, where the agarwood commodity is fluid and diffuse, yet not exactly placeless or stateless; agarwood connect places and people, but in persistently ambiguous ways. Agarwood's commodity network has historically embodied both a high degree of embeddedness/sense of place as well as de-territorialization, with specific locations exhibiting layered histories and varied roles in production processes over time (cf. Bair & Werner, 2011) and a deep sense of fragrance "terroir"³⁴ in the consumer market, while also exhibiting isolation and discontinuity between "nodes" and creating hierarchies in sets of actors (cf. Bestor, 2001; Cook, 2004). Its

³¹ Specifically, Mintz asserts, "The forces that impel consumers to spend more on 'traditional' consumption at one point, and on 'modern' consumption at another, are complicated and many-sided" (Mintz, 1986, p. 194).

³² Slave labor meant that the production of sugar was low-cost, which made it a cheap source of carbohydrates for feeding the British white working class. The white working class in turn manufactured goods that facilitated the trade in more slave labor.

³³ Namely chocolate, tea, and coffee.

³⁴ The concept of "terroir," originally associated with wines, refers to "an area or terrain, usually rather small, whose soil and microclimate impart distinctive qualities to food products" (Barham, 2003, p. 131). Naturally-produced agarwood is said to have distinct scent characteristics associated with its place of origin (see Chapter 3).

contemporary production network is highly influenced by increased global demand, trends in green consumerism, and the interplay between local knowledge systems and Western biological/genetic research (cf. Elias & Carney, 2005, 2007). Social customs and trends have played a heavy role in shaping the production and demand for agarwood as well. Its status as a marker of wealth and power as well as a marker of spirituality has been constant, but the consumer landscape has expanded in recent years as certain sectors of the global population within major consumer markets (primarily China, Japan, and the Middle East) gained wealth. This has driven the push for increased production, which in turn has shaped and encouraged the proliferation of niche markets for high-end, "natural," "wild," or "pure" products, in addition to lower-end blended and synthetic products. Trends towards green consumption (and its increasing cultural caché and "chicness") is driving the push to develop "sustainable" products of various kinds (detailed in Chapter 4).

In contrast to commodity chain studies which focus on the formation of patterns of trade and the enrollment (or exclusion/disarticulation (Bair & Werner, 2011) of people and places into commodity networks, the case of agarwood reveals and how a diffuse commodity network can enable a range of ambiguous roles and positions within the network, without necessarily systematically excluding actors from the network as whole. While current works in the area on commodities production illuminate how places and people become incorporated into structured patterns of production for certain commodities, they overlook how irregularities in both production and consumption preferences/practices can lead to circumstances where commodity networks do *not* form fully legible patterns of production, and can be strategically flexible and diffuse.

26

Olfaction as Consumption and the Creation of Value and Meaning

Understanding Production in Relation to Consumption

Traditional commodity network studies are primarily production-focused, which has been a point of critique. In efforts to better understand a "fuller" commodity network, some areas of scholarship on commodities, particularly in agro-food studies, have highlighted the role of consumer agency and perceptions. These scholarly efforts work towards "bridging" ideas between consumption and production to understand linkages between, focusing on the role of quality and safety concerns, the preferences/ethics of consumers, cooperative organization, fair trade initiatives, and so on. Building on the idea of a "double structure" of understanding nature (Eder, 1996),³⁵ some scholars point to a duality of growth in both alternative food provision/consumption practices and increasingly global mass consumption patterns/practices (Murdoch & Miele, 1999). Agro-food studies have shown the shift towards a variety of segmented markets through food "relocalization," turns toward quality, proliferation of alternative systems of provision such as organic, fair trade, slow food, and so forth.³⁶ Guthman (2002) for example has shown how taste and quality is conceptualized from both the production and consumption side in organic foods. These works point to how "quality" is often associated with ideas of nature by consumers, and how this in turn informs their choices.

The significance consumer agency and perceptions is relevant to understanding the agarwood market, as it is strongly mediated by consumer-driven concepts of quality. However, unlike agro-food cases such as organic foods, "quality" standards for agarwood are not monitored or certified, and the question of quality is openly acknowledged and understood to be

³⁵ Refers to a duel role of nature as both nature as both "moral authority" and "utilitarian object."

³⁶ Some relevant works include: Bryant & Goodman, 2004; Murdoch & Miele, 1999; Watts, Ilbery, & Maye, 2005.

inconsistent, variable across types of consumers, and highly subjective (based on desired consumption experience). Knowledge of the consumer is often shaky at best, partially because personal standards of quality and olfactory preferences are so different, and partially because misinformation and distortion about agarwood's origins and characteristics is so rampant. Agarwood's market and perceptions of quality is also mediated by rarity/endangerment, which is not considered in the various food studies cases (though some food studies works consider scarcity, such as with organic food).

Understanding Olfaction

Olfaction and fragrance, though having some similarities to gustation and food, has certain peculiarities that make it difficult to standardize; accordingly, agarwood, as an olfactioncentered good, possesses commodity characteristics that are different from the aforementioned studies on commodities or foods.

Scholarship on social and cultural aspects of olfaction specifically is sparse, but scholarship on the senses more generally focuses on the embodied experiences of understanding, knowing, and remembering the environment, broadly construed. Anthropologically-oriented works point to how the senses may be used to recognize and understand the materiality and agency of non-human things, which might change how we think of, and, in turn, our behavior towards said things (Bennett, 2009).³⁷ Stoller's work (1989) points to the importance of senses in developing more nuanced ethnographic work and understandings of a culture, and Shepard (2008) notes how sensing is a "biocultural phenomenon:" a biological function/interaction with one's environment that is influenced and shaped through culture and experiences of the

³⁷ These insights are in contrast to works in other fields that emphasize the reverse, that is, how changes in thought follow changes in action, specifically in regards to understanding nature and conservation in the field of political ecology or political science (Agrawal, 2005; Braun, 1997).

individual. In this way, sensory experiences can be seen as a "new theoretical perspective for addressing human-environment interactions mediated by the senses" (Shepard, 2008, p. 252). Other works discuss how embodied sensory experiences connect disparate spaces, how the environment affects the senses, and its role in creating social meaning of places (Artaud, 2016; Law, 2001). Latour (2004) wrote of olfaction as a kind of learning process, specifically, how the body "learns to be affected" by scent. Constance Classen and David Howes have written extensively in the interdisciplinary field of sensory studies, with several works on the role of senses in history/cultural history, anthropology, literature, consumer culture theory, and marketing. Classen points to the senses as a means of "transmission of cultural values" (1997, p. 401), and touch and olfaction as a way of knowing capable of producing different modes of consciousness (1993), while Howes writes on cultural analysis through the lens of sensory experience (2005).

For scientific understandings of olfaction specifically, works in neurology and memory studies point to olfaction's close ties with memory (via the limbic system), the literal ephemerality of scents, and a relative lack of independent vocabulary with making scent and olfaction difficult to categorize or control (Delplanque et al., 2012; Ferdenzi et al., 2013, 2011). The diversity and specificity in olfactory preferences is partially attributed to this lack of a "semantic field" in *most* languages and cultures (Sperber & Sperber, 1975).³⁸ Scholars have also shown that scent is considerably associative (closely conditioned and informed by personal experiences) and that there are few innate/inborn preferences to smell, relative to taste (Moeran, 2007). Most humans do not innately prefer any smell in particular; the only common dislike for

³⁸ This, of course, is not universal. Some studies have shown that there *are* cultures which have more nuanced "semantic fields" for olfaction and are much more skilled at naming, identifying, and otherwise verbalizing scents in various ways, such as the Ongee of the Andaman Islands (Classen, 1993) and The Jahai of Malay Peninsula (Majid & Burenhult, 2014). These seem to be exceptions rather than the rule, however.

scents across most peoples is the smell of decay, though even the aversion to the scent of decomposition is sometimes flexible (Moeran, 2007). In contrast, most humans have an innate liking for a variety of gustatory tastes, namely fats and sugar, as well as umami and saltiness (Beauchamp, 2016; Drewnowski & Almiron-Roig, 2010; Ventura & Worobey, 2013). The scholarship on senses notes that many other flavors in foods, aside from these basic elements of gustation, are actually created or mediated by smell (Araujo, Rolls, Kringelbach, McGlone, & Phillips, 2003; Shepherd, 2011). These factors contribute to what Moeran calls "an anarchy in individuals' smell associations" (Moeran, 2007, p. 157); he further states that this prevented the development of a standardized scent culture in most societies, unlike with food and what Bourdieu called "taste cultures" (1984). These associative, memory-linked characteristics of olfaction make its preferences and practices more diverse and culturally/geographically specific than gustation.

Methods and Positionality

My fieldwork was qualitative in nature. Drawing on ethnographic methods, I spent 15 months total³⁹ interviewing and observing agarwood farmers, vendors, and consumers, and visiting agarwood cultivation sites and points of sale. The majority of my time was spent in Việt Nam. Through an affiliation with Nông Lâm University in Sài Gòn and connections with The Rainforest Project (TRP), I was introduced to several agarwood farmers around the southern region. Interviews were almost never formal; as is common in Việt Nam, discussions often took place over food and/or drink, with a mix of personal and business discussions. Conversation and observation contexts ranged from religious ceremonies at temples, to large group meals with

³⁹ My time was divided into 13 months from 2012-2013 with a two-month follow-up in the summer of 2013.

agarwood farmers in someone's living room, to a vendor's stall in a local open-air market, to fragrance boutiques, to long treks into the mountains.

Though I always led with specific agarwood-related questions during fieldwork discussions, information about agarwood was more often scattered and interspersed amid long conversations on family, the city, the country, the rains, the price of fertilizer, myriad thoughts about Starbucks,⁴⁰ whether or not anyone was fasting (refraining from meat, in this context) on the next new moon, so-and-so repairing his roof, incenses more generally, and so forth. On rare occasions would I be seated in someone's office or in a cafe to strictly talk about my research. Taking notes was a challenge; conversations happened fast, and while I understood the discussions, in most cases, my Vietnamese was not good enough where I could quickly and easily take notes *in* Vietnamese. I was slowed by the process of comprehending, mentally translating to English, and writing it down while trying to not leave out any of the nuances. Outdoor observations and discussions at sites of *Aquilaria* cultivation were often accompanied by bursts of rain, which also made it difficult to take notes in real time. In most cases, I resigned myself to taking down a sparse word here and there and writing out what I could remember afterwards.

Excursions to Cambodia and Thailand, where I visited agarwood and incense retail outlets, gave me a broader regional framing of the agarwood trade and consumption in Asia. Informal interviews with parties involved in perfumery culture and my attendance at perfume blending classes in Los Angeles contextualized the Western fragrance industry. In addition to

⁴⁰ Việt Nam has a strong coffee culture; it is consumed at all times of day and night at small sidewalk stalls, in the many outlets of homegrown chains such as Trung Nguyên Coffee, and in highly aesthetic independent coffee boutiques where baristas create beautiful milk foam art (I once received a cappuccino with a depiction of my face and wavy hair; it was a very good cappuccino, in addition to being visually pleasing). The first Starbucks opened in Việt Nam in early 2013 and was much discussed in the time leading up to it.

ethnographic field work, I drew upon document analysis of magazine and news articles from American, European, Southeast Asian, South Asian, Chinese, and Middle Eastern outlets,⁴¹ unpublished notes loaned to me from TRP and Vietnamese agarwood growers, social media and websites dedicated to perfumery, and grey literature published by CITES, the IUCN, the UN, TRAFFIC, and various ministries of the Vietnamese government involved with environmental issues. A literature review of the scholarship on the history, trade, manufacture, and use of fragrance materials and scent provided a broad view on understandings of olfaction.

I would be remiss to not address my positionality in this project, as a person of Vietnamese heritage doing research in Việt Nam. Whenever my mother visits, she tries to mask the fact that she is Việt Kiều (overseas Vietnamese) in order to draw less attention, and would encourage me to do so as well. This, to me, seemed like a pointless endeavor and I made no effort to hide that I was not native-born. Walking down the street in Sài Gòn, perhaps no one was the wiser. Day to day, I was outfitted in what I typically wear in the United States, which is also typical of Sài Gòn youth: denim jeans, a tee-shirt or blouse, and sneakers or flats. I covered up against the dust and smog of the city with a long-sleeved hooded shirt and facemask, which I do not typically wear in the U.S. but are ubiquitous in Việt Nam. I primarily used the public bus system to get around the city and lived in Bình Thạnh, a district just outside of the central part of town with nearly no foreigners and few tourist spots. But I am Vietnamese-American, born in the United States, with a light regional accent when speaking in Vietnamese (apparently; this was not something I ever knew before I moved to Việt Nam). As soon as I opened my mouth, it became completely obvious to anyone within earshot that I was not from "around here" in a

⁴¹ For regions where English is not the primary language, I mostly relied on English-language versions of publications.

general sense, despite all appearances. I received a wide range of reactions, from "Are you Hoa?⁴² Your accent is a little... stiff," to more commonly, "You're from... somewhere else. Where?" Surprisingly, I was rarely asked if I was an American. On a few occasions, someone would ask if Bình Định Province was my nhà quê⁴³ (that person would invariably be from Bình Định themselves). I would reply I was born in the U.S., but my parents are from Bình Định, to which they would say, "Oh, so Bình Định *is* your nhà quê." To this response, I eventually started thinking to myself, "Well, in this context, sure, I guess so."

On the one hand, being familiar with the culture and language definitely made many aspects of doing fieldwork in Việt Nam easier. On the other hand, I came to realize it disadvantaged me in some subtle ways. For instance, during a lunchtime gathering of foreign researchers, one colleague, a white American man, told us about a recent incident where he ended up getting an interview for his research project (and invited to someone else's house for dinner) after someone randomly approached him and started chatting when he was at the park. "That never happens to me," I said under my breath. The woman next to me, who was also Vietnamese-American, turned and said, "Of course not. Lots of folks are curious about the obvious white man. Us, not so much."

One of my aunts, who has since passed away, called soon after I arrived in Sài Gòn to tell me she was glad that I decided to do research there, and how even though I was American, we were "chung voi nhau" (together) as Vietnamese people. My aunt, who had lived a life full of hardships and witnessed things that I cannot fathom, who never fully learned to read or write because only the eldest son in the family went to school past the first year, was a woman who I

⁴² Vietnamese of ethnic Chinese descent.

⁴³ Where one is from; home town/village/province, but can also mean one's ancestral home.

barely knew. At the time, I had only met her twice. But the idea of "being Vietnamese together" was something that echoed in my mind throughout my fieldwork, and it is something that I continue to contemplate to this day.

Chapter Outline

This dissertation provides an ethnographically grounded account of how culture and geography can inflect and disrupt traditional notions of commodity networks and regulation of nature-derived goods. In exploring agarwood's olfactory economies, I show how culturally- and geographically-specific practices of production, consumption, and constructions of value create a commodity network that is diffuse and strategically flexible.

The first chapter looks at olfaction broadly, detailing its function as a biological, embodied process, and a way of experiencing and consuming nature. I then historicize and culturally contextualize the development of three different agarwood scentscapes: its "homeland" of Southeast Asia, with a focus on Việt Nam; the Middle East and East Asia (particularly China and Japan), which are agarwood's largest markets, both historically and today; and the new market of the West, where agarwood has only recently become popular.

The next three chapters focus on each of these regions and shows how agarwood is produced and consumed in the context of these scentscapes. Chapter 2 explores domestic production and use in Việt Nam. The commodity and scent of agarwood sits at the nexus between Việt Nam's understandings of nature, the domestic environmental regulatory landscape, and changing economies and livelihoods. Agarwood use is part of traditions of religious ceremony and ideals of spiritual purity, and is increasingly being incorporated into contemporary ideals of *bodily* purity, cleanliness, and naturalness. I show how these various forms of consumption practices have enabled numerous modes and points of entry for producers into the agarwood trade, and how and why trade regulations are often disregarded or circumvented.

Chapter 3 shows the context of agarwood as a scent of wealth and power by tracing the international trade spanning the whole of the Asian continent, from the commodity source in Southeast Asia to consumers in the Middle East and East Asia. The focus is on Việt Nam, Thailand, and Laos as producers and the Middle East region, China, and Japan as traditional consumer markets. Agarwood has long been treated as a luxury good, and a mark of wealth as well as spirituality. Its path of trade, though partially obscured, has historically followed a general direction of extract and export from less wealthy to more wealthy powers, which continues today. This global path is paralleled at the regional level, where extracted product from less wealthy nations in Southeast Asia (such as Laos) move to more wealthy nations (like Việt Nam and Thailand) before reaching final consumer markets. In following this path, I show the relationship between nature/extraction and wealth/power.

Chapter 4 details the scentscape of the high-end Western fragrance industry in connection with Việt Nam's agarwood production and the state's efforts towards sustainable development and building a "green" economy. The Western fragrance industry emphasizes luxury, beauty, self-expression, nature, and increasingly, sustainability in its marketing and consumption practices. This creates a kind of "imperialist nostalgia"⁴⁴ that informs and influences green economy initiatives. Western fragrance preferences articulate a particular set of values and understandings: on romanticized, colonial natures and sensory, sensual landscapes that have been destroyed, but are being "revived" through cultivation and sustainable production initiatives. By

⁴⁴ From Rosaldo, 1989.

tracing this relationship, I show the place of nostalgia for nature in the creation of "green" goods, through the lens of agarwood as a luxury commodity.

I end with a brief conclusion, touching upon the main arguments of the dissertation and considerations for future research.

CHAPTER 1. OLFACTION AND SCENTSCAPES

Introduction

This chapter focuses on how culturally and geographically specific olfactory experiences develop and inform different consumption practices. I historicize the development of the three scentscapes that are the focus of this dissertation: agarwood's "homeland" of Southeast Asia, concentrating on Việt Nam; agarwood's traditional, historic primary markets of the Middle East and East Asia; and agarwood's new market in the West. I use the term scentscape to refer to agarwood's production, uses, and meanings across space and cultures.

I start with outlining the development of consumption and connoisseurship in fragrances and how it differs from connoisseurship in taste and foods. I show how scent is characterized and experienced as a biological function, and how these experiences connect to consuming disparate ideals of "nature" ("Olfaction as a Bodily Experience"). I describe the various ways in which consumption practices frame, understand, and romanticize the elements of nature that fragrances attempt to capture or emulate ("Olfaction as Consumption of 'Nature"). Then, the contexts and histories of three scentscapes are outlined. In demonstrating how radically different the functions of agarwood and constructions of value are in each scentscape, I show that the agarwood commodity network is much more fragmented than how traditional views of political economy frame commodity production.

In Việt Nam, I detail agarwood's history in the foundation of the state and how it has been emblematic of the connection between the country's two main landscapes, the forested highlands and the coastal lowlands ("Agarwood's Homeland: Việt Nam's Scentscape of History and State"). For the Middle East and East Asia, I trace the histories of agarwood use as a mark of luxury and spiritual distinction ("Agarwood's Historic Aficionados: Scentscapes of Luxury and Ritual"). In the West, I detail the recent rise of the "oud" note, which has become extremely popular in artisanal and high-end fragrances ("Agarwood's New Market: Scentscape and Fragrance Aesthetics in the West"). Oud scents are often marketed in the West as "mysterious" or "dark," exotic, luxurious, and unique. I show how the scentscape in the West is shaped by the motivations and practices of Western fragrance enthusiasts, who are driven by desires for selfexpression, the unique, new, and novel, and increasingly, ideals of sustainable consumption.

Olfaction as a Bodily Experience

It is a popular misconception that humans do not have a particularly sensitive sense of smell (Luhrmann, 2017). While it is true that compared to some of the mammals most familiar to people (dogs and cats), human olfaction is far outstripped, it is still rather sensitive and much more powerful than was previously believed by both scientists and society at large. As neuroscientist Jay Gottfried stated in an interview with National Public Radio, recent studies have demonstrated that "the human sense of smell is finely tuned to different odors," able to "discriminate odor molecules that maybe differ by one single atom" ("Words Fail When It Comes To Aromas," 2014).

Olfaction is uniquely visceral yet simultaneously intangible. Being closely tied to and partially controlled by the limbic system and the hippocampus, structures which are also deeply involved with emotion, sense of place, and memory (Zald & Pardo, 1997), smells can be vividly evocative of distinct moments in time in ways that our other senses cannot. This is sometimes indicated in certain idioms of language; in Vietnamese, for example, "hurong," which means scent or fragrance, is frequently used to indicate wistful remembrance, longing, and/or nostalgia

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for a thing or place, and the thing's "essence."¹ Scents are so evocative that neuroscientists have used olfactory stimuli to study the limbic system and how the brain processes emotion, emotional memories, and affective experiences (Anderson et al., 2003; Zald & Pardo, 1997). Gottfried further explained:

So let's say we gave you the smell of orange. We put an orange smell inside a bottle. You can't see what's inside of it. And we ask you to name it. And you may come up with the word orange. You might say citrus. You might say lemons. You might say fruity, or you might say my grandmother's sock drawer kind of depending on your own personal experience and associations. What's happened here is there's a kind of looseness or imprecision in extracting a name from the odor you're smelling. ("Words Fail When It Comes To Aromas," 2014)

Olfaction, which according to neurological studies "is dominated by a hedonic

(pleasantness–unpleasantness) dimension" (Zald & Pardo, 1997, p. 4119), appeals to some of our most elemental, primeval emotions in ways that we often cannot clearly verbalize beyond "good" and "bad." Most languages possess very little specialized vocabulary or terminology for smells and olfaction compared to other senses (Moeran, 2009). In Vietnamese for example, terms for "smelling" or "to smell" are a combination of different bodily senses: "thấy mùi" (literal translation: "to see smell"), or "nghe mùi" (literal translation: "to hear smell"). As Fox explains, even colloquialisms have a paucity of olfaction-related phrases:

All of the other senses have positive, complimentary associations in everyday language. We may speak of a person as 'visionary', 'keen-eyed', 'having a good ear', 'a good listener'. We praise 'dexterity', 'a light touch' and 'good taste', etc. There are no equivalent terms of approval for smelling ability. In fact, the only common expression which implies olfactory prowess is 'nosy' – a term of abuse rather than commendation... Most Western languages are so impoverished in olfactory terminology that they cannot even distinguish between the perception of odours and the odours themselves... As if this were not degradation enough, the verb 'to smell', when used descriptively, has a negative

¹ Such is the case with "quê hương," used poetically to indicate one's homeland, sometimes in an idealized or ancestral sense (i.e., some Vietnamese nationals would say to me that Việt Nam was my "quê hương," even though I was not born there).

meaning unless qualified by a commendatory adjective. If we simply state that something or someone 'smells', we mean that they smell bad; to give praise, we must specify that they 'smell good' or 'smell nice.' (Fox, 2007, pp. 25–26)

It is difficult to speak about smells beyond the things that are emitting them, as "the bridge [between] the olfactory information with the language system is deficient... wobbly and a bit treacherous" ("Words Fail When It Comes To Aromas," 2014). Scents are transient, ephemeral, and resist attempts to "capture" them in some kind of static state: most cultures have no standard system of quantification or classification of smells, nor is there any easy way of "recording" them for posterity, as we can do for sights and sounds. Scents also change dramatically over time.² This contributes to fragrance consumption and connoisseurship resisting the degree of standardization and proliferation that has been seen in areas such as wine and coffee consumption.

Perceptions of and reactions to scents are influenced by a multitude of factors. Cultural norms play a massive role (McHugh, 2012). Knowledge of terminology, categorizations, and scent names can have a large influence: "analogous to the state of people's knowledge about a material such as coffee nowadays, where some experts and connoisseurs are very careful to differentiate arabica from robusta, as well distinguishing many regional productions, whereas for most people this material is simply coffee, which tends to have quite varied flavors" (McHugh, 2012, p. 266). Packaging, presentation, and marketing, like with most other goods, can sway opinions on a scent (Ferdenzi et al., 2013).

² There are mechanisms for capturing scent, but they are not commercially available and are primarily used by fragrance researchers. For example, Takasago, one of the largest manufacturers of flavors and fragrances, had once sent a team of researchers to the Amazon to capture scent molecules to bring back for attempted reproduction in their labs for the formulation of a new cologne for Hugo Boss (Wallick, 2010).

A consensus in the scientific community regarding how, exactly, humans physically detect and process smells remains elusive; there are several competing theories for which there is ongoing research.³ As mentioned above, there has long been an understanding that smells are experienced primarily in hedonic scales (pleasant-unpleasant) and degrees of intensity (strongweak), but there is no widely-accepted scientific classification of smells in general beyond that (Belkin, Martin, Kemp, & Gilbert, 1997). From philosophers of ancient India and ancient Greece to contemporary neuroscientists, people throughout time and place have grappled with this same confounding issue: that olfaction has been a notoriously difficult sense to describe, classify, and understand, both in conceptual or abstract terms and biological terms (Belkin et al., 1997; Guérer, 1992; McHugh, 2011). Thus when describing scents, perfumers, and people in general, often refer not only to "things that smell"-like foods, woods, and flowers-but also to places, landscapes, feelings, and states of mind. Scents are not only floral, woody, dirty, clean, or chocolaty, but warm, bright, dark, sensual, aggressive, intoxicating, soothing, and melancholy, capable of summoning all manner of mental images from clear skies, to misty mountain forest, to bustling bazaar.

The act of smelling can thus be understood as more than a biochemical reaction to molecules in the air coming into contact with one's olfactory nerve and receptors. It is an evocation of an individual's memories and feelings, shaped by one's experiences and cultural lens. It is little wonder then that olfaction, via the use of incense, has played such a prominent role in the cultural contexts in which agarwood consumption developed: religious prayer, contemplation and introspection, communing or connecting with God(s), spirits, the mysterious

³ Shape, odotope, and vibration theories are the main frameworks. Luca Turin, who is well-known as a perfume expert and has published several popular perfume guidebooks, is a biophysicist by training (earning a Ph.D. at University College London in 1978) and proposed the vibration theory.

and the intangible. These characteristics—the ties to emotion and memory, the strong associative dimension—are what make olfaction ideal as a medium for these activities.

Olfaction as Consumption of "Nature"

The extended histories of international trade in aromatic materials have made cultural blending a fundamental characteristic of the fragrance industry the world over. Fragrance traditions, as cultural practices in the West and the East, are rather distinct in that they are "intrinsically and overtly prone to value the exotic" (McHugh, 2012, p. 246). Quality ingredients are explicitly tied to a place, and these places were and are often used for marketing purposes:

Not only are blended perfumes layered combinations of aromatic materials and foreign terminologies, but their culturally mixed nature was frequently celebrated, from the writings of Pliny and Indian, Arab, or Chinese sources all the way to the flagrant orientalism one sometimes sees in perfume marketing today. Love of the exotic and the flaunting of the foreign nature of materials celebrate contact and cultural-material admixture, though typically this is represented as a movement of materials from a strange luxurious periphery to the civilized center. (McHugh, 2012, p. 247)

Most who have strolled through any major department store or opened a fashion magazine will be familiar with this "flagrant orientalism" of the contemporary Western perfume industry. Advertisements are frequently filled with (white European) models against a background of tropical or other remote landscapes, exotic animals, and (darker) "native" peoples. These images are so common that few of us even notice. Official perfume descriptions frequently make note of the specific place from which the raw materials are from (even if it is made from synthetic compounds emulating these materials): for example, it is not simply "rose," but Turkish rose, not only because Turkish rose is slightly different from Bulgarian rose—though the difference is imperceptible to many, if not most, consumers—but because the place, the source, matters for how the scent is marketed.

As implied in the quote above, however, this exoticizing of perfume materials and the places they come from is not at all a new phenomenon, nor is it solely a trait of the West. Ancient Indian texts on fragrant materials also often used terms of "perfume exotica," describing islands, remote forests, and other foreign landscapes to the east and west. For Chinese incenses, Southeast Asian fragrant woods and Arabian resins are often remarked upon and highly prized (McHugh, 2012, p. 266). Agarwood was historically used as tribute to the Chinese from the "southern lands," i.e. contemporary Việt Nam, a region that was under Chinese dominion (the "civilized center") for centuries and literally at the border, but was seen as exotic and mysterious (the "strange luxurious periphery"). Arabian perfumers too historically rhapsodized on the intriguing complexity of oud from the distant and mystical lands of contemporary Indonesia, Malaysia, and mainland Southeast Asia (Barden, Anak, Mulliken, & Song, 2000). These descriptors of place have real meaning and real impact in how fragrances are conceptualized and perceived in the mind of the consumer. In some traditions, this tie to place is quite literal: "In some South Asian philosophical accounts of matter and the senses, odor is the special quality of the element 'earth': where there is a smell there are earth particles, and, thus, perhaps surprisingly to some, smell of all the senses is intrinsically associated with concrete, multisensory matter" (McHugh, 2011, p. 157). Today, agarwood is still seen by consumers as one of the most unique and exotic scents. Having been introduced to the West from perfume traditions in the Middle East (hence the use of the Arabic term "oud" in the Western fragrance industry, as opposed to agarwood's myriad other names), it draws a olfactory path from "the Orient" to the Western world, acting as "the jigsaw piece that helps fuse European and Eastern styles of perfumery together" (Dunckley, 2012).

The obsession with agarwood among perfumers and perfume lovers is driven by the attraction to rarity and uniqueness, but also the understanding of the powerful emotions and memories that scents can evoke. As previously noted, part of the uniqueness of agarwood's scent profile is its wide variability and changing nature, having been described by some perfume enthusiasts as a "shapeshifter" (River, 2014). It can conjure an incredible spectrum of ideas and emotions in a split second. The barrage of contrasting (some might say clashing) scents in some agarwood varieties can be slightly nauseating, nearly to the point of revolting: pepper, rotting hay in a barn, melting plastics, sterile bandages and hospital rooms, fresh, damp soil, warm, smoky woods, something unidentifiable but sweet. Each sample of natural agarwood I encountered, sourced from various regions, smelled different from the last, and each sample shifted and morphed in smell upon prolonged exposure to air or skin. It was an interesting experience, to say the least, one in which I was incredibly confused and unable to decide whether it was pleasant or repellent. The various dimensions in some agarwood alone rival the multitude of notes in a blended perfume. Something so layered and complex can be both a dream and a nightmare for perfumers and fragrance enthusiasts, with endless possibilities for intriguing combinations with other notes. It is a perfect example of the evocative power of olfaction and what it can do to the mind, all the senses, and the body as a whole.

Scholarly discussions in the social sciences on consumption and taste frequently draw upon Bourdieu's 1984 sociological work, *Distinction: A Social Critique of the Judgement of Taste*. Bourdieu focuses on the accumulation of certain types of knowledge, high cultural capital in "legitimate" areas of interest, in the creation and refinement of tastes and aesthetics of the elite upper classes. The process of becoming a connoisseur, the acquisition of the "right" kinds of knowledge as a social practice, is accessible only to those who have the resources to invest the time and effort in learning differences and nuances of art, food, music, and so on; thus it is not only tied to cultural capital, but to social and economic capital as well. The connoisseur's refined tastes includes understandings of how such products should be consumed properly and elegantly, and the specialized language used to demonstrate one's cultural capital and differentiation from a casual or "low end" consumer; the connoisseur will describe wines in terms of tannins or "oaky notes" and can differentiate between the different types of wine glasses, describe coffees as having "bright tones" or hints of blueberry and will know that a "proper" coffee shop will often serve a cortado or espresso with a glass of sparkling water, and so forth. This creates a set of dispositions, a habitus, that shapes and influences perceptions of the world and daily choices.

Connoisseurship in olfaction, and for agarwood specifically, works differently than in other areas, such as wine or coffee consumption. Like with the "democratization" of coffee and wine connoisseurship (Bertilsson, Egan-Wyer, Johansson, Klasson, & Ulver, 2014; Elliott, 2006), there has been a similar kind of "democratization" of agarwood, to a degree: a proliferation and popularization of "legitimate" or respected agarwood products at varying price points, the rise of the independent, untrained perfumer,⁴ and an explosion of information and expertise shared, discussed, and spread all over the world via the Internet. Unlike coffee or wine, however, where the most well-regarded, expensive product can be traced back from specific farms, through a well-documented chain, and into one's glass or cup, the most costly, coveted form of agarwood is still the whole, raw product whose origins are smudged and obscured, and whose value is partially dependent on this shroud. And while the language around fragrance connoisseurship is standardized to some degree—the idea of fragrances having "bases" and "top notes" is fairly universal, for example—the differing desires and priorities of agarwood's various

⁴ Perfumers, that is, people who formulate perfumes, can be considered both producers and consumers.

consumers, in conjunction with the fact that most languages sorely lack specialized scent vocabulary in comparison to other types of sensory vocabulary, fragments agarwood and scent consumption and prevents it from being standardized to the same degree.

Agarwood's Homeland: Việt Nam's Scentscape of History and State

Agarwood's scentscape in Việt Nam is bound with notions of the nation and the environment that has nourished its formation. It has been a prominent component of the spiritual practices, understandings of nature, foundational myths, and history of the lands now called Việt Nam since *before* any kind of formal Vietnamese state existed. This foundational role manifests throughout the country in a variety of ways. Perhaps the most visible and obvious example is the coastal province of Khánh Hòa, which is strongly identified with agarwood in folk tales, sayings, and architecture.



Figure 4. Tháp Trầm Hương. Photo taken 2009 by Luu Ly, from Wikimedia Commons (Lưu, 2009).

Tháp Trầm Hương ("Agarwood Tower"), located in Khánh Hòa capital of Nha Trang, sits at a figurative convergence of Việt Nam's ancient past and fast-paced present. It is located just south of the intersection of two streets that allude to the nation's history: Trần Phú, named after a respected member of the Indochinese Communist Party, and Lê Thánh Tôn, after a revered king from the 1400s.⁵ The tower is usually surrounded by tourists and crowds of local teenagers and twenty-somethings, dressed in fashionable clothing with asymmetrical Harajuku-inspired haircuts. The tower harkens to Khánh Hòa's long history and deep connections to its namesake. A folk song about the province speaks to the prominent role of the agarwood trade in the history of the region:

Khánh Hòa là xứ Trầm Hương Non cao biển rộng, người thương đi về

Khanh Hoa is the land of agarwood [Upon] High rising seas, merchants return home

Though the origins of agarwood and the details of its creation and trade are not necessarily common knowledge to all in Việt Nam, agarwood itself is a familiar part of the society, embedded in the fabric of day-to-day life.⁶ From as far back as archeological records show, agarwood has held a unique and mystical position in the culture and history of the area now comprising the Vietnamese nation.

Tháp Trầm Hương's design bears little relation to its namesake, agarwood, but is a fitting symbol for the city. With its reddish and brown tones, sandy textures, and tapered design, it echoes the nearby Tháp Po Nagar, also called the Tháp Bà Thiên Y A Na ("Thiên Y A Na

⁵ Practically every town in Việt Nam has streets named after these transformative figures.

⁶ When strangers inquired what kind of work I did, without fail the initial comments were that agarwood was "quý" (precious) and "măć" (expensive) when I explained.

Tower"), or simply Tháp Bà ("Lady Tower") for short. Tháp Po Nagar is a Cham temple originally built in the 8th century, located on a low mountain north of the city center (Núi Cù Lao, or "Isles Mountain," referring to the islands off the coast of Nha Trang). Made from baked red brick, precisely cut and expertly fitted without the use of mortar, Tháp Po Nagar, like most Cham structures, bears some architectural similarities to other Indic-influenced structures in Southeast Asia, such as Angkor Wat. The Kingdom of Champa, which occupied central and parts of southern Việt Nam before being overtaken by Kinh (ethnic Vietnamese) peoples from the north, was a civilization which adhered to variants of Shaivite Hinduism, and later, Buddhism and Islam.



Figure 5. Tháp Po Nagar, also known as Tháp Bà Thiên Y A Na or Tháp Bà. Left: photo taken by Étienne André 2005, from Wikimedia Commons (André, 2005). Right: photo taken by author 2006, detail of Tháp Po Nagar featuring the Hindu goddess Durga.

The ancient Cham originally arrived in Việt Nam from the Indonesian islands thousands of years ago.⁷ As highly skilled seafarers, the Cham had strong traditions of international trade. Champa lands once encompassed most of Việt Nam and parts of Laos and Cambodia, with major

⁷ It is believed that the ancient Cham were descendants of an earlier civilization dubbed the "Sa Huỳnh." Very little is known about the Sa Huỳnh, but their archeological remnants trace back as far as 1,000 B.C. and range from Việt Nam to Taiwan and the Philippines. At its height, the Champa empire controlled maritime trade in what was once called the Champa Sea, today known as the South China Sea or the Eastern Sea.

trading ports at present-day Hội An, Qui Nhơn,⁸ and Phan Rang (Hardy, Cucarzi, & Zolese, 2009). Today their descendants, the contemporary Cham people, form a distinct Austronesian minority group in Southeast Asia.



Figure 6. Map of Vietnam (Central Intelligence Agency, 2018).

Through the figure of Po Nagar, agarwood ("gahlau" in the Cham language; likely derived from the Malay term "gaharu") plays an essential role in the history of Việt Nam long before the Vietnamese people occupied the land. Po Nagar was the mother goddess of Champa,

⁸ Incidentally, Qui Nhon is where my family is from.

said to be the founder of the empire and associated with the Hindu goddesses Durga and Bhagavathi. According to legend, Po Nagar descended as a child from the sky in the light of the moon. She touched down in the melon patch of a couple living in what is now Khánh Hòa Province, and they raised her as their own. At some point, she sat upon a massive piece of agarwood that appeared on the beach, and was carried away by waves to China. There, she married a prince and had children. Remembering and missing her foster parents, she later set "sail" upon the same piece of agarwood, back to Việt Nam. She arrived in Khánh Hòa once more, and is credited with bestowing the Cham people with the fragrant, precious wood, alongside the knowledge of rice cultivation. Her gifts allowed the Cham to prosper. Agarwood, a high-value commodity for more than two thousand years, was thus closely tied to the wealth of the empire, placed on the same level of importance as rice agriculture itself. It played a pivotal role in the Cham's economic system as a valuable product for trade as well as tribute/tax to China, which allowed Champa to flourish (Hardy et al., 2009). Its status as a coveted product, and the lands of the Champa being the source for high quality agarwood, was noted by early European and Arabic historians, traders, and geographers such as Edrisi (Al-Idrisi), Soleiman al-Tajir (also known as Sulayman the Merchant), and Marco Polo (Hardy et al., 2009). William Noseworthy hypothesizes that this mystical giant agarwood "raft" is a metaphor for the importance of agarwood, its international trade, and maritime trade in general, to the Cham: "Gahlau trade was critical to the Champa polities... and 'riding the gahlau' can simply be taken to be the same as 'riding the trade winds'" (Noseworthy, 2015, p. 115). He further notes how agarwood "illuminates a history of Champa-highland trade relations and socio-religious importance" (Noseworthy, 2015, p. 115). Aquilaria trees grow naturally in highland areas, while the Cham have historically been coastal lowland dwellers.

50

The agarwood trade necessitated political and economic engagement with the distinct, highly diverse, and loosely grouped peoples living in the highlands under Cham rule (Hardy et al., 2009; Salemink, 2003), those who today are called the Degar, Montagnard, or người thương. The Degar practiced swidden agriculture, animal husbandry, hunting and gathering, fishing, and collection of both timber and non-timber forest products, and these collected products connected them to international land and sea trade networks. They were vital in the luxury goods trade; products like elephant ivory, rhinoceros horn, beeswax, high-value hardwood timbers, agarwood, medicinal plants, cinnamon, and others were traded to lowlanders for commodities such as salt, silks, ceramics, iron tools, and bronze works (Salemink, 2003, p. 33). Though the Cham culture was primarily a lowland one, their influence reached quite far into the highland areas. This is evidenced by the remains of Cham-style "ruins, statues and other vestiges" and prevailing tales and myths among highland groups about the Cham suzerainty (Salemink, 2003, p. 35). Additionally, there is evidence that highlanders were part of some Cham court rituals (Salemink, 2003). Descriptions of agarwood types on international markets from European sources in the 1600s are also indicative of frequent trade and interactions between highland and lowland societies during this time (Li, 1998, p. 80).

The highlands, and the "strange and luxurious" things that came out of the forested mountains, were considered somewhat mystical by those who did not permanently reside there, i.e. the lowland-residing Cham and the Kinh who came after. "Civilization" was in the coastal lowlands, while the highlands were something of a mystery to varying degrees (Baldanza, 2018; Scott, 2009). Though they were (and are) the source of traditional medicines and myriad valuable commodities, general wisdom in Vietnamese culture also warns of its wild animals, infectious diseases, the sheer difficulty of the environment and terrain, and general air of foreboding. The highland forests were both life-threatening and life-giving. This is encapsulated by the dictum "ăn của rừng, rưng rưng nước mắt:" "eat [take] of the forest, tears well up [tears fall]."

When the Vietnamese displaced and forced out the Cham empire in central and southern Việt Nam, much of the Cham agarwood mythos, as well as the networks of highland to coastal lowland trade, became incorporated into Kinh culture and society. Agarwood continued to be a coveted and important export of the region, traveling from the highlands to port cities in Việt Nam like Hội An and across Southeast Asia, westward to South Asia and the Middle East, and northward to China and Japan. Agarwood continued to be used as tribute or taxes paid by the Vietnamese to the Chinese empire. The Kinh not only inherited the agarwood trade networks from the Cham, they adopted the figure of Po Nagar as well. Following a long tradition of combining belief systems and forgoing strict separation between them, the Vietnamese call Po Nagar "Thiên Y A Na." She is still recognized as the mother goddess of the Cham and retains the same origin story. She is one of the primary figures in the practice of Đạo Mẫu, a nebulously defined faith centered on mother goddess worship and spiritual medium rituals, categorized as a folk religion in Việt Nam.⁹

Throughout Vietnamese history, major figures were linked to agarwood in various ways. It comprised a significant part of the funds put towards state-building by the Nguyễn lords, who lead the expansion of Kinh lands southward, seizing much of central and southern Việt Nam from the Cham. They ruled in opposition to the rival Trịnh family in northern Việt Nam, and after a long war with the Trịnh ended in 1775, the Nguyễn lords established a royal monopoly on

⁹ Many worshipers partake in more than one faith, often praying to the mother goddess(es) as well as performing prayers of the Tam Giáo. Tháp Po Nagar today is a tourist attraction as well as a functioning temple, and people continue to pray to Thiên Y A Na there.

the trade of a specific type of agarwood called calambac¹⁰ (Li, 1998, p. 82). When a series of peasant rebellions broke out in central Việt Nam around Tây Sơn,¹¹ one of the leaders of the rebellion, Nguyễn Huệ (not related to the ruling Nguyễn lords) became associated with agarwood. Nguyễn Huệ led what is now called the Tây Sơn Rebellions along with his two brothers, Nguyễn Nhạc and Nguyễn Lữ, who are described by a Vietnamese saying: "ông Hai trầu, chú Ba thơm, thầy Tư Lữ," or "the second brother [Nhạc] has areca, the third brother [Huệ] agarwood, and the fourth brother is a priest of Mani¹² (Li, 1998, p. 151). The precise meaning of this saying is not clear, though it should be noted that each element attributed to the brothers (areca nut, agarwood, and Mani, the prophet of Manicheism) have great historical, cultural, and spiritual significance throughout Asia and across many ethnic groups, including Việt Nam's highland tribes, Kinh, Cham, Khmer, Malay, and others.¹³

Agarwood's Historic Aficionados: Scentscapes of Luxury and Ritual

"No two ouds are the same." "Each type of oud triggers certain memories." "When I smell Cambodian oud I remember my mother...when I smell Indian oud, I remember my father." "Each piece of oud tells its own story, encapsulating decades."

¹⁰ Calambac is type of high-grade agarwood historically favored in Japan, though there is no consensus in the agarwood industry as to its exact nature and characteristics or what exactly makes calambac, calambac. Calambac is the French term; it is also known as kỳ nam (Vietnamese), kynam/kinam, or kyara (Japanese). See Chapter 3 for details.

¹¹ Tây Sơn is a district located in Bình Định Province. It is approx. 50 km from Qui Nhơn.

¹² In Vietnamese pronoun and naming conventions, siblings are ranked by birth order, but starting with two, not one.

¹³ Note that the Tây Son rebellions were supported not only by Kinh peasants, but by a wide range of ethnic minorities in Việt Nam. The areca nut (*Areca catechu*), coupled with the betel leaf (*Piper betle*), are seen as auspicious and hold various kinds of symbolic value throughout South and Southeast Asia. In Việt Nam, they are representative of love and marriage. Areca nut and betel leaf are chewed together as a stimulant, a custom dating back hundreds, likely thousands, of years. Li (1998) notes that in the era of the Nguyễn lords, agarwood extraction was still closely associated with the Cham as both an economic and religious activity, and there is no indication that Nguyễn Huệ was involved in it (p. 151). She hypothesizes that the saying might suggest that Nguyễn Huệ was known amongst the Cham and highland peoples before the rebellion broke out. Manichaeism, though Persian in origin, was a prevalent and influential faith among peasant movements in China until it was banned under the Ming dynasty in the 1300s.

In the agarwood consuming cultures of the Middle East and East Asia, agarwood's scents encompass entire worlds. All manners of ancient medical, religious, historical, and trade texts from imperial China, Japan, the Arab world, and the Mediterranean allude to the high value of agarwood in these areas, but say little regarding the use of agarwood in its native range (López-Sampson & Page, 2018). Mattioli, a well-known physician and botanist from Siena, noted in the 1500s that "agarwood was valuable 'everywhere' except for the places from where it was sourced" (López-Sampson & Page, 2018, p. 118). While this is untrue, as evidenced by the deeply embedded harvesting and consumption traditions, folk tales, and unique symbolic value associated with agarwood in its native lands, it is true that agarwood was/is of greatest monetary value in these regions of export. Today, agarwood hunters and farmers in Việt Nam will still opt to sell any high-grade product they may have abroad rather than consume it themselves or sell domestically (see Chapter 2). The Middle East, China, and Japan developed more elaborate, and more carefully documented, ideas and rituals of connoisseurship, both spiritual and secular, which have persisted and are still prominent today. The cultures around agarwood consumption in the Middle East and East Asia have deep historical roots tied to religious practices, patterns of trade in luxury goods that have connected these far-flung regions into a network of consumers for hundreds of years, and varying expressions of faith, luxury, power, and taste.

The diversity in agarwood consumption preferences and contexts fosters the diffuseness of agarwood's commodity network, which pulls from a wide range of places, people, and scales, in irregular and inconsistent ways. Its vast list of aliases throughout ancient texts reflects the global scope of use: oud/oudh/aoud/ud (عود), agar, gaharu, gahlau, chenxiang (沉香), trầm hương, jinko (沈香), eagleswood, lignum aquila, aloes wood, lignum aloes. It is used as part of certain Islamic, Buddhist, and Hindu religious ceremonies as well as various folk religion practices throughout Southeast Asia, is often brought to Mecca by Malay Muslims on pilgrimage, and is a part of welcoming gestures for honored guests throughout the Arabian Peninsula. Agarwood is the main focus of the Japanese kōdō/koh-doh ("way of incense") ceremony, which arose in feudal Japan and is still practiced today (Compton & Ishihara, 2004, p. 7). Agarwood products are part of the traditional medicine pharmacopeias of East, South, and Southeast Asia (Liu et al., 2013), and is also used simply for leisure, as a stimulating fragrance to be enjoyed and experienced in daily life. Throughout the Middle East and the Asian continent, agarwood oils are used to perfume the body, and smoke from burning incense or whole pieces is used to perfume garments as well as spaces.

Incense and aromatics were among the earliest internationally traded products, traveling along routes connecting the ancient civilizations of the Mediterranean, Middle East, India, and China. Some evidence of agarwood use in religious rituals goes back approximately 3,000 years to ancient Egypt (Persoon & van Beek, 2008), far from its native lands of Southeast Asia.¹⁴ Some of the oldest notes on the trade in aromatics exist as historic, documented accounts of the network known as the Incense Route. The Incense Route was similar to the more well-known Silk Road (though preceding it by several hundred years and possibly even longer¹⁵), and one can assume that agarwood traveled along these paths (Jung, 2011). The Incense Route consisted of several land and sea passages through which certain aromatics, like agarwood, textiles, spices, and other luxury goods were transported westward, from India to the Arabian Peninsula, through

¹⁴ Though there is evidence of use, the exact paths agarwood took to cross the continent at this very early point is not clear.

¹⁵ There is some archeological evidence suggesting the earliest forms of the Incense Route go back as far as the late Bronze Age, approx. 1200 B.C.E. (Artzy, 1994).

the Levant, and from there to the population centers of the Mediterranean (Amar, 2003; Van Beek, 1960). Though most trade in aromatics occurred in an "east-west" fashion, some goods were also transported the opposite direction; the export of frankincense from the Middle East to China, where it remains a popular incense ingredient to this day, is one prominent example. These routes were not static, shifting throughout the years with changing conditions. Increased risks from piracy on the seas or land conflicts and shifts in political organization and taxation among tribes in the Arabian Peninsula influenced the routes through which goods traveled (Van Beek, 1960). The routes also changed as better, more efficient paths were discovered and, later on, as ancient Greeks and Romans sought to circumvent the land-based middlemen of various tribes in the Arabian Peninsula who controlled this trade (Amar, 2003).

Scentscape Contexts of the Middle East and East Asia

Trade of agarwood to the Middle East predates Islam and has been ongoing for over 2,000 years, though agarwood's rise in use and prominence corresponds with the rise of Islam (Antonopoulou et al., 2010; Zohar & Lev, 2013). Much of the ancient trade to the Middle East of goods sourced in East and Southeast Asia is assumed to have been conducted by South Asian merchants. The name for agarwood in many parts of Southeast Asia, "gaharu," supports this assumption, as it is derived from Sanskrit (Wyn & Anak, 2010). Goa, Mumbai, and Singapore were major historic ports for product going to the Middle East (Compton & Ishihara, 2004; Wyn & Anak, 2010). Some ancient Arabs were also engaged in sea-based trade, cutting out South Asian middlemen and trading with East and Southeast Asia directly. Records from the seventh to eleventh centuries indicate Arab traders arriving in China and the Straits of Malacca to purchase all manner of luxury goods, including agarwood, with Indonesian Muslims controlling the trade in the Straits (López-Sampson & Page, 2018). Many of these cities remain important locales for

the agarwood industry today, both as importers/exporters and points of sale to end consumers (Wyn & Anak, 2010). These trade networks were highly complex, relying heavily on long-established, often inherited, undocumented/informal bonds of trust between merchants that continue to exist today (Compton & Ishihara, 2004).

Consumers in the Middle East favor all manner of agarwood products of all grades: blended incense, whole pieces, chips, powders, and oils of all scent profiles, as well as various beauty products and blended liquid perfumes (both of the oil-based "Eastern" style and alcoholbased "Western" style) utilizing these. Throughout the region, agarwood has long been an important and integral part of daily life: "It is used as a traditional aromatic and perfume in many forms: from high grade wood chips burnt by Sheikhs to honour their guests, perfuming personal garments before special occasions and in preparation for prayer, through to providing general household fragrance" (Antonopoulou et al., 2010, p. v). The Arabian Peninsula, perhaps more than any other region, has an intense love affair with fragrances: the history of fragrance manufacturing and trade here is deep, and the aromatics culture is complex and widespread among all classes. Though perfumery has a long tradition in the region, its rise in prominence in Arabian culture was closely tied to the spread of the Muslim faith:

Agreeable scents have been highly regarded in Islam from the very beginning; their esteem has been established by the Qur'ān. Numerous verses (including commentaries) describe the Paradise with its fine air and greenery. It is hardly possible to draw a distinction between the odoriferous environment and spiritual energy... The understanding of agreeable scents as a (re-)presentation of Divine qualities supported the pursuit of perfumery in the following centuries. (Jung, 2011, p. 10)

Agarwood's status as a prestigious scent garnered it specific mention in numerous texts of perfumery as well as the pharmacopeia of the Middle East from the 700s onward (López-Sampson & Page, 2018). Historical records indicate that agarwood was imported from nearly all of its native regions, ranging from India to Indonesia (Zohar & Lev, 2013). The rise of Islam corresponded with the use of agarwood in liquid perfumes, as opposed to only solid incenses. Agarwood perfumes were highly regarded and coveted, and it was often given by various Indian kings to Persian and Arabic kings as a gift (Zohar & Lev, 2013). Today, agarwood is equally popular as a tool for religious contemplation and prayer as it is a means for recreation and social bonding.¹⁶

Unlike the Arab world, which consumes agarwood in basically all forms that exist, East Asia has historically favored agarwood solids (blended incenses and pure wood pieces) almost exclusively. Like the Arab world, the rise in the consumption of fragrance, and agarwood, was tied to religion: the use of manufactured incense in China traces back to the 1st century C.E., with the arrival of Buddhism from the Indian subcontinent, and spread to Japan from there (Barden et al., 2000). Because most of the incense ingredients preferred for Buddhist ceremonies, such as agarwood, were not native to Japan or nearby regions, they had to be imported over long distances. The imported ingredients were expensive, and thus incense appreciation eventually became associated with the wealthy (Iwasaki, 2004; Moeran, 2009). Trade to Japan was almost exclusively conducted through Chinese middlemen, "and even today, many Japanese trading houses conduct business in Chinese when sourcing their agarwood" (Compton & Ishihara, 2004, p. 9). Historically, product going to East Asia was moved through entrepôts such as Funan (encompassing the Mekong Delta, corresponding to modern day southern Việt Nam and Cambodia), and later, Hong Kong and Hội An (on the central coast of Việt Nam¹⁷). Hong Kong's role as an exporter of aromatic material and manufacturer was so vital and renowned that

¹⁶ Gatherings to sample agarwood chips is a social/communal activity (Al Jazeera English, 2016).

¹⁷ Hội An was once a major international port, inhabited by a sizeable population of Chinese, Japanese, Indian, Portuguese, and Dutch merchants.
the territory is literally named for it. Evidence of attempts at inducing the formation of agarwood resins in southern China trace back to the 300s C.E., where tree wounding was mentioned in one of the earliest known texts on subtropical Asian flora (López-Sampson & Page, 2018). Most agarwood came to Chinese consumers directly, primarily from the Kinh and the Cham as tax and tribute. In addition to its regular use in temples, agarwood was used to decorate/scent the walls of prominent galleries and as time-keeping¹⁸ in the royal spaces of imperial China, demonstrating agarwood's exalted role as a marker of distinction and wealth (López-Sampson & Page, 2018).

Exports of agarwood from Việt Nam and other parts of Southeast Asia spiked significantly in the 200s C.E., when demand in China grew due to several factors. As the leadership of the Chinese empire declined in the north, much of the wealthier population began to move south, leading to an economic boom and corresponding growth in demand for luxury and "exotic" goods in the southern region (Hall, 1993). During this time, overland trade declined as international maritime trade rose, and Southeast Asia itself also experienced economic growth (Hall, 1993). While ports in Southeast Asia before this point primarily acted as an entrepot for goods traveling from elsewhere and into East Asia, Southeast Asian merchants increasingly promoted and marketed domestically sourced goods, agarwood among them (Jung, 2013). It is posited that agarwood and other Southeast Asian aromatics began increasingly replacing certain aromatics sourced from the West and Middle East (such as frankincense) during this time (Jung, 2013). Political upheaval in the Roman Empire and Persia during late Antiquity limited the transportation of goods eastward, while goods from Southeast Asia, so too did the

¹⁸ Incense sticks were marked at intervals, contained in specially made incense seals, and burned to mark time.

emphasis on use of incense in religious practice, as a form of spiritual cleansing and a facilitator of prayer and contemplation: "Wandering Buddhists, among other travelers coming from and via, or trading with, the West and South have considerably strengthened the promotion of aromatics over the course of the centuries" (Jung, 2013, p. 107).

Agarwood gained greater popularity during the Tang Dynasty (600s C.E. to 900s C.E.), when it was listed as one of the six primary ingredients in the official pharmacopeia and large, historically noted agarwood carvings were added to religious spaces (López-Sampson & Page, 2018). The Chinese considered agarwood from Hainan and mainland Southeast Asia (Việt Nam, Cambodia, Thailand) as superior in terms of fragrance to agarwood from Indonesia, which the Chinese use primarily for medicinal purposes (López-Sampson & Page, 2018). Periodic eras of peace and unification in both China and the Arab world from the late 500s C.E. through the 1200s C.E., "combined with advances in shipbuilding and navigation, opened up ocean trade between China, India, and Arab centers in the Middle East," further facilitating trade in agarwood out from Southeast Asia (López-Sampson & Page, 2018, p. 116). In the 1700s, French botanist Pierre Poivre documented multiple types of Vietnamese agarwood favored in China in addition to several grades of non-resinous Aquilaria wood (López-Sampson & Page, 2018).¹⁹

In Japan, the first mention of agarwood use traces back to the Nihongi (Japanese Chronicles, completed in 720 C.E.), which purports that a large piece of agarwood washed ashore on Awaji in 595 C.E. (Iwasaki, 2004). When locals discovered its pleasant scent upon burning a piece, they presented the remainder to the Empress Suiko (Iwasaki, 2004). In the 700s C.E., China presented the Emperor Shomu with a massive piece of agarwood now called the

¹⁹ Interestingly, "he noted even in this early period that counterfeit goods using non-resinous wood were rampant and "suggested that one has to be a connoisseur to purchase agarwood" (López-Sampson & Page, 2018, p. 121).

Ranjatai, measuring over a meter long and weighing more than 11 kilograms (Bedini, 1994).²⁰ Incense appreciation as a form of connoisseurship grew under the Heian period (794-1185) (Masanori, 2016). Prominent feudal lords Oda Nobunaga, Toyotomi Hideyoshi, and Tokugawa Ieyasu were strong advocates of incense appreciation (along with tea appreciation), and in the 1500s, Oda Nobunaga established a position of incense master in his court (Masanori, 2016). In the 1600s, a gift of agarwood from the Goan Portuguese to the Emperor of Japan was documented by a French merchant, evidence that European parties were well-aware of agarwood's status amongst the elite in Japan (López-Sampson & Page, 2018).

Two high-end incense companies specializing in agarwood were established in Japan in the 1700s and still exist today, Baieido and Shoyeido. Of particular interest in Kōdō/Koh-Doh (Japanese incense appreciation ceremonial practices) both historically and today is the practically legendary "kyara" (kỳ nam²¹ in Vietnamese, calambac in French) grade agarwood. Historical accounts by both Chinese traders and French observers in the 1600s and 1700s noted its inflated value in Japan; Chinese traders would often wait in Việt Nam for a year or more to fill a cargo ship to send to Japan, where it fetched many more times the amount it sold for anywhere else (Li, 1998, p. 79). Pierre Poivre noted that though the Japanese loved all types of agarwood, the kyara grade was different, so resinous that a finger nail could sink into its surface like wax; it was "very dear," with the types from present-day Khánh Hòa being the best (Li, 1998, pp. 79–80).

Agarwood's New Market: Scentscape and Fragrance Aesthetics in the West

"It is a different mix [mixture of products] of oud. In order to reach the smells of 20, 30 years ago [we have to blend it] ... With the deforestation, all the forest of oud are now cut. The oud we have today is not the same as before... The old oud, it was so sick, so wild, so animal-y, and

²⁰ Since then, the Ranjatai has been stored in a royal repository in Nara, where small portions have been cut on rare special occasions and is taken out periodically for public display.

²¹ May also be spelled kynam or kinam.

today it is more sweet, more soft, like beautiful skin of a lady... It was wild. Now it's been tamed."

French Perfumer Henry Jacques on the creation of his contemporary oud fragrances (Al Jazeera English, 2016)

Today, possibly the most common or well-known form of categorization in the fragrance industry internationally (though not the only form) is done according to the "fragrance wheel" developed by aromatics expert and consultant, Michael Edwards. It is a comprehensive classification system that has been refined several times since its creation in 1983, and corresponds fairly well to general odor perception according to recent studies (Zarzo & Stanton, 2009). It consists of four main families: floral, oriental, woody, and fresh. Within each family is several sub-groups, and each sub-group in turn contains several types. The "orientals,"²² where agarwood scents typically fall, speak to the very strong history and continued presence of exoticization in the fragrance industry, though not exclusively by Western perfumers. The foreign, the mystical, the natural, and the beautiful are often evoked simultaneously and conflated with each other in the description, promotion, and consumption of a fragrance. This is frequently reflected in the names and promotional materials of fragrances: iconic French perfumes such as Shalimar, Vol de Nuit ("Night Flight"), and Mitsouko evoke impressions of fanciful, far-flung, and unknown places and invigorating sensations. Tom Ford's Oud Wood Eau de Parfum, which has an agarwood scent at its heart, was not subtle in its evocation of the mysterious and the unique; it was marketed with the tagline "Rare. Exotic. Distinctive." ("Oud Wood," n.d.).

²² Orientals, or "ambers," in Western perfumery generally refers to scents that copy or are derived from/inspired by the fragrance traditions of the Middle East. They are typically composed of woody, spicy, and sweet (but not fruity) notes such as sandalwood, cinnamon, vanilla, and various types of resins (such as frankincense) and musks.

For some fragrance enthusiasts, the intense love for their particular object of obsession leads them to go to exceptional lengths to seek out the best, the most extraordinary, the rarest, the purest, the avant-garde, the most outlandish, or the vintage version of some famed perfume from decades ago. While agarwood has a long, deep history of spiritual use in the Eastern world, agarwood is also a particular favorite for scent enthusiasts in the West today who seek the unique, the challenging, the beautiful, and the "wild" aspects of nature; for, as previously mentioned, agarwood is sometimes a "difficult" scent. While agarwood had been traded to the West since Antiquity, it was a novel product, not widely known or applied to aspects of daily life. Its use in the West was not "common" until the 21st century, but even now it is considered a "boutique" or niche note. Still, thousands of photos, blog posts, discussion threads, and YouTube videos on agarwood and agarwood fragrances today have made it more knowable and accessible to anyone with Internet access, while at the same time intensifying the obsession and perpetuating the exotic mystique and allure of rarity and uniqueness.

This need to experience some rare and unique thing which is unknown to mainstream society is at odds with the current regulatory state of agarwood, and aromatics in general. As noted in the quote above, luxury perfume maker Henry Jacques uses a blend of scents, including some natural oud, to re-produce his personal experiences of wild oud decades ago. More and more of the natural source materials for fragrances (like agarwood) are becoming regulated by environmental or conservation legislation at international and local scales due to scarcity. Many more source materials are being placed under restrictive use or banned completely by the International Fragrance Association due to growing concerns over allergic reactions and general health risks of certain constituent compounds.²³ While some consumers focus on finding the most "real" or the most "natural" products while they still can, others have accepted combinations of cultivated products and synthetics as the future. Another group of fragrance enthusiasts and perfumers have gone the opposite route to champion synthetics, and specifically for environmental purposes. An article in Elle Magazine details:

Perfume brands are beginning to make the case that some synthetics are, in fact, more eco-friendly than naturals. Natural musk, which once had to be extracted—with fatal consequences—from the unfortunate musk deer, is now illegal, as is civet (thankfully, no longer derived from the anal glands of an exotic cat), and endangered crops, such as rosewood, can be protected by using molecular facsimiles. "Synthetic raw materials give us confidence in sustainability—knowing where and how they were made and what exactly is in them," Flores-Roux [master perfumer] says. "Your essence of orange or sandalwood may be adulterated or not the best quality. It might not even be the plant it claims to be."

"I think sustainability is really important in a discussion of synthetics," Huber [founder of Aquiste Perfumes] says. "It's where the future will be. A lot of naturals come from conflict-ridden areas or are irresponsibly sourced." (Long, 2016)

As it is frequently stated, by perfumers and official CITES publications alike, there are no synthetic compounds which capture a good fraction of high-quality agarwood's baffling scent, because the complexity of its primary aromatic compounds make it too difficult and costly to synthesize in full. That is not to say there are no high-quality synthetic agarwood compounds in general. While it is true that synthetics are often "flat" (less complex) in comparison to their natural counterparts, this is not always viewed as a negative by fragrance makers. The fragrance industry invests massive amounts of time and money into research and employs some of the best chemists in the world to analyze the compounds and molecules of aromatics; Ryoji Noyori, for example, who is a chemist for the major Japanese scent and flavor manufacturer Takasago, has a

²³ Oakmoss was a notorious example, as the banning of the use of natural oakmoss forced a reformulation of one of the most popular perfumes in the world, Chanel No. 5.

Nobel Prize in chemistry. At some point in the late 1990s or 2000s, both Firmenich and Givaudan developed synthetic agarwood molecules for the perfume industry.²⁴ Following this, Tom Ford, under the fashion house of Yves Saint Laurent, was the first to introduce the oud scent to mainstream, Western perfumery. His fragrance, made in collaboration with "noses" Alberto Morillas and Jacques Cavallier, was called *M*7 and was released in 2002. The fragrance did not shy away from the more aggressive, animalistic, and challenging aspects of the oud note. With controversial advertisements featuring full frontal nudity of a man who, against current trends of the time, possessed prominent chest hair (Speer, 2002; Whitehead, 2002), *M*7 loudly projected a grittier manliness that was in stark contrast to the popular, clean and sleek "aqua" trend embodied by fragrances like *Acqua de Gio* by Giorgio Armani. It was highly polarizing at the time, partially because of the general unfamiliarity and strangeness of the oud scent to consumers, and partially because of the unabashed nakedness of the ad campaign, but has since developed a cult following (Hathaway, 2011).

Agarwood scents have become popular amongst the set of consumers who seek creativity and self-expression of their values and personality through overall presentation, which includes both visual and scent aspects. "Power Perfumes Return to the Scene" was the title of a 2015 article in the New York Times Fashion & Style section: "For the young and fashion-forward fragrance consumer, subtlety is out, and bold is in. The clean, light, 'aqua'-like, non-descript fragrances that were the general trend of the late 1990s and early 2000s in the West are making way for smells that are more 'unique,' 'funkier,' and 'artisanal'" (Syme, 2015). A saleswoman at the Brooklyn fragrance shop Twisted Lilly is quoted in the piece saying, "People are trying to move out of big-box-store uniformity... And they look for that everywhere, even in scents. It is

²⁴ Firmenich and Givaudan are both Swiss companies. Together with Takasago, they are the three of most prominent scent and flavor manufacturers in the world.

an invisible expression of self" (Syme, 2015). The major "power" perfumes of the 1980s were a reflection, both in name and smell, of the decadence that society today tends to associate with the era: scents like *Poison* (so dangerous), *Obsession* (so provocative), *Opium* (so intoxicating and with an air of danger and illicitness). These were sweet, spicy, strongly floral, and/or "boozy" scents that lingered. Drawing both a connection and contrast to the flashiness and "power moves" of the 1980s, the piece details how although the big and brash scents of that time are not making a comeback, young consumers today ("fave-crazed millennials" the piece calls them) are increasingly seeking out strong, bold, unique scents "that will become as much of a signature for them as their Twitter handle," that will "showcase their strength, quirkiness and creativity" (Syme, 2015).

Oud/agarwood is singled out as a fragrance that is particularly adored in the current trend, distinct from other woody notes. One consumer is quoted saying, "'I love wearing oud... For one thing, it's inherently androgynous. Women are as interested in it as men, which feels very modern for where we are at with gender dynamics. Also, the name sounds like wood, but it also sounds like some faraway Middle Eastern fantasy. It has a mystical, magical allure'" (Syme, 2015). "Marketed as both luxe and exotic," many of these new scents are unambiguously "Middle East-facing" (Syme, 2015), that is, made using primarily European techniques²⁵ by Western fragrance makers, and sold to the Western market, but drawing inspiration from Middle Eastern fragrance traditions, which typically have stronger, layered scents, greater projection, and a smokier base. In other words, they are made to convey distinctiveness and worldliness of the Western wearer.

²⁵ This is a broad categorization, but one of the bigger differentiating factors is that Western perfumes and most often thin liquids with alcohol and water bases, whereas Eastern perfumes are traditionally thicker and oil based.

The Los Angeles Times noted in 2012 that "The explosion in indie perfumery illustrates a desire for the handmade in an increasingly mass-produced world" (Hamilton, 2012). These motivations, the desire for something not mass-market produced, that can express some element of their identity, are characteristic of what Colin Campbell calls "craft consumption": a consumer "transforms 'commodities' into personalized (or, one might say, 'humanized') objects," where there is not only a demonstration of taste and understanding of the product, but also focusing on "creativity and self-expression" (Campbell, 2005, p. 28). Here, "actual" naturalness is not the priority. The wildness and exotic qualities of agarwood, its complex woodiness that projects uniqueness, are abstract expressions, meant to be an extension of the wearer's self.

The Natural and a Manufactured "Feel" of the Natural

"Naturals confer richness to a perfume... They're like the gold leaf on the architecture. And personally, I like them for the romance. You can say Cool Water has lots of dihydromyrcenol, but that doesn't really tell a story. Whereas it is fantastic to say in X perfume there is narcissus absolute from the mountains of southern France. It talks to the mystique of the product, and that's something we do in perfumery—we sell dreams."

> Rodrigo Flores-Roux, master perfumer²⁶ (Long, 2016)

"Synthetics give you the modernity and the signature... Naturals give you the beauty."

Alberto Morillas, master perfumer²⁷ (Long, 2016)

The idea of "natural" has currency and value in perfumery, especially in the non-mass

produced, less "mainstream" corners of the industry, away from mega fashion brands such as

Chanel or Yves Saint Laurent. It is held as a premium and marketed as a premium.

²⁶ Flores-Roux is the creator of Clinique *Happy*, multiple fragrances for Tom Ford, Calvin Klein, John Varvatos and others, as well as several niche fragrances.

²⁷ Morillas is the creator of *CK One*, *Acqua di Gio*, and others. He also co-created the aforementioned M7.

Oud/agarwood, one of biggest perfume trends in recent years, is a scent that has until recently been made mostly from wild growing trees and is now transitioning more and more to planted trees and synthetic notes of increasing quality and complexity. As such, agarwood is central to these varying and sometimes contradicting understandings of "the natural" in Western perfumery and interpretations of what is valuable, what is worth a premium, and what is not.

A synthetic scent can be more advantageous in many perfume compositions: they are more consistent and easier to control the quality over time; it is easier to isolate and amplify particular scent aspects while muting undesired aspects; components in natural scent sources that are known to be allergens can be avoided; and it does not rely on wild populations that may be threatened or endangered. There are many artisanal and niche "oud" scents that are highly regarded fragrances, regardless of their "naturalness" or lack thereof.²⁸ At the same time, for all these advantages, "natural" products are still seen as premium, and natural agarwood especially is celebrated for reasons that are nearly the exact opposite of the aforementioned advantages: it is changeable and variable across time and place of origin; the scent profiles can range from a simpler, strange but mostly pleasant woody scent, to hyper complex layers of animal musk, rot, burning rubber, pepper, smoke, damp earth, antiseptic, and sweet incense; the scent aspects that are traditionally considered "undesirable" by most people, such as the animalic aspects, are considered part of the uniqueness among enthusiasts; and especially because it is rare, and often *does* pull from threatened wild populations of trees.

The increasing international availability of Middle East fragrance brands like Amouage and Ajmal, and the growth in oud's presence in Western perfumes, was correlated and associated with this boom in artisanal, niche, and independent perfumery in the West. Considering it in

²⁸ For example, *Oud* 27 by Le Labo; see Chapter 4.

another way, the boom in agarwood scents was correlated and tied with a movement focused on quality and personal uniqueness in perfumery. An article in the Los Angeles Times marked the addition of an "independent perfumer" category to the FiFi Awards²⁹ as a watershed moment in independent fragrance (Hamilton, 2012). The Los Angeles Times further noted that in the proliferation of "indie" perfumers:

Some use only botanical ingredients. But even those using aroma chemicals usually include more natural ingredients than do their mass market cousins. They are obsessive about sourcing raw materials (such as oud, sandalwood and ambergris), mixing in small batches and following their creative bliss — through their noses. Lacking big budgets for models, ads and fancy bottles, they focus on the juice." (Hamilton, 2012)

The Institute for Art and Olfaction was also founded in 2012 in Los Angeles, with the following

mission statement:

The Institute for Art and Olfaction is a 501(c)3 non-profit devoted to advancing public, artistic and experimental engagement with scent. We do this by initiating and supporting experimental projects that utilize the medium of scent, by providing accessible and affordable education in our laboratory as well as in partnership with institutions and community groups, and by celebrating excellence in independent, artisan and experimental perfumery through our yearly award mechanism, The Art and Olfaction Awards. Through these efforts, we extend the world of scent beyond its traditional boundaries of appreciation and use. ("Mission," 2012)

The Los Angeles Times article commented on a collaboration between two celebrated local figures: "Leonesio [of Smell Bent] has teamed up with Luckyscent to create a limitededition fragrance for hard-core oud enthusiasts" (Hamilton, 2012). This is notable in that it speaks of "hard-core oud enthusiasts." While such consumers are relatively common in regions like the UAE and Oman, where the use of oud products dates to biblical times, such a group of people in the United States was unfathomable until a few years ago. This kind of collaboration

²⁹ A ceremony held annually by the Fragrance Foundation and considered perfumery's version of the Academy Awards.

has not been reserved to local scales either; master perfumers from the Middle East have increasingly engaged and partnered with French, Italian, and other Western perfumers and vice versa.

What does it mean to be a "hard-core oud enthusiast?" Depending on the degree of knowledge of "natural" agarwood, understanding of the molecular wizardry of synthetic materials, primary means, desires, and goals of consumption, one "hardcore oud enthusiast" may not be invested at all in natural or wild agarwood. Another may identify strongly with environmental issues and therefore purposefully seek "sustainable" agarwood products (see Chapter 4). Natural, synthetic, or both, what is important to consumers of agarwood varies widely and is not always tied to whether it came from the "wild," the farm, or the lab. What is prioritized, however, is whether the consumed scent captures the essence and aesthetic of what each consumer wants and *thinks* oud to be or should be: something beautiful, changeable, luxurious, mysterious, mystical, exotic, spiritual, complex, not always agreeable, and yes, something "wild" or an embodiment of nature, at least in feeling, if not in a literal sense of being extracted or grown from "nature." In this way, the "oud note" can be seen to stand in for nature, not only as a physical, material object, but as abstract and diverse understandings of what nature and "wild" should be and how one relates to that personally.

Conclusion

Olfaction, as a sense and an embodied experience, is unique in its close relationship to emotion, memory, personal experience, and sense of place. These associations, along with the lack of a "semantic field" for olfactory experiences in most languages, inform the diversity in olfactory practices and preferences, as well as the irregular form of agarwood's commodity network. Experiences and understandings of scent are different from taste and gustation, which has led to cultures of connoisseurship that are distinct from those of foods. Olfactory practices reflect, frame, and romanticize elements of nature, which fragrances often attempt to capture or emulate, in particular ways across different cultures.

This chapter has focused on understanding olfaction and defining the concept of scentscapes. In Việt Nam, agarwood has a long history of use and extraction. It was foundational to the early development of the state and served as an emblem connecting the country's two main landscapes (highland forest and the coastal lowland). For the Middle East and East Asia, agarwood serves as a mark of luxury and spiritual distinction. In the West, the growing popularity of the "oud" note, reflects consumer motivations and practices driven by desires for self-expression, the unique, and personal ideals of "greenness" and sustainable consumption. The scentscapes of agarwood's three main regions provide insight into how different actors value and understand nature within a context of commodity production. Understandings of the embodied experience of olfaction and the histories agarwood's use and trade provide context and a foundation for assessing the current state of agarwood's diffuse commodity network across three scentscapes, each of which are detailed in the next chapters.

CHAPTER 2. THE DOMESTIC SCENTSCAPE OF VIÊT NAM

Introduction

Agarwood's presence in Việt Nam is extensive, and its role in day-to-day life is simultaneously exceptional in some ways and mundane in others. For local consumers and domestic producers, agarwood, as a commodity and a scent, embodies spiritual practice, networks of business and trade, and the spaces of farms, home altars, and temples. This chapter explores agarwood's scentscape in the context of Việt Nam's changing economies, shifting regulations, and the livelihoods of Vietnamese individuals in the agarwood trade. Agarwood is deeply embedded in Việt Nam's history and culture; its use is part of long-held traditions of religious ceremony and ideals of *spiritual* purity, as well as contemporary actions towards ideals of *bodily* purity, cleanliness, and naturalness. I show how these various forms of consumption practices have enabled numerous modes of entry for producers into the agarwood trade, and how and why environmental regulations are circumvented more often than not. I begin with exploring domestic agarwood consumption ("Việt Nam's Agarwood Consumers: Use and Acquisition") and then connect use and acquisition with agarwood production (Việt Nam's Agarwood Producers: Sourcing and Making").

Việt Nam's Agarwood Consumers: Use and Acquisition

Agarwood Use

There is a noticeable shift in demographics at major temples in Sài Gòn throughout the lunar cycle. While there is always a steady stream of visitors, on the monthly auspicious days (full and new moons), roads and driveways outside of temples become markedly congested with private sedans and large SUVs. As automobiles are incredibly expensive in Việt Nam and subject to high taxes, it can be assumed that the wealthier denizens of the city are making their regular visits for spiritual cleansings and to make temple donations at these times. Vendors mostly elderly women and children—gather on the sidewalks and courtyards to sell goods used for rituals, the air becoming thick and smoky with the intense smell of sacred lotuses, the burning of thousands of incense sticks and coils, and the flapping of wings as cage upon cage of birds are purchased and ritually released to gain merit.



Figure 7. Left: cars parked outside of a temple on a full moon day of the lunar calendar. Right: incense burning at the temple. Photos taken by author, 2012.



Figure 8. Left: captured birds are ceremonially released to gain merit. Right: birds waiting to be purchased and released. Photo taken by author, 2012.

Incense is everywhere in Việt Nam, in all corners of daily life, and agarwood exists as a component or primary ingredient in a great deal of it. To this day, incense makers in Việt Nam, both mass producers and small-scale handicraft incense makers, guard their formulations and sources zealously. When inquiring on the composition of the incense he sells, one colleague simply shrugged. He partners with local craftsmen to turn the raw material into incense, but has only a vague notion of what goes into the incense sticks aside from his own Aquilaria trees. He noted that he could gather some idea of the components based on smell, but that the specific composition, ratios of ingredients, binders, gums, and so forth¹ will remain forever elusive, and he has accepted that: "I have no idea. I never will know. They'll never tell me. Like everything else in this business." "Like with everything else" in the agarwood trade, he simply trusts the incense makers to create a good product, and they trust him to provide a steady supply of the main ingredient.

¹ Note: incense is typically made by combining aromatic powders with a flammable base, like charcoal, and pressing it into shapes or dipping a wooden core with repeating layers of powders with a binding agent. Traditionally, binders consist of various tree gums, plant mucilage, and other plant byproducts.

Agarwood is especially present in religious spaces, as spiritual practice and incense go hand in hand. Both resinous agarwood and/or non-resinous *Aquilaria* wood are popular and prevalent ingredients for incense-making in Việt Nam. These basic incenses are used daily amongst families and individuals who keep small shrines within the home or place of business, a practice that is very common throughout the country. Daily spiritual practices keep sales for lowgrade agarwood at consistent levels, consistent enough for local growers to feel relatively confident and unconcerned about the local market for their product.

Spirituality in general has been on the rise since restrictions on religious practices were loosened after Đổi Mới (Taylor, 2007). Not only has overt engagement with the most prominent faiths of Buddhism or Tam Giáo² increased among the general populace, but various other practices such as Đạo Mẫu (Mother Goddess worship), Cao Dài, Gió Thom ("fragrant wood;" assumed to be agarwood and a relic of ancient Cham traditions) and Po Nagar worship (another Cham relic) in the central regions, the use of spiritual mediums, various types of animism, and smaller sects of Buddhism such as Hòa Hảo³ have also flourished (Endres, 2011; Hoskins, 2011). Some scholars have attributed this "re-enchantment" to anxieties over the changing economy, unknown futures, changing senses of identity, and anxieties over modernity more generally (Taylor, 2007). The resurgence of religious practice has also been linked to resistance to the "modernizing" and "citizen-subject making" process that is inherent in the state narrative (Avieli, 2014; Tai, 2001; Taylor, 2007). Avieli (2014) for example describes the surge in

² "Three teachings/faiths," the simultaneous practice of Buddhism, Taoism, and Confucianism, which are seen as complimentary to each other.

³ Agarwood is particularly sacred and important for those of the Hòa Hảo faith. Hòa Hảo is prominent in the far south and southwest, where it was founded. It "preaches simplicity and egalitarianism" (Hoskins, 2011, p. 3). Accordingly, worship rituals are humble affairs centered on incense and flowers, as other offerings, more elaborate ceremonial materials, or religious icons of the Buddha are frowned upon. It is common for Hòa Hảo temples in the far south and southwest to have *Aquilaria* planted on their grounds, and practitioners are avid consumers of agarwood incense ("Personal Interview: Agarwood Farmers in Đồng Nai Province," 2012).

vegetarianism in Việt Nam through Linda Scott's concept of "subversive consumption," wherein people increasingly turn to vegetarianism and Buddhist ideals of simplicity as different modes of resistance (Scott, 2009). These actions are meant to stand in opposition to the State's encouragement of mass consumption, the State's lingering wariness towards religion, the perceived gluttony and resulting health problems that have accompanied rapid economic growth, and the stress and hectic nature of modernity. Shifts toward simplicity and spirituality are coupled with certain practices becoming a marker of distinction for more elite classes, as oncerare foods such as meat became widespread among the masses (Avieli, 2014; Scott, 2009). These various belief systems are not necessarily mutually exclusive of each other; some are off-shoots of Buddhism or syncretic faiths, and some are quite recent developments.⁴ The majority of the population in Việt Nam engages to varying degrees in some form of spiritual practice or a combination of several.

With this rise in spirituality has come an increase in attention paid to incense its components. An emphasis on "cleaner," healthier consumption in general has been growing in recent years. The availability of organic foods and other higher-value products is rising (Mergenthaler, Weinberger, & Qaim, 2009), and terms such as "tự nhiên" (natural), "sạch" (clean), "nguyên chất" (pure), or "không sử dụng hóa chất" (chemical-free) have become increasingly prevalent in Việt Nam's urban markets. Villages and regions throughout the northern and central regions specializing in traditional, "natural" incense making—such as Phia Thấp, Xà Kiều, Cao Thôn, and Thủy Xuân—have been promoted as tourist spots and homestay destinations in recent years (Duong, 2017; Khoa, 2015; Quynh, 2016). For example, Nhang

⁴ Cao Dài and Hòa Hảo were both founded in the early 1900s.

Thiền (meaning "meditation incense"), an aromatics company, was founded in 2014 by a Đà Lat⁵ native in his 20s with investment and manufacturing assistance from a Taiwanese firm. It quickly made a name for itself by selling "natural" aromatic products. Stating that "Natural incense is favoured by international markets, especially in mainland China, Japan, Taiwan, South Korea, the Middle East, and Europe" (Vu, 2017), Nhang Thiền pursued a strategy of marketing their "green" products at "festivals, exhibitions, vegetarian restaurants, places influenced by fengshui and meditation" to great success, and in just four years have expanded to five manufacturing workshops across Ho Chi Minh City and Hanoi (Vu, 2017). The founder also noted that domestically, tastes were different, and that his company aimed to "chang[e] the mindset of domestic customers used to unhealthy, chemical-laden incense" (Vu, 2017). Other companies such as Thiên Hương ("fragrance/incense of heaven"), Trầm Hương An Nhiên ("calm/peaceful agarwood"), and Trầm Hương Kỳ Anh ("Kỳ Anh agarwood;" Kỳ Anh is a district on the northcentral coast) have followed suit in emphasizing "natural" incense products. This turn towards both spiritual and bodily "cleanliness," "purity," or "naturalness," has gone hand-in-hand with a growing middle and upper class and their increased consumption of luxury goods (both domestically and in major agarwood export destinations like China). As agarwood has a unique position of fulfilling both growing niches, increases in domestic farming and harvesting of agarwood is hardly surprising. Nhang Thiền states that they use farmed agarwood, specifically noting that it "does not come from rainforests" and is less expensive than wild harvested agarwood (Vu, 2017).

In addition to incense, decorative carvings and prayer beads made of agarwood are popular markers of distinction and luxury as well as religiosity among the growing upper middle

⁵ Đà Lạt is a located in Việt Nam's Central Highlands.

and upper classes. It was not uncommon for me to see them on display in the homes of the more well-to-do, placed on high amongst ancestral shrines. Conspicuous displays of piety, such as decorative agarwood carvings, the ritualistic release of captured animals,⁶ funding temple renovations and events, and participating in "fasting" (vegetarian) days are often used to "make up" for perceived moral failings or to accumulate spiritual merit.⁷ This in itself becomes a competition for some, an eagerness to be more demonstratively, performatively pious than one's peers and acquaintances.⁸ Times of conspicuous consumption are punctuated by times of austerity, especially as holidays approach. As both a spiritual and luxury good, agarwood punctuates and can be present in both "phases." Agarwood products in this way can be a manifestation of conspicuous consumption as well as a gesture towards reclaiming some sense of spiritual morality in Việt Nam.

Agarwood Acquisition

In the incense and precious woods specialty shops across central and southern Việt Nam, whole agarwood pieces and processed agarwood products are carefully displayed. In Hội An in particular—a port city on the central coast that was once a gateway for agarwood and other uniquely Southeast Asian goods to the merchants of Asia and Europe, and where Japanese

⁶ The releasing of animals, either wild or animals meant for slaughter, from captivity as a means of gaining spiritual merit is a common practice in all branches of Buddhism.

⁷ "Merit," in the Buddhist sense, is gained by doing good deeds, which is said to have a positive impact on one's karma (the accumulation of all of one's actions, thoughts, etc., both "good" and "bad").

⁸ As someone who "ăn chay trường" (is vegetarian "full-time," as opposed to "ăn chay kỳ," which is to practice vegetarianism on holy days only), in my interactions during field work I had the sense that some felt silently "chastised" by what was perceived to be my piety (but is mostly habit; I was raised vegetarian from the age of six). For example, when meeting with agarwood farmers, it was customary to be invited into the home for a meal and drink. In some cases, it was chicken congee and beer, in other cases a large multi-course meal with imported French cognac. As I neither eat meat nor consume alcohol, I had to decline both, and worried greatly they would see me as insolent and ungrateful of their hospitality. Despite my efforts to assure them that I thought nothing of their dietary choices, my nervous apologies were met with their own hurried apologies for their moral "weaknesses," for not going to temple frequently enough, for indulging too much in meat and alcohol, and so forth. The vacillation between the desire for material wealth against strong ideals of moral purity was prevalent amongst farmers I met.

traders especially often ported—agarwood boutiques are beautifully lit and artfully decorated, with carvings, jewelry, and a variety of incense types. The largest agarwood shop located in the historic core of Hội An is situated in a high traffic, high tourism area. Small stations are situated throughout the shop with informative displays about the basic process of agarwood growth and incense manufacturing. At the same time, in the grand agarwood tradition, they are also incredibly private and protective. Large signs in multiple languages warning against taking photos are posted throughout, and anyone attempting to is met with immediate intervention. I was stopped from even writing in a notebook within the store, without any questions as to what I was writing. Any inquiries about the products on full display were met with the simplest of responses; easily, smoothly recited lines within the bounds of the basic information already available and displayed on placards in the store. The agarwood products here are marketed towards the high-end consumer, though from my sampling, the quality in the boutique, at least of the agarwood out for immediate display, was middling and indistinctive.



Figure 9. An agarwood boutique in Hội An. Photo was taken from outside, as photography was prohibited inside. Photo taken by author, 2012.

Agarwood products in Việt Nam can be bought in a wide variety of vending spaces, not only in dedicated boutiques. However, in some cases, one must know where to go and who to ask. In Sài Gòn, dedicated incense boutiques are concentrated more in the outer districts, especially Tân Bình, which is closer to Tân Sơn Nhất International Airport and far from the city center. These boutiques tend to sell the full range of solid agarwood products (as opposed to liquid-based fragrances): incense, powders, carvings, beads, chips, and increasingly, items like agarwood herbal teas with purported health benefits.



Figure 10. Right: an incense shop in Tân Bình, Sài Gòn, selling incense, incense powders, and carvings. Left: detail of products placed in the window. The cone incense reads, "Tháp Trầm Hương đặc biệt" ("special agarwood tower"). Photos taken by author, 2012.

Perusing the stalls of the open-air markets in and around Hội An, Huế, Sài Gòn, Châu Đốc, and a number of other smaller towns, agarwood is not often immediately accessible, visible, or on display. However, upon inquiring with vendors in the traditional medicine or religious products (incense, joss paper,⁹ altars, and so forth) areas if there was one, usually at least one vendor had agarwood products for sale. One simply had to ask, and incense or agarwood pieces would be pulled out from a counter or back room. These products did not seem particularly "secret" and vendors clearly were not attempting to hide anything, but agarwood products tended to be kept in more secure spaces. In contrast to agarwood boutiques, vendors in the open-air markets welcomed questions (though they also would not allow photographs). The responses were frequently questionable, however. For example, in one market outside of Hội An's historic core, solid pieces that I was quite certain were counterfeit—real, white or very light resin *Aquilaria* wood, treated with various compounds to create dark striations to give the appearance of have greater resin content—were presented as moderate quality agarwood. Incense sticks were

⁹ Joss paper is imitation money that is burned as an offering in various worship rituals.

common, though whether they contained real agarwood was difficult to discern. With the amount of blending with other aromatic substances, and usually without the ability to burn a sample, detecting individual components is no task for the average buyer or consumer.

Việt Nam's Agarwood Producers: Sourcing and Making

Agarwood use and production is woven deeply into Vietnamese culture and history as well as contemporary daily life. In Việt Nam, agarwood is practically synonymous with incense and olfaction. The term "trầm hương" itself, as agarwood is called in Vietnamese, is a combination of two words that are also used to refer to incense and aroma, pleasant fragrances in particular. It is not uncommon to hear the terms "Trầm hương" and "nhang" (another word for incense) used interchangeably. As incense is a vital component of religious practices of all types throughout the country, agarwood in Việt Nam today is still associated with holiness and mysticism and is given the poetic epithet of "linh khí của trời đất," or the "spirit of heaven and earth."

Agarwood Seekers¹⁰ Turned Growers

I was put into contact with Chú M¹¹ by Dr. Phan, a forestry professor at one of the local universities. Chú M works for the Việt Nam Agarwood Association, and I agree to meet him in one of the stylish coffee shops that exist in practically every corner and alley in Sài Gòn. He is a fairly boisterous man, quick to smile, quick to laugh, friendly and welcoming. We speak casually

¹⁰ The phrase most often used in Vietnamese to describe wild agarwood extraction is "đi tìm trầm hương," which means "to go seek/look for agarwood." Hence, I have chosen the term "agarwood seeker," though news reports tend to use the term "hunter" (see discussion below).

¹¹ Pseudonym, "Younger Uncle" M. Vietnamese naming conventions: when addressing other persons, the given name is usually accompanied by a kinship pronoun that is indicative of relative age and social "rank." In this case, "Chú" indicates a male of approximately the same age as my parents and/or of higher social station me. Nearly all agarwood growers addressed me as "cháu", the pronoun for "niece," "nephew," or "grandchild," which is used for persons significantly younger than oneself.

for about an hour about nothing of huge import. He agrees to invite me along the next time he makes a visit to some agarwood growers.

A few days later, I was invited to join Chú M and one of his business associates, Anh H,¹² on a day trip to neighboring Dong Nai province. We took Anh H's vehicle, a new Honda Civic, and his personal driver. I had assumed we would be renting a shared van and driver (xe đò), which is not terribly expensive in Sài Gòn, and was surprised to see the private car. At the time, import taxes on vehicles were around 100%, depending on the make and model, so I was curious as to what sort of business Anh H does. Rather predictably, inquiring yielded a vague non-answer: he has a company, and does "này kia kia nỏ" (different things, this and that). However, he stated that his father was long involved in wild agarwood extraction when he was a child. We left Sài Gòn at dawn and drove for several hours, down a highway, to road, to dirt road, to paths that no mere Honda Civic without four-wheel drive should really be taking.

Eventually we arrived at our destination, which appeared to be on a path by a rural, wooded area. We were greeted by Chú B, who owned the lease on the surrounding plot of land as well as another plot nearby. Chú B began growing agarwood on his land about a decade ago. The adjacent forested area is not a "natural" forest at all, despite outward appearances: from the outside, the mix of vegetation, trees, shrubs, and low-lying plants of various types, seems completely mixed and unplanned. From the inside, the mix of vegetation, to me as an outsider, still appears completely random. Unless one were to closely examine the vegetation, one would never suspect that perhaps half or two-thirds of the land was cultivated. Scattered amongst the naturally growing trees and underbrush were cultivated *Aquilaria*, banana, pineapple, a hodgepodge of herbs used in Vietnamese cuisine, papaya, an occasional rubber tree, cashew, and a

¹² Pseudonym, "Older Brother" H; "Anh" indicates a male of approximately the same age and/or station as myself.

small flock of chickens running about. There appeared to be no pattern for what was planted where. Aquilaria was clearly just one of many different crops Chú B planted to support his family.



Figure 11. Pineapples grow in the underbrush on Chú B land. Photo taken by author, 2012.



Figure 12. Several tree types growing on Chú B land. Photo taken by author, 2012.

We wandered around with Chú B as our guide, stopping periodically to check on the growth of particular *Aquilaria* trees.



Figure 13. Chú B (right) checks on one of his older cultivated *Aquilaria* trees. Photo taken by author, 2012.

In his younger years, Chú B joined expeditions into the highlands to search for wild agarwood. Elements of agarwood's deep historical roots in Việt Nam can be seen in agarwood search expeditions, which Chú B and his friends state traditionally begin with a set of rituals that are adapted from or at least heavily influenced by Degar and/or Cham spiritual practices. A person who intends to venture into Việt Nam's highland forests (or forests in bordering nations) for any extended period will consult with a thầy cúng, a medicine person or shaman of sorts, to acquire a defensive charm for protection against illness, rock and mud slides, thieves, wild animals, and other dangers of the forest. A bùa ngải is one of the most common charms.¹³ Kinh (ethnic Vietnamese) agarwood seekers performed specific rituals before going on their search, which would last two weeks or more. Typically, someone would first acquire the bùa ngải, and then a small altar is set up at the forest edge for one (or more) of the mother goddesses. Prayers, offerings, and sometimes ritual sacrifices are performed at the altar before embarking into the forests, traditionally in groups of three to seven persons.

Those who find good agarwood specimens are lauded and often featured in local and national newspapers (Tuoi Tre News, 2011a). On occasion, a seeker has become a trader to Taiwan, China, and Japan, where they can fetch higher prices (Tuoi Tre News, 2011b). To find agarwood from the depths of the forest is seen as a glorious triumph. From these agarwood gathering experiences and tales comes the Vietnamese aphorism "ngậm ngải, tìm trầm," or "hold [in mouth] ngải, seek agarwood." As a general piece of wisdom, the saying is a metaphor for the hardship and struggle one encounters, and the effort required in order to find life's rewards.

While not all agarwood gatherers perform these rituals today, most are at least familiar with them. In recounting to me what these expeditions were like, Chú B, and other agarwood-gatherers-turned-farmers I spoke with, would repeatedly "tsk" and suck breath in through their

¹³ "Bùa" is a protective charm or amulet, and "ngåi" is a type of plant of the *Artemesia* genus that is used to create a particular type of bùa. Bùa ngåi are not used solely in the context of agarwood searches, but it is frequently associated with agarwood. Some Vietnamese today continue to believe in the power of a thầy cúng and these charms; one can acquire bùa even in Vietnamese communities in the United States if one knows where to ask.

teeth in a fashion that is a particularly Vietnamese gesture, exclaiming "chu cha."¹⁴ Chú B described his treks as physically draining and dangerous: days in the middle of nowhere with a high risk of malaria and other diseases, not to mention being targeted by thieves.¹⁵ Shaking his head with a downturned mouth, he described his trips, embellishing with large hand gestures, raised eyebrows and knowing glances at key points. With exaggerated shudders, but also in wistful tones, searching for agarwood was described as a high-risk endeavor that rarely yielded high rewards, but the occasion when figurative gold was struck made the treks worth the effort, at least until wild stocks took a precipitous decline in late 1980s and early 1990s. Eventually, the energy, costs, and risks were too great for Chú B to continue. With an eye to the future, he began planting Aquilaria trees. In the early years, he sold whatever he managed to grow directly to the State. During the late 1990s and early 2000s, the Vietnamese government encouraged growing Aquilaria as an environmentally friendly source of income for rural farmers, providing direct access to saplings and guidance in the growing process and resin induction techniques for farmers throughout the south. State support was rolled back in 2004, and those growing Aquilaria trees were left to fend for their own.

Chú B's specimens appeared healthy, most with lichen-like splotches on the trunk; a desired trait according to Chú B and my companions. Chú B and my fellow visitors stated that there are many resin induction techniques, some more reliable than others. A few trees here had been treated in different ways: some simply have holes drilled into the trunk; some have had particular mixtures of compounds inserted, which Chú B purchased from a third party. Other trees remain untouched, growing normally, with the possibility of being treated in the future.

¹⁴ An exclamation that I believe is made of nonsense terms, but implies a sense of incredulity or amazement; phrase used often in day to day life.

¹⁵ Theft was and remains a serious risk; attacks by gangs are a common occurrence when word gets out that someone has found agarwood, and people have been killed over pieces of high-grade agarwood (TN News, 2013).



Figure 14. Left: younger *Aquilaria* trees on Chú B, growing amidst a variety of other plants, both cultivated and wild-growing. Right: detail of a tree treated with resin-induction material. Photo taken by author, 2012.

I inquired about the treatments used to inject into the trees to induce resin production, and was told they were purchased from an acquaintance of Chú M who is former chemistry professor, but its composition was unknown by all men present. Many such ready-made injection mixtures are available for purchase, some originating domestically, some being imported from other *Aquilaria* range states such as Thailand and Malaysia. Chú B and Chú M informed me that use of such treatments can be an uncertain gamble; the mystery mixtures, if acquired from sources that are "xao" (questionable or deceitful), are just as likely to kill the trees entirely as they are to stimulate agarwood production, resulting in significant financial losses. This has happened to many farmers, Chú B and Chú M stated.

Chu B's home was located a few kilometers up another road, but he invited us into a small resting shack nearby. Outside of the shack, felled *Aquilaria* sat in a pile. Entering the shack, we had tea and breakfast. I inquired what he will do with the cut *Aquilaria* outside. Chú B, and small-scale farmers like him, were well aware that most, if not all, of the *Aquilaria* product they produce, whether it be incense, oil extracts, or decorative objects, will not be sold for the maximum market price of tens of thousands of U.S. dollars per kilogram. Chú B

described his agarwood products as basic and of fairly low grade. Much of the cut *Aquilaria* in the pile resting by the shack contained no agarwood resin at all, most of the wood being white and devoid of the characteristic dark, striated marks or dense tumor-like blobs. Even so, Chú B informed me the wood will still be used to make decorative carvings, beaded bracelets and necklaces, and low-quality incense and distillates. While these will not fetch him tens of thousands of dollars, what he will get for it, he says, "cũng được" (is decent, acceptable) and worth the effort, though he declined to speculate how much he might be able to sell it for when I asked. Would he like to be producing high grade agarwood products? "Dương nhiên," he said, of course he would. But high-quality cultivated agarwood requires the use of specialized mixtures and methods that he cannot afford to purchase, additional time and effort that he does not have, and even if he could somehow purchase the better inoculation mixtures, Chú B did not have enough *Aquilaria* trees planted to justify the cost of purchase.



Figure 15. The initial stages of carving down a felled *Aquilaria* tree. Photo taken by author, 2012.

Chú B and other small-scale farmers I spoke with share a similar perspective on the agarwood trade to large-scale *Aquilaria* plantation owners I encountered: for them, though agarwood is recognized as culturally and spiritually important, it is not seen as particularly exotic or romantic; it is work, a part of their business. For Chú B, participating in the agarwood trade is a building block for a larger livelihood strategy involving a wide variety of crops planted for sustenance as well as for market. Chú B is one of many entrepreneurs operating at different

scales. He personally knows some of the large plantation owners, and is even familiar with some of their methods. But according to him, these *Aquilaria* farmers are "cao cấp" (high; at a high level/quality), operating at a level that is essentially out of his league. Chú B did not think about competing with them. Indeed, he did not speak of, nor seem terribly occupied with, market competition at all. Farmers like Chú B mostly sell product for "daily use" incense, where a complexity of scent is not necessarily needed (due to the fact that they are often blended with other scents) and the traditional medicine markets, where scent is not of primary importance. Chú B said of his agarwood operations: "trồng ít ít cho đủ sống," or "I just plant a bit, enough to live/to make do." As Chú M states, farmers are always on the lookout for the next popular thing.¹⁶ Because *Aquilaria* trees require at least five, and preferably 10 or more, years to grow from planting to harvest, cultivating agarwood is something of a long-term investment. For Chú B, his returns, though not outstanding, have been good and reliable, sufficient to justify continuing his *Aquilaria* cultivation efforts.

We did not sit for long. My travel companions quickly finish their breakfast, and saying our goodbyes to Chú B, we travel another 20 minutes or so to a house in a nearby village. The home belongs to Chú T, a friend of Chú M's. He is equally vague as to what he does for a living, though judging by his house, he seems to do well. I inquired if Chú B and my travel companions personally used any agarwood products themselves. Like many Vietnamese, they all used blended incenses in their regular rituals and several owned some decorative carvings of decent quality, but "tram huong tốt," the quality agarwood, was too expensive to use, and if they had high grade product in their possession, they would rather sell it than use it. None of them used

¹⁶ Việt Nam has seen many "waves" of farmed commodities boom and bust (and often boom again) in the last two or three decades, such as rubber, cashews, and coffee, and in a broader perspective, catfish and shrimp farming as well.

oils, though two of our companions possessed some vials of newly distilled local product for us to sample. Sitting in the living room, bottles of varying sizes were passed around. We all looked at each one, commenting on the consistency and color and possible prices, though strangely no one bothered to open the bottles. It seemed to be more of a social activity: partaking in inspecting these coveted oils, speculating what they could fetch on the market, and what they could do to make them better.



Figure 16. A sampling of oils extracted from agarwood resins, distilled onsite at a small steam distiller on on Chú T's farm. Photo taken by author, 2012.

Most of the oils were made at a small, single-silo still located on Chú T's farm. Body fragrances are not popular in Việt Nam, and products such as perfumes and body deodorants are relatively new. Distilling in-country is still a miniscule part of the agarwood industry in Việt Nam, and essential oil distilleries are relatively few. For Chú T with his experimental still, there was a possibility that branching out into finished products, as opposed to solely raising the raw ingredient, would lead to greater returns down the road.



Figure 17. Chú T's still. Photo taken by author, 2012.


Figure 18. Felled agarwood waiting to be processed into incense or oils. Photo taken by author, 2012.

My perspective on small-scale farmers is skewed. The only small-scale farmers I met were through Chú M, who is a former chemist with connections to agarwood trader and grower organizations. Thus the farmers I met were more connected to sources for saplings, inoculation/resin-inducing products, and buyers than many of the other small-scale growers that do not know such people or have similar connections. For farmers with few avenues to learn of new techniques or access to middlemen, bulk purchasers, or artisans making finished products, their raw *Aquilaria* often does not travel far. I occasionally saw vendors in markets or street stalls selling pieces of low-grade agarwood or even just raw *Aquilaria* wood alongside fruits, herbs, traditional medicines, and so forth, all things they personally grew, harvested, and brought to the local market themselves. For the farmers I met, their experiences with cultivating and trading *Aquilaria* are heavily influenced and shaped by the people they knew, people like Chú M. and Chú T (also a former chemist) who actively promote agarwood industry organizations, introduce new or different resin-induction techniques which they test on their own trees, direct farmers to sources for saplings (some sapling sellers are themselves small-scale agarwood growers), and connect farmers to local middlemen or bulk purchasers.

All the farmers I had met participated to some degree in wild agarwood extraction in the past, which led to their interest in cultivation. However, there is also a contingent of people in Việt Nam who, though having no previous experience in agarwood, have become interested in agarwood cultivation. Unlike these farmers described above, the business is not an extension or evolution of their previous careers, but a new, intriguing investment opportunity.¹⁷ Chú B introduced me to two of such would-be agarwood investors, and I accompanied them on trips to the countryside as they investigated their prospects.

Would-Be Growers and Entrepreneur Monks

In one of the outer districts of Sài Gòn, amongst the newer planned communities and sleek high-rise condos, an area of European-style villas houses a large population of expatriates and diplomats. In contrast to the very narrow and very tall homes typical of the city, the villas have wide floor plans with open, breezy living spaces, surrounded by yards which are small but lush and green. Residents stroll or jog down the clean, paved roads, some pushing strollers, others with dogs on leashes. It is less than 10 kilometers from District 1, but almost feels like another country: quiet even though it is right next to a main highway, suburban-like, remarkably

¹⁷ This trend in agricultural investment is not unique to Việt Nam. Financial firms with dubious claims of 5%-10% returns on investments in agarwood, sandalwood, and similar products have been cropping up in online advertisements and newspapers across Asia.

free of trash. When I was invited by Chú M to take a day trip to visit a few more agarwood growers, I had no idea with whom I would be going with, where exactly we were going, or how we would get there. I arrived in this neighborhood on the back of Chú M's motorbike right around sunrise, crossing the Sài Gòn River that separates this neighborhood from the central part of the city. Before this point, I had never been to this area; I only had a vague notion that it was one of the more "posh" parts of town and that most of its residents were foreigners. I soon discovered that in addition to foreign residents, a handful of Việt Nam's upper-class families also live in this neighborhood, some of them "old money," having moved to the area decades ago before the price for these roomy plots of land sky-rocketed. We pulled up to one such family's villa. Bác H¹⁸ was a kindly old man with a kindly old wife. His hair was slightly shaggy and saltand-peppery. His children were grown and photos of his grandchildren dotted the living area. There was a small water garden and various fruits growing the yard, and a white 1966 Volkswagen Beetle in near mint condition parked in front, which was unusual. Citizens who can afford to own and operate an automobile in Việt Nam typically go for new and flashy. I commented that such a vehicle was quite novel. Bác H laughed, explaining that he had another 1960s Beetle years ago that broke down. He planned to get a new car, but said he just could not let go of the charming little Beetle. He loved them for being from "thời gian xưa" (a distant, past era), so he went searching for another Beetle. I had a feeling it was to be a strange day; I had no idea what I was doing there, why we were at this house, who Bác H was, and what Bác H had to do with agarwood.

As it turned out, not much. Bác H is a retired mathematics professor originally from the north. I soon learned that we were going to take Bac H's Beetle to visit some agarwood growers,

¹⁸ "Elder Uncle" H; "Bác" is a person, male or female, older than my parents.

and that Bác H was going to drive it himself.¹⁹ After formally bidding farewell to Bác H's wife, we piled into the car, took a few turns around the neighborhood, and pulled up at a different villa. We picked up Bác D, who is also a retired professor. I still did not know where precisely we were going or why we were going there with two retired professors who had no experience in biology, botany, forestry, or any other subject remotely related to agarwood.



Figure 19. From Bác H's Beetle. Photo taken by author, 2012.

We drove northeast for nearly three hours, eventually splitting off the main highway, following several unmarked roads up a large hill. I was then informed that we were going to meet Thầy Sư GN,²⁰ the abbot of the temple atop the hill. Thầy Sư GN has grown Aquilaria for decades, first on the island of Phú Quốc, then later at this very temple, the construction of which

¹⁹ Which was also unusual, as most people I encountered who could afford a car had a hired driver.

²⁰ "Thầy Sư" is an honorific for spiritual masters/teachers.

he funded himself. Upon arriving at the temple we discovered that Thầy Sư GN is not there; he left town a few hours prior on undisclosed business. After an early lunch and some discussion, one of the monks led us through the temple to the vegetable gardens (where they grew an assortment crops such as jackfruit, durian, and leafy greens), then to a separate plot of land dedicated to *Aquilaria*. The trees here were large, most being ten years of age or more.



Figure 20. At Thầy Sư GN's Aquilaria cultivation plots. Photo taken by author, 2012.



Figure 21. Some of Thầy Sư GN's trees are co-planted with other crops, such as black pepper (far left trees). Photo taken by author, 2012.



Figure 22. The would-be *Aquilaria* growers listen on as one of the temple's attending monks explain their cultivation process. Photo taken by author, 2012.

It is at this point that I discover why we traveled all this way with a couple of retired professors. We were taken to a nursery, where hundreds of *Aquilaria* saplings were neatly arranged. The professors came here to buy into a new venture. They purchased dozens of saplings, packing the trunk and all available floor space of the car, each in a plastic container. We thanked the monks and set out for the road again. My legs were drawn up onto the seat the whole way, so as to avoid crushing the little plants underfoot.



Figure 23. Aquilaria saplings at Thầy Sư GN's temple. Photo taken by author, 2012.

On the drive home, I discovered the professors have their own plots of land in Khánh Hòa Province and were considering *Aquilaria* as a new investment venture. Why? I asked. They tell me they heard so much about it, that it seemed like the next big thing. They were considering establishing both a small plantation on their lands as well as "công viên sinh thái, ha một khu du lịch sinh thái" (an "eco-park", or an "ecotourist" area), which would prominently feature agarwood and Aquilaria trees, in accordance with Khánh Hòa's reputation. The saplings purchased were for initial trials, they said, to see how the plants would fare on their land.

* * *

Agarwood products are traded and sold very openly in specialty stores and markets with no indication of permits or certifications, and it appears that the CITES legislation has little influence in day-to-day life, at least within Việt Nam. Some small-scale traders I had spoken with briefly were not even aware of the restrictions, or were only aware in a vague sense; that is, they knew some kind of restrictions existed, but they did not know what the restrictions entailed and did not seem particularly bothered by it. Farmers had little to say to me regarding rules and regulations. Few showed any concern at all, and those who did only spoke upon it briefly when questioned or prompted. Aside from broad-stroke comments such as "There is very little left in the wild and what remains should be protected," "It is important to protect what forest remains," and "the permit systems are difficult," the matter was not discussed at length with anyone in my acquaintance aside from one farmer. However, this individual came into the agarwood business via other, separate projects specifically on trade and conservation, so his case was rather exceptional. Farmers and traders did seem to genuinely believe that the dwindling wild population was a major concern and that something should be done about it, but they either expressed that they did not feel there was much concrete action that could be taken, or that such actions were not within their sphere of business. Even when I posed further questions regarding regulations to farmers and traders, responses were short and perfunctory. For example, in one exchange, a farmer/trader responded to me thusly:

How do you deal with the rules and laws surrounding trade? Farmer/trader: "It is very difficult to handle and understand."²¹

What do you think will happen to the agarwood industry in the future? What are your thoughts on long-term sustainability?

Farmer/trader: "There is still some natural product out there, but very, very little. The demand will still rise. I didn't think much about it in the beginning. It's an important issue now for future generations, so is protection."

What do you think should be done [by those in the industry and by the government]? What sort of aid would you like to have in handling the difficulties in the cultivation and export process?

²¹ A response that is vague enough to mean anything from "It is a lot of work, but we manage it eventually," to "We try and have a very hard time with it and do what we can," to "It is too much of a mess to even try, so we don't."

Farmer/Trader: "There should be more **oversight**, **regulation**, **and structure**. The government should provide more support in research and increasing the quality of cultivated products. They should provide more technical expertise in the growing process [and biology] and the export process."

(emphasis added)

Việt Nam's Agarwood Trade and Regulatory Resistance

The issue of oversight, regulation, and structure is a complicated one; compliance with rules and regulations, both domestic and international, amongst the general populace in Việt Nam is sometimes patchy at best. In terms of the environment, Việt Nam has been an eager participant in a wide range of international regulatory programs and policies for quite some time now. McElwee (2016) traces it back to the colonial era, with the implementation of forestry policies imported from France. Việt Nam became a party to CITES in 1994, and as previously mentioned, was the site for the earliest agarwood cultivation program funded by the European Commission.²² In recent years, Việt Nam was part of the first group of nine nations to implement REDD+ pilot projects among forestry certification programs (beginning in 2009). Regardless of the degree of success these programs may have, participation in these large,

multilateral/international programs contributes to state-building efforts, the goal being to bring Việt Nam more in line with international standards, solidifying Việt Nam's international relations and standing, and legitimating a space in the international order. However, there is also a long history of conflict and resistance towards overarching, institutional rule in Việt Nam, and the current context of CITES, international trade in environmental goods and services, and environmental policies/environmental rule continues the tradition. Different actors circumvent, challenge, resist, or slip through the legislative and regulatory structures in various ways.

²² The program became The Rainforest Project, which began planning in 1993 and was established in 1995.

The most obvious route of resistance to regulatory structures was described above: simply ignoring it. Rules and laws in some ways are a low, background hum in day to day life in Việt Nam: present, heard, and noticeable, but not necessarily interfering or influence actions and behaviors unless there is immediate cause; for example, if something might be damaged or someone might get hurt. This is a sentiment in many aspects of life and not only in terms of the environment. Many laws are known by citizens, but may not necessarily be followed or taken seriously.²³ Extraction of agarwood from the wild is illegal, but occurs on a fairly regular basis. This is well-known and openly discussed without much issue. Enforcement of this law seems to be uneven at best. The considerable cost of obtaining permits, both in terms of time and money, places a significant burden on agarwood growers.²⁴ Thus, for seekers and dealers, ignoring the regulations might not be considered terribly risky or unusual, especially given the potential rewards of agarwood. News reports spring up periodically in major state-owned papers such as Thanh Niên and Tuổi Trẻ,²⁵ detailing rumors, high-value finds, and skirmishes between agarwood seekers and organized crime elements.

From around 2011 to 2012, for example, a concentrated "boom" occurred and several groups searching in Quang Nam Province (in central Việt Nam) found substantial amounts of agarwood, which were reported in multiple local and national news outlets. One article from

²³ One prominent example in daily life: sidewalk sale/consumption of alcohol in Hà Nội is restricted to certain places, but is very widespread. Vendors and customers are quick to respond if law enforcement is around. On several occasions, I had been sitting at a sidewalk café when, suddenly and seemly without warning, bottles, cups, tables, and chairs were quickly packed away. I was extremely confused the first time I experienced this, and a colleague had to explain to me that police were about to sweep the area.

²⁴ For those who do not have the resources to acquire proper permits, or the resources and connections to export illegally, they can often find themselves stuck with product that they cannot move to international markets even though they are farming and not conducting wild extractions, as has been observed with small-scale farmers in Assam and parts of Laos (Harris, 2013).

²⁵ Both widely-circulated papers which publish in both Vietnamese and English, originally founded by political youth organizations in Việt Nam.

Thanh Niên in 2011 detailed how a discovery made one search group millionaires six years prior to this small "boom" (TN News, 2011). The group had been on an agarwood expedition for more than 20 days at that point. One young man named Đoàn Thanh Tài dug around an *Aquilaria* tree that appeared to have no agarwood, but continued to dig down around the trunk anyway. Eventually he realized that not only did it contain the resin, but a substantial amount, and his group spent six days digging up the tree. After bringing it out of the forest, the group sold the tree to a mystery trader only called "Tu" for approximately USD \$1.16 million (TN News, 2011). Doàn Thanh Tài later used some of his portion of the funds to search for agarwood in neighboring Cambodia, stating "There we hired local people to lead us to mountains. Besides the salary, every day we paid them VND100,000 (\$4.82). Everyone was happy! **Hundreds** of Vietnamese hunters were also invited to Cambodia to explore forests" (emphasis added) (TN News, 2011).

The article states that Tài's discovery is "the stuff of legend," quoting him, "The money was like tree leaves in the forest" (TN News, 2011). This find sent people flocking to the forests of the region over the next several years. Other groups in Quang Nam made discoveries of varying worth, from \$4,000-5,000 USD to bounties of more than \$1 million USD, and while there have been several stories of fortune, many more are of injury and even death from floods, disease, rock slides, organized crime rings, and thieves (TN News, 2011, 2013; Tuoi Tre News, 2011b; Xuan, 2017). Several local officials were interviewed in the article giving their perspective, one stating the finds were not necessarily a good thing, as "the village didn't get any benefit. They [the agarwood seekers] left the village and came back when they had no more money;" on the other hand, another official from a different village stated "When locals found Calambac, I was happy, because they also did many things in public interest," such as building

roads for the community (TN News, 2011). Other stories tell of fortunes found in Gai Lai Province (in the Central Highlands), sometimes after long, arduous searches, sometimes supposedly by divine providence of local goddesses giving visions leading the lucky chosen to the right spots (Tuoi Tre News, 2011a).

Again, note that the extraction and trade of wild-harvested agarwood is banned in Việt Nam, and is restricted/monitored or banned in most of Asia. Yet stories like these are reported in official state news outlets, containing interviews with any number of local people's committee officials or foresters. It is openly reported that Vietnamese nationals search across borders in Thailand, Cambodia, Laos, or Malaysia, buying and selling in Taiwan, China, Singapore, and other places (ex., Zulkiffli, 2016). In most articles and reports in various news outlets in Việt Nam as well as outside, there is little to no mention that the practice is technically banned in the country, or that trade is restricted by international agreement.

Forestry and local law enforcement officials in Việt Nam have been known to take bribes for allowing agarwood seekers into an area and permitting them to remove any product they find. Bribes can be in the form of straight cash, a percentage of the profits when the product is sold, or a certain portion of the product itself. This bribe is easier, faster by orders of magnitude, and most likely cheaper than attempting to acquire proper permits ("Personal Interview: Agarwood Farmers in Đồng Nai Province," 2012). This practice is well-known for wildlife smuggling in general as well as illegal logging, and few people are prosecuted relative to its frequency. When someone is charged for illegal harvesting, it is usually the seekers themselves.

There are rare occasions though when officials are taken to court. For example, in 2012, a district police chief in Khánh Hòa province was charged with illegally possessing 1.5 kilograms of agarwood that had an estimated worth of approximately \$453,000 USD. Three of his

subordinates were also convicted. In this case, officers were originally dispatched to stop the literal thousands who "rushed to a forest in Khanh Son District to search for calambac, or agarwood... following rumors that a man had earned a lot of money after selling some agarwood pieces he found there" (Thanh Nien News, 2015). Agarwood hunters filed complaints to provincial authorities, stating that local officials had allowed some of them "to enter the forest on the condition that they all shared the money" (Thanh Nien News, 2015). In 2015 the police chief was convicted and sentenced to nine years in prison. The conviction was not for the selling of agarwood specifically, but for "consuming stolen property," as the agarwood had been seized by the police from illegal loggers. The police chief's subordinates who participated in the seizure and sale were found guilty of "abusing of power," and a local resident was also convicted of collusion. The conviction was a rare one, and the community was surprised it even happened. Arrests of Vietnamese nationals in other nations, such as Thailand, Cambodia, Malaysia, and Indonesia, illegally harvesting agarwood seem much more common (ex., Singh, 2014; "Vietnamese caught in Sukhothai with mai hom," 2015; "Vietnamese gang nabbed for cutting down 'gaharu,'" 2014; Zulkiffli, 2016).

Compounding the difficulties in oversight, regulation, and structure is the fact that local authorities may or may not be trained or up to speed on current policies. Indeed, some authorities may not have much experience in environmental legislation or related fields (forestry, ecology, etc.) at all. When speaking to Chú D (a friend's uncle who works in the Forestry Department), he complained that very few people working in wildlife management and the forestry department did because they "yêu nghề" (love the profession). Chú D, who was in his early 50s, had worked for the forestry department for most of his adult life, and from his perspective, very few people take the job seriously. For most, it was frequently a position they "fell" into: perhaps a relative

already worked there, or they knew a friend of a relative who knew someone who knew someone, and the opportunity was presented for a government position with low pay but relatively good job security and they took it, regardless of whether they knew much about wildlife smuggling and forestry or not. Some might make the effort to learn "on the job," but Chú D made it sound like these types were few and far between. This has changed a little in recent years, according to Chú D, as university programs specializing in forestry have grown and provided more standardized training to students who seem more enthusiastic. Campaigns by university groups and environmental NGOs have also increased general awareness on forestry management. Still, for the most part, Chú D spoke of their operations as being largely permissive and frequently clueless. Many laws and decrees are not enforced simply because the enforcers are unaware of them entirely, or do not feel they are important enough.

What is the incentive for growers and traders to acquire licenses? Simply doing the "right thing?" To be "law-abiding?" The considerable costs, both in terms of time and money, places a significant burden on those involved in the trade. For single person or single family operations, what are their options for following protocol and what is the appeal? Promises of easier access to certain markets, particularly in the "developed world," and more avenues for marketing a "sustainable" product have not particularly panned out for those who do not already have connections to these markets.

There is very little incentive to follow regulations for three main reasons. First, many of those involved in the trade are not entirely sure what the law entails, and those that do know frequently feel lost or unable to follow through with the complicated and highly bureaucratic process. It is frequently more economical to proceed as usual and bribe if the situation calls for it. Second, there is little enforcement of the law due to indifference or lack of awareness, and

even those tasked with enforcement are frequently perpetrators of breaking the law. Third, related to the lack of enforcement, the regulations seems to have no real impact on the day-today operations for most (not all, but most) traders and growers. Trade of agarwood happens openly and obviously, and I never, not once, witnessed anyone, government official or otherwise, ask a seller if they had a permit to sell agarwood. From what I gathered in my conversations, the situation is different for seekers: *some* forested areas are protected and monitored by local forestry departments. It is usually very thin and scant monitoring, but the risk of getting caught still exists. However, again, bribing in the event one is caught by a low-level forest ranger is usually more economical and, frankly, a very normal practice, whether or not one is even doing something that is illegal. While I cannot speak directly to bribing officials to harvest and trade agarwood without a permit, in my experience in other situations, bribes do not necessarily have to be in large amounts. Low-level government employees are paid very little and regular bribes in small amounts are a supplement to their income.

On the other hand, there is a *disincentive* to trading and harvesting agarwood in the "legitimate" way. The process is lengthy (and possibly might not even happen unless you bribe someone) and difficult to understand unless one has had experience with or education in the regulations. It is burdensome in terms of time and money and there appears to be no real advantage to having a permit. The vast majority of agarwood traders, growers, and seekers do not have permits and they have been able to operate just fine through "unofficial" channels, selling locally, regionally, and in some cases, internationally, with relatively few obstacles (see Chapter 3).

Conclusion

The domestic "homeland" scentscape reflects Việt Nam's history and understandings of nature. Agarwood has a long legacy in Việt Nam; it encompasses deeply embedded spiritual meanings and a wide range of consumption practices, from the daily and mundane to the highly ritualized. Today, changing lifestyles, livelihoods, regulatory structures, and understandings of naturalness and purity have shaped the local scentscape. While agarwood has deep spiritual meaning, these meanings are shifting, changing, and expanding. In addition to long-held religious applications of agarwood use in pursuit of spiritual purity and cleanliness, domestic consumers are also increasingly using agarwood as a reflection of ideals of *bodily* purity and cleanliness. This has altered the commodity network and enabled agarwood product types to proliferate, with items ranging from "clean" and "chemical-free" incense, to agarwood herbal teas, to the generic incense sticks that have been used in temples for hundreds of years. These changes in the scentscape disrupt the notion of a single, standard commodity network.

The means of production for agarwood are increasingly shifting from wild extraction to cultivation. Việt Nam's varied consumption practices make "room" for many types/grades of product and many nodes of entry into the commodity network for diverse types of producers. Harvesting from the wild is still conducted, though less and less for domestic consumption. Most wild-harvested agarwood is destined for the export market, which is detailed in the next chapter.

<u>CHAPTER 3. THE SCENTSCAPE OF THE TRADITIONAL EXPORT</u> <u>MARKETS: THE MIDDLE EAST AND EAST ASIA</u>

Introduction

This chapter focuses on the scentscapes of the largest agarwood markets both currently and historically: the Middle East and East Asia regions (in this context, "East Asia" refers primarily to China and Japan). I first detail the means of acquisition, consumption practices, and evaluations of cultivated versus wild products in these markets ("The Consumer Side: Acquisition and Use"). I then connect these consumer perspectives to the processes and practices of production in Southeast Asia, with a focus on Việt Nam, Thailand, and Laos (The Supply Side: Sourcing and Making Agarwood").

The role of agarwood as a marker of wealth and power has been constant since its beginnings as a traded commodity. I trace the paths of extraction and export, historically facilitated by the spread of Islam and Buddhism. While the general direction of these paths is known (from agarwood's source regions to regions westward and northward), much of the specific movements through religious and/or historic social relations remain obscure. This path moves from less wealthy source nations to wealthier consumer nations. It is a loose pattern that is echoed at the regional level, as more wealthy nations in Southeast Asia extract from less wealthy (and less closely regulated) nations. By following these paths of extraction, I show a scentscape embodying the relationship between fragrance, ritual, tradition, and wealth/power.

The Consumer Side: Acquisition and Use

The traffic in the heart of Bangkok moves at a pace that is so slow, it is barely perceptible. Unlike Sài Gòn, with its overflowing streams of countless motorbikes, the primary mode of individual transport in Bangkok appears to be the automobile. Practically stationary on the road, the cars are partially shaded by the city's elevated mass transit rail system. It takes an age to reach my hotel, and by the time we arrive and I drop my things into my room, I am eager to get out and see the city and its agarwood traders. I meet my travel companions/guides in the lobby: Mr. N,¹ an agarwood grower/seller, and one of his colleagues.

Stepping out of the empty alley where the hotel is located and on the main sidewalks is rather jarring: the walkway is crammed with stalls selling snacks, beverages, cigarettes, random knickknacks and souvenirs, signs and banners in every direction, and an endless parade of people. I scramble to follow my travel companions up to the platform to board the sky train. The train is clean, relatively cheap, and very fast, and we pass through several stops in mere minutes. We disembark at our stop and continue to walk a few blocks. At this point I have lost track of where exactly we are, but we soon reach and turn into long, wide alley (or narrow street) off the main road. This is the agarwood selling district in Bangkok, or what I took to privately calling "Agarwood Alley."

¹ Pseudonym



Figure 24. Soi Arab, Bangkok. Photo by author, 2012.

A few Western brand convenience stores are scattered—a Seven Eleven, a Circle K among Middle Eastern restaurants (Yemeni, Omani, Arabian, etc.), travel agents, and many perfume shops. Most of the storefront signs and neon are written in Arabic. Many of the perfume shops here prominently advertise "oud" (Arabic) or "gaharu" (Indonesian, Malay) with window lettering and banners, and a few have tables out on display with ornate incense burners and glass and porcelain platters. Saudi Arabia and Dubai are agarwood capitals, being the places where the majority of global stocks are shipped and sold. Middle Eastern tourists flock to this area to buy agarwood. This is largely because agarwood sold here, being closer to the sources, cuts out several layers of middlemen and is typically much cheaper than in the Middle East (Osborne, 2014). As a major trading center, Bangkok receives agarwood products from all over Southeast Asia, which allows for a wide spectrum of scent profiles and products to suit the varied tastes of different consumers.

Strolling down the alley, passing groups of men sipping tea and smoking from water pipes, we enter an agarwood shop belonging to a Thai Muslim called Suleiman.² Suleiman and Mr. N have known each other for many years. When I ask how he knows Suleiman, Mr. N replies simply, "I've been around in this industry for a long time," implying that Suleiman is something of an elder statesman in the agarwood trade. Suleiman greets Mr. N with a warm, wide smile and extended arms, clapping him on the shoulder and patting his back as he invites us all to sit. He brings out a Chinese style teapot filled with a strong, bitter brew, and four tiny tea cups. For the next half hour or so, the meeting is purely social: sipping tea, catching up on each other's lives, inquiring about children, parents, and spouses, musing about the changes in their respective home bases. Suleiman speaks with us in an accented, speedy, and clear English.

Eventually the conversation turns to Suleiman's livelihood, agarwood. His shop is small and unassuming, but refined; tidy, no neon signage in the front (unlike the surrounding stores) display cases filled with delicate glassware and all manner of agarwood products, from elaborately cut crystal vials of oils to whole, unprocessed pieces. I quickly gather that the solid agarwood in Suleiman's shop is almost certainly not cultivated; if it is, it is like nothing I have ever seen. Some of the oils however, which are frequently made with lower quality agarwood, are made with cultivated product, Mr. N tells me. Oils are frequently "cut" (diluted) with various inert compounds and blended with other fragrant oils, such as rose.³ The glass case in front me holds pure agarwood chips about the size of guitar picks, but thicker. It is the highest quality

² Pseudonym

³ A very popular, traditional Middle Eastern pairing with agarwood, one of the most "classic" fragrance pairings in Middle Eastern perfumery.

agarwood I have ever seen in person, looking almost like a cross between marble and petrified wood. The chips are polished and dark, streaks of ebony running through lighter browns, so that the tawny, fibrous, non-resin permeated wood is only barely present. I have seen counterfeit products before, and this definitely was not it.



Figure 25. High quality agarwood chips, source unknown. Photo taken by author, 2012.

I am by no means highly trained in discerning agarwood grades and types, but seeing real agarwood makes most counterfeits very easy to discern (though some counterfeits are more convincing than others). They look markedly different, and it surprises me that anyone is fooled at all. Mr. N tells me that many purchasers in today's market "don't really know anything" about agarwood, only that the "good stuff" is rare, expensive, and coveted. Counterfeit products, which frequently are not exactly "fake" so much as they are Aquilaria wood with very small amounts of resin that are further injected with a variety of compounds and heat treated to give the appearance of resin saturation, do not have the quality of light reflection that is obvious on these

chips, a kind of diffused, "fuzzy" glow, shiny even though layers of glass. Suleiman pulls out a handful of chips for us to inspect: they are smooth, beautiful, make a muted, deep tone when knocked against each other, and most importantly, heavy for their size. The resins in good quality agarwood give it a significant heft; the highest grades of agarwood are usually known as "sinking grade" across the world, since when the pieces are completely dry, they will still sink in water from the weight of the resins, unlike normal wood.

Mr. N introduces me, telling him I am a graduate student from the United States interested in agarwood and conservation. Suleiman is kind and polite but is always careful to speak in broad strokes, avoiding detail about anything to do with his product or his work. He states he has been in the trade for a very long time, and from the muted, understated air of his shop, I get the sense that he has the utmost confidence in the quality of his wares, and it is likely his customers do as well. His supply of agarwood comes from all over Southeast Asia; he discusses briefly the differences between his recent acquisitions from Laos, compared to his older pieces from Cambodia and Indonesia, and the various quirks of each. He is something of a fragrance equivalent of a sommelier, with a very finely tuned nose that can discern differences between agarwood types and qualities. How has he learned to do so? Again, his reply is a simple, "I have been in the trade for a very long time." Suleiman is a well-established, well-regarded agarwood dealer, and it is logical that such a businessman in this secretive and highly competitive field would keep his cards close to his chest.

Suleiman is in the middle of telling a story about a recent buyer who offered close to \$100,000 for one of his prized pieces of agarwood when Suleiman's eldest child, Ismael,⁴ enters the store. Suleiman beams at his son and introduces him as the "next in line" for the business.

⁴ Pseudonym

Ismael appears to be in his mid-twenties, dressed in Levi's, Converse Chuck Taylors, a white button-up shirt, and a messenger bag, with partially highlighted, gravity-defying hair, similar to the styles of the myriad K-pop stars that are popular throughout Asia. Suleiman explains that he has been training his son's nose to take over the business and that he is now as much as an expert as his father. I inquire about the learning process, and Ismael states he started as a young boy. It has taken years of smelling, feeling, visually inspecting, listening (to the tones they make when tapped), even tasting (agarwood of different types are said to taste differently and yield differently against the teeth), and just being surrounded by the myriad varieties of agarwood that have passed through his father's store. Understanding agarwood is truly a multisensory experience. He delights in the work, he tells me, finding great joy in the skill and the subtlety of evaluating and consuming agarwood of all kinds: he loves the nuances between oils and smoke, the smooth mellowness of Indonesian, versus the fruitiness of Cambodian, versus the animalic sharpness of Indian agarwood. He expresses appreciation for his father's tenacity in building his business, as it has afforded a good education and comfortable life for his mother, younger sibling, and himself.

Mr. N eventually asks if we could see something special, and Suleiman gives a sly smile, appearing proud to oblige. He goes into a back room and comes out with a locked, deep green box with gold detail. Inside is a solid piece of agarwood cushioned upon rich velvet, about five to six inches in length. Ismael explains it is a relatively recent addition, brought into Bangkok from Laos. Again, Suleiman and Ismael decline to give any detail as to how they came across it. All of the good stuff is coming out of Laos nowadays, they say. Việt Nam has nearly been cleared of wild agarwood, but on top of that, border authorities in Việt Nam have become more scrutinizing. Indonesia and Malaysia are still probably hot spots, but authorities have also been far stricter on wildlife trade violations in the last few years, they say. Laos is something of "wild west," still heavily forested, and with a sense that "no one is paying attention to what's going on" in the more remote pockets of the country. The only other customer in the room, clearly one of Suleiman's trusted and long-time customers as he had been present for most of this conversation, offers nearly \$30,000 for the Lao agarwood on the spot. Suleiman laughs heartily and gently turns down the offer. He'll hang on to it for a while longer, he says. There is really no way he would *not* increase his profits by doing so.



Figure 26. Ismael picks up a very high quality, whole agarwood piece from Laos. Photo by taken by author, 2012.

For the most part I am a passive member of the party, listening to the conversation. Many of Suleiman's customers are from the Middle East, he says; he makes frequent trips there, mostly to Dubai and Saudi Arabia. Though it is not stated directly, it seems clear, from my perspective, that trade and movement through these religious ties is the modus operandi for agarwood, at least from Southeast Asia to the Middle East. All of the shops in the alley are clearly targeted towards Middle Eastern buyers, with signs in Arabic and travel agents advertising cheap flights to the U.A.E. and elsewhere, and most (if not all) of the shop keepers are Muslims, of Thai or other ethnicities.

Understanding Islamic Ties and Thai-Arab Trade Relations

Thailand has a complicated relationship with the Arab world and a complex Islamic history, having roots in several different time periods and coming from several different directions. There are deep historic links between Arab peoples and various Siamese kingdoms, formed through centuries of economic, cultural, and religious interactions. Unlike maritime Southeast Asia, Muslims today are a minority throughout most of mainland Southeast Asia, though they are a significant minority. The majority of Thailand's Muslim population resides in the south and is ethnically Malay. Far southern Thailand, which was once under the domain of Malay Sultanates, has experienced ongoing insurgencies and separatist movements for some time, since at least the 1960s. Islam first came to southern Thailand in the 1200s-1300s as Arab traders made stops to and from other parts of Southeast Asia and China and eventually settled (Yusuf, 2007). In central Thailand, Islam was established not from the south, but by several waves of peoples from other parts of Asia: Shia Persian and Sunni Indian traders throughout the 1400s, Cham Muslims after the collapse of the Champa Kingdom (present-day Cambodia and central Việt Nam) in 1491, and Indonesian Muslim refugees after the Dutch conquered Makassar in the mid-1600s (Yusuf, 2007). These groups settled primarily in Ayutthaya (established 1350, destroyed in 1767 by the Burmese), a Siamese kingdom encompassing most of central Thailand, including present-day Bangkok, and at one point part of southern Thailand.

Ayutthaya was one of the largest and most cosmopolitan centers of commerce and diplomacy in the world and had a strong reputation of being welcoming to foreign traders from all over the Eurasian continent, from the Dutch to the Japanese. The Muslim population became fairly integrated with the kingdom, as rulers increasingly appointed Muslims in governmental positions all along important trade routes in an attempt to stave off Dutch economic expansion throughout the late 1600s and into the 1700s (Forbes, 1982). There have also been several smaller influxes of Malay Muslims to central Thailand at various points over the centuries, as Siamese rulers fought insurgencies in the south and periodically relocated captured groups to serve as labor (Ardrugsa, 2014). Finally, Islam came to northern Thailand in the late 1800s via a wave of Indian and Bengali Muslims, in addition to Haw Chinese Muslims from Yunnan after a Muslim rebellion was repressed under the Qing Empire (Forbes, 1982; Yusuf, 2007). The Chinese Muslim population in northern Thailand increased significantly after the Communist revolution in China in the 1950s (Forbes, 1982).

Formal diplomatic relations were not established between the modern states of Saudi Arabia and Thailand until 1957. Subsequently, hundreds of thousands of Thais migrated to Saudi Arabia to work, mainly as manual labor and domestic servants. Relations between the two nations were generally quite smooth and cordial until 1989, when what was later termed the "Blue Diamond Affair" occurred in Saudi Arabia.⁵ The incident deeply damaged Thai-Saudi relations. Even so, in my time in "Agarwood Alley," it was obvious that some Saudis (as well as

⁵ A janitor from northern Thailand working in the home of Prince Faisal bin Fahd in Riyadh broke into a safe and stole nearly 100 kg of jewelry, shipping it to Thailand. The Royal Thai Police launched an investigation and subsequently arrested the thief. They returned the jewels, but Saudi authorities later discovered the returned jewels were mostly fake, and a coveted blue diamond from the collection remained missing. At the same time, three Saudi diplomats were shot and killed in two separate attacks in Bangkok. A mere two days later, a businessman well-acquainted with the Saudi royal family was also killed in Bangkok while he was investigating. Saudi Arabia subsequently instituted a temporary travel ban to Thailand and ceased issuing work visas to Thais. The case remains unsolved today, despite very strong and persistent pressure from the Saudi state.

others from the Middle East) are still visiting Thailand. Though they are not visiting at the same levels as before the Blue Diamond Affair (Toumi, 2013), Thailand today remains a common tourist destination for those in the Middle East.⁶ Saudi labor recruiters had begun to congregate in a specific spot in Bangkok the early 1980s, and this eventually became Bangkok's Arab (and later, more generally "Middle Eastern") quarter, or "Soi Arab."⁷ Soi Arab houses businesses catering to all sorts of visitors and expats from primarily the Middle East, but also serves as a meeting point for African tourists as well as some of the local Thai Muslim population. I learned after my trip that Soi Arab was what I had been thinking of as "Agarwood Alley," a place understood to be something of a pan-Islamic meeting space and the center for "conservative Islamic culture" in Bangkok (Wrisley, 2009).

Obviously, Muslims in Thailand are very diverse, with a multitude of histories and origins. Muslims in Bangkok specifically have a wide range of backgrounds and with varying relationships with the Arab world, some having deep roots in the city, others recent migrants, and descended from Arabs, Persians, Malays, Indians, Chinese, Thais and other ethnicities who converted. Suleiman's shared Islamic faith is an advantage, connecting him with his Arabic customers on a personal level (especially as diplomatic relations with Saudi Arabia remain sour).⁸ To call Suleiman a "Thai Muslim" is possibly something of a misnomer. He is of Thai nationality, but I am unsure if he is ethnically Thai; there is a high possibility that he is of Malay

⁶ Thailand's enduring popularity as a tourist destination is in part because other popular Saudi tourist spots have experienced greater bouts of political upheaval in recent years (Toumi, 2013).

⁷ "Soi" is the Thai term for side streets that branch off from major thoroughfares.

⁸ Though I did not inquire about Suleiman's particular form of religious practice, most Muslims in Thailand are broadly Sunni, which is also the branch of Islam practiced in Saudi Arabia.

or South Asian heritage.⁹ Suleiman's shop does brisk business. He seems to be well-known and well-liked in the neighborhood, evidenced by his periodic wave and smile in response to greetings from people passing his shop.

Suleiman's high-end product, like most high-end agarwood products in general, does not go to local consumers. It goes to tourists and consumers abroad, though how specifically Suleiman sells his products abroad, he would not say, aside from mentioning he made frequent trips to the Middle East personally. It is possible he has partnerships with other traders there, or perhaps has a roster of private customers that he communicates with directly. How he transports his product without the proper paperwork and licenses was not elaborated upon. I suspect he does what I am told (by Mr. N) that many other traders do, which is pay off customs officials, both in Thailand and his destinations, and simply brings items through in his personal luggage. An agarwood dealer in a documentary by Al Jazeera confirmed this as a common means of transport (Al Jazeera, 2016). Bangkok is a major point of trade, bringing in agarwood from throughout Southeast Asia, and re-selling it to consumers from all over, but mostly in the Middle East, China, and Japan—the primary consumer markets for agarwood, both historically and today.

Consumption

Consumption of agarwood in the Middle East and East Asia today continues to be a marker of distinction and taste. Demand spiked sharply in the 1970s, as the oil crisis increased the purchasing power of many consumers in the Middle East and the wars in Southeast Asia came to an end. Demand spiked again after the liberalization of markets in China, which led to an expansion of the upper-middle and upper classes. With the growing wealth in China came

⁹ I did not inquire, as I did not wish to pry into what can be a sensitive issue, due to the aforementioned history of friction between the state and Malay Muslims.

initiatives among the populace to redevelop parts of the cultural identity that were lost during the Cultural Revolution. The move to revive artistic practices and arts appreciation led to a refocus on incense consumption (Jung, 2013). Because much of the local practices were lost, Japan and (rather surprisingly) Taiwan have had strong influences on current agarwood consumption trends in China (Jung, 2013). Agarwood can be purchased throughout China (the southernmost regions bordering Việt Nam are actually part of *Aquilaria*'s range, though the trees are rare there). However, as the country's newly wealthy travel with increasing frequency, more and more consumers have been buying directly from source countries and bring products back (Mr. N, 2012).

Though high-grade wild agarwood remains in demand, there is recognition by consumers in the Middle East and East Asia that cultivated agarwood is a necessary and growing part of the market. High quality, naturally occurring agarwood is difficult to find today, and costs have skyrocketed. Recent sales of pieces less than 20 kilograms have gone for hundreds of thousands of dollars, and in one case, a Buddhist monastery in Thailand with a whole agarwood tree (with resins visible even on the surface, and currently under armed military guard) was supposedly offered \$23 million USD by a Japanese buyer (Al Jazeera, 2016). Even moderate quality, naturally occurring agarwood is increasingly difficult to find. This has led to increased promotion and use of cultivated product and synthetics by fragrance makers to meet international demand. Major Middle Eastern perfume firms such as Ajmal began cultivation decades ago, and blended perfumes and incense products throughout the Middle East and East Asia today use farmed agarwood or synthetic replacements fairly extensively. Many consumers have accepted it over the years, and some consumers are actively choosing farmed products specifically for environmental reasons (Al Jazeera, 2016).

Xinhua News, the largest state-owned press agency of the People's Republic of China, has published several pieces on the growth in agarwood consumption among China's wealthy. One feature article from 2016 titled "Chinese tourists with deep pockets increasingly spurring Viêt Nam's economy" noted how agarwood was a draw for Chinese tourists along Viêt Nam's coast (Tao & Dong, 2016). Khánh Hòa Province has deep historic ties to agarwood (see Chapter 2), but in recent years¹⁰ this aspect has been increasingly marketed with greater and greater emphasis on upscale consumers. Agarwood boutiques targeting wealthy tourists have proliferated, with signs and price tags in Chinese; Xinhua reported, "it is easy to catch sight of dozens of Chinese tourists shopping at agarwood handicraft production bases or showrooms" (Tao & Dong, 2016). Even when tourists are up-charged for goods,¹¹ purchasing agarwood in Việt Nam is cost effective. One tourist quoted in the piece stated that she disliked the "dualpricing," "However, agarwood products here are very good and less expensive than in China," running from approximately \$70 USD to nearly \$1,800 USD per kilogram of raw product (Tao & Dong, 2016). Similarly, consumers from the Middle East will often buy products closer to the source, like on Soi Arab, while traveling in Southeast Asia.

Some Japanese firms, such as Baieido and Shoyeido, continue to seek out the best of the finest agarwood from the wild, which for them, is kyara. Over the course of my fieldwork, I was told second-hand stories by every agarwood grower I encountered that Japanese incense firms have agents throughout Việt Nam, in the major cities and "scouting" along the forest edges. No one I knew had ever met them first-hand, though I was inclined to believe these stories given the popularity of kyara in the Japanese market. Though there is no consensus on what precisely

¹⁰ In the last 5-10 years.

¹¹ Charged a greater price than local Vietnamese, which is a common practice despite this being technically illegal.

constitutes kyara and there is debate over whether the grade of kyara must necessarily be characterized by region, Japanese incense makers insist that true kyara only comes from Việt Nam. Some other incense makers claim that it can come from anywhere as long as the resin content fits a similar density and scent profile, and some question whether or not kyara or kynam even truly exists, at least in contemporary times (discussions happen on the myriad oud-related forums, ex., Rai Munir, 2017). Still, others tell tales of experiencing the burning of a tiny chip of kyara/ky nam hand, and it being a transformative experience unlike anything else in the world (for example, the reviews for Royal Guallam [ky nam] at Ensar, n.d.-a). One well-established agarwood dealer, known only as Ensar, sells what he claims to be Vietnamese ky nam for \$695 per half gram (approx. 0.02 ounces) (Ensar, n.d.-b).

Whatever the true nature of kyara/ky nam is, the Japanese market for it is clearly for serious buyers/consumers. For example, Shoyeido's U.S. online shop sells 0.04 ounces (approx. 1.13 grams) of kyara for \$1,595 USD, while Baieido's Japanese online shop lists a 25 gram (approx. 0.88 ounces) whole piece for 2,160,000 yen (\$19,029.49 USD).



Figure 27. Screen capture of the listing for kyara on Shoyeido's English-language online outlet. (Shoyeido, n.d.).

★店頭引き渡しのみ★ベトナム産 伽羅木 25g 《現品限り》



Figure 28. Screen capture of listing for kyara on Kokurodo, Baieido's online outlet. ("Online Shop Kokurodo," n.d.).

Though agarwood consumption and appreciation in-country remains robust, Japanese agarwood incense firms have been increasingly marketing to consumers abroad. Konaka Masayoshi, the president of firm Nippon Kodo, a major incense company which has an incense factory in Việt Nam, stated, "more and more people around the world are coming to appreciate Japanese incense for its delicate and subtle aromas. With the Japanese market beginning to contract as the population shrinks, we are looking to expand our sales in other markets, and foreign visitors to Japan are an important part of our sales strategy" (Masanori, 2016). Nippon Kodo's greatest demand for kyara today no longer comes from domestic consumers, "but from foreign visitors, especially those from China" (Masanori, 2016).

The Supply Side: Sourcing and Making

Wild Extraction for Export

It is difficult to ascertain and define the various "levels" of operation of actors involved in making agarwood products in Southeast Asia for export to the Middle East and East Asia. The market for agarwood is not really a single market; it includes products as "generic" as cultivated agarwood incense, which can be easily bought on Amazon.com, to highly elusive, mysterious products such as kyara. It contains different consumers with different interests and wants, seeking products that, while they come from a single commodity, the *Aquilaria* (or *Gyrinops*) tree, are wildly varied. Getting "pure" agarwood products (that is, products made from real as opposed to synthetic agarwood) from tree to shop involves a complex, nebulous, largely obscured web of trade routes, harvesters, growers, manufacturers, middlemen, and end sellers operating are different scales (Antonopoulou, Compton, Perry, & Al-Mubarak, 2010; Barden, Anak, Mulliken, & Song, 2000; Compton & Ishihara, 2004). Historically, these actors were mostly distantly connected or isolated from each other: harvesters and growers were not well-informed on the practices of middlemen, processors, and perfumers, and processors and perfumers were frequently aware in only the vaguest sense of where the raw material came from or how it was found (Barden et al., 2000).

In some cases a few, or all, of these roles are played by a single, relatively large entity, or a single small-scale independent "artisan" agarwood dealer.¹² In general though, middlemen, as those literally in the middle of the web going from forest to market, are perhaps more knowledgeable about the wider network. For example, Suleiman (a middleman trader) and Mr. N (both a farmer and middleman, though he currently no longer deals in wild agarwood) noted to me that much of the high-grade product now found for sale in the shops of Thailand and Việt Nam are from neither country, but extracted from Laos, areas along the Lao border, or (to a lesser extent) more remote areas of northeast India and northern Burma and brought to larger

¹² This is occurring with increased frequency now; that is, while the overarching network as a whole is still diffuse and mostly undocumented, there are more and more "pockets" forming wherein a single party or firm is overseeing the process from beginnings in South and Southeast Asia to end in their own boutiques or online outlets.

markets. How exactly it gets from source to shop is murky, and traders wish to keep it that way. According to Mr. N and other agarwood growers and traders I spoke with, the uncertainty around wild stocks can be advantageous, since the rarer it is, the higher the going price, and traders like Suleiman are in a good position to hold on to products and wait for increases in market value. This falls in line with reports that showed that much of what is marketed as "kyara" in re-export cities such as Singapore is not actually sourced from Việt Nam (Compton & Ishihara, 2004). It also corresponds with another study which found that the majority of high-value agarwood extraction conducted in Laos is done by Vietnamese foreigners, who have better connections to international markets, greater resources to invest in longer/larger search expeditions, and greater capacity to stockpile product than Lao nationals (Jensen & Meilby, 2010).¹³

Across the border in Cambodia, there is evidence of foreign extraction as well. While perusing the outdoor market stalls in Siem Reap, I came across a selection of (non-agarwood) incense and prayer beads. The vendor began speaking to me in Vietnamese, though at that point I had not spoken to anyone (in Vietnamese or otherwise) and gave no indication of being Vietnamese myself. She inquired, "Kiếm gì, chị?" ("What are you looking for, sister/friend?"). While I was aware that there is a well-established Vietnamese minority in Cambodia,¹⁴ I did not expect such an encounter and was caught off-guard. When I inquired if she had any agarwood products, she gave a knowing smirk that said, "Of course, who do you think I am?" Once again,

¹³ Commercial harvesting in Laos began around 1976 (just after the end of the Việt Nam War and as international demand for agarwood was growing) and was initially done by Vietnamese veterans who had extensively explored/lived in the bordering Lao forests during the war. The difference in earnings is substantial: the returns of Vietnamese harvesters were found to be as much as three times greater than that of local Lao harvesters (Jensen & Meilby, 2010).

¹⁴ One example: one of the floating villages on Tonle Sap that is a common stop on guided tours is actually a Vietnamese village.
the vendor pulled out a selection of products from beneath a locked counter: beaded bracelets and various kinds of incense cones.

The bracelets appeared to be treated Aquilaria wood with very little resin and only a faint fragrance. The incense however was quite pleasant. I had purchased a small satchel of six cones and burned one upon my return to Việt Nam and found it earthy, woody, with a slight fruity sweetness and bitter antiseptic edge; real agarwood to my nose, at least in part, and of decent quality. When I asked the vendor where she acquired her products, she was unsurprisingly vague, merely stating "chỗ này chỗ kia" ("different places/here and there") with a wave of her hand. She was more willing to discuss the agarwood trade in Siem Reap in general. As in Laos, a significant portion of the agarwood trade in Cambodia is conducted by ethnic Vietnamese. She stated, "chỗ nào cũng có mình," "we are everywhere. That is, "we,"¹⁵ Vietnamese people, were all over the agarwood trade in Southeast Asia. This correlated with anecdotes shared with me by agarwood growers as well as periodic reports from Malaysian, Indonesian, Cambodian, etc. news outlets of Vietnamese nationals being arrested for smuggling agarwood. These cross-border extractions are typically well-organized, high-investment expeditions consisting of larger hunting parties that will often extract other high-value forest products at the same time (Al Jazeera, 2016; Jensen & Meilby, 2010). These products are brought to international markets to be sold primarily to consumers from the Middle East and East Asia.

Shifts Toward Cultivated Products

Outside of the realm of high-end, luxury agarwood products, cultivated agarwood is quite prominent in the Middle East and East Asian markets. Though it will likely never reach the

¹⁵ The vendor did not say người Việt," or Vietnamese people, but used the word "mình" specifically, a more casual form of "we" that was inclusive of her and myself. This framed us more as peers or friends in conversation rather than vendor and customer or foreigner/tourist and local. This is in contrast to generalized or formal forms of we, "chúng tôi" or "chúng ta."

exalted status of high-grade wild agarwood, the scent complexity of some cultivated agarwood has been increasing over the last decade or so and has become more and more acceptable to some connoisseurs (Al Jazeera, 2016; Ligaya, 2011). Nabeel Adam Ali, from UAE fragrance company Swiss Arabian Perfumes, has stated that research in synthetics and cultivation has reached the point where "What we have been able to do is to get a good, close enough, chemical product which, if mixed with the natural product, gives a good compound and good perfume" (Ligaya, 2011). Cultivating agarwood and artificially inducing resin production at a large scale is a costly affair; funds are needed to purchase or maintain plantations, purchase compounds to inject into trees for resin production or alternatively, develop them in-house, and monitor the resin development process. Thus, the growing prominence in artificial cultivation, especially for foreign export, favors large firms that already have the significant capital and connections to international markets.

Different actors, from private companies to national governments such as Malaysia, have conducted studies independently on cultivation and resin induction methods, but findings are proprietary and often patented, with some kind of licensing mechanism associated with the patent. The small-scale farmers I met used third-party resin induction tools and compounds (which they did not know the composition of). The precise means and methods for resin induction used on larger farms are usually closely held secrets; though I met a few, no large-scale agarwood growers/exporters in Việt Nam allowed me onto their plantations, and only one agreed to speak with me for longer than 10 minutes. Though the agarwood growers and sellers I met were nearly all men, Cô C^{16} was one of the biggest, if not the biggest, agarwood grower and seller based in Sai Gon and was the sole woman agarwood exporter I knew of. It was not stated

¹⁶ "Aunt" C; "cô" indicating a woman roughly the same age as my parents.

explicitly, but in my brief conversations with her, it was apparent that she and/or her husband comes from a connected family, since she stated she was able to acquire access to fairly large tracts of land for growing agarwood in the early 1990s.¹⁷ She was an early adapter to agarwood cultivation; at the time she started, very few in Việt Nam were engaging in systematic agarwood cultivation, and everything she had built up to this point—her plantations, growing methods, choice of agarwood resin induction technologies, relationships with purchasers abroad (primarily in China)—was a product of her own work and trial-and-error experimentation, with little or no help from other growers.¹⁸

Large firms based in both Asia and the Middle East have been increasingly investing in plantation-style plots to cultivate agarwood. Some of these firms, like Ajmal, are more or less vertically integrated, and have been "self-contained" for some time now, even before agarwood came under regulation.¹⁹ Ajmal currently owns large tracts of land throughout South and Southeast Asia, have their own in-house chemists, biologists, purchasers (for naturally occurring agarwood, which they still deal in), and perfumers, their own distilleries, stand-alone boutiques and 135 international retail outlets selling their products. The firm is said to dominate whole areas of northeastern India and parts of Cambodia, with large tracts of land used to grow agarwood closed off to outsiders and contracts with agarwood seekers in addition (Harris, 2013b, 2013a). They advertise and promote throughout the Arab nations. Though their operations are fairly enclosed, members of the Ajmal family do interviews with the press, even American press, on occasion. In 2011, Abdulla Ajmal, then general manager, was quoted in the New York Times:

¹⁷ She stated that the area was previously sparsely populated and residents were moved, not employed by her business, which is not an easy task without connections to the state.

¹⁸ Though she is a member of the local agarwood trade association, she stated that she finds it more or less useless.

¹⁹ The Ajmal family has supposedly been involved in the agarwood trade for generations, though the company was not established until 1951.

Mr. Ajmal estimates that roughly 20 years ago, a kilogram, or 2.2 pounds, of high-quality "e-grade" oud — the entry-level grade among the best oud quality grades — would cost about 1,800 dirhams, or \$500. Now, that same amount would cost 12,000 dirhams, he said, a staggering increase in price. "That's what I have seen. Imagine what my father has seen," he said. "If my grandfather was alive and he saw this quality of oud and the prices they are selling for, he would be appalled. Because he never even traded in these qualities that we are trading in." (Ligaya, 2011)

Note that this grading system is not universal. While "e-grade" is considered the "bottom of the top" for oud according to Ajmal, I had been told by several agarwood growers and traders that agarwood used to make oil extracts of oud, even those considered e-grade, is of lower quality than agarwood used for high-end incense or in the sale of whole pieces for burning. Speaking generally, incense production with natural materials requires less processing, equipment, and technology (broadly construed) than liquid fragrance production with natural materials, as one is using the raw solids as opposed to extracting a liquid. Incense can take the form of an unadulterated piece of agarwood or agarwood that has been crushed in some way, blended with a binding agent and, optionally, other scents. The term "incense-grade" is often used to differentiate between agarwood intended for solid products versus liquids. Until very recently, fragrant oil or liquid production required distillation or solvent extraction. This typically involves heating the raw material, which can alter, release, or denature some of the volatile compounds that make up the scent. Thus even the gentlest methods of distillation and solvent extraction do not keep the fragrance fully intact, changing the scent profile and composition in ways that, for very "sensitive" or complex scents, is undesirable.

As one *Aquilaria* buyer/seller told me, "You don't want to use the really, really good stuff for distillation. You don't even want to use the really, really good stuff for powders [for incense]." This issue, how to utilize fragrant compounds without heating and denaturing them too significantly (some alteration is inevitable), is one that perfumery at large has struggled with

since the beginning of the practice and is an area of constant research and refinement in the industry. Even in the production of incense, high-end producers take care to keep heat at a minimum in the process. For example, Baieido uses custom-made equipment to "pulverize" the raw material instead of grinding, which produces more friction (and thus more heat) (Oller, n.d.). Today, processes such as supercritical fluid extraction can more adequately handle delicate and/or complex compounds.²⁰ Such methods are relatively new and require specialized equipment that is quite costly. Thus, the newest and arguably best form of extraction is out of reach for all but the most monied parties.

Large Middle Eastern firms like Ajmal and established agarwood dealers like Cô C and Suleiman have long acknowledged the precipitous drop in agarwood supply (Al Jazeera, 2016). Though there is no public documentation as to when firms like Ajmal began investigating mass/industrial-scale cultivation, agarwood traders I spoke with agree that Middle Eastern actors began very early on, long before Western entities began research into cultivation or regulation came into effect (in the 1990s for both cases). Ajmal has over 100 products in their line, ranging from more affordable purely synthetic alternatives, to synthetic-natural blends, to limited amounts of the highest grades of natural oud available. Surprisingly, Mr. Ajmal has stated that trading in the best of the best naturals today is not what it used to be: "'It's not making us money any more... The vast majority of the quantities we sell is on almost marginal, marginal profitability — or they would be called loss leaders. But you have to carry them'" (Ligaya, 2011). Though he does not go into any explanation as to why this is, I presume it is because of the cost involved in finding the material, in bringing it in across a great distance and across many

²⁰ This involves using supercritical carbon dioxide (highly pressurized to enter a liquid state) to draw out aromatic compounds from material. Due to supercritical carbon dioxides's chemical properties, it acts as an excellent solvent in extracting hydrophobic compounds, like those found in agarwood resins: it is nonpolar, has low surface tension, and is low temperature in the liquid state. It is thus able to draw out the aromatic elements while exposing them to almost no heat, and will evaporate in full when returning to atmospheric pressure, leaving no trace of solvent behind.

borders, and the smaller pool of end-users that seek out such high grades. This sentiment however is not universally shared or believed, as evidenced by the continued emphasis on wild agarwood by firms like Baieido and Shoyeido.

Conclusion

Agarwood's association with faith and spirituality led to the formation of an ancient commodity network that crossed the entire Asian continent. Though agarwood consumption is not always done in a spiritual context, these ties to Islam and Buddhism remain vital, as even today, movement of agarwood from Southeast Asia outward to the Middle East and East Asia is still enabled and facilitated by religious ties. In addition to its role in spiritual practices, agarwood has long held an exalted position as a marker of wealth and distinction in the Middle East and East Asia. Its mysterious and distant origins (relative to these major consumer markets), rarity, cost, and effort involved in bringing agarwood across long distances lent itself to exoticization and its elevation as a luxury good. The scentscapes of these regions do not actually embody a single market, but many. These markets contain consumers with highly diverse preferences and wants, and this variety of meanings enables a single tree type to spawn a wildly diverse range of products, from blended incense bundles that can be purchased for just a few dollars, to oils and whole chips that run into the hundred and even tens of thousands of dollars. This stands in contrast to traditional commodity networks, which tend to focus on producing standardized goods.

The path of extraction and export reflects complex social relations and a global pattern of movement from lesser wealthy to more wealthy powers/actors. This global pattern is echoed at the regional level, as actors from more wealthy Southeast Asian nations, such as Việt Nam and Thailand, extract or act as middlemen for actors and product sourced from less wealthy nations, such as Laos. Though wild agarwood is still coveted and in high demand, cultivated product is accepted as a necessary reality. Actors engaged in *Aquilaria* cultivation operate at a multitude of scales, from large, multi-national, vertically integrated firms like Ajmal, to established agarwood growers/dealers like Cô C. These cultivation efforts are proliferating, but few of them are engaged in international bodies legislating sustainability. Actors involved in the market for certified, "sustainably produced" product is detailed in the next and final chapter.

<u>CHAPTER 4. THE SCENTSCAPE OF THE NEW MARKET: THE WEST</u> Introduction

While agarwood embodies luxury and spirituality for consumers in the Middle East and East Asia (Chapter 3), for many consumers in the West, it envisions romantic scenes of "charming" Sài Gòn streets and French architecture in conjunction with dreams of sustainable, environmentally-friendly consumption. For agarwood growers on the ground in Việt Nam, the imposition of sustainability frameworks and regulations to support this sustainable consumption lead to a split in production. On one path are those who possess the resources to acquire certain permits and connect with Western "green"-oriented markets. On the other path are those without these resources and connections, who sell agarwood products locally, regionally, or through more obscured or informal channels (as discussed in Chapters 2 and 3). In this chapter, I explore how these "green"-oriented producers supply the fragrance industry in the West, looking at one particular fragrance brand, called Cochine, as a case study.

Both the fragrance industry and sustainability/green economy narratives are underpinned by a kind of yearning to revive an ideal of nature that has passed, been destroyed, or perhaps never truly existed in the first place; a historical fantasy of an "ecological Other" (Arnold, 2000; Bryant & Goodman, 2004). We might see this as an example of what Rosaldo calls imperialist nostalgia, a state wherein "people mourn the passing of what they themselves have transformed. Imperialist nostalgia thus revolves around a paradox: a person kills somebody and then mourns his or her victim" (Rosaldo, 1989, p. 108). The fragrance industry leans heavily on romanticized descriptors and imagery of nature: Edenic gardens, idealized beauty, leisurely and relaxed movements in gorgeous landscapes. The revival of "lost Eden" is meant to occur through the very means by which nature was destroyed: consumption, or rather, *particular ways* of consumption in the fragrance industry.¹ However, this revival falls short of the intended goals. The sustainability and green economy ideas that CITES is based upon do not function as intended; they are tied to traditional notions of commodities and consumption, its regulatory framework mismatched with agarwood's diffuse commodity network and varied cultural valuations and understandings. The consequence of this is that some consumers in the end accept the flawed and questionable notion that consumption will rehabilitate the "lost Eden," which is not usually the case; at best it is a neutral action, at worst, it might possibly contribute to it.

In this chapter, I first introduce the Western fragrance scentscape, beginning in Los Angeles ("Agarwood and the Scentscape of the West"). Then, I consider Cochine as one example of such a scentscape, and trace its agarwood commodity network in Việt Nam ("Production: Cochine's Green Commodity Network"). Lastly, I look at CITES, its role in producing a brand like Cochine, and its broader sustainability and green economy foundations ("CITES: Framing Sustainability and the Green Economy"). I demonstrate how both the Western scentscape and CITES are symbiotic to each other and possess shared roots in colonial imaginings.

Agarwood and the Scentscape of the West

An L.A. Scene

Los Angeles is place of sensory overload: a mash of colors, concrete, metal, palm trees, hills, flats, skies ranging from clear blues to the hazy grey-brown tinge of smog; honking horns, idling engines, the chatter of dozens upon dozens of different languages, music of all kinds from all over the world, pouring from all manner of stores with open windows and doors (since the

¹ Bryant and Goodman (2005), in their work on the use of tropical conservation themes in "alternative" consumption lifestyles, deemed this "Edenic myth-making," where environmental concerns become incorporated into particular "consumption-intensive if conservation-minded lifestyles", and the idea that the environment can be "saved" by consuming certain types of "green" products is promoted in order to lead consumers to certain types of commodities.

accommodating weather allows for this year-round); countless neighborhoods and enclaves pressed against and bleeding into each other, each with their own characteristics, sights, sounds, and quirks; cars, cars, and more cars, and people of all stripes in every pocket of town, resting in place or walking, driving, or using any other method of transportation in between. And most importantly for the context here, Los Angles is a riot of smells: gasoline, exhaust, sweat, urine, the dry earthiness of dust under warm sun, ozone, salty ocean breezes, the sharp metallic smells from industrial emissions, the smell of sizzling onions from sidewalk food vendors, a confusing multitude of floral fragrances emitted by the myriad flowers and plants from all over the world that thrive in the mild Mediterranean climate, blooming and dying at all times of the year. The sights, sounds, and smells of Los Angeles are too numerous list, or to even begin scratching the surface.

It is no accident then that Los Angeles has been instrumental in the explosion of niche and artisanal perfumery in the last 5-10 years (Hamilton, 2012; Nelson, 2013; Talbot, 2015). Many acclaimed artisanal fragrance brands such as Keiko Mecheri,² Regime de Fleurs, Strange Invisible, Sanae Intoxicants, Smell Bent, Goest Perfumes, and Capsule Parfumerie were founded in Los Angeles, typically by just one or two independent perfumers making and selling tiny batches of fragrances. Some have no formal training in perfumery whatsoever, and transitioned from consumer to producer-consumer in an auto-didactic way. Many niche international luxury fragrance brands such as Diptyque, Jo Malone of London, Santa Maria Novella, Julian Rouas Paris, and Editions de Parfums Frédéric Malle have their own boutiques for direct sales in the area. As an article in Los Angeles Magazine noted, "We've witnessed an unprecedented surge in

² Keiko Mecheri, in addition to being a respected artisanal fragrance firm, has also "ghost" composed scents for Ralph Lauren, as a ghost-writer would author texts for another person or entity (Hamilton, 2012).

niche fragrances recently" (Mundi, 2015). Speaking to Los Angeles Magazine, the creator of Goest Perfumes (which has been featured in the New York Times, Vogue, GQ, and other publications), Jacqueline Steele stated, "Niche brands often set the trends and forge into new aesthetics way before the big companies–and Angelenos are extremely responsive to that. Plus, Angelenos often know what they want often even before they know it exists" (Mundi, 2015).

Upon returning to Los Angeles from my fieldwork in Việt Nam, I realized that my sense of smell had regressed to some degree.³ It had not disappeared entirely, but the loss was noticeable, so I saw my otolaryngologist to seek further treatment. After a year's worth of fieldwork on a fragrant wood, partially losing and then fully regaining my sense of smell following a few months of treatment, I was eager to experience the broadest gamut of scents and gorge myself (in an olfactory sense) as much as I could. It was then that I discovered the plethora of specialized fragrance boutiques and a scent-centered subculture in Los Angeles that I never knew existed prior to starting my research.

It began when I went looking into Ajmal, a fragrance brand from the U.A.E. that is widely known for its oud scents. Many of their fragrances use real agarwood grown on their own plantations in India and Cambodia.⁴ There was no easy way to acquire a sample of Ajmal scents from Los Angeles. However, in my search, I was surprised to discover a shop right in my metaphorical backyard that carried Amouage, an upscale Omani fragrance brand also known for fine oud scents (using a combination of real and synthetic); and not just one, but a rather large selection of them. The Scent Bar is the brick-and-mortar store for Luckyscent, a web retailer of

³ Ironically, soon after I began planning this project, I was diagnosed with a condition that, among other symptoms, can severely reduce one's sense of smell if left untreated. At one point, my sense of smell was entirely gone. Prior to conducting field work, I had surgery, which restored my sense of smell, but during my time abroad, the condition returned, though thankfully to a lesser degree.

⁴ Ajmal mostly grows Aquilaria agalocha, which is closely related to what is grown in Việt Nam, Aquilaria crassna.

perfumes and one of the most established and well-known sellers of niche, artisanal, and difficult to find fragrances from all over the world. Not considering myself a perfume connoisseur, I was a bit apprehensive entering the store for the first time, but my reservations were unfounded. The staff was very welcoming and generous, offering suggestions and samples based on the kinds of smells I did and did not like, and chatting breezily about the explosion in oud scents (what agarwood is usually called in the perfume industry) by Western perfumers since around the late 2000s. I smelled five oud scents of varying types, and of varying brands. One was warm, slightly sweet, and woody, like baked sugar cookies and sandalwood with some kind of odd metallic twist that I was unable to describe; another was dark, ozone-like, with a hint of rotting hay and barnyard musk. Amouage's oud fragrance that I sampled was lovely, but leaned strongly into a woody-smoky scent, which was appealing to me but not terribly distinct. I began digging to see what else was out there in the wilds of Los Angeles, more than 8,000 miles away from the agarwood trees I had seen growing and agarwood chips I had seen burning in Southeast Asia.

In my readings on blogs and perfumery websites about various artisanal fragrances making agarwood scents, one brand, Le Labo (based in New York City), came up frequently as having a particularly notable oud scent. After discovering that the brand had a standalone boutique in Los Angeles, I made sure to visit. This brand is very popular amongst perfume enthusiasts and is well-known for blending their fragrances by hand, using quality ingredients, and not shying away from occasionally creating difficult, complex, and/or not exactly pleasant scents. Their oud perfume is one of said "difficult" scents. Upon entering the shop and locating the oud fragrance, I sampled it on a test strip: barn-like, musty, and a little motor oily, peppery, and smoky. The "weirder" and less pleasant facets of agarwood were definitely there, but it did not smell like what I had sampled in Asia, of that I was quite certain. As untrained as my nose is, natural agarwood oil or distillate is usually quite distinct from other wood notes, in a way I find hard to describe. It was either a synthetically made agarwood note (a good one), or a combination of synthetically made notes with natural wood scents of several types to create a layered semblance of agarwood. I inquired about the ingredients: "Would you happen to know the source of the oud note, what manufacturer?" I asked. "No," the sales associate replied, "It's natural." I wrinkled my brow, sniffed the test strip, frowned some more, and looked at the bottle. Printed on the label was "Oud 27 eau de parfum natural spray Compounded in New York City." I looked at the sales associate again.

"I don't think this is natural agarwood," I said hesitatingly. The sales assistant looked at me like I had sprouted another head, and a particularly rude head at that. I did not intend to insult, but I was fairly certain of what I was smelling. "We don't use synthetics," the sales associate responded after a pointed look at the bottle. "Um... are you sure?" I said. After a pregnant pause, "Yes," was the response. I left the store after a few more minutes of perusing, and coming back home, I logged on to my computer to do some internet sleuthing. I came across this quote from Fabrice Penot, one of the founders of Le Labo: "The major part of our formulas are made of natural ingredients, but we also use high end synthetic ingredients (most of the time safer in terms of Allergens and more expensive than sore [sic] naturals) to replace animal ingredients (like civette [sic] for example, or castoreum) or botanical species that are interesting olfactively but are in danger of extinction" (Natasya, 2012). Furthermore, Eddie Roschi, also a Le Labo founder, had this to say: "Entire olfactory families have been created synthetically... If we were to do perfumery using 'old' ingredients, scents would smell like your greatgrandmother" (Wallick, 2010).

More than a year later, I regaled this Le Labo shop incident to a stranger that I fell into conversation with while attending an event at the Institute for Art and Olfaction. They laughed and rolled their eyes, "Oh my god, people can be so serious and stuck up about these things sometimes... there's no way Le Labo uses real agarwood. It's still good though. Smells great, so what's the big deal? No shame!" they shrugged. Thinking about the stranger's comment a few days later, I perused the reviews of Oud 27 on Fragrantica, one of the most extensive and wellknown websites for perfume enthusiasts and "an online encyclopedia of perfumes, a perfume magazine, and community of perfume lovers" ("Fragrantica Team - About Us," n.d.). One of the more popular reviews (as rated by community vote) noted "It has almost no connection to actual oud (it's clearly Givaudan's Black Agar blend)... It takes the whole Western wimpy 'oud' concept and Westernizes it further with hilarious results", which added to its "weirdo charm" (deadidol, 2015).⁵ I do not know for certain if Le Labo uses Black Agar by Swiss firm Givaudan, one of the premier manufacturers of raw materials for fragrance, flavors, and cosmetics, and I have no definitive proof that Le Labo's agarwood note is synthetic, but the sales associate at Le Labo seemed insulted when I implied that their fragrance was not all-natural (I could not blame them though; the bottle's label did clearly say "natural spray", after all).

I share these encounters because they demonstrate the premium placed on real agarwood by certain types of consumers, and illustrate the ways in which the Western fragrance industry has interpreted and been inspired by "oud" in general.

⁵ In regards to "wimpy" ouds, perfumers have noted that Western fragrances in general tend to tone down stronger scents, while traditional Middle Eastern fragrances fully embrace powerful scents. It was an ultimately positive review, it should be noted.

The Colonial Scentscape: "Cochine"

Inspired by the timeless elegance of Saigon, Cochine captures the essence of romantic escapism through its range of luxurious candles, diffusers and fragrances. Created as eau de parfum using the finest essential oils from plants unique to Vietnam, such as Champa Jasmine, Delentii orchid, Agarwood and Water Hyacinth, each fragrance tells its own story. ("About Cochine," 2018)

One fragrance that utilizes real, cultivated agarwood to distinguish itself in the industry is luxury brand Cochine. The above quote is how Cochine describes the company in their "About" statement. Cochine sells a variety of perfumes, candles, and bath and body products through a range of high-end outlets, from stores like Barney's and H.D. Buttercup in Los Angeles, to luxury spas and resorts like the Four Seasons Beijing, to perfume boutiques like Parfumerie Spitzenhaus in Zurich. Its founder, Kate Crofton-Atkins, decamped from London to Việt Nam "on a whim", following her now-husband: "I didn't speak any Vietnamese… and could barely point to the country on a map but somehow it felt like the right thing to do" (Archer, 2017). Crofton-Atkins, and Cochine in general, embody a kind of yearning for a colonial past long gone, in conjunction with aspirations of a sustainable and green future.

Cochine's product descriptions are dreamy to the point of botanical fantasy. "Champa jasmine" is not any type of flower in particular, jasmine or otherwise, though perhaps it is meant to reference the ancient kingdom of Champa, which once existed in central and southern Việt Nam.⁶ The "Delentii orchid," which Cochine describes as indigenous to Việt Nam and blooms "for only 2 months a year and is treasured for its delicate fragrance" ("Vietnamese Rose & Delentii," 2018) does not exist. The similarly spelled *delenatii* orchid (*Paphiopedilum delenatii*)

⁶ True jasmine, of the genus *Jasminum* (used in perfumes and tea), grows throughout Việt Nam, as well as another plant commonly called Tonkin jasmine (*Telosma cordata*), which is prevalent as a food as well as a smell when the flowers are in bloom. Though it is strongly fragrant, Tonkin jasmine is not related to Jasminum.

however, does have a soft fragrance and is in fact endemic to Việt Nam. Water hyacinth, which Cochine says "float like tiny islands along the meandering rivers of southern Việt Nam are an enduring image of the lush landscape of the incredible Mekong Delta" ("Water Hyacinth & Lime Blossom," 2018), is native to South America, and as an invasive species, is a major nuisance around the world.⁷ Another of Cochine's scents, "Vanille and Tabac Noir", is said to blend "two of the Orient's most evocative aromas," vanilla and tobacco flower, "encapsulat[ing] the magical allure of Sài Gòn at sunset" ("Vanille & Tabac Noir," 2018). Tobacco flowers smell light, fresh, and slightly carnation-like, a distinct contrast to what most associate with the smell of tobacco leaf (earthy and leathery), which is a much more common perfume note. Both are New World plants. This does not necessarily preclude them from being "Oriental" scents—the trade between Southeast Asia and the New World from the 1600s onward was extensive, after all—but vanilla and tobacco flower are not plants/smells which I personally associate with Việt Nam/Southeast Asia.

Cochine's "About" statement continues:

When skincare and fragrance specialist Kate Crofton-Atkins moved to Saigon she was instantly struck by the city's unique style, elegance and romance. Charmed by everyday scenes around her from hidden streets overflowing with Jasmine to the stylish backdrop of French architecture, she set about designing a range of fragrances that could capture these unique moments and the carefree sense of escape they provided.

Partnering with a New York based fragrance house, Kate spent over a year working with essential oils harvested from Vietnamese plants in order to produce the perfect combination of scents to reflect Saigon's diverse flora and distinctive blend of oriental charm. ("About Cochine," 2018)

"Romance," "escape," and "carefree" are not ideas that I associate with Sài Gòn or Việt Nam; as the child of Vietnamese refugees, Việt Nam in my mind was not a place to escape *to*,

⁷ Water hyacinth is one of the fastest growing plants in existence, becoming expansive, dense carpets which clog waterways and can quickly deplete the oxygen levels in a body of water, killing off other organisms.

but the place which my parents were displaced *from*. Crofton-Atkins has said her move from Hanoi to Sài Gòn was surprising: she expected "a sprawling concrete metropolis," but instead "found tree-lined avenues and French-style buildings with pale green shutters. Walking through the streets was like being in an old film and I instantly fell in love. We swapped the bustle of Hanoi for a more relaxed pace" (Archer, 2017). I was baffled by the notion that anyone could find bustling Sài Gòn more relaxing than Hà Nội. French architecture and jasmine-lined alleyways do not immediately come to my mind when thinking about Sài Gòn. The majority of the colonial buildings, while indeed lovely, are confined to Districts 1 and 3, which are at the core, but compose a small fraction, of the city. Sài Gòn, in my mind, is a giant, sprawling metropolitan area, beautiful and alarming in its stark contrasts, vivacity, and throngs of people of all stripes, operating at all hours of the day and night. Sài Gòn, to me, is always buzzing with life. Hà Nội, with its streets that are crowded in the day but mostly quiet after 9 or 10 pm, where a midnight curfew for restaurants and bars was in place until 2016, with its ancient Imperial buildings mixed with newer French colonial and even newer contemporary high-rises, and location within the "cradle" of Vietnamese culture and history that is the Red River, harkens more to some idea of Old World "Oriental charm," in my mind. Crofton-Atkins and her family now live in Hong Kong, having moved there in 2008 for "more reliable access to the internet and electricity" (Archer, 2017).⁸

Cochine's company's name (truncated from the French "Cochinchine", or Cochinchina, the southernmost colony of French Indochina), can be seen to encapsulate a general mission of the brand: an unreal word that easily rolls off the tongue, evocative of an Orientalist, colonial

⁸ A statement that I found puzzling; my first visit to Việt Nam was in 2006, and I found the internet service in the major cities at that time to be robust, widespread, and fast. Electricity was also mostly reliable in the urban centers.

past, and a landscape full of nostalgia, romance, and beauty. Cochine has formulated a series of scents that do what many fragrances are intended to do: conjure an idealized past and/or idealized place. Scent in this case is meant to form a kind of a "phantom" memory of a landscape; phantom in the sense that a consumer may not have ever experienced it first-hand, using smells that may or may not be "unique" or "true" to that landscape, but are carefully formulated to evoke an *idea* of it. Cochine is carrying on a long tradition of perfumery, and is not even the first to do this using Việt Nam specifically.⁹

In contrast to Cochine's olfactory evocation of Sài Gòn's colonial past, the scent of Sài Gòn to me is first and foremost petrichor: the smell after rains hit and saturate previously dry ground. Sài Gòn smells of ozone, exhaust, chrysanthemum, sacred lotus, cinnamon, clove, anise, benzoin resin, sandalwood, patchouli, ginger, lemongrass, vetiver, grilled pork, white peppercorns, woody agarwood blends, and smoke from generic and ubiquitous joss sticks. It feels like dodging traffic and hopping onto a bus when it has slowed down but is still moving, and looks like a jagged skyline of boxy angles broken by an occasional smooth, futuristic curve, alleyways partially flooded during the rainy season, kids walking home from school eating bánh tráng trộn out of plastic bags, and people lounging on parked motorbikes or at low plastic tables.

Perceptions and sensations of place are, of course, subjective. "My" Sài Gòn is clearly different from Crofton-Atkins', from a Sài Gòn native living in District 7, from a Vietnamese national migrating from a rural area to Thủ Đức, and so on. The sensory experiences that Cochine induces aim to create a romanticized vision of their products, a lush landscape with commodities "professionally crafted and perfectly scented to heighten the sense of luxury for

⁹ Diptyque, a well-known artisanal Paris-based fragrance brand with two retail outposts in Los Angeles, has two scents based on the founder's memories of French Indochina. They are named after real places in Việt Nam where he spent part of his childhood: Do Son and Tam Dao. In 2005, Diptyque was acquired by Manzanita Capital, a London-based equity fund.

you and those about you" ("About Cochine," 2018). The "you" here is reflected in the photographs on Cochine's "About" page of their website: centered on a white model with blonde hair gazing into the distance, within various scenes of southern Việt Nam that are either without people (aside from the model), or where other (local) people are literally faceless blurs in the background. This is a common aesthetic in the high-end fragrance world, featuring Orientalism, beauty, romanticism, and wistfulness of a Western consumer within an exotic, sensual landscape. So when the brand states it aims to "produce the perfect combination of scents to reflect Sài Gòn's diverse flora and distinctive blend of oriental charm" the question arises: Whose Sài Gòn is being reflected or captured, why, and how?



Figure 29. One in a series of images featured on Cochine's "About" page of their website. ("About Cochine," 2018).

The sensory landscape drawn by Cochine presents a vision of Việt Nam as a glamorized, fanciful place of escape for particular types of consumers, coupled with a grounded appeal to

their core consumer base's personal morals and sense of ethical, environmental consciousness. Cochine's website features a section on sustainability, stating, "Using ethically and sustainably sourced materials is at the heart of Cochine's mission to both celebrate and preserve the Vietnamese landscape" ("About Cochine," 2018). The sustainability section details three elements: the company's "support of sustainable farming projects" for sourcing their agarwood, the use of plant-based waxes certified through the Roundtable on Sustainable Palm Oil, and the use of recyclable packaging.

Agarwood is the major focus of Cochine's sustainability efforts and marketing. Their agarwood scent is called "Agarwood & Amber," a blend of "sensuous" agarwood, and the "rich warmth" of tuberose, patchouli, and other "amber" scents ("Agarwood & Amber," 2018). "Amber" is not a single note nor meant to smell like literal amber (which has no smell), but an accord¹⁰ that is considered by Western perfumers to be a quintessentially "Oriental" smell: a combination of woodiness, earthiness, leather, and sweetness made through a layering of fragrant woods and resins. Agarwood, tuberose, and patchouli are all very prevalent plants/smells in Việt Nam and throughout Southeast Asia,¹¹ and are scents that are commonly included in perfumes seeking to capture some idea of "Oriental charm."

¹⁰ Accords are complimenting combinations of different scents that form "chords" or "harmonies" of sorts, blending to create a new whole that is distinct from the individual components. Perfumers have in some cases developed "signature" accords. One famed example is "chypre," which is now a "generic" accord first popularized by Francois Coty of the cosmetics firm Coty, Inc. "Chypre" is the French name for Cyprus. The original Chypre perfume by Coty was constructed of scents from around the eastern Mediterranean. Another example is fougère (French for "fern-like"), originally developed in 1884 by master perfumer Paul Parquet, which has diversified into an entire scent family of its own despite the fact that ferns are not very fragrant. Parquet developed the perfume Fougere Royale based on the *idea* or *concept* of ferns and has been quoted as saying, "If God gave ferns a scent, they would smell like 'Fougere Royale" (de Nicolaï, 2008, p. 1138).

¹¹ Though tuberose is not native to the region, it is grown extensively and has been used during holidays and in religious settings for many generations.

Cochine's description of its agarwood product are the most straight-forward, and frankly the least romantic, which is unexpected, as the mythos and mystique of agarwood often results in a slew of tall tales being told about it. Cochine plainly states: "Agarwood is a precious resinous wood indigenous to Việt Nam, where it is known as the 'Wood of the Gods'. Highly sought after due to the unique richness of its fragrance, it was harvested almost to extinction last century" ("Agarwood & Amber," 2018). This descriptor captures the very essence of imperialist nostalgia, wherein something is destroyed or killed, and subsequently mourned by the perpetrator of the destruction (Rosaldo, 1989). In the wake of this destruction, sustainable agarwood farming projects were established. They add, "Cochine sources its Agarwood oil from a new project investing in 30 small farms in southern Vietnam to produce sustainable Agarwood oil" ("Agarwood & Amber," 2018).

Production: Cochine's Green Commodity Network

Cochine's agarwood is sourced from The Rainforest Project (TRP),¹² an NGO founded in the 1995, where I worked periodically, and whose sites in the far south I visited and observed during my field work.¹³ TRP grows *Aquilaria* in mixed agroforestry plots, working with local farmers to monitor growth, harvest, and process the wood. It was founded by Western parties with funding from the European Commission,¹⁴ utilizing forest pathology research from the University of Minnesota. It is one of the few cultivated agarwood growers in the world whose "sustainability" claims are bolstered by its certification with the Convention on the International

¹² Per Cochine's "About" page: "We support sustainable farming projects, such as the Agarwood Project founded by The Rainforest Project. This Foundation has created a durable and commercially viable solution to the problem of over-harvested *Aquilaria* trees, which are cut down in order to extract Agarwood oil" ("About Cochine," 2018).

¹³ I visited TRP's mixed agroforestry plots in the summer of 2013.

¹⁴ The European Commission is the legislative body of the European Union.

Trade in Endangered Species (CITES). It is a significant distinguishing feature of "green" marketing that requires massive amounts of time and resources that few Vietnamese farmers have access to. TRP does decent business selling sustainable, CITES-certified agarwood to exporters and foreign-owned firms such as Cochine, as well as their own in-house made incense products. It is however uniquely positioned, having contacts in Europe and the United States and patented resin-induction technologies developed with the aid of a major American research university. The promise of easier access to certain markets, particularly in the "developed world," and more avenues for marketing a "sustainable" product to the West is a further reach for most other domestic farmers who do not already have pre-existing connections to these markets.

Back in the Mekong Delta

The mountains seemed small. With the highest peak approximately 700 meters above sea level at level, it is dwarfed by the mountains around Los Angeles (over 3,000 meters above sea level at the highest peak). I was fooled, though; as we hiked upward in the dense humidity, on steep and often slippery terrain, it felt much higher than 700 meters. We follow a trail that blinked in and out of existence, wide and well-worn in some places and barely there or disappearing entirely in others. Weaving through bamboo groves, thickets of trees of varying kinds, over bits of rocky terrain, and through patches of dense undergrowth, I quickly lose track of what direction we are going in and I just follow my companions, local partners with The Rainforest Project.¹⁵ The ground is lush and damp; it is August, at the peak of the rainy season, and the vegetation glistens.

¹⁵ TRP works with local farmers and forestry departments to provide *Aquilaria* saplings and training in cultivation methods. The project coordinates across many parcels of land around southern and central Việt Nam (approximately 400 hectares total), working with approximately 200 farming families. Trees were planted in a mixture of home gardens, small plantations on land under leases held by private citizens, and in state-held forested lands (note that as a technically socialist country, land cannot be privately owned in Việt Nam; however, long-term leases of land confer many similar rights to land ownership). Farmers retained ownership of the trees they planted and maintained.

I spot bunches of one of my favorite Vietnamese herbs, rau càng cua,¹⁶ all over the place as we walk. Their little leaves, which are already bright and shiny when dry, positively sparkle a beautiful emerald green under all the moisture.



Figure 30. A multitude of plants, both wild and cultivated, grow in the area. Left: rau càng cua. Right: a young jackfruit. Photos taken by author, 2013.

We pass by small structures on occasion. Most are storage or resting huts, with chopped wood or large baskets of bamboo shoots that someone has harvested to sell in the local markets. We stop briefly at the grounds of a small temple, where a simple altar of flowers and incense sits outside. Nearby, someone is in the process of making joss sticks. It appears they have already been dipped several times and are spread out to dry, but the makers are nowhere to be found. Near the drying incense is a pile of felled *Aquilaria* that appears to have a bit of resin in some of the pieces. I could tell it was not TRP's tree, as it was not treated with their method of resin-induction. Will it be used right here to make incense, I ask my companions. They are not sure, but possibly.

¹⁶ "Crab claw herb," *Peperomia pellucida*. This plant belongs to the same family as black pepper, Piperaceae. It has a fragrant, lemony, slightly spicy/peppery flavor and is usually eaten raw. It is also used in traditional medicine, and it is sometimes used as an ornamental plant in the West.



Figure 31. Incense sticks laid out to dry. Photo taken by author, 2013.

Further and further we go, through more bamboo groves and finally to a larger elevated hut. I then begin to see trees with tiny green tubes protruding from the trunk; these are cultivated *Aquilaria* trees which have been treated with TRP's proprietary mixture to induce resin production. The tubes are left in place for a period of time to allow aeration, which, according to experiments done by their researchers, improves resin formation.



Figure 32. An Aquilaria tree treated to induce resin production. Photo taken by author, 2013.

Aside from this obvious human tinkering, the broader landscape still looks like what most people would consider forest. There are no neat rows of planted vegetation, with *Aquilaria* (some treated, some not) interspersed amongst other types of trees, bamboo, and thick undergrowth.



Figure 33. The general landscape of the area. Photo taken by author, 2013.



Figure 34. Some *Aquilaria* trees interspersed among the vegetation. Note one tree has been numbered. Photo taken by author, 2013.

I follow my companions as they make rounds, checking the tubes, the trunks, and the leaves. These trees are young still and have only recently been treated; they are mostly checking to make sure the trees are still healthy and growing overall. It is an interesting balance; *Aquilaria* must be wounded and infected for it to produce resins, forming over and through aberrations like a scab, but they do not want to go so far as to kill the trees outright. Though the trunks are narrow, the trees already soar high above me, perhaps four meters or more. This particular patch of *Aquilaria* appears to be doing well, and my companions seem satisfied with the progress.

As often happens during this time of year, a downpour starts without warning, and we all run to the hut to wait out the rain. Inside, there is a simple gas range, some pots and pans, a kettle, and other sundries, and one of my companions brews some tea. A tree had been felled a few days prior, and the wood is also stacked inside. We inspect the pieces and I see resin formation, dark streaks in some places between the normal, whitish wood, but none of the pieces have the solid, dense, petrified look of the natural agarwood that I had seen elsewhere. I bring a piece to my nose to smell: woody, earthy, a tiny hint of almost-berry nuttiness and metal. It is pleasant; though not particularly distinct in oud terms, it definitely smells like an oud, and not a generic "Oriental wood" smell. As it continues to pour, I think about that spread of joss sticks further down the mountain. I wonder if anyone grabbed them in time to avoid the rain, if they were to be sold or kept at the temple for use, who would use them, and how.

After 30 minutes or so, the rain stops, and we continue to inspect the rest of the trees and discuss the progress as we go along. The trees planted in this area are of varying ages and have been treated at different times. Some will be left standing for longer, allowing the resins to further develop into a more complex, denser, higher quality agarwood. Some might be harvested a bit earlier in the process. An hour later, we head back down the mountain and return to town. We do not go to the hotel where I am staying, but take a few turns down several alleys to reach an unassuming house. Entering the front gate, I am greeted by several other local TRP partners seated on the ground, carefully carving away at *Aquilaria* pieces to separate the resinous wood from the normal wood. It is a delicate process, as the resins here are not strongly developed and the streaks of dark agarwood are thin.



Figure 35. Separating *Aquilaria* wood permeated with resin from healthy wood. Photo taken by author, 2013.

The agarwood will be sold to third parties—like Cochine—or crushed, blended with other ingredients, and pressed into sticks or cones to sell as finished products. TRP does not do extraction to create oils for perfumes, so any product sold to third parties is in solid form. TRP's in-house made incense can be purchased online from anywhere in the world, and consumers can view a copy of the operation's CITES certificate online as well.

The existence of these Aquilaria/mixed agroforestry plots is largely a product of broader trends in international environmental regulation towards promoting sustainability and "green economies" through various avenues around the world. TRP's founding in the 1990s followed efforts by CITES to make agarwood a sustainable commodity.

CITES: Framing Sustainability and the Green Economy

The 1990s was a pivotal moment in the agarwood industry. Traders I had spoken with in Việt Nam had said that by the early 1990s, they noticed significant declines in harvest and wildly

fluctuating market values, and generally felt that something was wrong. *Aquilaria malaccensis* was first proposed to be included in CITES Appendix II in November of 1994 by India. An Appendix II listing meant that permits are required to internationally export or re-export.¹⁷ Authorities in exporting states must "ensure that exports are maintained within levels that are not detrimental to the survival of the species, and that specimens to be exported have not been obtained in violation of the laws of that country" (Barden, Anak, Mulliken, & Song, 2000, p. 3).¹⁸ There is no firm definition of "levels that are not detrimental to the survival of the species." Appendix II mandates that the issuing of a permit should be contingent upon "non-detrimental findings," which is essentially a sustainability assessment for which there are no guidelines.

As the availability of agarwood declined and its value sharply increased, CITES certification and cultivation projects received greater attention in the industry. However, navigating the CITES permitting process domestically and across national borders is notoriously difficult, time-consuming, and costly, to the point where most growers do not even bother. Policies are often unclear and difficult to follow. For agarwood in Việt Nam specifically, a blanket ban on the harvest and trade of all *Aquilaria* species was implemented in 1991 by the Government on the Management of Endangered, Precious, and Rare Forest Fauna and Flora Species (categorizing it domestically under "Group I" of managed species). This was repealed the next year and replaced with a ban on the harvest and trade of *Aquilaria crassna* only, with other species falling off the list of managed species.¹⁹ In 2002, Việt Nam placed *A. crassna*

¹⁷ A specific import permit is not necessarily required, but member nations are required to confirm the validity of export permits before allowing import.

¹⁸ This may or may not be stricter that the broader CITES ruling; for example, some nations choose to further implement an export cap; such is the case with Indonesia and Malaysia with *Aquilaria*.

¹⁹ Note that this was *before* the regulation of *Aquilaria* was proposed to the international community at the 1994 CITES Conference of the Parties.

under the domestic "Group II" list, restricting the "exploitation" of the species and reflecting the international CITES regulations at the time. This required permits to be issued for any kind of use and harvest, though the criteria for issuing permits were not clearly outlined.

This ruling was replaced in 2006, in a decree written by a different state apparatus altogether, Việt Nam's Government on the Management of Export, Import, Re-export and Introduction from the Sea, Transit, Breeding, Rearing and Artificial Propagation of Endangered, Precious and Rare Wild Animals and Plants. This decree placed all CITES Appendix I species under a domestic trade ban unless used for "non-commercial" purposes (that is, research, in which case it requires a permit). Trade in Appendix II species requires a permit. Those wishing to grow and trade in artificially propagated Appendix II species in Việt Nam, such as cultivated *Aquilaria*, are technically mandated to register with the local provincial Forest Protection Department. The Forest Protection Department must then report to the Vietnamese CITES Agency, who will conduct an assessment on the operation. Upon passing the assessment the Agency will grant certification as a legal artificial propagation operation.

The listing of *A. malaccensis* onto CITES Appendices subsequently made agarwood, a product historically shrouded in myth and mystery, legible as a commodity on a global market for the first time, yet also simultaneously reaffirmed that wild agarwood is still poorly understood, even by the industry. Official data, approved by international institutions, on trade volumes, market characteristics, and so forth for agarwood was made available at a fairly wide, international scale, but also emphasized that the estimates could be unreliable, and that the industry as a whole did not (still does not) know much about the extent of wild population and had (still has) problems with identifying the various species being traded (Barden et al., 2000). *A. malaccensis* was the only agarwood-producing species regulated by CITES for several years. In

that time, the CITES Plants Committee,²⁰ came to believe that understanding the results and impacts of the listing could not be determined by studying the single species alone, and subsequently commissioned a study in conjunction with TRAFFIC²¹ to include all agarwoodproducing species being harvested and traded.

The study provides some statistics, though it warns against the reliability of them, and is primarily qualitative in nature. TRAFFIC regional offices (East Asia, Southeast Asia, India) collaborated with TRAFFIC International to collect interviews and questionnaires from CITES officials, customs officials and forestry departments, researchers, state-owned agarwood production companies, traders, and trade associations, some of whom I also spoke with. TRAFFIC conducted visits to local markets in Mumbai and north-eastern states of India, Jakarta, Vientiane, Kuala Lumpur, Bangkok, Singapore, Hanoi, and Sài Gòn. Harvest and processing site visits in India, Laos, and Việt Nam were also made. Available official government documents and CITES annual reports were reviewed, though it was noted by CITES that these data help illuminate the trade, "but may not provide an accurate picture of actual trade or trade volumes" (Barden et al., 2000, p. 4). This report was released by TRAFFIC in 2000 under the title "Heart of the Matter: Agarwood Use and Trade and CITES Implementation for Aquilaria malaccensis." This is the first comprehensive study on agarwood by an international governing body, is the most cited, was foundational to all proceeding studies, and contributed the listing of all Aquilaria and Gyrinops species on CITES Appendix II in 2005.

The establishment of CITES and the development of TRP were part of the process of making agarwood into a sustainable commodity. In doing so, it also interpolated agarwood into a

²⁰ This is the committee in charge of reviewing cases regarding plants.

²¹ TRAFFIC is also known as the Wildlife Trade Monitoring Network; it is a leading environmental NGO.

logic of sustainability that was based in imperialist nostalgia that did little to actually regulate the agarwood trade, as I will explain below. As a large, unwieldy, multi-national agreement, CITES is purposefully loose and sparse on directives, absolute mandates, and requirements, very rarely *forcing* signatory nations to do anything or giving specific instructions on standards of procedure or protocol. The details of enforcement, persecution for violations, permitting procedures, and so on are left to the state governments. Because of this, some nations have stricter policies than the internationally set standard, some will have looser policies, while some nations will have no real restrictions at all despite being a signatory to CITES.²² In contrast, some nations will independently choose to categorize Appendix II-listed species ("threatened" species; restricted/capped trading allowed by CITES to a limited degree) under Appendix I (highly endangered species), which prohibits trade altogether (at least domestically). The permitting requirements and procedures are different depending on where the product is sourced in addition to where it is to be exported, and thus the process of trade can become very convoluted and confusing very quickly, especially if multiple national boundaries are traversed.

CITES mandates that a trade permit for an Appendix II-listed species can be issued when it has been shown that trade "will not be detrimental to the survival of the species in the wild" ("The CITES Appendices," n.d.), but what that actually means in practice is not defined by the legislation. Most range states for *Aquilaria* and *Gryinops* do not have even cursory wild population estimates. In conversations with agarwood farmers, some stated that a local official could probably be bribed to issue a cultivation permit, but none I spoke to personally bothered. Applying for these permits is still a long, arduous process filled with paperwork, levels upon levels of bureaucracy, and unpredictable, sometimes questionable fees. "How do the permits

²² Any CITES member nations may file a request for exemptions for any regulated species.

work? What's the procedure, exactly?" I asked a TRP employee one day as we were inspecting product from a recent harvest of farmed agarwood. They scoffed and laughed aloud, a genuine, full-throated, head-thrown-back laugh, and said, *"It is a nightmare and you don't want to know."*

The process is simply too long, too complicated, "headache-inducing," and costly. None of the agarwood traders I knew (except TRP) acquired growing or import/export permits. Those that have the time and energy to attempt the process are already connected to outside investment and research/development resources, as was the case with TRP. Thus, firms like Cochine and other luxury fragrance lines in the West, particularly amongst firms that appeal to ideas of sustainability as part of their marketing, source their agarwood material primarily from producers that were already advantaged and/or connected to American and European actors who mediated and managed the permitting and export process. Still, I met and spoke with nearly a dozen agarwood farmers who did consistent business, all without permits and indeed, nearly no bureaucratic contact at all. Though many agarwood growers in Việt Nam are excluded from the dreams of the "clean, green" economy, they have numerous other possible paths to connect into agarwood's broader commodity network (as detailed in Chapters 2 and 3).

Việt Nam has been eager to participate in broader frameworks of sustainability and the green economy. Việt Nam's state planning documents highlight the leveraging of biological resources, including valuable non-timber forest products such as agarwood, as part of the nation's economic as well as biodiversity management plans. The Ministry of Natural Resources and Environment emphasizes that the nation is a range state for numerous threatened or endangered species "in urgent need conservation action", particularly plants, and that "The over-exploitation of plants not only affects biodiversity, but also the livelihoods of households depending on forest products (Biodiversity Conservation Agency, Vietnam Environment

Administration, Ministry of Natural Resources and Environment, United Nations Development Program, & International Union for Conservation of Nature, 2015). Leveraging biological resources for economic growth in different ways, such as the promotion of agarwood growing by the state, falls in line with a greater global trend towards sustainability and the green economy.

However, the logics of "the green economy," and CITES in turn, have roots reflecting ideas of imperialist nostalgia. The concept of the "green economy" has become increasingly prevalent in conservation literature in recent years. In the UN's 2012 publication "The Future We Want," it is described as "an economic development model that results in improved human well-being and social equity while significantly reducing environmental risks and ecological scarcities" (Bailey & Caprotti, 2014; UN General Assembly, 2012). Official publications such as "Towards Green Growth" (Organisation for Economic Co-operation and Development, 2011), "Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication" (United Nations Environment, 2011), "Inclusive Green Growth: The Pathway to Sustainable Development" (World Bank, 2012), multiple official releases and publications leading up to, during, and after the United Nations Rio 20 Sustainable Development Summit, and similar works have been brought forward with greater frequency and emphasis at the international, institutional level.

The idea of the green economy can be traced back several decades, with varying meanings and connotations. It was used throughout the 1960s and 1970s to frame ideas of "a radical, revolutionary transformation of economic (and hence social and political) relationships to bring them in line with natural limits and ecological virtues" (Death, 2014, p. 16). For deep ecologists, eco-Marxists, and other environmentalists of a more radical stripe, the idea that there are limits to growth meant that there was a need for a complete paradigm shift in order to achieve

balance with the natural world: a type of green economy encompassing "a range of alternative forms of knowledge such as de-growth, steady-state economics or prosperity without growth" (Death, 2014, p. 6). As the term became integrated into the general lexicon of political and environmental institutions, much of the "radical connotations" gave way to what the conservation community would generally consider "mainstream" ideas of sustainable development. "Limits to growth" became a call to find a balance with the natural world within the current framework of capitalist markets. In particular, technological advances and market modifications are emphasized to achieve "sustainability," that is, development that meets the needs of the present without compromising the ability of future generations to meet their own needs. This definition, the most common one used for sustainability or sustainable development, comes from a report produced at the 1987 UN World Commission on Environment and Development called Our Common Future, or the Brundtland Report (World Commission on Environment and Development, 1987). This report officially codified at the international level a conception of sustainability, and by extension green growth and a green economy, based on contemporary ideas of environmental economics and explicitly linking issues of economic development with issues of environmental quality.

The worldview that the Brundtland Report is founded upon is fundamentally neoliberal in nature (Blowers, 1997; Goldman, 2001, 2006). One of the underlying assumptions of mainstream sustainable development, environmental economics, and thus the initiatives for building a "green economy" is that the current economic system is rife with negative externalities, specifically externalities for which the environment bears the burden.²³ These oversights are considered

²³ That is, many choices made in production (or extraction) result in impacts and costs to other parties that are not accounted for or considered in market prices. For example, the price of timber produced through means of clear-cutting forest does not factor in the costs incurred by soil loss, biodiversity loss, decline in water quality due to
market failures. The efforts at sustainable development, building a "green economy," the creation of a "green New Deal," and similar terms, ostensibly aim to ameliorate or correct what are seen as defects in the global pricing system, with the idea that proper valuation will ultimately lead to more efficient use and better conservation of resources overall.

This idea is predicated upon a belief that the market is the best method to "fix" environmental problems, regardless of the frequent critique that it was the market itself that created these problems to begin with. Sustainable development and the push to establish a green economy assumes that the market merely needs to be tweaked in order to produce a kind of "win-win" situation, where capitalist development can take place at the same time as environmental protection in some kind of balance. Under this view exemplified by the Brundtland Report, the path to green growth is primarily based on methodological and technological means: more efficient sources of energy production; inventing analogs for resources that are limited or non-renewable; making the market more accurate by incorporating externalities into production and consumption processes, and other similar means (Bäckstrand, 2003; Taylor & Buttel, 1992). This view of sustainability has become foundational to virtually all international projects for green growth, sustainable development, and various conservation policies (Lele, 2013). These initiatives, ranging from clean energy projects, to clean water, to regulation of extraction and trade of natural resources, are usually guided, coordinated, funded, and, to varying extents, directly implemented by large intergovernmental organizations such as the UNEP, World Bank, and the OECD. One strong focus of green growth projects is the development of more efficient methods of producing renewable resources, such as advances in

damage of surrounding watersheds, the possible release of new diseases as the habitat is destroyed and humans come into contact with pathogens that were previously isolated within the ecosystem, and so forth.

cultivation and agricultural technologies. Initial pilot projects for agarwood cultivation in Việt Nam were funded by the European Commission with this in mind.

The massive range of issues and varying scales that the green economy is supposed to encompass means that the modes and methods of implementation vary wildly. This rather haphazard hodge-podge of public, private, and public-private "poly-centric" (Ostrom, 2010) strategies results in initiatives that are both "synergistic" and "dysfunctional" (Bailey & Caprotti, 2014) in their application, where consistency between overarching policy ideas and implementation is difficult to maintain and realms of responsibility and accountability are difficult to delineate. These contradictions and complications are apparent when assessing the CITES regulatory framework. It is full of contradictions and intentionally vague wording: key phrases such as "threatened with extinction," "detrimental to survival of species," "overexploitation," "commercial purposes," and "affected by trade" are nebulously defined or not defined at all, rules are loose with loopholes for exceptions, consequences for violations are not delineated, and so forth. As noted by Hajer and Versteeg, "Environmental debates often take place in a situation of institutional ambiguity, in which there are no generally accepted rules and norms according to which politics is to be conducted and policy measures are to be agreed upon" (2005, p. 182). It is this vagueness that allows CITES to be "coded and recoded" (Krueger, 2002, p. 880) through legal discourse, so that a multitude of perspectives and ideas can exist within the same body of relatively unchanging legislation, even if they conflict with each other. The general, overall approach of the green economy has been described as "a somewhat schizophrenic mix of interventionist/managerialist approaches that attempt to regulate capitalism in pursuit of environmental and social objectives, and market-friendly/liberalizing impulses that

seek to value and commodify environmental resources/services" (Brown, Cloke, Gent, Johnson, & Hill, 2014, p. 246).

This is one of the biggest criticisms of the green economy, as well as ecological modernization and associated ideas of contemporary sustainable development initiatives more generally: that none of it is really new or innovative, it is simply a "renewed attempt by the social forces of capital to render environmental change and sustainable development less threatening to, and even profitable for, capitalist accumulation strategies" (Bailey & Caprotti, 2014, p. 1798; Boyd, Prudham, & Schurman, 2001), using or co-opting what were once progressive frameworks and language to facilitate "neoextraction" (Baletti, 2014) without addressing any of the root causes of uneven development. Along these lines, scholars have also argued that the agenda of the green economy merely reinforces a global status quo, re-framed and codified in depoliticized, technocratic, managerial language (Swyngedouw, 2011) with an emphasis on innovation and "techno-fixes" (Altvater et al., 2016) that favor the global North and in many ways disadvantage the global South and, again, do not address the root causes of ecological disaster or large scale poverty (Lele, 2013).

* * :

Various UN branches and NGOs promote "biodiversity-based industries," which are defined as those that "either depend on biodiversity for their core business or contribute to biodiversity conservation in some way" (van Paddenburg, Bassi, Buter, Cosslett, & Dean, 2012, p. 148). The WWF states that "Many biodiversity-based enterprises are run by communities that access materials and products from community land. These products can include forest honey, gaharu [agarwood], aloe vera, banuaka beads, medicinal plants, fish, cocoa and adan rice" (van Paddenburg et al., 2012, p. 148). Echoing this, Việt Nam's Ministry of Agriculture and Rural Development has pushed for various forms of biodiversity management. Firstly, there has been a concerted effort to gather genetic diversity in an attempt to either secure/ensure or rehabilitate populations for cultivation, breeding, or pharmaceutical research. The Ministry of Natural Resources and Environment claims "some endemic and rare species have begun to create competitive advantages for domestic products for consumption and export, which contribute to socio-economic development and national security: e.g. spotted deer, crocodile, Ngoc Linh ginseng, cardamom, and agar wood" (Biodiversity Conservation Agency et al., 2015, p. 59), a rather lofty claim. National sustainable forestry standards "based on the principles" of the Forest Stewardship Council (FSC) have also been implemented. The state boasts that Viêt Nam currently has over 100 FSC-certified firms, a dramatic increase from only one in 2007 (Biodiversity Conservation Agency et al., 2015). Việt Nam has wholeheartedly embraced the overarching green economy ideology at multiple levels, from UN REDD+ programs,²⁴ to agarwood cultivation research and management. This is one avenue through which the Vietnamese state can engage with the international community and an idea of "global citizenry," something that the State has been striving to do as the nation develops.

Yet when one looks historically at the regulatory tools, such as CITES, through which a green economy is legislated, one can see how they are informed by logics of imperialist nostalgia that resonate with Cochine's ads. Consider, for example, that the parent organization of CITES is the International Union for Conservation of Nature (IUCN).²⁵ The IUCN claims to be the "global

²⁴ REDD+ stands for "Reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries". It aims to "simultaneously contribute to climate change mitigation and poverty alleviation, whilst also conserving biodiversity and sustaining vital ecosystem services" ("What is REDD+?," n.d.).

²⁵ The IUCN maintains observer status at the UN (may speak at United Nations General Assembly meetings but may not vote on resolutions), and consultative status with the FAO, UNESCO, and the UN Economic and Social Council (officially recognized as an avenue for consultation in matters relevant to the organization).

authority on the status of the natural world and the measures needed to safeguard it" ("About," 2014), and though it began as an organization geared towards conservation exclusively, over the years it has increasingly become involved in sustainable development projects. The IUCN publishes the peer-reviewed "Red List," the most extensive and comprehensive global inventory of species conservation status. A government-organized non-governmental organization ("GONGO"), the IUCN's approximately 1,300 state and non-state members, encompassing 16,000 experts divided into six different Commissions, make it among the largest, if not *the* largest, environmentally oriented international networks in existence.

CITES was born from a resolution drafted at an IUCN members meeting in 1963. Through the TRAFFIC program, a joint non-profit project with the World Wildlife Fund for Nature, the IUCN participates in the monitoring and study of the illegal wildlife trade, in cooperation with the CITES program. The TRAFFIC program itself was established as a specialist group of the IUCN in 1976. TRAFFIC is primarily funded by another large nongovernmental organization, Fauna and Flora International (FFI). This alphabet soup of organizations—the IUCN, CITES, WWF, TRAFFIC, and FFI—are closely intertwined, and between them, have a reach and extent throughout the world which cannot be underestimated. Though not as directly visible in the global environmental governance infrastructure as the other organizations, FFI is in many ways the progenitor of how conservation is understood, and how conservation policy is implemented, at the international level. Through funding and the direct action of the organization's early figures, FFI has been instrumental in establishing today's key organizations and the current world order of conservation policy and politics.

FFI was founded in 1903 as the Society for the Preservation of the Wild Fauna of the Empire (SPWFE). As the original name suggests, the group was founded upon the colonial

interests of the British Empire. Much of today's conservation infrastructure, particularly the network of preserved/restricted lands, is pulled from the experiences of the Society's American and British founders: the national parks of the United States, and the long tradition of preserving game and the hunting grounds of large estates throughout Great Britain. The system of national parks and preserves has been rightly criticized around the world for its exclusionary policies and tendency to lay blame for environmental degradation on native populations, among myriad other issues. But the beginnings of FFI were geared towards protecting what was seen as a pure, verdant, Eden-like landscape from "the carelessness and wastefulness of white men" (Buxton, 1902, p. 117).

Edward North Buxton, a British conservationist and verderer (forest law official of Crown-owned lands), was the main driving force in the founding of the SPWFE. An avid hunter, alpinist, and opponent of land enclosure, Buxton firmly believed in the preservation of public lands and that hunting "must not be done in such a way as to endanger the existence or seriously diminish the stock of game" (SPFE, 1924, p. 23, as cited in Prendergast & Adams, 2003, p. 252). Through the late 1800s and into the early 1900s, the rapid decline of big game throughout the African continent, especially in South Africa, was noted by all European colonial powers. In 1902, Buxton published a book called *Two African Trips*, in which he offered critique of British colonial land policy and admonished a class of hunters that he deemed reckless, excessive, unsportsmanlike, and "bloodthirsty" (Buxton, 1902). In 1903, upon hearing the news that a recently formed reserve in Sudan was to be dissolved, Buxton led a campaign to have the decision re-considered. Through a series of meetings organized by Buxton, a letter opposing the dissolution of the reserve was drafted and sent to the Governor-General of Sudan, endorsed by "a remarkable range of aristocratic or political figures" (Prendergast & Adams, 2003, p. 254). This group of signatories became the founders of the SPFE, which aimed to preserve game animals in the British Empire "through influencing public opinion, promoting national parks, and enforcing game laws" (MacDonald, 2003, p. 6). Eventually, two primary visions, different from Buxton's original but only slightly, took shape:

Like many such organizations, this imperial group contained a variety of ideological positions, but two stood out. One was the need to protect species that were seen to be in decline as a result of "native" hunting pressure, the other was to protect species for the continuance of hunting by "Europeans"... The emergence of natural preserves throughout Africa and South Asia during the early part of the century was continually justified through this exclusionary logic, designed in part to eliminate the competition of subsistence hunters, and what was seen as the need to preserve not simply species, but the social value of the hunt as an element in the production of European masculinity. (MacDonald, 2003, p. 6)

Several of the original key figures of the SPFE went on to help co-found the International Union for Protection of Nature (IUPN), later changed to the IUCN, in collaboration with other European and American conservation groups. The mission, goals, and overarching narrative of the IUPN were patterned after the SPFE. Namely, the IUPN was originally geared toward the prevention of extinction of game animals. Over subsequent decades, as understandings of ecology changed and environmental science as a discipline developed, the IUCN's aims also changed and the organization became more science-oriented. The IUCN began publishing information on threatened species in the 1950s. In the following years, it gradually began to brand itself as an organization that could consult with governments, especially governments of underdeveloped nations, on matters of environmental degradation, and eventually, sustainability (Macdonald 2003). The World Wildlife Fund was established as an arm of the IUCN dedicated to fundraising, though it eventually became a separate, independent NGO.

The IUCN continued to build a presence amidst global governance structures. In 1972 it participated in the UN Conference on Human Development in Stockholm and was an influential

actor. One of the IUCN's suggestions at that meeting, a system focused on monitoring the import and export of endangered species that was first proposed at an IUCN meeting in the 1960s, began the process for establishing what eventually became CITES. Serving as a key consultant at the Stockholm Conference in preparing research, background information, and reports, the IUCN was also pivotal in the establishment of the UN Environment Programme (UNEP). In the following years, the IUCN was instrumental in linking ideas of environment and development within global institutions, popularizing and mainstreaming the concepts of sustainability and biodiversity (MacDonald, 2003). As the IUCN continued to research and promote these concepts, it began "increasingly to intervene in the livelihoods and human-environment relations of communities in locales around the world" (MacDonald, 2003, p. 15). It not only institutes conservation programs, but institutes and perpetuates a particular set of ideas on what conservation should be. The IUCN and its many affiliates—CITES, FFI, UNEP, TRAFFIC, WWF, and so on-are thus ideological actors (Macdonald 2003), encouraging and imposing a brand of conservation throughout the world. This particular brand of conservation is founded on imperialist nostalgia, focusing primarily on the economic value of "ecosystem services" or specific, often charismatic (and usually faunal) species,²⁶ and preserving a certain "Edenic" vision of landscapes, often to the exclusion of people who have long lived in these landscapes. This means that other forms of nature that do not fit into these molds—whether because their value is not easily measurable or understood, or if they are not "charismatic"-become somewhat lost in this "brand" of conservation. Agarwood, as a commodity with highly varied

²⁶ "Charismatic megafauna" are species that are strategically used to promote environmental goals or ideas (policies, awareness, fundraising, etc.) due to their broad appeal to the public, usually because they are seen as "cute," majestic, awe-inspiring, and so forth. African and Asiatic elephants, which are literally the poster child for CITES (the logo for CITES consists of the letters artfully arranged to echo an elephant silhouette) are a prime examples. Some plant species may also be "charismatic" in some sense (consider the giant sequoia or various rare orchids), though they are not utilized by environmental movements to the same extent.

understandings of value and a diffuse commodity network, and a nature-derived good that is charismatic, but not in the same way as is traditionally understood in environmental circles, clearly illustrates this.

Closing

How do individual Vietnamese farmers and agarwood cultivation fit in these global frameworks? With CITES, as with most other large, international environmental programs, areas of responsibility for each involved party and the nature of engagement is very undefined and uncertain for individuals at the local level. Aside from those directly involved with CITES, very few citizens know, care about, and/or participate in any capacity. This was similar to the experiences of another large international conservation framework in Việt Nam, the REDD+ Program (Pham, Moeliono, Nguyen, Nguyen, & Vu, 2012), and is rather symptomatic of conservation and green economy initiatives in Việt Nam more broadly. In many ways, most of the individuals or "actual people" that these programs are targeted towards do not really fit in at all; they seem to be simply there, floating or forgotten between the spaces of a larger plan. The gap between the narratives and goals of CITES and the Vietnamese state's plans for green economy initiatives, and the actual manifestation (thus far) is huge. The most prominent CITEScertified grower of cultivated agarwood in Việt Nam, TRP, was founded by Western parties. The farmers with which TRP partners do well, but most other agarwood growers operate outside the CITES framework. Agarwood's diffuse, flexible, disarticulated commodity network is accommodating of this.

The operations at TRP seem sound: the landscape appeared healthy, consisting of mixed agroforestry containing a wide range of thriving species, and local partnering farmers were trained in various cultivation methods. However, their case is exceptional, and the impacts of sustainable cultivation operations overall are mixed at best. Most environmental scientists agree that the greatest driver of population decline and decline in species richness overall, at least on land, is landscape change (deforestation, desertification, etc.). As a policy dealing with nature only at the species level, this is a problem that CITES does not touch or deal with directly. But in some cases, CITES may actually contribute to the problem indirectly. In the case of agarwood and other precious tree species, CITES indirectly encourages the establishment of monocultured plantations (since cultivation and farming exempts the species from close regulation; large-scale Aquilaria cultivation operations are usually monocultured). While this increases the numbers of one particular species, it can endanger others (as forests may be cleared to make way for silviculture plots), the income from cultivation can enable increased targeted extraction from the wild, and evidence of cultivation reducing pressure on wild resources in general is weak (Bulte & Damania, 2005; Hall, Milner-Gulland, & Courchamp, 2008; Newton, 1996). The efforts to address the growing commercial demand for agarwood resulted in the modification of "nature" by encouraging farmed tree production; thus, the evoking of a particular vision of "nature" to market agarwood as a fragrance, combined with the demand for extracted product, has contributed to "wild" agarwood's decline. The possibility of rehabilitating "lost Eden" remains ambiguous and precarious.

During another sampling session at the Scent Bar, I inquired about a different natural, sustainable oud line I had recently read about, Strangelove NYC. They make scents using agarwood cultivated in Borneo by a partnership between American firm GaiaOne,²⁷ Malaysian

²⁷ GaiaOne was founded by Elizabeth Gaynes, who also founded Strangelove NYC. Gaynes is a longtime friend of supermodel Helena Christensen, who is the creative director of Strangelove NYC. According to Christensen: "My friend Elizabeth Gaynes met the Bornean royals through friends in Europe 15 years ago. The daughter of the family, Marinah Embiricos, was put in charge of saving 5,000 hectares in Sabah, Borneo, and she approached Elizabeth to help raise awareness. Embiricos' father, Datuk Harris, decided to intercrop those fields and plant teak, agarwood, herbal teas, and crops for essential oils" (McIntyre, 2014).

firm Kebun Rimau SDN BHD, and Givaudan. A 50 ml bottle is \$475. GaiaOne specializes in sustainable cultivation of aromatic plants such as *Aquilaria* and patchouli for the fragrance industry, "seeking to update and refresh a traditional, opaque and fractious raw materials market" ("GaiaOne," n.d.). They are explicit in appealing to a particular kind of fragrance consumer:

As manufacturers demand a supply chain for sustainable materials that is more consistent and consumers demand a supply chain that is more transparent, GaiaOne helps growers innovate toward a new 21st century business standard. Other sectors have seen the premiums that branded sustainable raw materials can command because they symbolize values that resonate with consumers, and symbolize supply chain and pricing integrity to manufacturers. ("GaiaOne," n.d.)

These values—transparency, a future where an exotic and distant nature is rehabilitated and restored to an Edenic ideal through technological advances, market modifications, and consumption of "green" commodities—shape and inform the sustainability scentscape and agarwood's value to the Western "ecologically minded" consumer.

Conclusion

This chapter detailed how one sector of the agarwood commodity network embodies connections between imperialist nostalgia and Edenic myth-making and the development of sustainability and green economy frameworks. The Western high-end fragrance industry trades on wistful, nostalgic ideas of a nature that is far-off or long gone, ideas that are broadly anchored in colonial histories between the global North and global South. "Green"-focused fragrances implicitly seek to revive this "past" nature through modern means of sustainable production, thus forging a particular path to certain environmentally-minded consumers and consumption practices. Through the exclusion of those that do not have the resources to engage with the "green" market and the subsequent "split" in production-consumption paths, the scentscape of the West contributes to further disrupting the notion of a single commodity network. I explored the scentscape formed from the interplay between these elements. However, like the historical fantasies of a romantic nature, the promises of the green economy are elusive or non-existent to many. This chapter traced the development of imperialist nostalgia, sustainable agarwood production that has become a product of this nostalgia, and the colonial foundations of conservation frameworks. In doing so, I demonstrated how global legislative structures regulating sustainable production shape a production-to-consumer path that excludes some small-scale producers from the "sustainable" market.

CONCLUSION

My curiosities and academic interests have always stemmed from a single thought: a personal belief that nature matters and is valuable, and that the environment is important. This is a simple and uncomplicated notion. However, understanding how this valuing and belief is manifested into actions is not simple. Thinking, feeling, or believing something is important is not always the same as acting like it is; one does not necessarily follow the other, or one can follow the other, but in convoluted or unexpected ways.

How valuing is manifested into actions at different levels—personal, interpersonal, all the way to societal and global scales—can be difficult to understand. How do we, as a society, *show* that the environment is important? How do I, as an individual, *show* that I value nature and the environment? These questions led me through a circuitous undergraduate path, from ecology, to biology, to phytochemistry, and finally to geography. I wanted to know why and how "nature," writ large, is valued, what we, individually or collectively, do about it, and to what extent these actions "work" or are successful.

The Convention on the International Trade in Endangered Species is where I started. In considering how "caring" is put into action at the societal level, legislation and policy seemed to be a logical focal point. CITES clearly conceives of nature as a commodity, as does many other forms of conservation legislation: whether it's something like "ecosystem services," or material, physical commodities derived from "nature" and traded.

From these broad questions, I came to ask: How do varied, culturally specific understandings of nature and its value match or mismatch with traditional understandings of commodities and commodity networks? What does this entail for conservation policies that are predicated on traditional notions of commodities, commodity production, and commodity value? To empirically analyze this, I chose a specific genus, and a commodity derived from it, that is regulated by CITES. Agarwood, with its generic appearance, mysterious origins, and huge reputation as a coveted and culturally meaningful commodity, was an ideal case.

This project shows how varied understandings of nature, consumption practices, and consumer preferences can create irregularities in a globalized production network. It provides an empirical, ethnographically grounded account of how culture and geography can inflect and disrupt traditional notions of commodity networks and regulation of nature-derived goods. In contrast to conventional understandings of commodities, the production and consumption of agarwood shows how culturally and geographically specific meanings and preferences can create a commodity network that is diffuse, disarticulated, flexible, and often purposefully obscured. In exploring agarwood's olfactory economies, I show how culturally- and geographically-specific practices of production, consumption, and constructions of value create a commodity network that stands in contrast to conventional understandings of commodity networks.

I first assessed understandings of olfaction more broadly in Chapter 1: the biological, embodied process, and olfaction as a way of experiencing and consuming nature. I contextualized the history and development of agarwood's three main scentscapes: its "homeland" of Southeast Asia; the traditional export markets of the Middle East and East Asia; and the new market of the West, where agarwood has only recently become popular.

Each scentscape was investigated in detail. Chapter 2 explored domestic production and use in Việt Nam and how it is reflective of understandings of nature, the environmental regulatory landscape, and changing economies and livelihoods. Agarwood's use in connection to ideals of both spiritual and bodily purity, cleanliness, and naturalness was described. I showed how these various forms of consumption practices have enabled numerous nodes and points of entry for producers into the agarwood trade, and how and why trade regulations are often circumvented.

Chapter 3 shows the context of agarwood as a scent of wealth and power by tracing the international trade to end consumers in agarwood's largest markets, the Middle East and East Asia. Agarwood has long been treated as a mark of wealth as well as spirituality. The global path of extraction from less wealthy to more wealthy powers is paralleled at the regional level, where extracted product sourced from less wealthy nations in Southeast Asia (such as Laos) moves to more wealthy nations (like Việt Nam and Thailand). In following this path, I show the relationship between nature/extraction and wealth/power.

Chapter 4 detailed the scentscape of the Western fragrance industry in connection with Việt Nam's agarwood production, the state's efforts towards sustainable development, and broader, international frameworks of building a "green" economy. The Western fragrance industry emphasizes luxury, beauty, self-expression, and increasingly, ideals of sustainability. This is founded on an idea of "imperialist nostalgia," a concept which also informs green economy initiatives. The West's agarwood scentscape demonstrates the place of nostalgia for nature in the creation of "green" goods.

Moving Forward

I remain fascinated with the conceptual "big questions" I began with: How is valuing of nature manifested into actions at different levels—personal, interpersonal, societal and global? How do we, as a society, *show* that the environment is important? Why and how is "nature," writ large, valued, what do we do about it, and to what extent do these actions "work?" Moving forward, I have two projects I will explore. One is on the contemporary imaginings of the environment in Việt Nam and how citizens are engaging with conservationist ideals to critique the state and seek environmental justice. In particular, I intend to investigate the widespread protests and subsequent activist arrests the stemmed from an industrial disaster off the central coast of Việt Nam 2016, which resulted in a mass mortality of sea life. The Vietnamese government has long used narratives of natural bounty in the service of national strength, and the environment in support of livelihoods (see Figure 36), i.e., "Rừng vàng, biển bạc" (forests of gold, seas of silver). How are citizens using this narrative themselves to critique the state?



Figure 36. "The environment today—livelihoods for tomorrow." Photo taken by author, 2012.

Secondly, I remain intrigued with scent and understandings of olfaction. The fragrance industry is notoriously opaque in its operations and has historically seen relatively little regulation (though this is slowly changing). Large fragrance firms, like Givaudan, are increasingly becoming involved in sustainable production of aromatic materials. I seek to further understand how it operates in this context.

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