

Opium Poppy Agriculture and Consumption: Contextualizing its Functions as Food, Medicine, and Narcotic

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Abstract

As a crop, the opium poppy, *Papaver somniferum*, has been part of multiple human cultures since at least 5000 BCE. Its role as both food and medicine has made this plant an important traditional agricultural product. However, today research on such functions has been largely eclipsed by a focus on the narcotic use of opium and its derivatives and the economies that stem from them. The historical uses of the poppy and related cultural conceptualizations of its nutritive and medicinal aspects contrast against practices and commodification introduced by European colonization. The commodification of the narcotic potential of the opium poppy has been used by multiple actors since the onset of globalized economic expansion as a means of attaining financial and political power. This paper draws on research compiled from academic, journalistic, and other sources to create a holistic framework for examining the complex health, social, and economic issues related to contemporary production and use of the opium poppy. This paper concludes that future research, specifically anthropological field research grounded in historical and sociopolitical contexts, can offer important insights into the lived experiences of individuals and cultures that produce, distribute, and consume the poppy as food and medicine. Such future research may offer critical insight into the relationship between the cultural constructs of food and medicine and the effects of narcotic substance consumption. Such research may also offer insight into the possible restructuring of cultural meanings and economies on a broader scale in order to mitigate the harmful effects of narcotic substances within foods.

Keywords: opium poppy; colonialism; narcotics; agriculture; ethnography

The opium poppy, *Papaver somniferum*, has been part of human agriculture since 5000 BCE in Sumerian Mesopotamia (Grey-Wilson, 1993; Lack, 2016), and the multiple histories of the relationships that various cultures have since had with this plant have tended to be complex. While this species of poppy has uses as both food and medicine, its medicinal power is so significant that the bulk of academic literature focuses on this aspect of the crop, and any writing on its use as food seems consistently to include at least some reference to the drugs the plant contains. The inextricability of the poppy's function as food from its function as drug creates social challenges within contemporary economies that produce, distribute, and/or consume the poppy and its derivatives. As in the case of other commodified psychoactive and addictive goods such as tobacco or alcohol, an examination of the social and economic structures concerning the poppy can unveil the dysfunctions and injustices inherent in capitalist systems. The opium poppy's properties also challenge basic dichotomized constructs, such as food/drug, beneficial/harmful, health/sickness, and as such, it seems appropriate to consider the poppy holistically. Such a reframing may allow for

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complexities to unfold that can work as reflexive mechanisms to de-couple our modern imaginations from our accustomed objectification and commodification of foods with pharmacological properties.

This paper will briefly explore the history of poppy agriculture and examine some issues that have emerged from it. Examples of more holistic approaches to research on the poppy will be assessed, and a case for an expansion of this approach will be made. The observations and conclusions made are based on readings of academic literature, including historical, geographic, medical, economic, and ethnographic research published in journals and books, as well as on work done by journalists that has been published in online periodicals. Databases, government records, and a documentary series were also used as research material. The research presented in this paper is important for understanding the historical, sociopolitical, and economic contexts that contemporary poppy agriculture and consumption practices are grounded in. This research also offers some insights into academic perspectives and research practices that provide rich and holistic conceptualizations of the production and use of foods and medicines, particularly those that have great potential for both benefit and harm in terms of physiological, psychological, social, and economic health, well-being, and prosperity.

A Crop Deeply Embedded in Human Histories and Traditions

Ancient Evidence of Symbiotic Human Relationships with the Opium Poppy

The origin of *Papaver somniferum* is unclear, but as no wild populations exist today, its symbiotic development with human settlement and cultivation is presumed (Chouvy, 2009). Archaeological evidence indicates that the opium poppy likely emerged somewhere between the Western Mediterranean and Asia Minor (Chouvy, 2009). Evidence of Neolithic poppy agriculture indicates that the plants initially grown in Sumerian Mesopotamia appear to have been grown for use as both food and medicine during that time (Beyer, Drummer, & Maurer, 2009). The earliest written records of the medicinal use of poppies date to around 3000 BCE in an Assyrian herbal text (Grey-Wilson, 1993; Lack, 2016; Petrovska, 2012), and the ancient Egyptians also used poppies for their medicinal and narcotic effects (Grey-Wilson, 1993). The ancient Greeks are credited with developing the extraction technique of “milking” the alkaloid-rich latex for opium, while dissemination of this knowledge resulted from the expansion of the Arab empire (Chouvy, 2009; Grey-Wilson, 1993). By around 1000 AD, growing poppies for medicine as well as for food was widespread throughout Europe and Asia (Canton-Alvarez, 2019; Grey-Wilson, 1993). Ancient depictions of poppies in artwork incorporate its imagery with symbols of spiritual and religious power and ritual (Julyan & Dirksen, 2011; Lack, 2016), and writings from various ancient cultures indicate that the benefits as well as the dangers of using poppies were well understood (Beyer, Drummer, & Maurer, 2009; Lack, 2016).

Traditional Practices and Effects of Colonialism: China and Britain

Many traditional systems of medicine are regarded as holistic in their approach, in that personal well-being is not conceived of using binary constructs such as health/sickness, but instead is understood as depending on balancing the “elements” of one’s character, which in turn depends on a deep understanding of the balance of these same qualitative “elements” of the universe through a culture’s cosmology (Ventegodt et al., 2007). Traditional Chinese Medicine (TCM), for instance, attempts to restore balance between complementary elements, such as heat/cold, and the historic use of opium poppies in this medical system appears to be in keeping with this construct (Barbaso-Schwartz, 2004; Canton-Alvarez, 2019). For example, several texts from the Tang (618-907 CE) and Song (960-1279 CE) dynasties reveal that poppies were used in treating disorders associated with an excess of heat (Canton-Alvarez, 2019). As instances of any substance addiction epidemics

were unknown prior to the start of Eurocentric globalism, circa 1500 CE (Westermeyer, 2016), the importance of understanding and stressing equilibrium may have been one component of traditional cultural systems that protected them against large-scale opium addiction. Equilibrium in this sense merges physiology, philosophy, and spirituality, and allows for reverential and possibly safer relationships with ingestibles that have potentially beneficial and/or harmful effects on the human body and mind. Merged conceptions of food and medicine, again as in the case of TCM (Canton-Alvarez, 2019), may have also offered protection against opium addiction. Traditional methods of poppy administration during the Tang and Song dynasties relied on carefully incorporating the latex into ingestible recipes such as teas and porridges (Canton-Alvarez, 2019; Westermeyer, 2016). The practice of smoking opium, which is far more addictive, only came to China after the post-Columbian Exchange¹ introduction of smoking tobacco in the late 1600s (Westermeyer, 2016). By 1729, opium addiction had become so problematic in China that the emperor instated laws prohibiting its non-medical use (Lack, 2016).

Prior to this ban, competing European colonial interests had long been targeting South and Southeast Asia in order to dominate the region's lucrative market potential (Kreutzmann, 2007). The British had taken advantage of China's growing addiction epidemic by pushing the opium trade so that demand increased its value to the point that opium could be used in place of silver to acquire Chinese goods such as tea and silk (Chouvy, 2009; Kreutzmann, 2007; Lack, 2016). With opium's value so high, the Chinese government was unable to restrict opium imports and enforce the prohibitions against its use (Kreutzmann, 2007; Lack, 2016). Britain's desire for profits seemed to completely undermine any protections within Chinese cultural systems by thoroughly commodifying the dangerous potential of opium's addictive power. In 1799, the emperor again tried to control the damage being done to Chinese society by passing more laws banning the trade and cultivation of poppies (Lack, 2016). The British government ignored this ban as well, and used its monopoly, the East India Company, to continue to funnel Indian-grown opium into China, where a cabal of merchants and corrupt officials eagerly participated in the lucrative trade (Lack, 2016). Since this entrenched economy could not be stopped, China's efforts to undo it through legislation only further increased opium's value, and a circular feedback loop of addiction, attempts at control, and increased profitability escalated tensions until the First Opium War broke out in 1839 (Lack, 2016). After two wars over opium between China and Britain, which eventually included other nations such as France, Russia and the United States joining British forces, China and its efforts to mitigate its opium crisis were defeated by 1858 (Lack, 2016). Britain's subsequent annexation of Hong Kong secured its dominant trade position between Asian and world markets (Lack, 2016). China's opium epidemic increased phenomenally, and it is estimated that in the 1880s one quarter of the population consumed between 12,000 to 15,000 tonnes of opium annually (this surpasses recent peaks in global production, which stood at around 10,500 tonnes in 2017) (Lack, 2016; Kreutzmann, 2007; United Nations Office on Drugs and Crime, 2019). By undermining China's traditional approaches to poppy consumption, colonial interests capitalized on the poppy's addictive potential and secured Britain's position as a global economic power.

The Trajectory from Historical to Contemporary Contexts

By capitalizing on opium's addictive properties, Britain was able to leverage its control over a robust informal economy into a position of global dominance. Since the beginnings of global

¹The Columbian Exchange is a collective term that refers to the two-way exchange of people, commodities, and diseases between the Americas and Africa/Europe after the onset of early colonialism in the 15th and 16th centuries ("The Columbian Exchange," n.d.). Tobacco and the accompanying practice of smoking were introduced to European colonizers through contact with Indigenous groups in the Americas ("The Columbian Exchange," n.d.; Westermeyer, 2016). When Europeans later brought tobacco smoking to China, this form of administration was applied to opium (Westermeyer, 2016).

capitalism, the use of addictive substances to gain power through both formal and informal economies has been one of its hallmarks, and the actors who participate in these economies range from impoverished individuals and communities to elite leaders and nations (Robbins, 2011). The elites who construct the global economy have always had the power to design far-reaching narratives that undermine smaller or competing players by obscuring the overarching economic forces at play and vilifying characters such as individual or organized illicit dealers and their consumers (Berger, 2014; Robbins, 2011). The obvious damaging effects of addiction on individuals and societies have made it easy to condemn the disenfranchised and less covert trade participants by conjuring abject imagery that operates on peoples' sense of disgust, fear, and justice (Berger, 2014; Evered, 2011a, 2011c; Robbins, 2011). Meanwhile, actual concern for the well-being of individuals and communities is doubtful, as the motive for increasing profits and political power appears to be behind many drug production and trade policies (Evered, 2011a, 2011b, 2011c; Furst & Willoughby Nason, 2020; Kreutzmann, 2007; Robbins, 2011).

Modern Globalization and Conflict: Afghanistan and the US

Since the wars between China and Britain, production and trade of opium has been affected by global political dynamics, including the Chinese revolution, the Cold War, and ethnic insurgencies in South and Southeast Asia (Kreutzmann, 2007). Today, most of the world's illicit supply of opium is produced in Afghanistan, and the history that led to this situation similarly includes international struggles for global influence (Lack, 2016; Kreutzmann, 2007; Parenti, 2015). Prior to 1980, Afghanistan's production of opium was minimal, and the country was fighting to expel the USSR's Red Army (Kreutzmann, 2007; McCoy, 2018; Parenti, 2015). The US was competing for global influence in the Cold War against the USSR and secretly backed the mujahadeen guerillas by supplying billions of dollars in arms (McCoy, 2018; Parenti, 2015). Over the following years, the mujahadeen, followed by the Taliban, coerced local farmers to grow poppies in order to fund their campaigns, first against the Soviets, then against one another in the internal tribal conflict for political control (Kreutzmann, 2007; McCoy, 2018). The US overlooked poppy production when it supported their agenda, and once the Soviets pulled their forces out of Afghanistan in 1992, the US left the Afghanis in a state of lawless turmoil (McCoy, 2018). The civil conflict was largely reliant on the illicit opium trade for its funding, and the Taliban was only defeated temporarily when it suddenly enforced a complete ban on its production in 2001 (Kreutzmann, 2007; McCoy, 2018). After the 9/11 terrorist attacks, the US launched an invasion against Afghanistan with backing from Britain and included poppy eradication as part of its military strategy (Parenti, 2015). The war has cost the US roughly a trillion dollars since its onset, and the strategy to eradicate the poppy has been utterly unsuccessful (BBC Reality Check Team, 2020; Lack, 2016; McCoy, 2018; Parenti, 2015).

Alternative Approaches in Economic Policies and Academic Research: Afghanistan Vs. Turkey

The ineffectual US military presence in Afghanistan persists, and poppy production, while tapering in 2018, continues to dominate Afghani agriculture as its single most important cash crop (Kreutzmann, 2007; McCoy, 2018; Parenti, 2015), making the nation "the world's first true narco-state" (McCoy, 2018, para. 5). While poppy production is technically illegal, the legitimate government appears to lack the ability or the will to enforce this ban, and corruption is rampant with many officials making profits from the opium economy (Evered, 2011a; McCoy, 2018; Parenti, 2015). Increasing periods of drought due to climate change along with wartime damage inflicted on irrigation systems complicate the issue further, as the poppy is one of the few crops that can be grown under such desiccated conditions (Evered, 2011a; Parenti, 2015). Some researchers call for a

reverse in the eradication strategy to bring more social cohesion to Afghanistan by embracing poppy agriculture (Parenti, 2015), presumably by incorporating it into the licit international pharmaceutical trade.

A strategy for the legal incorporation of poppy agriculture was adopted in Turkey, where poppy production had been previously targeted for eradication due to pressure from the US (Evered, 2011a, 2011b, 2011c). In the 1970s, Richard Nixon attempted to rally the American body politic using antinarcotic rhetoric and instigating the US's first international "war on drugs" (Evered, 2011a, 2011b, 2011c). Turkey was a leading producer for the illicit trade of opium during this time, but its economy also relied heavily on US funding, and the Turkish government was easily pressured to give in to Nixon's demands to instate a total ban on production (Evered, 2011a, 2011c). Local farmers were impoverished as a result, as for most, the poppy was the only marketable crop available to them (Evered, 2011b, 2011c). The Turkish government was able to develop a model for licit cultivation of medical morphine that appeased US interests while allowing local farmers to resume production with strict enforceable measures in place, creating an entirely state-run opium economy (Evered, 2011a, 2011b, 2011c).

In order to provide a platform for otherwise marginalized farmers, geographer Kyle Evered conducted ethnographic research with retired Turkish poppy growers who lived prior to and through the ban, as well as after the institutionalized economy was established (2011a, 2011b, 2011c). Evered's holistic and humanistic approach reveals the meaning that poppy agriculture has had for local peasants and sheds light on the range of functions that the plant has had in this regional culture (2011a, 2011b, 2011c). According to the farmers' reports, poppy cultivation had a long-standing tradition in local communities before the ban, and it is possible that poppy cultivation had never been completely interrupted in Anatolia (Evered, 2011b). The seeds are to this day an important food staple, primarily as a source of cooking oil, and since many communities in the region could not grow olive trees, it was traditionally the only source of oil other than butter (Evered, 2011a, 2011b). In the past, the oil was also used externally for its curative properties for conditions such as rheumatism, wounds, and animal mange (Evered, 2011b). The seeds are still eaten whole or are crushed into a paste that is consumed in a similar way to peanut butter and is added to local varieties of halvah (Evered, 2011a, 2011b). Traditionally, the leaves were used in salads, and the dried stalks were used in brick making, as roof thatching, and for stove fuel (after which its ashes were used in soap making), although not all of these practices are as common today (Evered, 2011a, 2011b). Importantly, the opiates had been used as a traditional medicine for pain relief, and it is worth noting that the informants reported few to no instances of addiction due to internal cultural sanctions against the misuse of narcotics (Evered, 2011b).

Evered's ethnographic research provides historical and contextual information drawn from the subjective experiences of marginalized actors in poppy agriculture. Evered argues that these perspectives are causal factors in the effectiveness of various state and international policies regarding poppy eradication or incorporation (Evered, 2011c). Ethnographic research done in Afghanistan would similarly provide insights regarding local cultural histories, practices, and attitudes towards poppy agricultural and consumption. Such insights can be applied to create a deeper and more nuanced analysis of the effects of state and international policies on poppy production in Afghanistan, which in turn may contribute to improved policy change.

Complexities Within Holistic Cultural Research in Global Economies: Turkey and India

Many of the Turkish farmers Evered interviewed had not had any interactions with the state prior to the poppy ban, and looking back, they interpreted the sudden appearance of government officials in their villages to enforce a US directive as a breakdown in local democracy (2011a,

2011b, 2011c). Evered proposed that the Turkish solution to the problems inherent in poppy agriculture exemplifies “progressive” approaches that are sensitive to local cultural lifeways and allow for respectful international trade relationships (2011c, p.302). His ethnographic approach to understanding the lived experiences of the marginalized actors in the global production of opium is valuable, and similar studies conducted in Afghanistan would be as well. However, since the trade of Turkish opium is international, his conclusions stop short of being holistically derived in that they do not include factors pertaining to the poppy’s complete supply chain, including the processing, distribution and consumption of Turkish opium products.

Global economics create chains of commerce that are so complex that holistic analysis of any one commodity necessarily involves research between multiple cultural actors. For example, Turkey exports some of its surplus culinary seed to India, where poppies are also grown under strict regulations for both medical production and seed consumption (Menon, 2019; Simoes & Hidalgo, 2011; Vincent, 2014). Poppy seeds are a traditional staple food in most regional Indian cuisines (Nandy, 2020), making it a valuable non-medical/non-narcotic market for local farmers. In 2013, Indian poppy farmers complained that the value of their crop was being undermined by the working of a cartel illegally bringing seed in from Afghanistan through Turkish import channels (Menon, 2019; Vincent, 2014). Since the profits on Afghanistan poppies are created through the illicit opium trade, the seed surplus was dumped into the Indian market at a fraction of the cost that local farmers could produce it (Menon, 2019; Vincent, 2014). Aside from the cartel’s activity being common knowledge amongst farmers and distributors, evidence showed that Turkey’s export tonnage vastly outweighed their production, minus local consumption, sowing stock, and waste factors (Menon, 2019; Vincent, 2014). A public interest litigation plea was brought to the Allahabad High Court in an effort to put a stop to the cartel’s activity (“Ayurveda Sewashram Kalyan Samiti vs. Union of India,” 2014; Menon, 2019; Vincent, 2014). Guidelines had recently been issued by India’s Finance Ministry to ensure that all poppy seed imports be attained by legal producers, and the court ruled that there should be no fault found against the importers since the guidelines had only been in place a short time (Nair, 2014). While the court stated that future dealings should adhere to these guidelines, this statement seems to have done little to protect Indian farmers, as their potential profits continue to be undermined by Turkish imports to this day (Menon, 2019).

Relationships Between Licit and Illicit Narcotics Economies

The licit and illicit narcotics economies are not necessarily discrete, nor does the licit trade of opium preclude corruption, and these factors combined have produced addiction epidemics such as the one that began in the US in the 1990s (National Institute on Drug Abuse [NIDA], 2020; Furst & Willoughby Nason, 2020). In this instance, unscrupulous pharmaceutical companies and medical doctors pushed opium-derived medications using the same techniques as illegal drug dealers, arguably from more dangerous positions as authorized institutional figures (NIDA, 2020; Furst & Willoughby Nason, 2020). After more than two decades, during which time millions of Americans of a range of socioeconomic statuses became dependant on opioids, law enforcement officials finally began targeting the companies and doctors implicated in this complex and layered scheme (NIDA, 2020; Furst & Willoughby Nason, 2020). With the flow of opioid pharmaceuticals interrupted, many who became addicted to them began turning to the informal economy for their supply (NIDA, 2020; Furst & Willoughby Nason, 2020). While the US claims that most of its illegal heroin comes from Mexico and South America (Rowlatt, 2019), it is no small irony that its long, expensive, and failed anti-opium campaign in Afghanistan has overlapped with a domestic opioid crisis.

The nature and scope of the problems associated with poppy-for-food agriculture stem from harnessing its addictive potential as a narcotic in order to secure political and economic power (Chouvy, 2009). When global capitalist systems commodify the value of foods and medicine with

addictive properties, those who control these economies are able to steadily rely on the high profits that are made off of these commodities (Robbins, 2011). Regulation of foods and medicine that are potentially addictive through measures such as illegalization or trade restrictions only increase their value potential, inviting corruption within formalized economies and the creation of illegal informal economies (Robbins, 2011). Narratives around the inevitable social problems that arise from such circumstances can be manipulated by dominant political actors to condemn and criminalize more marginalized individuals, communities, and nations involved in the production, distribution, or consumption of addictive goods (Robbins, 2011). Most producers of illicit opium are trapped by economic pressures that make it otherwise difficult or even impossible to engage in other means of generating income (Chouvy, 2009). Much of the official and public discourse pertaining to opium production and consumption, however, characterizes producers as motivated by greed and consumers as a social nuisance (Berger, 2014; Chouvy, 2009, 2014). Consumers of opium and opioids come from a wide range of cultural backgrounds and personal experience that need to be appreciated to understand what motivates their use, and even whether or not such use ought to necessarily be considered problematic (Berger, 2014; Chouvy, 2014). Meanwhile, globalized medical and narcotic economies and legal frameworks, which lead to the creation of black markets, inhibit full realization of the crop's nutritional and other values, to the detriment of local farming opportunities.

Conclusion: Field Research and Ethnography

The oppressive realities of this situation, together with the fact that poppies have played a significant food and medicinal role in numerous cultures over thousands of years, make it an important subject for ethnographic research. Although scholarly research on poppy agriculture has been prolific, anthropological ethnographic study of the lived experiences of producers and consumers has been lacking. Contemporary cultural anthropology grounds its practice in respectful interrelational exchange between researchers and cultural subjects, using richly descriptive qualitative analysis that can bring to light experiences and perspectives of marginalized people (Gruenbaum, 2009; Campbell & Lassiter, 2015). Such research can provide insights that have the potential to inform effective policy making to enhance the overall wellbeing of individuals, cultural groups and nation states attempting to find solutions to complex social problems (Archambault, 2011; Gruenbaum, 2009). Anthropologists can also offer important cross-cultural analysis that is of great value in understanding multilayered issues in an economically and socially globalized world. Such analysis will enhance the important field research and ethnographic work on poppy agriculture and consumption being done by researchers such as Evered who come from other disciplinary backgrounds. Unveiling the intercultural dynamics that are affected by or contribute to global market forces that keep marginalized actors subjugated are necessary for challenging public and official discourses and for making effective policy change recommendations.

A relevant aspect of capitalist agricultural profit-seeking is that it manifests in the form of biorefining, in which the processing of crops into refined products increases their potential market value (Jensen, 2017). This increases the relational distance between consumers and crops and undermines the potential for holistic relationships between individuals and their food/medicine. Future research should engage various disciplinary analyses with anthropological ethnographic fieldwork to identify ways in which cultural concepts of food/medicine and relationships with powerful plants, such as and including the poppy, offer protection against harmful consumption practices. Combined historical and ethnographic research could examine if and how localized systems of trade support holistic understandings of uses for the poppy. As this paper is being written during the time of the coronavirus pandemic, the possibility of the failure of supply chains is being brought to the forefront of global concerns. The importance of ethnobotanical research becomes more relevant to all of us when traditional practices may offer insights into respectful and safe uses of foods and

medicines that can be locally produced and utilized. In the case of *Papaver somniferum*, which has remarkable food and medicinal benefit as well as enormous capacity for harm, research into holistic relationships with this plant and approaches toward food/medicine is necessary for analyzing possibilities for incorporating it into localized economies.

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