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PRODUCING TRADITION: INTERNATIONAL STANDARDS AND DEVELOPMENT IN JORDANIAN OLIVE OIL

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PRODUCING TRADITION: INTERNATIONAL STANDARDS AND
DEVELOPMENT IN JORDANIAN OLIVE OIL

DISSERTATION

A dissertation submitted in partial fulfillment of the requirements for the degree of
Doctor of Philosophy in the College of Arts and Sciences at the University of Kentucky

By

Brittany Eleanor Cook

Lexington, Kentucky

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And Dr. Tad Mutersbaugh, Professor of Geography

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ABSTRACT OF DISSERTATION

PRODUCING TRADITION: INTERNATIONAL STANDARDS AND DEVELOPMENT IN JORDANIAN OLIVE OIL

This dissertation project examines how value is changed and created through organic certification and the universalizing ideas of capacity building within the olive oil industry in Jordan and how these shifts affect the social and material processes of production. I approach organic olive oil production in Jordan as one method that producers use in accessing markets and capacity building. By shifting from looking strictly at organic certified farms to examining the larger context of capacity building and international standards, I identify how organic is just one strategy in a larger effort to diversify Jordanian agricultural production and to access global markets. However, more work needs to be done to elucidate how development shapes organic and other ‘alternative’ initiatives differently than in European and North American contexts (Bidwell, Murray, and Overton 2018). In order to do this, I incorporate postcolonial critiques of GPN (Hughes, McEwan, and Bek 2015) and critical development studies (Ferguson 1999; Li 2007b; Escobar 2011) to further our understanding how of these certifications and standards are taken up, challenged, and sometimes abandoned in favor of other production methods in local spaces of the Global South.

The local embeddedness of olive oil production and the relative recent history of export provide a unique opportunity for examining how producers, organizations, governments, and universities create new export industries. As Ouma and Whitfield (2012) argue, work needs to trace how these capacities are built. This dissertation examines the following questions: how is value redefined as producers try to access distant consumers? What are the material and social strategies? In answering these questions, I examine three types of value: taste/sensory, organic/environmental, and gendered tradition. Through the examination of these values, I found that they were each built through a mechanism: re-aestheticizing local taste, creating a new commodity network, and pushing domestic labor into the public sphere. Each mechanism has intended and unintended consequences for the social relations of production.

In summary, this dissertation explores the use (and abandonment) of organic certification within the larger context of development and capacity building in Jordan. In order to explore how value is being created in new ways, the three empirical chapters examine extra virginity, organic certification, and women’s rural organizations. By looking beyond a singular commodity chain, this dissertation examines the processes

through which institutional assemblages are formed and destabilized. Therefore, each of the three empirical chapters covers a different aspect of the institutions that are defining value within the larger network of the olive industry. This approach will further our understanding of how quality and conventions function in systems under transition (Higgins, Dibden, and Cocklin 2008a).

Together these findings provide a broad picture of efforts in Jordan to improve and expand the Jordanian olive oil industry. A large aspect of this effort is to produce exportable olive oil. While only a small percentage of producers are exporting, governmental and development networks want to build the capacity of the olive industry so that more farmers are producing to international standards. Through this broad initiative, traditional ideas of quality and the best practices of production are being challenged. These shifts create new networks and products through which rural producers try to capture value. While the overall ramifications of this shift for the average farmer are small now, with further government standardizing, production and its associated social relations could be significantly changed. The traditional farmers who were able to sell within their personal networks may lose their ability to sell flexibly, and simultaneously larger irrigated producers may flourish, having larger environmental impacts.

KEYWORDS: alternative food networks, organic, agriculture, Jordan, development, commodity chains

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April 27, 2018

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1. Introduction

In Jordan, the olive tree is considered holy, blessed, revered, understanding, giving, and lucrative. Nearly every conversation I had about olive oil in Jordan included olive oil's importance to local food, religion, and social relations. People would often recite verses from the Quran about the olive tree. Across the Levant, villages are scattered with trees said to be thousands of years old, some memorialized and encircled with bricks. It is within this context that olives are being used to reach distant consumers with gourmet tastes and deeper pockets. Although this project focuses on the political economic aspects of knowledge, development, and markets, the olive's religious and cultural significance is an integral part of how many Jordanians tend to and think about their production. Producers and retailers often capitalize on these cultural meanings in global supply chains, sometimes with disastrous results (Tsing 2009). While not always harmful, these efforts to capture value often have unintended consequences. This dissertation project examines how value is changed and created through organic certification and the universalizing ideas of capacity building within the olive oil industry in Jordan and how these shifts affect the social and material processes of production.

I was initially interested in researching the impacts of organic olive oil production on rural livelihoods in Jordan. However, as I began to talk with producers, I found nearly as many people who had left organic certification as those who were certified. This struggle held true for both smallholder farmers as well as larger investment farms. Through interviews with bureaucrats and producers, I found that smallholder farmers often left organic because organic production required accessing distant consumers, which often made them more dependent on using specific certified mills to reach those customers.

Meanwhile investment oriented farmers often left organic certification because the restrictions led to a decrease in quality and increase in cost, especially in desert areas where they were susceptible to the harsh weather and pests. I will elaborate on this idea in the second empirical chapter. Furthermore, the idea of certification seemed ridiculous to many farmers, government officials, and mill owners; they repeatedly told me that traditional olive farmers are organic without certificates.

In this project, I examine organic olive oil production in Jordan as one method of accessing markets and capacity building. By shifting from looking strictly at organic certified farms to examining the larger context of capacity building and international standards, I identify how organic is just one strategy in a larger effort to diversify Jordanian agricultural production and to access global markets. However, more work needs to be done to elucidate how development shapes organic and other ‘alternative’ initiatives differently than in European and North American contexts (Bidwell, Murray, and Overton 2018). In order to do this, I incorporate postcolonial critiques of GPN (Hughes, McEwan, and Bek 2015) and critical development studies (Ferguson 1999; Li 2007b; Escobar 2011) to further our understanding how of these certifications and standards are taken up, challenged, and sometimes abandoned in favor of other production methods in local spaces of the Global South.

Olives are an important lens for discussing this production, because, unlike many other organic certified and fair trade foods in the Global South, the olive industry is not export oriented in Jordan. Much of the existing alternative agro-food network (AFN) literature examines coffee, tea, and other products in buyer-driven chains where much of the value added is on the retail end of the chain (Neilson and Pritchard 2009). Only a

small percentage of Jordanian production, about 2 percent, is exported, and much of this export is to Jordanian expatriates in Gulf countries, meaning that local ideas of quality would be valued. The local embeddedness of olive oil production and the relative recent history of export provide a unique opportunity for examining how producers, organizations, governments, and universities create new export industries. As Ouma and Whitfield (2012) argue, work needs to trace how these capacities are built. This dissertation examines the following questions: how is value redefined as producers try to access distant consumers? What are the material and social strategies? In answering these questions, I examine three types of value: taste/sensory, organic/environmental, and gendered tradition. Through the examination of these values, I found that they were each built through a mechanism: re-aestheticizing local taste, creating a new commodity network, and pushing domestic labor into the public sphere. Each mechanism has intended and unintended consequences for the social relations of production.

1.1 Why Olive Oil in Jordan?

Olive oil production in the Levant has a long history. Archaeological evidence indicates that there was intense cultivation in the Levant during the Bronze Age (Kapellakis, Tsagarakis, and Crowther 2008). Olive oil had such economic importance in the 19th century that it was often used in lieu of money (Doumani 1995). The tree itself was also extremely valuable. Under Ottoman land law, ownerships of trees was assigned separately from the land itself (Cohen 1993). To this day, uprooting centennial olive trees in Jordan is illegal without a permit (Namrouqa 2017). Jordanians continue to emphasize this historical importance in governmental meetings, in companies' marketing materials, and in the tourism sector. In other words, today, industry actors cite this history as one

reason that the government, Jordanian farmers, and consumers need to continue to produce and consume olive oil.

Jordanian olive oil production is low compared to other countries such as Tunisia and Morocco, but olive oil remains an important aspect of local food systems. However, unlike in countries such as Tunisia, Jordanians still consume 98 percent of the domestic production. In other words, unlike in Tunisia (Putinja 2015), domestic consumption has remained high because consumers have not switched to primarily using other cheaper vegetable oils.¹ Because production is mostly for local consumption, ideas of quality do not necessarily follow the global industrial norm of extra virginity, virginity, and pure olive oil. Instead, the biggest current challenge regarding quality in Jordan is olive oil that is mixed with other cheaper vegetable oils. Meanwhile, the public, private, and education sectors have run several programs aimed at encouraging production and defining tastes that meet global industry standards.

Although there is considerable scholarship by historians and archeologists on olive oil production in the region, little research has examined the differing ideas of quality in contemporary olive oil production (Heath and Meneley 2007; Meneley 2007, 2008a, 2008b, 2011, 2014; Al Ganideh and Good 2015). Outside of the Middle East, there has been the widely popular book by Mueller (2013), which, in its journalistic style, focuses largely on scandals within the industry. Meanwhile, Coq-Huelva, Sanz-Cañada, and Sánchez-Escobar (2014) examined olive oil and conventions in Europe. However, their work focuses largely on disputes within Spanish cooperatives, a dynamic which has not

¹ Some Jordanians are switching to cheaper vegetable oils, especially for cooking due to economic difficulties. However, olive oil is still seen as a staple in most households.

largely affected smallholder Jordanian farmers. Meanwhile, work in Palestine has critically examined the challenges to export and maintaining international quality (Meneley 2008b, 2011, 2014), but it has focused more on how quality is constructed instead of how this sense of quality and the developments in the industry are linked to different development and capacity building networks. Therefore, this dissertation research fills a gap in the limited literature on olive oil by addressing how value and quality standards are constructed within larger governmental and economic networks.

Furthermore, conducting this research in Jordan answers a recent call for more work on alternative food networks (AFNs) in the Global South (Bidwell, Murray, and Overton 2018). Research on commodities needs to take into account the hybridity of institutions in postcolonial contexts (Hughes, McEwan, and Bek 2015). While I do not want to define Jordan primarily in terms of postcoloniality, it is important to note the ways in which policies supporting organic agriculture, for example, take place within a governmental system that is in part a product of its colonial history and a current aid receiving country. The national government's ministries often work closely with development agencies and the international private sector in order to fund new projects. Therefore, in comparison with other countries such as the United States or the UK, rural development in Jordan works through these unique postcolonial institutions in which the government's economic limitations are supplemented by aid and development networks. Overall, Jordan received 2.739 billion USD in 2016 in net official development assistance and official aid according to the World Bank. French, Japanese, and American development agencies have all funded various food production programs in Jordan.

Furthermore, rural residents often voiced frustration with the concentration of resources in Amman. Nearly half of the population in Jordan lives in Amman, the capital. People in the rural areas of Jordan often lamented the lack of services and work opportunities in the region compared to Amman. They said that job opportunities are concentrated in the more diversified urban economy while rural areas rely largely on wage labor in Amman and positions in the local government. Likewise, most of the contemporary research in Jordan is urban based, with development agencies doing most of the rural research (Women are Key to Food Security in Rural n.d.; Olaimat and Al-Louzi 2008).² With this research project on olives in Jordan, I contribute to our understanding of how capacity building and global commodity production touch ground in rural spaces in Jordan.

1.2 Alternative Food Networks and Organic

I found it difficult to fit the Jordanian case neatly within the context of existing work on Alternative Agro-Food Networks (AFN). This led me to ask, what do we need to think about differently in terms of ‘alternative food networks’ in the Global South? The study of this agricultural movement has come largely out of Europe and North America in two strands: local food studies (SYAL) and AFN (see Bowen and Mutersbaugh 2014). As Bowen and Mutersbaugh (2014) note, while both bodies of work focus on local agriculture projects, AFN focuses largely on organic and fair trade, while SYAL focuses on locally territorial projects such as GI. However, as seen in my experiences in Jordan, these two projects function through much of the same networks and farmers similarly fall in and out of these projects. Although GI and organic have unique structures and

² Some exceptions include Honey and Kharmeh (1989), Tarawneh and Husban (2011), Tarawneh (2013), and AlTarawneh (2016).

characteristics, at this stage of their preliminary development in Jordan, they face many of the same debates around how to implement them, who are the stakeholders, and who gets included/excluded.

Understanding how these projects develop within the overlapping networks of capacity building in Jordan challenges the ‘alternativeness’ of AFN. In the Global South, Dolan (2010) argues that fair trade is inseparable from the development context and that it is increasingly hard to see anything alternative or oppositional about it. I would extend this argument to many of the other certifications such as organic and GI that get used to promote sustainable development. Examining the larger networks within which these various projects get taken up shifts the focus from the ethics of fair trade, for example, to how these projects’ focus on global gourmet markets restructures the social relations of production. Therefore, by moving our analysis beyond a particular certification scheme, our analysis shifts to how these certifications are part of a broader idea of development and capacity building that depends on producing to international quality standards

Much of the work on organic is in this AFN tradition which is rooted in exploring processes of embeddedness and re-embedding (Murdoch, Marsden, and Banks 2000; Higgins, Dibden, and Cocklin 2008a; Bowen and Mutersbaugh 2014; Hughes et al. 2014). The analysis often addresses the ‘quality turn’ and its resultant re-embeddedness (Goodman and Watts 1997; D. Goodman 2004). While this scholarship is often concerned with the construction of quality and value in local contexts, the discussion of quality focuses largely on European and North American consumers in which organic is seen largely as a reaction and protection against widespread conventional farming (Goodman 2003). However, in Jordan, organic certification is not providing an alternative to a

largely industrial nor to an export-oriented crop. Instead, it functions to differentiate the product for a small subset of olive farmers interested in accessing distant consumers. Furthermore, unlike tea and coffee in the Global South (Fridell 2007; Dolan 2010; Blowfield and Dolan 2014), olives do not have a long export history, making conversations about ‘re-embedding’ irrelevant because the olive was not ‘un-embedded’.

While many certifications try to obtain value by containing a sense of place to their consumers. However, the idea of organic production as a spatially extended short commodity chain (Marsden, Banks, and Bristow 2000) in which a sense of place is conveyed to the consumer overlooks the superficiality of this connection and how this connection is mediated. In the olive oil commodity chain in Jordan, this expression of place is connected to the goal of getting Jordanian olive oil on shelves, not putting farmers in closer contact with consumers.

Additionally, there is a tension between the idea of tradition, the reality of change, and the restraints of certifications. Within this tension, there is a simultaneous celebration of local tradition and standardization. Grasseni (2011) argues that the seemingly celebratory promotion of heritage and tradition in agro-food systems often masks appropriation and commodification and the related changes to production. Bowen and De Master (2014) argue for a more flexible sense of heritage and territory than the European model of *terroir*, which is often based on a culturally marketed and institutionally controlled system. However, this suggestion overlooks the ways in which producers in the Global South must convey quality through recognizable standards and certifications in the international market. Therefore, arguments from the SYAL scholarship emphasizing that the idea of local is an ever-changing processes (Muchnik 2010), do not

resonate with the ways in which certifications are used to open foreign markets. Instead, research must examine how this process of developing local tradition under the guise of development is often in the interest of the funding country in order to create imports (Bidwell, Murray, and Overton 2018).

Although some of the work in AFN examined the role of development, it has largely been in Europe (Ilbery and Kneafsey 2000; Marsden, Banks, and Bristow 2000; Murdoch, Marsden, and Banks 2000) where organic consumers are looking for a better quality version of a familiar product. For example, when organic is produced for a domestic European market, the goods are being manipulated in order to diversify for “ever more health, quality and ecologically minded consumers” (Marsden, Banks, and Bristow 2000, 430). However, in Jordan, these customers are not merely ‘more quality conscious;’ they are a new customer base whose retail outlets are much harder to access and whose ideas of quality differ from local Jordanian ideas of olive oil quality. In Jordan, the few smallholder farmers who have been involved in organic were recruited and trained with the support of international development funds. However, instead of producing for a similar group of consumers who are merely more quality conscious, they were producing for a whole new group of consumers, in another country, who did not evaluate the taste of olive oil in the same way as local consumers. Therefore, the idea that AFNs serve ‘more quality minded customers’ obscures the ways in which organic requires a new commodity chain for smallholders in Jordan and creates new material and social assemblages. It is not simply a better quality product.

Although global commodity chains have been invaluable for our thinking regarding international commodity production, value creation, and governance, several critiques

have inspired alternative approaches. First, the chain and network heuristics often reinforce the ‘core’ as consumer and the ‘periphery’ as producer by freezing the complex and contingent economic relationships (Leslie and Reimer 1999; Ramamurthy 2004). Assemblages have been one way to focus on the contingent relationships within human and non-human interactions, producing commodities with particular conceptions of and governance over quality (Mansfield 2003b; Li 2007b; Tsing 2012). I use this assemblage thinking to extend the object of study in my case beyond organic certification.

This emphasis on assemblage compliments a larger trend of network thinking. In their studies on development, Rankin (2008, 2011) and Li (2007a) approach markets and institutions in commodity chains not as bounded objects or structures, but relations that are time and place-contingent and are shaped by contestations. This was certainly true in Jordan as the decisions and implementation of the initiatives in the Ministry were heavily contingent on shifting employees, directives, and partnerships. As Rankin (2001) argued, many women were seen as the prime subject for market-led rural development. Rankin (2008) combines the idea of assemblage with Polanyian emphasis on markets as meaning-making institutions in order to trace the processes without the risk of the market seeming like a cohesive whole. I draw on this work in my effort to show the shifting meanings of quality and value in the new olive oil production.

A second alternative to the GVC literature has been to focus on the exclusions (Mutersbaugh 2002; Neilson and Pritchard 2009; Bair and Werner 2011). Likewise, research on standards has long established this process of exclusion and inclusion and produces try to increase differentiation (Mutersbaugh 2002). In order to accomplish this, Bair and Werner (Bair and Werner 2011) suggest focusing on the absences of the chain,

the exclusions, as much as the positive inclusions. They argue that commodity chains simultaneously market place and tradition while devaluing it in other ways. In other words, the GVC scholarship largely focuses on how producers can gain a comparative advantage and to capture value as good are produced transnationally. Recent work in Global Value Chains has emphasized the need for attention to the exclusions and inclusions in the creating of chains and networks (Neilson and Pritchard 2009; Bair and Werner 2011). Ouma and Whitfield (2012) argue that,

“Creating competitive advantages in turn requires the transformation of landscapes of disparate capabilities, organizational forms, inherited institutional frameworks and routines, and technological relations into a coordinated socio-economic system. Furthermore, constructing the linkages that ‘make industries work’ have to be made and remade in response to changes in local and international environments” (302).

They argue that it is important to look at agro-industry not in terms of advancement in technology (or upgrading in GVC terms), but in terms of “the system of socio-technological relations that produce one product or related products” (Ouma and Whitfield 2012, 302). This shift towards the larger system of socio-technological relations shifts the focus away from topologies of standardized and industrial food production on one end of the spectrum and specialized and alternative on the other (Storper and Salais 1997; Marsden, Banks, and Bristow 2000). Instead, due to olive oil’s physical requirements, processing occurs in Jordan and only blending, bottling, and packaging might occur outside of the country.

1.3 This Dissertation

In summary, this dissertation explores the use (and abandonment) of organic certification within the larger context of development and capacity building in Jordan. In order to explore how value is being created in new ways, the three empirical chapters

examine extra virginity, organic certification, and women's rural organizations. By looking beyond a singular commodity chain,

“Empirically the task becomes one of examining the processes through which institutional assemblages are formed and territorialized in particular space–time conjunctures (the forging of alliances, authorization of knowledge, production of subjectivity, management of failure, and so on; see Li, 2007[b]), as well as the processes through which they are destabilized (for example, by competing institutional projects engaging those knowledges and subjectivities)” (Rankin 2008, 1967).

Therefore, each of the three empirical chapters covers a different aspect of the institutions that are defining value within the larger network of the olive industry. This approach will further our understanding of how quality and conventions function in systems under transition (Higgins, Dibden, and Cocklin 2008a).

Within this larger context of thinking through development, I explore three forms of value making in the olive industry in Jordan. The first article examines the ways in which science-based standardization binds taste and practice in ways that delegitimize other ways of relating between agricultural practices, processing, and tasting (Cook 2018). This conceptualization of the re-aestheticization of olive oil through extra virginity informs the second article in which I examine the ways in which the organic paradox in Jordan is grounded in development programs and the ways in which producing for distant consumers actually hinders traditional farmers from capturing value, despite development aspirations to assist them. Finally, the third article examines how women's small rural businesses, which are a visible part of the Jordanian olive festival demonstrate another way in which development logics affect social development and how women use these networks in order to redefine the value of their social reproduction.

The first empirical article of the dissertation furthers our understanding of the aesthetic politics of defining quality and taste. Although there is a large body of work on standardization in agro-food networks, this article moves from a conventions theory approach in order focus on foreclosure of taste and reconfiguration of ‘legitimate taste’ in olive oil. I frame extra virginity as a new tasting aesthetic regime that claims legitimacy through techno-social tools and scientific discourses of best practices that shape who has the ability to claim quality. This shift is important because it also privileges the practices necessary to creating oil that meets these particular standards. By tracing these processes, this article furthers our understanding of how seemingly apolitical, scientific standards travel across scales and affect how (and which) people experience taste.

The second article examines how organic certification in Jordan creates a unique paradox in which traditional olive farmers, who many Jordanians colloquially refer to as organic, face larger barriers to producing organically certified agriculture than large intensive investment farms. I argue that this paradox develops in Jordan because of the way in which new quality standards necessitate a particularly configured commodity chain that relies on distant customers, undermining farmers’ traditional rents. This shift benefits intensive irrigated forms of production because those producers already had access to organic-consuming networks. While, like in the US and European cases, organic creates a paradox in which intensification occurs despite the ecological goals of organic production, the mechanisms through which this occurs differs in Jordan. In Jordan, the need to meet international tastes causes fundamental shifts in production that exclude traditional olive farmers, despite development agencies’ desires to support them. Understanding this broader context of organic certification challenges ideas of organic as

‘alternative’ in both development and academic contexts by highlighting how organic certification functions when adopted for local traditional crops.

The third article, for *Gender, Place, and Culture*, challenges the casting of women’s small rural businesses as entrepreneurial development projects. While the women certainly engage with development networks and entrepreneurial workshops, their work cannot be encompassed by these frameworks. Frameworks regarding entrepreneurialism and empowerment often prioritize women's economic engagement or changing of gender roles. However, these vantage points risk reinforcing outside ideas of women's goals in their ventures. Instead, I examine how these women’s projects engage with development networks in order to shift the value of their social reproduction. In other words, they continue to do activities that reproduce tradition, maintain social bonds, and provide for their families. However, the shift into the public sphere allows them to assert the value of their labor in a new way. By analyzing their work through this lens, this article shifts the theoretical framework in order to think outside of US/Eurocentric notions of productive labor and empowerment.

Together these findings provide a broad picture of efforts in Jordan to improve and expand the Jordanian olive oil industry. A large aspect of this effort is to produce exportable olive oil. While only a small percentage of producers are exporting, governmental and development networks want to build the capacity of the olive industry so that more farmers are producing to international standards. Through this broad initiative, traditional ideas of quality and the best practices of production are being challenged. These shifts create new networks and products through which rural producers try to capture value. While the overall ramifications of this shift for the average farmer

are small now, with further government standardizing, production and its associated social relations could be significantly changed. The traditional farmers who were able to sell within their personal networks may lose their ability to sell flexibly, and simultaneously larger irrigated producers may flourish, having larger environmental impacts.

2. The Aesthetic Politics of Taste: Producing Extra Virgin Olive Oil in Jordan

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ABSTRACT

Extra virginity as a standard is predicated on a chemical and sensory evaluation according to the parameters set by the International Olive Council. Though a rich literature examines how food and agricultural standards are implemented in local contexts, little work has assessed how certifications redefine the local aesthetic experience of the food. In order to fill this gap, I analyze the aesthetic politics, which redefine who can taste and how they can do it. I argue that incorporating aesthetic politics into analyses of quality and standards enables tracing how this standard becomes regarded as scientific and, in return, effects a re-aestheticizing of what is considered a(n) (il)legitimate taste. This re-aestheticization redefines ‘best practices’ in olive oil production, according to the new aesthetic. This particular configuration of the sensorial experience of olive oil, through its dissemination and employment as part of international-funded capacity building efforts, has social and environmental consequences across Jordan. In sum, this paper—based on 15 months of qualitative fieldwork with farmers, NGOs, mill employees, mill owners, and government officials in the Jordanian olive oil industry—explores how basic taste standards for extra virgin olive oil are discursively instilled in sensory evaluations and physically produced in farm and mill management practices. By tracing these processes, this paper furthers our understanding of how seemingly apolitical, scientific standards travel across scales and affect the ways in which people experience taste.

Keywords: Jordan, agriculture, olive oil, aesthetics, standardization, quality

2.1 Examining Quality and Production

Selling a culturally important local product on the global market requires meeting international standards that may change several aspects of production. For Jordanian olive producers who are trying to get the best price for their oil, this means producing according to extra virgin olive oil standards. The conditions for extra virginity, the highest grade of olive oil, originated in Europe in the 1960s and have been subsequently established as the global industry norm by the International Olive Council and Codex Alimentarius in 1981. According to the Codex standard, extra virgin olive oil is, “virgin olive oil with a free acidity, expressed as oleic acid, of not more than 0.8 grams per 100 grams and whose other characteristics correspond to those laid down for this category” (FAO 2015). The ‘other characteristics’ include chemical and organoleptic qualities. However, this very specific list of qualities are traditionally not how the average Jordanian evaluates olive oil value or quality. This contrast is most visible to consumers in the packaging design (Figure 1)³. The oil on the left is bottled in a small glass bottle with a colorful label stating that the oil is extra virgin and has .8% or lower acidity. The oil on the right is an example of a 16-kilogram *tanaka* in which most Jordanians buy their oil. Although the packaging is the most obvious difference between these two olive oil products, they can also differ all along the commodity network, from harvest to sale.

³ Extra virgin olive oil can also be sold in *tanakat* (plural of *tanaka*). However, extra virgin olive oils often have more expensive packaging and marketing designs.



Figure 1: Extra virgin olive oil in bottle (left) and 16 kg tanaka of olive oil (right).

This paper, based on 15 months of qualitative fieldwork with olive producers in four Jordanian olive oil producing regions in 2016 and the summer of 2017, examines how extra virginity, both as a concept and as a type of olive oil, is produced in Jordan. Although many scholars have addressed quality standards and taste (Lyon 2010; Wilson et al. 2012; Meneley 2014; Besky 2016), few studies have thoroughly traced the inclusions and exclusions occurring as a result of new taste regimes in standards and how this affects production overall. In order to fill this gap, I consider standards to be a sociotechnical agencement, or a momentary coming together of environment, standards, tasters, producers, and the oil through which a formula (in this case a formula for evaluating quality and taste) succeeds or fails (Callon 2007). This sociotechnical agencement functions as an aesthetic politics that reorders who has the ability to speak and taste. By tracing how this reordering occurs through standards and their implementation, we can identify how standards that are purported as simple indicators of better quality have specific ramification for production and producers in local contexts.

Using this theoretical framework, I analyze how extra virginity defines the taste of olive oil, how people in Jordan are trained to detect taste in this particular way, and how production changes in order to reach these standards. Although the general population has little concern for extra virginity and oil testing is sporadic on the local market, olive producers and other key actors in the Jordanian olive industry are trying to build awareness about extra virginity and to increase the production of extra virgin olive oil. Through an examination of extra virginity standards, their implementation, and the production of the oil itself, I argue that the standards are not only a form of governance but also a form of aesthetic politics. By defining taste and quality, this aesthetic politics of standards establishes new rules for the relationship between the materiality of the oil and the human body. These new rules operate both in shaping the oil and in reworking practices of production and consumption. Viewed from this perspective, extra virgin olive oil is not simply a product of a higher quality. Rather, it is the product of a particular sociotechnical agencement of consumers, producers, institutions, and capacity building efforts that declare extra virgin olive oil as scientifically superior to other forms of olive oil production. Using this framework furthers our understanding of how global agricultural technology and knowledge circulate, take hold, and face resistance in local contexts. Better understanding these processes will allow us to challenge our understandings of 'best practices' in capacity building projects and develop more flexible approaches that recognize and allow for multiple, parallel practices and aesthetics.

2.2 Producing an Aesthetic Politics

Standards and tests are essential in the creation of commodities because they classify objects, determining value for exchange, and through this process change the relationships between objects and people along the chain (Tanaka and Busch 2003). By

examining food standards, scholars trace how production and its associated values and meanings occur across multiple scales yet take root and function in local contexts in particular ways (Miller and O’leary 1987; Higgins, Dibden, and Cocklin 2008b; Higgins and Larner 2010a; Timmermans and Epstein 2010; Coq-Huelva, Sanz-Cañada, and Sánchez-Escobar 2014; Loconto 2015). Although there is a rich body of work on how international standards affect local agricultural production (Mutersbaugh 2004; Gibbon, Bair, and Ponte 2008; Higgins and Larner 2010b; Lyon 2010; Jaffee 2014), little work has investigated how the adoption of standards affects the politics of who has the authority to determine ‘good taste’ and how this distinction affects production practices within and outside of the market-in-the-making. In order to fill this gap, this paper incorporates the idea of aesthetic politics, which focuses on changes in who has the ability to speak and taste, into an analysis of extra virginity as a sociotechnical agencement or a particular coming together of standards, social relations, and material objects.

Agencement theory and other network-based theories have been a useful tool for examining how standards work as a form of governance in the globalized agro-food network (Busch and Tanaka 1996; Busch 2000; Mutersbaugh 2005a; Li 2007a; Oliveira and Hecht 2016). While these network approaches are not collapsible, they evidence a united effort to consider the relationship between power, politics, and space as a socio-material process (Murdoch 2006; Müller 2015). In particular, I consider extra virginity to be a sociotechnical agencement, or a coming together of socio-material resources alongside particular tools and knowledges that add value to products (Callon 2007; Ouma 2015). Ouma uses this idea in order to demonstrate how the market is not an existing

system, but is a performative agencement of market making. In other words, agencement calls attention to the ways in which these academic and governmental knowledges are used as sociotechnical tools for creating a market. In this paper, the market is exportable Jordanian extra virgin olive oil. Instead of considering standards as top-down governance, this paper traces exactly how standards work in order to understand how local producers use these standards to meet their own needs and in ways that differ from the written regulations (Loconto 2015).

Extra virginity, with its focus on regulating taste, is unique from other standards that focus on safety. Taste is an important part of quality standards and can be one lens for examining standards in local contexts (Busch 2000; Jaffee 2012; Wilson et al. 2012). Although there are specific taste parameters tied to extra virgin sensory analysis, they unavoidably touch ground and mix with local tastes and discourses. The production of taste is simultaneously discursive and connected to physical environmental factors of production. In the case of coffee, Wilson et. al. (2012) found that the correlation between quality standards and particular geographic factors contributed to the uneven development of gourmet coffee. Besky (2016) explored how embodied algorithms drive uneven development. An embodied algorithm is the calculation of the value of a commodity, which is determined by the interaction between the body, cultural meanings (value), and the materiality of the resource. In other words, it is the embodied experience of tasting and its connection to the particular resource materialities in which natural resources are not just physical things, but are “complex arrangements of physical stuff, extractive infrastructures, calculative devices, discourses of the market and development, the nation and the corporation, everyday practices, and so on, that allow those substances

to exist as resources” (Richardson and Weszkalnys 2014, 7). The strength of embodied algorithm as a concept is the way in which it emphasizes the bodily experience of taste in the creation of value in its physical and social context.

While the idea of the embodied algorithm draws attention to how the body, the material object, and environment come together, further work is needed to push how this translates into value as established through taste. Although Besky (2016) is engaging with ideas of aesthetics and taste, she, citing Bourdieu (2000), argues that taste and judgment are often a masked expression of social class. Furthermore, she focuses mostly on the judger’s sense of taste, and less on taste in society as a whole. However, Bourdieu’s approach to aesthetics is limited by the way in which it conceptualizes taste and appreciation of quality as a mask for class distinction (Rancière 2004, 2005, 2006, 2010). While class certainly plays a role, the vocabularies of taste and olive oil are not relegated to a particular class in Jordan; conversations about oil quality and distinction cross class boundaries. Instead, Rancière (2004) argues that taste and distinction are a redistribution of who can sense and how they can do so. He suggests that this redistribution can be traced as a horizontal topography that forces something to appear as either a fixed or transformable reality. In his theorizing, aesthetics is a dialectic between the social, political, and aesthetic. Therefore, Rancière’s attention to the distribution of the sensible provides a model for tracing how extra virginity standards function through horizontal relations in order to enforce a particular distribution of the sensible in the olive oil-to-tongue experience.

In this study, aesthetic politics refers to the establishment of a particular distribution of the sensible via extra virginity. This approach contrasts to much of the

work in political aesthetics, which focuses mainly on art or politics as performance (Sartwell 2010; Jolaosho 2015; Virmani 2016). In a broader sense, however olive oil can be seen as an artistic product that can be ‘censored.’ Although Rancière often refers to aesthetic politics and dissensus as the opening up of knowing and what is sensible, the control or counter to this politics occurs through processes such as policing that guard a particular distribution of the sensible (Dikeç 2012). Standards function much like the police and often within similar governmental apparatuses of control and regulation⁴. The maintenance of this order occurs within a tension between trying to establish an order and making it seem natural—between clearly establishing parameters for extra virginity and making it seem like common sense. In this way it seeks to become an aesthetic in the sense of a shared understanding that shapes communities and shapes what is able to be said and perceived, included and excluded (Rancière 2004; Dikeç 2012; Jazeel and Mookherjee 2015). Thus, an aesthetic politics is the way in which processes build and take down constructions regarding sensorial experience and the communities that form around these boundaries.

It is the focus on taste and its context within the larger community that distinguishes this approach from other work that has taken on the iterative, performative, and technical processes of standardization. Many scholars have argued that standards are embedded processes that take shape out of diverse people and contexts instead of top-down forms of governance (Lien and Law 2011; Loconto 2014; Holland, Kjeldsen, and Kerndrup 2016; Loconto and Demortain 2017). By building on this work through an

⁴ I do not carry this analogy through in my analysis of Jordanian olive oil, because the standard’s “enforcement” occurs in disparate moments of networks coming together instead of through any one particular apparatus such as police or other enforcement body.

aesthetic approach, this study highlights how standardization as market-making extends beyond the commodity chain in establishing new aesthetic norms. Few studies have interrogated how commodity production and the formulation of value involve a retraining of the tongue and development of the vocabulary and expression not only for producers but also for experts, merchants, and the average citizen.

Even when examining the aesthetic production of new food regimes, the literature often contrasts the act of tasting a traditional food for pleasure to a mass-produced food with a standardized taste (Miele and Murdoch 2002). However, the case of extra virgin olive oil does not fit into this dichotomy. For this reason, this paper confronts aesthetics beyond personal taste or craft and identifies how standardization is an aesthetic politics intimately bound in market-making and science. In other words, this paper understands standardized tasting as a scientific practice that claims a particular reality as legitimate. Work in science and technology studies such as Donna Haraway's work has similarly argued that aesthetics form an integral aspect of the master-narratives that fuse science and industry (Haraway 1997; Dixon 2009). These aesthetic scientific algorithms are essential to controlling nature for commodification and creating or accessing a market (Grasseni 2005). Although aesthetics often refers to an opening up of the sensible via art (Jackson 2016), it can also be a closing off of what is sensible, as happens in the case of scientific standardization. These standards create a community of experts who have a particular way in which to taste and describe. This process occurs by training people in the industry to comply with and uphold international standards. In the case of olive oil sensory analysis, the standardizers are taught the proper way to physically engage their bodies with the oil, detect particular sensations (smell, feel, and taste), and describe them

with the proper vocabulary. This methodology is then considered ‘best practice’ and spread through capacity building and educational programs rooted in objective, scientific fact in order to improve industry.

Much of the work in food studies attempts to draw lines between craft and sensation, on the one hand, and industrial production on the other. For example, in Meneley’s (2007; 2014) work on olive oil production, although she acknowledges the ways in which organoleptic tasting depends on training experts in order to build the extra virgin aesthetic and encourage the production and consumption of more expensive oil (Heath and Meneley 2007; Meneley 2007), she associates technoscience with the chemical analysis and *techne* with organoleptic tasting and the art of olive oil production (Meneley 2007). Building on Bourdieu, she argues that this organoleptic tasting, like wine tasting, establishes classed distinctions based on taste. However, this framing de-emphasizes the fact that sensory analysis is a technical epistemology that is carefully designed and taught so that the information can be assumed to be transferrable to any group. This performance of tasting as scientific and objective is visible in how tasters are ‘calibrated,’ fill out the form sheet, and come to a consensus. Latour (2004) discusses how such trainings are not just simply about taste, but about creating the body into a tool, changing it.

In summary, an aesthetic politics is more concerned with the changing embodied algorithm. Focusing on this aesthetic politics, how these tools come about and become standardized, points our attention to the variable ways in which taste itself is being reordered. In terms of olive oil production, extra virginity and sensory evaluation provide a standardized way in which the person with a trained mouth can name their aesthetic

experience of olive oil, defining an authoritative community of experts and closing off a multitude of other ways to describe that sensation. By engaging with the concepts of taste and aesthetics, this paper examines how capacity building, which is centered around producing this aesthetic and the oil to match it, works to reshape local taste on an individual level, between the oil and the tongue, and the effects that this has on production. This approach highlights how this commodity making affects both key actors and the general public.

2.3 Extra Virginity in the Context of Jordanian Olive Production

More than 80,000 Jordanian families participate in olive production (Irregularity in production a major challenge facing olive sector — conference participants 2014) and olives constitute roughly 74% of planted trees by area in Jordan (Jordanian Department of Statistics 2016). Most of Jordan's olive oil production is consumed locally. According to the Jordanian Department of Statistics, in 2015 Jordan produced 29,611 tons of olive oil and 606 tons were exported (Jordanian Department of Statistics 2016). However, private and public organizations want to increase production across the country in order to allow for a larger surplus that can be exported. Additionally, to further support the increase in production, they are also interested in changing consumers' tastes so that extra virgin olive oil has a larger local market. These experts and practitioners often see themselves as trying to modernize olive oil production within a, sometimes resistant, traditional context. Extra virginity and export represents the modern, while outdated techniques that prioritize yield over acidity represent the stubborn family farmer.⁵ A variety of producers and experts expressed this dichotomy through stories of farmers

⁵ I am not stating this dichotomy as a fact. It is the common stereotype that people use to describe what they see as the biggest challenge to strengthening the industry.

who, in a blind taste test, would choose an oil considered inedible by current testing methods—and definitely not extra virgin—as the best quality.

Extra virgin production occurs across the country, but most of the extra virgin for export is produced in desert regions. Traditionally olive oil production occurred in the mountainous areas of Ajloun, Irbid, and Jerash regions. These farms are usually smaller parcels of land due to family ownership and inheritance. These orchards are often rainfed and occasionally supplemented with partial irrigation. Meanwhile, in part due to lower population density in the eastern desert areas, the desert farms are often larger scale and irrigated because there is more available land and better water access. Key players in the olive industry often claim that the best extra virgin oil comes from desert farms because they irrigated farms and managed by agricultural engineers. However, extra virginity as a concept does not have much salience on the local market. Instead, local consumers often prefer oil from their home town or rainfed oil from Ajloun/Irbid (Al Ganideh and Good 2015).

Extra virgin is one of the highest quality grades of olive oil,⁶ as determined by the chemical and sensory requirements set by the International Olive Council (IOC) and initially established under European trade policy in 1960 (Mueller 2013). The IOC serves as a coordinating body between its 60 olive-producing member countries, working with both public and private sector stakeholders in each country. The standards established by the IOC are enforced largely by trade regulations and certifications. As a result, Jordanian production for the local market is not heavily regulated in terms of quality standards for olive oil. Instead, much of the current battle for quality and authenticity in Jordanian

⁶ There are other notes of distinction for olives, but the highest Codex category is extra virgin. The other grades of edible oil are virgin, ordinary, refined, and pomace.

olive oil is not over extra virginity but over whether or not an oil is 100% olive oil.

Therefore, mainly export-oriented producers and those wanting to sell in international supermarket chains focus on extra virgin production.

The first step in determining if an oil is extra virgin is the full chemical test at a certified lab. The test measures levels of components such as polyphenols, free fatty acid, and peroxide. While other chemical parameters should be tested in an official lab, acidity is the most common chemical factor discussed. All mills are supposed to have a small acidity testing kit, and many higher-end producers cite the acidity of their oil in order to convey quality on packaging and advertisements. In order to be classified as extra virgin olive oil, the free fatty acids need to be .8% or below. However, companies will often boast on their packaging that they have .2% or lower. These compounds affect shelf life/stability, antioxidants, and impact on health. For example, if the acidity level is too high, the oil is not considered edible. In order to be considered extra virgin, the oil must pass this chemical test as well as a sensory evaluation by an IOC certified panel.

The sensory evaluation examines the organoleptic⁷ qualities of the oil based on smell, taste, and mouth feel. Note that color, although often discussed by the average Jordanian, is not a factor in olive oil quality. There is a standardized list of defective qualities that, if present, deem the oil not extra virgin (see Figure 2). While there are also required positive attributes, they are rarely absent. The tasting team agrees upon the intensity of each attribute. Although products such as coffee, tea, and wine undergo organoleptic sensory evaluation, olive oil is unique in the way that it is not typically consumed alone like these beverages. Instead, it is an accompaniment to other dishes.

⁷ Organoleptic qualities are characteristics that are determined by the use of a sense organ (i.e. taste, color, odor, sound, feel).

Therefore, the training for the sensory evaluation of olive oil must teach the participants to interact with the oil in a new way. The tasting technique and the vocabulary for describing the sensation are predefined. Those well versed in the vocabulary of defects can also identify how each taste relates to a production practice on the farm, in the mill, or during storage. The paper returns to these tastings in the following section.

Name of Taster:	Sample Code:
Date:	
INTENSITY OF NEGATIVE DEFECTS:	
Fusty:	-----
Musty/Humid/Earthy:	-----
Winey/Vinegary/Sour:	-----
Metallic:	-----
Rancid:	-----
Other:	-----
INTENSITY OF POSITIVE ATTRIBUTES:	
Fruity:	-----
Bitter:	-----
Pungent:	-----

Figure 2: Sample Sensory Evaluation Sheet

Currently these standards are being taught in labs, general trainings, school campaigns, and festivals. In other words, key players in large olive businesses, the Ministry of Agriculture, and the university system are actively trying to increase public awareness about extra virginity in order to make it a ubiquitous industry standard across Jordan. Meanwhile, many Jordanians remain apathetic to this definition of quality and dispute the idea that practices, such as irrigation, will produce a high quality oil. This range of environments and practices makes Jordan an interesting site for exploring how international standards take on life in local contexts. Unlike other studies of mainly export-oriented crops, olives are both a local staple and an export product. The export

product, however, has to meet international standards. These standards affect the social and cultural understandings of the particular resource and the physical way in which it is produced. The goal of this paper is to examine how key players in the industry are transforming this local staple food product in order to conform to international standards.

2.4 Producing Extra Virginity: In the sensory lab

An official panel or team, recognized through the Jordanian Ministry of Agriculture and the IOC, conducts the sensory evaluation of olive oil. Jordan has four tasting teams of 8-11 people who are authorized to evaluate whether or not oil is extra virgin. Each team has a leader who trained in Spain and became a certified through the IOC. Members of the tasting teams are often university professors, mill owners, olive oil traders, or Ministry of Agriculture employees. Team members learned olive oil tasting techniques and terminology through trainings with the team leaders in Jordan, and some also attended workshops run by European specialists who came to Jordan. Team members become certified by taking a test administered by the team leader using samples of olive oil received from the IOC. Their test results are then sent to the IOC for approval. The team meets to test samples requiring verification of extra virginity, usually for export, sale in large supermarkets, or in response to a complaint.

Training involves tasting samples of olive oil with each defect. Every six months, the IOC will send a set of olive oil samples for training team members. These tasting trainings are aesthetic moments that tie the sensation of the oil on the tongue to a new verbal code, the code of extra virginity and non-extra virginity, of positive attributes and defects. The aesthetic of taste is unique from other senses in the fact that it cannot be taught without a material sample of that taste. Unlike with sight and sound, humans have not developed commonly accessible technology for sending an electronic replica of a

taste. Instead, we must send a physical sample of the chemical object and place it on the tongue. It follows then, that the material restraints of the sensation of taste limit the distribution and access to this knowledge regarding the sensory evaluation of olive oil. Therefore, the vocabulary and the ability to use it are limited to this circle of experts and others who are trained to taste and have access to samples. This exemplifies Rancière's aesthetic politics, which "revolves around what can be seen and what can be said about it, around who has the ability to see and the talent to speak" (2004, 13). Only instead of defining what can be seen and who can see, the sensory standards define what (attributes) can be tasted and who can taste them based on scientific standards. These standards and their implementation cement whose tastes are legitimate and perpetuate these tastes as a universal, scientific fact.

The standardization touches ground and affects local production in the moment of an official evaluation by categorizing local olive oils. During an evaluation, the team meets at the Jordanian Standards and Measures office. An employee of the lab pours the oil into blue glasses so that the color will not affect the tasting team's judgment. A glass plate rests over each blue cup in order to keep the smell contained. Then, the glass is either set on a hot plate or warmed by rubbing it in the hand of the taster to release the aroma. Once the oil is warmed, each taster removes the clear glass on top of her cup, places her hand over the glass, and brings the blue cup to her nose to smell the oil. Then she takes a small sip of the oil, moving it around her mouth in order to cover her palate. Each taster opens her mouth slightly, presses the tongue lightly against the roof of her mouth, inhales and aerates the oil in a similar way to wine tasting. Each person then writes down how she perceives the taste profile of the oil.

The sensory evaluation involves tasting the oil for the three positive attributes and then identifying any defects. One ministry employee described the sensory evaluation as:

You take a glass and put 25 mL of oil in it, without looking at its color because the color does not relate to the quality. I have to taste three positive flavors which are fruity and the smell of olives. I have to smell it and there has to be a type of bitterness; there has to be a peppery taste on the back of your throat when I swallow, there has to be a sharpness. If these things aren't there, then the oil quality is not good.

-- National tasting team member, interview, 2016

The sensory evaluation is not just about a good or bad taste; tasters identify specific flavors, feels in the mouth, and smells. In an interview with a tasting team leader, he said that it is very rare for an olive oil to not have a positive characteristic. In an olive training that I attended, the lecturer similarly noted that her training focuses on the defective qualities since they are more important in identifying (non) extra virginity. Therefore, primary focus during the sensory evaluation is determining whether the sample is free from defect. In other words, the sensory aspects of extra virginity are largely defined by what the oil is not. In the tasting, the attributes are recorded by each team member on a pre-printed chart of positive and negative attributes. The team then discusses their findings and agrees on the intensity of each attribute. This form, the process, and the words come together to redefine and solidify a new aesthetic of olive oil that differs from the average Jordanian consumer's taste. The tasters' bodies are recalibrated to this aesthetic that now shapes all of their interactions with olive oil. This new embodied algorithm gives value to different oils and the corresponding resource materialities. Each taster becomes a tool in asserting this formula.

This formal sensory lab experience contrasts to the usual way in which tasting occurs. On the local market there is little knowledge or concern for extra virginity.

Traditionally, a woman of the family is responsible for deciding on the quality of an olive oil (Al Ganideh and Good 2015). She may sit at the end of the milling line, waiting for the oil to fall into the tank, or she may sample the oil that the mill is selling. In contrast, in the sociotechnical assemblage of extra virginity, tasting authority is based on the trained palette of professional (male and female) tasters. While the family-based critics depend on positive qualities and attributes such as dark green color or a peppery taste, the professional tasters search for defects using a standard vocabulary to disqualify an oil from being extra virgin. In interviews, family-based tasters often stated that they can taste small differences in different oils, but they did not utilize specific adjectives. For example, when I asked farmers if there was a difference between their oil and someone else's, the response was typically, "Oh yes, there is a difference between the oil from this hill to that valley. Completely different." In other words, it is just something you taste.

The standardized sensory evaluation, in comparison to common ways of tasting olive oil, is restricted by very specific codes of sensory evaluation that cannot be learned unless you have a training sheet with oil samples. In other words, the sensory analysis is not simply a scientific tool, but it is a reframing of who has the ability to properly judge olive oil. The fact that you need to physically interact with samples of olive oil restricts learning this aesthetic to a specific community of people. Currently, this community is mainly people who are involved in institutions that set national standards and policies. However, these experts began doing in-school programs and other workshops to teach the average citizen how to properly taste and identify good olive oil. Through this process, their aesthetic understanding of olive oil is upheld as the universal truth of 'good olive oil.' Dikeç (2012) summarizes Rancière's politics as a disruption to the common sense or

what can be sensed. Extra virginity re-orders the legitimacy of ‘good;’ the common sense of ‘good’ is no longer enough. Instead, a scientific spreadsheet must be filled out. The following section will further explore how this aesthetic is spread beyond the tasting team. Then, I will show how this new regime affects production.

2.5 Producing Extra Virginity: Aesthetic Capacity Building

If the aesthetic politics of extra virgin olive oil standards creates a new community of experts, then who is included and how do they reformulate taste? One way is through capacity building. Extra virginity is central in conversations about quality, modernity, and capacity building amongst key players in the industry. The Ministry of Agriculture, NGOs, and Jordanian universities work together in efforts to do capacity building in the olive sector in Jordan. One effort is to spread knowledge of the standard through trainings organized by the EU-funded project Jordanian Olive Industry Capacity Building (JOCB)⁸. JOCB coordinates education exchange between students and professors of Jordanian and European universities for the exchange of knowledge and application of that knowledge in the field of olive production. Many Ministry of Agriculture employees and other agricultural engineers in the industry attended the trainings under the assumption that they will be the future trainers to Jordanian farmers and consumers. Therefore, these trainings, like the tasting teams, serve as a conduit to transfer international standards in a format that reinforces the objective, scientific foundation of the extra virgin aesthetic.

Capacity building often takes place via international cooperation projects aimed at proving technical assistance to developing countries. Technical assistance programs such

⁸ This is a pseudonym.

as these enact neoliberal development in which profits bring progress (Walker et al. 2008). One large farm owner said,

We also always focus on any capacity building that achieves a profit margin in the working framework. Of course there are barriers and we want things and we want to focus frankly on forums, any international organizations, any of our meetings with international donors, with countries with advanced technology in this this topic. We focus on capacity building in the olive industry through the private and public sector, whether personnel staff, engineers, trainers and technicians. In the private sector we want a lot of capacity building in the field of technicians and workers in olive mills because it is an important link in the quality of the oil and the needs of the sector.

-Personal interview with farm owner, 2016

In other words, capacity building is internationally focused and involves training people with the latest technology in order to increase quality and profit. Part of this funding including building training facilities, but as Pfeiffer (2003) noted capacity building was often put into action as trainings and workshops. Sometimes farmers noted that the knowledge was not always transferrable. Often the specific advice of when to pick or how much irrigation is needed was couched with ‘but it might be different here’. This same sentiment was expressed in a press conference when a farm and mill owner asked why the Ministry of Agriculture does not establish guidelines about when to pick. They responded that it varies too greatly from place to place. Because of the differences in cultivars, climate, elevation, and soils it can be difficult to give advice about picking times and other practices across different areas of Jordan, much less between Greece or Japan and Jordan.

The JOCB training session on sensory evaluation of olive oil was part of the JOCB workshop for training future trainers. As participant observation, I attended the week-long and participated fully in the course. One of the women from the Jordanian tasting teams came to give the training at the University of Jordan. She brought her

collection of olive oil samples exemplifying each defect from the IOC in addition to one or two examples from Jordan. As trainees we tasted the oil and identified the defect and its intensity. Before we did the practical training, the trainer presented a PowerPoint outlining the different defects (some translated to Arabic, some not) and the potential causes of the defect. Some of these tastes such as sediment or metallic indicate a problem that occurred during the production process. For example a rotten taste often results from too much time elapsing between harvesting and milling. This format allowed for more debate than in other trainings without the samples. Because understanding taste requires an experience, and many of these terms (such as fusty) do not have a common referent, a PowerPoint or lecture alone is a very different and less intense training than one with samples. Although farmers in the training without samples said that they found it useful, they did not actually re-train their tongues. It follows then that changing people's aesthetic understanding of olive oil is constrained by the ability to have samples.

In summary, these training efforts, which are often funded by international agencies and predicated on knowledge exchange and capacity building, seek to spread knowledge throughout the sector and to encourage better production practices. These better practices are based on the idea of extra virgin olive oil as the best quality. Creating sense of quality relies on retraining consumers to a new aesthetic. Thinking through aesthetics shows us just how difficult it is to attune people's tastes. This difficulty results in a division between the 'knowing' and the 'ignorant,' as seen in common remarks from people in the industry stating that the average rural Jordanian farmer does not understand good oil. Although a Bourdieuan analysis of taste and distinction is certainly applicable to this discourse, it does not address how these categories become solidified via official

governmental avenues, how they purport themselves as universal, nor how they seek to transcend divisions between gourmet/basic and upper/lower class. These capacity building programs seek to educate all parts of the commodity chain, from farmer to consumer. The following section examines how the desire to produce extra virgin olive oil affects some of these practices.

2.6 Producing Extra Virginity: In the field and mill

Producing extra virginity also occurs by changing commodity production practices and, in turn, reformulating who is revered as the best producer. Instead of determining quality based on a farm's or a region's reputation, formulas and studies identify the best way to reach the right chemical and organoleptic composition. These best practices spread through capacity building efforts training farmers and experts in best practices. Then extension and other education programs encourage other farmers to adopt these best practices, having potential long-term effects. However these practices can be hard to encourage because a higher 'quality' is often at the expense of yield. For example, choosing the right time to harvest the olives is often a trade-off between quality and yield. Picking early leaves less time for fruits to become broken by the blowing branches, animals, or insects. This timing is important for making an extra virgin olive oil because, if the inside of the fruit is exposed to air, then hydrolysis can begin to occur, increasing acidity. For this reason, when producers provide samples for testing or for potential buyers, they often use oil from the earlier months because it will be better oil. The oil from not-as-mature fruits will also give a different taste profile. However, by picking before peak ripeness, the amount of oil in each individual fruit is lower. Therefore, for farmers who are capable of selling on the international market where they can get a larger profit for extra virgin olive oil, it is beneficial for them to pick earlier.

However, for a smaller farmer who sells on the local market⁹ where extra virgin, generally, does not bring a higher price, it is more beneficial to focus on a higher yield of oil.

In order to overcome the disadvantage of low yield when picking early, farmers can irrigate. The trees need a minimum amount of water to live and bear fruit, and so irrigation helps fill that gap when rainfall amounts are low. This also prevents trees from producing in the alternating high yield/low yield cycle from one season to the next. Large desert orchards often have better water access than smaller, traditional olive farms in more densely populated mountainous areas. Owners of small farms in the mountainous areas complained about not being able to expand their farm, not being able to drill another well, and not having the time and labor power required to maintain their farm. In this context, irrigation is not a reasonable solution when they are already struggling to maintain a livelihood from farming and often working other jobs. Meanwhile, desert farms are often companies who are able to buy large tracts of land with access to water. They are also able to afford the investment required for irrigation. In other words, the sociotechnical agencement of extra virginity most often succeeds in producing and selling oil to these specifications from the large-scale, investment, and often desert, farms.

Another way in which producers overcome the challenges in yield is to buy oil from other sources. Even for larger producers, yield is a concern. In order to steadily supply international buyers, a large amount of oil must be available. However, especially with seasonal fluxes, it can be difficult to promise large quantities. Several producers

⁹ Local market refers to mills, farmers, and small shops. Larger super market chains often have difficult barriers to entry for small-scale local farmers.

tried to bring their products together in order to more easily fulfill large orders, but logistical issues hindered this project from coming to fruition. And so, in general, producers who own a mill are in the best position to overcome the yield issue due to their ease of accessing oil and their ability to control quality during processing. However, the oil is only as good as the olives. Therefore, it is in the mill owners' interest that more farmers care for their olive trees in a way that can produce extra virgin olive oil.

The milling process is another important production moment in which yield and quality must be balanced. For example, factors such as the temperature setting for the water used for extracting the oil from the crushed fruit creates a trade off between quality (in the extra virgin sense) and quantity. Since most mills in Jordan use automated machines, the temperature of water is often set from a central control board. If temperatures are kept lower throughout the milling process, then the oil will more likely be extra virgin and can also be considered cold pressed. However the amount of the oil extracted from the fruit will be lower. In other words, extra virgin olive oil is more costly to produce because the yield is often lower. Therefore, farmers who are going to sell to people who are not concerned with extra virginity do not have any incentive to get a lower percentage of oil from their fruits. Similarly mill owners who are concerned with yield over extra virginity have no incentive to invest in more costly machines that allow for better control of oxygen exposure and temperature during processing.

Packaging is another common focus when discussing extra virginity. Many in the industry say that if oil is stored in a 16kg *tanaka* and is opened daily, then it is undergoing constant exposure to air and humidity. Therefore, glass containers are better than the *tanaka* for maintaining quality. Some people have said that they personally buy a

tanaka and then use it to fill up glass bottles for daily use. Large producers often purchase bottles from outside of Jordan, especially from Italy. A large *tanaka* of oil often costs 85-95 JD, whereas in the small bottles might cost just 10 JD. The consumer would be paying more per kilo, but they would pay gradually throughout the year. Therefore, buying in the small amount is being pushed as more manageable for families on tight budgets. At the same time, it is more profitable for companies. Many of the bigger mills have their own bottling lines. Others will take their oil to a bottling facility. . Some of these producers explored other options such as individual serving packets, smaller *tanakat*, and cardboard boxes with a spout and a foil bag inside. This concern for extra virginity and seeking innovative ways to increase profits is causing a shift in how oil is packaged and stored.

However, despite all of this effort to shift practices, there is little enforcement on the local market regulating if a product is extra virgin or not. Throughout several interviews with extra virgin olive oil producers, they lamented the fact that there is not a structure in Jordan that actually checks to make sure that products labeled extra virgin qualify as such. This sentiment, alongside the various capacity building projects, suggests that efforts will be made in the coming years to create a more standardized system of demarcating extra virgin oil and promoting its sale within Jordan. In the meantime, extra virginity is a standard that is only enforced in specific moments such as exporting. While mills are required to have a chemical testing kit, some are rarely used. And so it follows that the standard is most salient for producers interested in accessing global markets and local gourmet consumers. Although extra virgin production is more costly due to lower yield, investment farmers who are able to sell in international and local venues are able to

compensate for the additional cost by accessing consumers who will pay higher prices, giving them a larger profit. Meanwhile, due to a lack of consciousness regarding extra virginity on the local market, small-scale farmers who are usually constrained to the local market, cannot sell their oil for a significantly higher price in order to overcome the additional costs and low yields.

Although extra virginity is not a standard that monitors production practices as organic certification or ISO do, the requirements for chemical and sensory evaluation shape the material and social aspects of successful production. As Besky (2016) demonstrates, the value being added to the final product via tastings is connected to how bodies and their labor are valued in the production of that process. In other words, the trained tongue and the trained farmer are valued more highly than the average peasant farmer and his different parameters for quality of oil. Or perhaps the engineer running the modernized mill is valued more than someone who has run a traditional mill for 30 years. However, this is not simply a reflection of class distinctions. In the case of olive oil production, it is the product of an educational effort that seeks to redefine consumers' taste and to change producers' practices. The ramifications of these changes are yet to be seen in Jordan. Currently, capacity building projects are underway to institutionalize this sociotechnical agencement and distribution of the sensible. In the immediate future, I expect that even if consumer tastes change, the environmental and economic constraints on the scale of production and the purchase power of many Jordanians will not encourage the growth of extra virgin oil on the local market. However, if it does become more widespread, then I expect an uneven development of larger farmers being able to

overcome the challenges of extra virgin production and a continuation of small-scale farmers stereotyped as producers of low-quality oil.

2.7 Conclusion

In this article, I demonstrate that extra virgin olive oil production is a unique agencement in which the aesthetic politics of sensory evaluation reach beyond tongue and lab via capacity building efforts seeking to change production and consumption practices. By engaging with Rancière's distribution of the sensible, I call attention to how these standards and their implementation affect who is able to taste and how they do it. In the case of Jordanian olive oil production, the IOC sets the standard for extra virginity and certifies particular individuals as qualified to conduct sensory evaluations. Then these people are responsible for training other tasters and interested parties in the olive sector. This network disseminates the new aesthetic regime as a scientific fact. Due to the material realities of olive oil production, this aesthetic reading of oil requires particular production practices that are also disseminated via trainings and pamphlets across the country. Industry leaders see global technology and quality standards as a move forward for Jordanian olive production, but testing and enforcement of the standards on the overall local market remain mostly limited to products for export and large supermarkets.

In other words, this standard applies to an overall small group of producers and other key players whose interests are largely in exporting olive oil and producing for gourmet consumers. However, these are producers who have influence over the Ministry of Agriculture and are involved with university programs. Although the standard is primarily enforced for export and some local venues, many people in the industry consider it a concern for all producers. This idea mirrors the universalizing logic of science, that science holds a universal truth about better practices and quality. Many

producers have the opinion that the reputation of Jordanian olive oil depends on the industry as a whole producing consistently good olive oil. However, under the aesthetic regime of extra virginity, whose oil is good can only be confidently determined by those who have been trained in the sensory evaluation of olive oil. This differs greatly from how the average person determines quality based on personal taste preferences and trusts producers based on personal networks and the local reputation of the mill, farm, and/or region. This common evaluation allows for a multitude of producers to establish a good reputation. However, if the international standard becomes more widespread through programs such as olive oil tastings in schools, producers who do not prioritize producing extra virgin oil may lose their reputation as good producers and their ability to charge a high price.

The goal of this paper is not to demonize standards and scientific research, but instead to call attention to the ways in which standards impact environmental and social aspects of production. Assumptions that rural producers lack innovation and should not change are just as ill informed as assumptions that heedless modernization is good. Instead of indulging either of these assumptions, this paper traces how extra virginity re-aestheticizes taste and changes production practices. Due to the physical demands placed on the material production of olive oil in order to generate an extra virgin olive oil, a push for extra virginity as an industrial norm, if successful in shifting local taste, will also shift production practices. In other words, extra virginity is a marker of quality, but, as it is pushed forward in capacity building efforts in Jordan, it also defines legitimate taste and, consequently, legitimate agricultural practices and their environmental impacts.

Therefore, framing extra virgin olive oil as a higher grade or quality type of olive oil is not an apolitical, factual statement. Such a framing masks the politics of what it means to re-aestheticize taste and re-order the production process. By tracing the creation of extra virginity as a standard and as an oil, this paper demonstrates that extra virginity is a unique assemblage where quality—as defined by the IOC—reigns over yield. This furthers our understanding of how products such as extra-virgin olive oil are a technical result of a particular assemblage of nature, society, and power that functions across scales. In the case of extra virgin olive oil, this means that the qualifications are produced within a network of international organizations that try to standardize and disseminate the knowledge, techniques, and new vocabulary of taste. This seemingly objective evaluation of olive oil quality, if used to push all development in the olive oil sector, will delegitimize the multitude of olive oil practices and tastes in Jordan, having potentially significant social and environmental impacts.

3. Organic Rural Development: Barriers to Value in the Quest for Qualities in Jordanian Olive Oil

Abstract

Organic farming in support of smallholder farmers is a popular development strategy. However, certified organic agriculture has proven to be a paradox: certification requirements designed to promote environmentally sustainable farming often lead to agricultural intensification contrary to organic agriculture's stated goals. This article, based on 15 months of qualitative fieldwork in Jordan, argues that the paradox of organic agriculture in Jordan centers around the ways in which the 'alternative' organic olive oil production actually requires producers to abandon local markets and engage in long-distance commodity chains. This in turn alters how value is added to olive oil and changes technological requirements for processing, storing, packaging, and transporting the oil to international gourmet markets. By calling attention to the social relations in differing commodity networks and chains, my analysis focuses on 1) how quality and value is constructed within material and cultural systems, 2) how farmers become dependent on access to distant consumers, and 3) how production for these consumers alters the structure of relational and technological rents. As a result, I find that the promotion of certified organic, gourmet olive oil for sale in global markets privileges specific regions within Jordan. In short, the structure of relational and technological rents favors resource-intensive production in a Jordanian desert region over 'traditional' low-input production in Jordan's mountainous hinterland. In theoretical terms, this study highlights problematic Jordanian teleologies of success and modernization and offers an examination of those environmental, socio-economic, and political factors that prevent small-farmers from realizing rents in certified agriculture.

Keywords: Organic certification, quality, commodity networks, Jordan, agriculture

3.1 Introduction

“the goal of doing organic is to put Jordanian olive oil on shelves in Japan regardless of gains or losses” - a Ministry of Agriculture employee, as quoted by an organic farmer

Ahmed, a businessman who has been working with organic farmers for about 8 years, scoffs when recalling how some government officials cited an organic olive project in Jerash as a successful model. In her opinion, the project’s dependence on external support is not sustainable. However, to the Ministry of Agriculture, quoted above, the project has succeeded because there is *Jordanian* olive oil in Japan. As seen from these contrasting perspectives, questions of success and failure are embroiled in disparate goals, desires, and outcomes from different parties in the commodity network. This paper steps away from this teleological question to conduct a political economic analysis of value and of who gets included or excluded in production (Bair et al. 2013). Such an analysis identifies organic production’s actual constraints by calling attention to the ways in which certification, within the social and environmental context of production, constrains who and what are included or excluded. Through this framework, this article identifies how smallholder farmers in traditional regions of rainfed olive production, have difficulty capturing the technological and organizational rents necessary to change their products and sell it according to quality demands of distant markets. Meanwhile investment firms and capital-intensive cultivation methods, often in desert areas, lead organic olive production in Jordan.

While this finding supports the idea that organic both weakens smallholder landowning farmers and strengthens intermediary firms and capital-intensive cultivation methods (Guthman 2004b), I found that, unlike the context of California, in Jordan the incentive to enroll small-scale producers into organic certification is linked to

international development projects and wider economic efforts to increase Jordan's presence in expos and supermarkets worldwide. So it follows that, although much of the literature has addressed the organic paradox (Guthman 2004b, 2004a; Mutersbaugh 2004; Trauger 2014) and larger problematic of the alternative versus conventional agriculture dichotomy (Sonnino and Marsden 2006), additional work is needed to understand exactly how transnational development institutions and teleologies of modernity operate in the context of internationally-traded organic commodities. In order to fill this gap, I examine the ways in which quality is constructed within multiple transnational networks, shaping how value is created and who can access this new value. This approach moves commodity network and chain studies away from the privileging of firms in order to call attention to the ways in which capitalist and non-capitalist producers interact, especially in contexts in which development networks and governmental agencies often play a large role in shaping the industry.

Using this framework, this paper demonstrates that the Jordanian organic paradox—in which small highland producers are excluded from capturing rents—results from the material, technological, and organizational barriers to accessing distant organic consumers on whose purchasing power organic certified producers' success depends. In other words, organic certification alone does not disadvantage smallholders; the new production network configuration for capturing price premiums disadvantages them. This paper explains how this happens through three processes. First, organic certification demands a particular form of quality, discursively and materially, which must be understood within local material and socio-cultural systems. Second, organic certification forces smallholder farmers to reach distant customers, reformulating the commodity

network in a way that makes smallholder farmers' relational rents less relevant. Third, the new organic commodity network's quality-standards require capital intensive technological improvements that are cost prohibitive for small famers, preventing them from capturing these rents. The unequal access to new and efficient technologies creates comparative advantages called technological rents (Kaplinsky 1998; Henderson et al. 2002). These technological rents are shaped by the interplay between material properties of olives and their fruit and the quality demands of the commodity network. Through this analysis, I show the move towards intensification in organic production stems from different social relations and the institutions¹⁰ of rural development in Jordan. From these findings, I suggest that international development groups should through alternative ways to support value capture for smallholder farmers beyond certification and export, while still supporting global organic environmental principles¹¹.

3.2 Developing the Jordanian Paradox of Organic Value

Although the complexity on the ground evades the dichotomies of ethical/unethical, small-scale/large-scale, or organic/conventional (Guthman 2004c; M. K. Goodman 2004; Mutersbaugh 2005b; Guptill 2009), significant research demonstrates that rents based on organic certification often lead to mainstream and intensive agricultural practices (Guthman 2004b; Mutersbaugh 2005b; McCarthy 2006).

Guthman's conventionalization thesis claims that, "as a result of these competitive pressures, smaller scale participants in the value chain are conditioned to adopt practices

¹⁰ The Agricultural Credit Corporation is another important institution in the historical development of agriculture in Jordan. However, as it was not a major component of interviewed producers' narratives about their farms, it is outside the scope of this paper.

¹¹ For example, the International Federation of Organic Agriculture Movements (IFOAM) definition emphasizes agricultural practices preserving the "health of soils, ecosystems and people" (IFOAM n.d.).

that cohere with the industrial model” (Guptill 2009, 30). She argues that this paradox of organic ideals between ecosystem health and the organic-industrial complex occurs largely because organic production creates a ground-rent, causing the price of land to increase and further necessitating an increase in profits via intensification of agriculture and rendering marginally profitable crops untenable (Guthman 2014). This section builds a framework by incorporating the development context into Guthman’s organic paradox in order to trace the shifts in quality and value, commodity network, and rent seeking behavior that result from organic as development strategy in Jordan.

Guthman’s thesis hinges on the distinction between conventional agriculture and alternative networks. However, this typology of conventional agriculture and alternative networks comes with its own set of problems (Sonnino and Marsden 2006). Although Sonnino and Marsden (2006) argue that we need to look at how these two networks compete with each other and how the line is blurred between them, their focus still rests on viewing alternative food networks as strategies for rural development via re-localization and embeddedness (Tregear 2011). Furthermore, when analysis conflates organic agricultural networks with alternative food network, it overlooks the ways in which organic and localization function differently outside of organic consuming countries. Instead, we should carefully trace how the networks and institutions (in this case, Jordanian organic agriculture) are at the intersection of multiple cultural and economic systems (Bair and Werner 2011; Hughes, McEwan, and Bek 2015; Argent 2017). Doing so is one step in countering Western bias in our analyses in order to better understand how these processes actually touch ground in local context.

A Jordanian organic paradox accounts for transnational systems affecting organic agriculture and rural development in Jordan. The Jordanian organic paradox, unlike in the US, hinges on the simultaneous involvement of development agencies' desires to support smallholder farmers and the simultaneous use of organic production to access distant markets through exports or through large supermarket sales, advantaging more intensive investment farms. In the case of the Jerash project, which I examine in this article, the government and private sector use organic exports as a development strategy for smallholder family farmers. Meanwhile, they compete with other farms that enter organic production as an investment strategy. In order to understand organic agriculture in this context, I argue that greater importance needs to be placed on how certification shifts the meaning of value, the structure of the commodity network, and in turn, how rents can be captured along the commodity chain.

This approach differs from other studies that have addressed the role of development in organic production in the Global South. For example, organic is often coupled with fair trade as a way for companies to participate in ethical commodity production and to promote a more independent and ethical model of aid (West 2012). Likewise, development often plays a role in funding equipment or testing facilities for organic production or development fair trade initiatives (Bacon 2005). However, in these studies the idea is to protect farmers who are engaged in global production of coffee and not to necessarily enroll more producers in the global production of coffee. In Jordan, the promotion of organic in smallholder regions is to increase Jordanian global market share. Therefore, it is necessary to trace how this goal affects producers.

Both firm-owned and family-owned farms use organic certification to access new markets and capture additional value and earnings.¹² However, as I will return to later in more detail, these two farm types differ in regards to environmental and economic structure. This paper interrogates how organic certification functions between these different types of agriculture (family-owned v firm-owned), commodity chain configurations, and environments. In Jordan, most exported olive oil is from desert (investment) farms, while the ‘naturally organic’ (low chemical input) rainfed olive oil production occurs in the highlands. This division of desert and highland is common in discussions of olive oil more broadly in Jordan. In Zarqa and Mafraq (largely desert) the average size of a unit of cropland are 138 and 81 dunum¹³ respectively. In Irbid, Ajloun, and Jerash (highland regions) the averages are 17, 13, and 18 respectively (Department of Statistics 2007) (see Figure 3). The highland farms are mostly small to medium sized inherited family farms whose owners usually simultaneously work other jobs. Meanwhile, the desert farms are often larger investment farms managed by agricultural engineers and owned by business people as one of a number of investment endeavors.

¹² Many producers also become certified because of the environmental benefits. But ultimately they cannot continue doing organic if it does not bring adequate revenue.

¹³ One dunum is approximately a quarter acre.

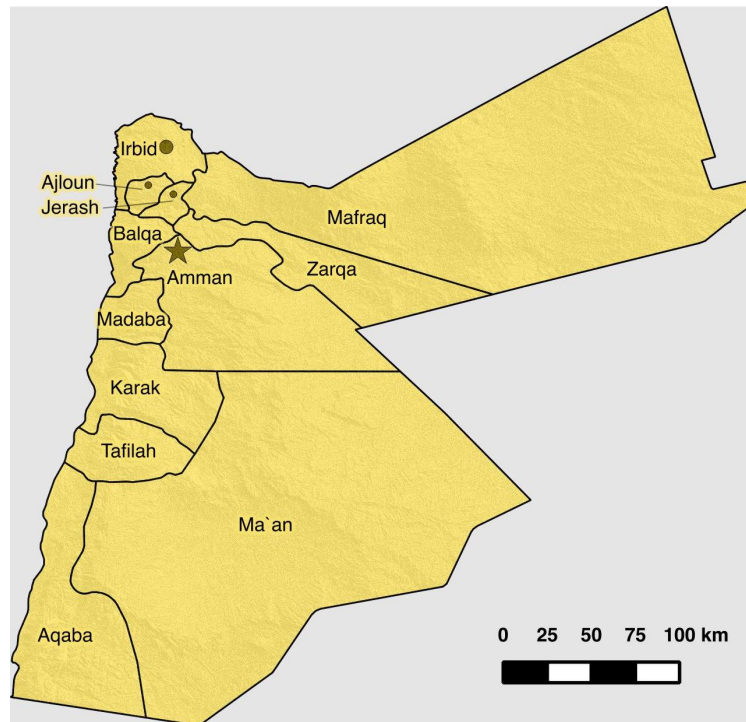


Figure 3: The Governorates and Northeastern Cities of Jordan (Map by author. Data from <http://ummeljimal.org/en/gis.html>).

Between these different types of farms, producers often operate according to differing ideas regarding quality, which I will trace further in the empirical section. Mansfield (2003a) conceptualizes quality as an assemblage of nature, society, and economics coming together to form global systems of quality differentiation. Similarly, Faier (2011) builds on this and other work arguing for an incorporation of the non-human into our analyses of capital and production (Goodman 2001; Prudham 2003) to argue that commodity chains are co-produced through the interplay between the human and the non-human. This approach shifts our ideas of quality to include the wider context of cultural meaning beyond production, certification, and standardization. For olive oil production, this means being attuned to how different producers plant in different environments, with

different cultivars, cultivate and harvest in different ways, and ultimately utilize and abandon organic certification due to economic and environmental pressures.

Quality is not only important because it is at the nexus of nature, production, and cultural meaning, but also because it is central to success on the global market, especially for organic. Although organic can often make obtaining high quality harder, a product of low quality will not be able to be sold as organic because organic consumers want a high quality product. Therefore, despite this paradox, organic demonstrates quality (Freidberg 2004; Guthman 2007), incentivizing certification for producers who want to engage in distant markets where they may need to establish trust and recognition because these seals and certifications translate knowledge and confidence to distant customers (Renard 2005). Quality, as an image, “must be constructed and then promoted in order to become a collective comparative advantage” (Renard 2005, 421). Therefore, those who can seize this comparative advantage and produce the image of quality, have power in the commodity chain. Because of this power differential along the commodity chain, we must examine how quality is produced (discursively and materially) along the network.

In order to pinpoint how value is captured and exclusion/inclusion occurs the commodity network, I incorporate the idea of rents, or how value is captured along the production process. Much of the work done in GVC has dealt with value and rents (Gereffi 1999; Mutersbaugh 2005a; Kaplinsky 2010). Kaplinsky (2000) considers rents as a an economic advantage that “arises in the case of differential productivity of factors (including entrepreneurship) and barriers to entry (that is, scarcity)” (123). In post-Fordist production, marketing and distinction are the keys to securing profit, even if they are always unstable. The fleeting ability to have a comparative advantage keeps

producers always seeking some form of rent (Guthman 2004a, 2004b; Kaplinsky 2010). For example, for producers in Jordan, going to Mafraq and Zarqa Governorates where you can buy a large plot of land and have access to water gives desert producers an advantage and the ability to produce on a larger scale. However, the ability to capture rents and transfer rents into profit is not uniform across the chain.

While the categories of rents are not mutually exclusive or exhaustive, it is useful to think through common ways in which rents are captured. The first basic distinction is exogenous and endogenous. Exogenous rents are from the environment whereas endogenous rents are from the firm. Within the endogenous, there are technological, organizational, and relational rents. Technology rents are the use of technologies (including improvements to the land) that give a firm an advantage. Relational rents are rents captured by advantageous within the firm's larger network. Organizational rents are advantages gained by internal organization (Kaplinsky 2005). Through these different categories, we can analyze the different ways in which production is organized and how various aspects allow producers to capture value.

3.3 The Cost of Quality

This section explores the specific construction, material and discursive, of quality that organic certification demands. Quality is not simply established by consumers demands (Mansfield 2003a; Renard 2005). It takes form within the interplay between retailers, consumers, producers, traders, cultural understandings, environmental conditions, and plant properties (Mansfield 2003a). First I explore the cultural meanings of organic within the local context of Jordanian olive oil production. Then, I examine how organic olive oil is produced and how first group of the organic olive oil farmers discuss their

introduction to certified production. This analysis highlights the convergent and divergent meanings of organic and their implications for production.

3.3.1 Meanings of Organic

“All of the oil in the North is organic” (informal conversation, 2017, government employee).

“It’s like organic; They are rainfed and it’s known that farmers don’t use chemical materials.” (Interview, 2016, olive mill manager).

This is the common refrain of people when you ask about organic olive oil in Jordan. They imagine the traditional northern, smallholder farmer. While the quote above demonstrates a colloquial sense of organic, governmental programs and private businesses often see organic as a system international law and regulation for selling and trading organic goods, based on international standards.¹⁴ Although more than 80,000 families are involved in olive production and olives constitute roughly 71% of the planted trees in Jordan (“Irregularity in production” 2014), only seven farms are organic certified. Within this context, organic takes on different meanings across the entire commodity network; Jordanian consumers and producers encounter and employ both international and local definitions of organic. While farmers of organic-certified olives take on additional costs to meet international organic certifications in order to sell to distant¹⁵ customers, many local customers already consider oil from their region organic and are therefore unwilling to pay a price premium for certified oil.

Despite this common assumption that most olive oil in Jordan is already ‘organic’, certified organic olive oil must meet certain international standards. Obtaining

¹⁴ Generally based on the International Federation of Organic Agriculture Movements definition.

¹⁵ Distant here refers both to geographic distance and distance in terms of accessibility.

certification requires annual inspections to ensure that the farm and milling facilities meet these standards. The main focus of the inspections is to make sure that all of the farm equipment and plots are dedicated to organic production alone, that there are no contaminants on the farm, and that the mill has a line dedicated solely to organic. The format of the inspections is not specifically for olive production, but farmers and mill owners must document everything they do for the purposes of inspection. The oil is also tested for any chemical traces. Therefore, the inspection for organic products is both on the process and the final product.

However, the organic guidelines are not the only type of standard affecting production. The production of organic olive oil, because of its gourmet niche and high price point it is produced mostly for large supermarkets and for export and therefore must also be of a particular global quality. As one organic olive oil company manager told me, “organic doesn’t do [anyone] any good if the quality isn’t high.” In other words, organic will not bring profits unless it can be considered of high quality. In the case of olive oil, this means extra virgin olive oil. Extra virginity depends on internationally set organoleptic and chemical properties (Cook 2018). In order to reach these quality standards, the production chain must be highly attuned to the sensitivities of the chemical composition of the oil. These quality standards differ from the emphasis on location and color that many local Jordanians use in choosing their olive oil. In fact, a common story amongst extra virgin producers is that the average farmer prefers a bitter, rancid oil over a high quality extra virgin oil. In the following sub-section, I explain how this new sense of quality is produced along the commodity chain.

3.3.2 Creating Organic-Certified Farmers

In this section, I outline how farmers must create quality in organic production and how this differs from non-certified production. While at first, the farmers will tell you that they did not really have to change anything because the farm is already organic, after further discussion, it becomes clear that organic certification comes with quality requirements and marketing requirements that necessitate several changes.

The Jerash project started as a collaboration between the Japanese International Cooperation Agency (JICA), Nippon International Cooperation for Community Development (NICCOD), Jordanian Ministry of Agriculture, and the King Abdullah Fund. The project started with trainings via the Ministry of Agriculture with at least 50 farmers. Then, through JICA's support (2003-2007), 9 farms became certified. The site of the initial trainings still stands (Figure 4), but due to the end of the development project, the site now sits mostly unused. The number of certified farms on the project has decreased to four. One of the remaining four farmers joked that maybe by the time I publish this research, there will only be one farmer left. In their humor is the real fear that all of their efforts will come to an end.



Figure 4: Training Facility for Organic Farming Project (photo by author).

While they do not consider their current olive cultivation vastly different from before, they have put in a lot of work into the trainings and negotiations necessary for obtaining certification, and they consider themselves pioneers in organic agriculture in Jordan. They began with trainings in organic farming techniques coordinated by the Ministry of Agriculture with international experts. The farmers fondly recall the trainings, remembering long all-nighters, sitting, talking, and learning together. There was excitement and a family-like dynamic. The farmers recalled, “It didn’t feel like work. We would work long hours. It was difficult because we all had different jobs, but we made it work.” The extra time demands of organic, including the trainings, often involved taking vacation days from other jobs. Nearly every farmer either worked for a wage somewhere or had a business, and so they were optimistic about the promise of increased revenue from their farm.

The first step of ensuring quality is strong, healthy trees with a good yield and undamaged fruits. Although olives are widely regarded by farmers in Jordan for being the ‘lazy farmer’s crop,’ a naturally suited tree that only needs a medium amount of water, some pruning, and it will keep on giving you fruit for thousands of years. However, to make this tree profitable and to produce extra virgin, high quality oil, it requires more intensive care. And the damages from one bad season can be more harmful. Unlike many field crops, tree crops can take five years to recover in growth. One producer said,

Here, investing in olives differs a lot from investing in anything else [...] They are long-standing trees, they grow slowly, they are one of the most trees that takes some time to produce, it takes 5 years when you have the chance to take its fruits, so when it is 10 years old and it is not producing enough you'd still keep it, these are 5 whole years of giving care to the tree, it's not easy to give up on it and just leave it (Interview, 2016, organic farmer).

While generally, trees are often more resilient long-term to change in the environment and changes in the market (Prudham 2003), the pressures for quality and revenue are unforgiving if the trees are affected by disease or environmental condition in the short-term. Additionally, the restrictions on chemicals and the cost of organic pesticides and fertilizers hinder farmers’ ability to combat pests and diseases, making them more susceptible to those threats. Therefore, paying for the organic certification annually undermines the flexibility and security of having trees long-term because the certification must be paid for annually even if there is a year of low-quality production and none of it can be sold as organic due to low quality. This makes a season that would simply be weaker and low-revenue in traditional agriculture, a season in which farmers spend more on certification and production than what they earn.

Another aspect of production to which the newly organic farmers had to adjust was harvesting techniques and labor. While there is a range of ways in which harvesting labor was accomplished under traditional production, organic farmers must harvest in the fastest and most thorough manner. They must make sure that the olives are picked early enough so that no damage is done to the fruits. They often pick earlier and take their fruits to the mill in a shorter period of time than other local farmers. Because they can no longer take a long time in picking, they often hire wage labor (often women from the Jordan Valley or a mixture of Syrian and Egyptian male laborers) to help with harvesting. However, the farmers must also watch the laborers carefully to make sure that they balance speed with care and thoroughness. Some people pick quickly (using sticks and rakes) because getting all the fruits quickly is the most important factor. However, for those trying to produce extra virgin and organic oil, the harvest requires handpicking, being careful not to damage the branches. It also means being careful to not step on any olives and keep any olives that had fallen off the tree separate from those that you picked, slowing down the process. While this technique is not unique to organic, organic production makes it non-negotiable in balancing other needs and interest.

Once picked, olives should be sent to the mill as soon as possible to ensure that they are pressed before the fruits are damaged due to puncture or heat. Harvested olives are often stored in large plastic or burlap sacks. However, organic producers use boxes to insure that the fruits are not damaged, because once the skin on the fruit breaks, the oil starts to oxidize, raising acidity and peroxide values and decreasing quality. Some mills will provide farmers with boxes so that farmers do not use bags that cause compression and heating of the olives when stacked on top of each other. However, mill owners who

have tried to supply boxes to local farmers found it costly because many boxes were lost or damaged. Therefore, they want to encourage farmers to bring the olives in boxes, but many farmers do not want to incur the additional cost either.

In order to extract oil, the fruits must then be taken to a mill. Modern mills have one to four pressing lines consisting of often Italian or Turkish machines.¹⁶ These lines are controlled by some form of computer, ranging from a simple control panel to a complete monitoring system including input information on the farmer and his farm. At the most basic level, the computers control the timing for each step and the temperature of the water being input into the system. All lines begin with a hopper that transports olives into the washer and then a blower that tries to blow away things such as leaves and stones. A trustworthy mill will always use clean water to clean the olives. At this point, olives fall into the crusher that crushes the fruit and pit together. For organic producers, the fruits must be pressed on a certified line dedicated solely to organic production.

The next step is malaxation. Malaxation is one the key moments of determining the olive oil quality in the milling process. For a mill owner to run an organic mill, he also needs a system in which he can carefully monitor water temperatures and balance malaxation time. The paste created from the crushing is mixed with water and turned for a set period of time. While longer malaxation time with higher temperature water will increase the separation of oil, it will also raise the acidity and alter flavor. In the best machines, oxygen exposure is also carefully controlled to prevent oxidation and keep acidity levels low.

¹⁶ Most of the older style mills in Jordan have shut down because their oil did not meet health codes.

From the malaxer, the paste goes to the centrifuge that separates the oil, paste, and water.¹⁷ From there the oil goes on to another centrifuge and possibly a filter. At the end of the line, families sit with their containers waiting for their oil to fall into their container of choice. Whereas a traditional farmer usually stores his oil in *tanakat*, often provided by the mill, the organic farmer is putting his oil in a large stainless steel tank in order to later bottle it. Glass bottles are more profitable and denote a higher quality.

In summary, if someone produces organic gourmet olive oil, then they will also ensure that the oil is high quality extra virgin oil. As discussed in the description of the production chain, quality and yield often have an inverse relationship. Therefore, from the perspective of the average farmer or mill owner not interested in extra virginity, they will delay picking, extend malaxer time, and increase water temperature. These practices however, would not produce a high quality olive oil that could sell for a high price on the global market. In other words, the meanings attributed to the biophysical properties of olives and their oil create a situation in which a more costly and low-yield production process elicits higher value globally. The rest of this paper compares how this attachment of meaning intersects with different utilizations of organic certification to constrain different people's ability to participate in the commodity network.

3.4 Shifting the Commodity Network

The vision of the Japanese development project was to get build improve rural livelihoods by training Jordanian smallholder farmers to produce organic olive oil that could then be exported to Japan. These farmers were the first of the current organic olive

¹⁷ There are two-phase and three-phase lines with two-phase requiring less water but outputting water with the solid waste.

farms certified in Jordan. However, getting certification does not just change some of the production practices. In this section I outline how the shift from producing for local consumers to producing for organic olive oil consumers changes the commodity network and the relational rents necessary for capturing value within the new configuration. I find that the organic commodity chain is limited to particular mills and particular consumers in a way that necessitates marketing, and new barrier to capturing value for farmers.

The primary difference is that organic certification forces producers to work with an organically certified mill, limiting their options in terms of mills. Because the cost of certification is high and the number of organic olive farmers is limited, out of 130 mills and 272 milling lines in Jordan, 4 lines across 4 mills are organic (Ministry of Agriculture and NCARE 2015; Olive Directorate 2016). For domestic production, farmers could go to any of several mills that were close to their farm. From these mills, they would choose a clean mill that will press their olives in a timely manner without cheating. However, for organic producers, the mill must have certified machines and be trustworthy that no chemical traces would be found in the oil and that the quality would be high. As for the average farmer, he is trying balance cost, quality, and quantity. Because there are very few organic farmers and the cost of certification is high, farmers must choose between only a few organic mills in Jordan. It is possible to change mills as an organic farmer. For example, in the beginning of the Jerash project, Ajloun Mill was updated and certified in order to press the farmers' olives. This mill had one line completely dedicated to the organic farmers. Having this one line for the farmers, however, did not become profitable for the mill and the farmers became frustrated that the mill was not selling all of their oil. In return, in 2009, the farmers began working with Amman Mill, the mill that they use

today. However they went from using a mill only twenty minutes away to one nearly an hour away.

Whereas the average traditional farmer might take his oil to a different mill each year, the organic farmers and mills usually have a long-term agreement. In the case of the Jerash project, Amman Mill and the farmers now have a written contract and are registered as an NGO under the mill. Through this written contract, the mill agrees to buy 3000 tons of olives from the farmers annually. The Amman Mill pays for the certification for both the mill and the farms. Under the contract, the farmers are liable for the organic certification fee if they fail their organic inspection or break other conditions of the contract (like harvest timing). While this helps the farmers reduce their financial risk, it also closes off their access to switch mills or determine how value is distributed after sale.

Furthermore, this relationship demands a certain quality, which lowers the yield of oil that farmers can take. Because olives pressed earlier in the season make higher quality oil, the mill first buys olives as organic until a certain date and then buys it as extra virgin from the farmers. The price paid for the olives is the most contentious point of the farmer-mill relationship. The farmers realize how much the olive oil can be sold for in the United States, and so they feel as if they should get more for their olives. One farmer said,

“Plus when I do it organically I'm asked to harvest in September and October. Do you know what that means? Less oil yield. I'm losing oil yield and they're not compensating me for it financially. Why would I want to keep working with them [the Amman Mill]?” (Interview, 2016, former organic farmer).

In other words, selling on the local market via personal networks becomes unprofitable because they do not take a higher price for producing organic and they produce less oil.

This dynamic led some farmers to leave organic in order to produce with a higher yield, lower cost, and sell their oil through their own networks, without an intermediary. One farmer felt that the intermediaries have no mercy and that it is senseless to work with them when he can simply sell to people who call him during the harvest season.

From the mill's perspective, however, they take on many additional costs such as transportation, storage, milling, packaging, marketing, and shipping. Therefore, they capture much of the revenue from the price premium. They pay for transportation and the plastic crates to transport the olives. They make sure that the olives are pressed immediately, that the oil is stored properly, and that it is bottled in marketable packaging. The mill also pays for the certification and coordinates inspection with the third party certifier, the Swiss-owned Institute of Marketecology (IMO). Annually the inspector from IMO comes and carefully checks all of the farms to ensure that all equipment is kept separate from any conventional land, that all of the plots are registered and mapped, that the farms are free from trash, and that there is documentation for all processes on the farm (irrigation, pruning, composting, etc). According to a manager at the mill, documentation was a challenge to get farmers to consistently do it. They were aware of everything in their heads, but that didn't matter to the inspectors. Instead of success of the farmer residing in his ability to sell his project, his success in organic depends on his ability to provide a product that meets international quality standards and to perform their production in a way that is legible to an international inspector.

The farmers in this model recognize that their lack of marketing capability precludes them from capturing value. Without the access to better international markets

or local hypermarkets, the farmers barely make enough money to make up for the lower yields that the organic and corresponding quality requirements caused. One farmer said,

They came and helped us develop something that *their* market needs, and then left us with a gap with no means of communication with that market. Who's going to fill this gap? The French, Italian, Japanese came and left, then what? This is the disadvantage faced by us farmers (Interview, 2016, former organic farmer).

Another commiserated this by saying that he was frustrated with the continued trainings on how to farm. He said, “We are trained, help us with marketing!” This assertion identifies the crux of the issue with organic production for the farmers—that in order for them to capture value, they need to be in control of the marketing. However, under the goal of getting Jordanian oil on Japanese shelves, this is an unnecessary step; there are already people who can utilize their relational rents in marketing and market access.

Two other models exist for farmer-mill relationships in this organic commodity chain. In the first model, the farmer uses the mill for milling, but does not store or package with them and conducts marketing and sales. This relationship mirrors traditional production when a farmer presses his oil at the mill, takes it home, and sells it through his personal networks. However, by doing organic, they need to access markets in which the distinction of quality is recognized and brings a higher price. Locally, organic only brings a higher price in hypermarkets, which require hard-to-obtain contracts with high initial investments in marketing and guaranteed sales. Usually smallholder farmers are not capable of promising this quantity and/or do not have the required capital and experience to do sufficient marketing. And so organic constrains farmers from being able to sell locally. The second model is when farm and mill-owner are the same entity. This model usually occurs when the farm is an investment farmer

who has invested in a mill and land with olive trees. In this model, s/he controls most of the value capture activities, from cultivation to sale. However, even some of these producers back out of organic because they struggle to balance quality and cost. In other words, due to restrictions on chemicals and fertilizers, organic does not necessarily mean higher quality, but it does require a high quality in order to sell in gourmet markets.

In summary, the mill coordinates the parts of production that add the most value: processing, certification, packaging, and selling. The smallholder farmers are aware of this and some noted that if only the farmers could get a big enough cooperative together and own a mill with an organic line, just for them, then they could hire a marketing person and all of the issues would be solved. However, building a mill requires a significant financial investment, making it not feasible for most small-scale farmers to invest that much money and time into a mill. I outline how these technological and relational rents exclude smallholder farms in the next section. While this happens in most olive production chains, organic exacerbates this uneven access to value by further limiting farmers' ability to work with different mills and the reliance on marketing to gourmet consumers.

3.5 Rents and Seeking Value

In order to sell to distant gourmet consumers, producers must engage in a particular commodity network that requires more capital and different relational rents than selling on the local market. As mentioned in the previous section, capturing value in this distant commodity chain depends on the ability to access markets. Whether coordinating marketing and sales oneself or through a specialist, one must be able to provide a large quantity at a consistent quality. Providing this large quantity at a high quality creates a barrier to entry in terms of capital because it requires hiring more

laborers, expensive processing and storage equipment, and more natural resources such as water. By overcoming these barriers to entry and gaining a competitive advantage, producers can then utilize relational and technological rents and increase their competitive advantage. This shift in the commodity chain and the new quality-demands create the organic paradox in which smaller farms cannot take advantage of premiums, quality enhancements, or incentives as well as the investment type farms. This paradox benefits the firm-owned farms that often produce in desert areas, requiring more resource intensive practices (see Table 1). In this section we explore how smallholder farms are largely excluded from these rents in comparison to investment farms.

Table 1: Comparison of Typical Family-owned and firm-owned olive farm.

	Family-owned Farms	Firm-owned Farms
Reason for farming	Inherited	Investment
Common Location	Highland	Desert
Water	Rainfed	Irrigated
Size	Small land plots	Large land plots
Sale of oil	Sold through social networks	Sold via global networks
Complaint with organic requirements	Documentation, lack of marketing. Early picking leads to lack of yield	Inputs restrictive, limiting yield and making quality more difficult to maintain
Complaint with organic marketing	Training never focuses on this. No access to markets	Restricted access to global markets because lack of recognition for <i>Jordanian</i> oil
Cultivation Decision Making	Owner, family, occasional consulting with engineers	Owner, full-time agricultural engineer
Harvesting Labor	Owner, Family, Wage	Wage Laborers

In contrast to the smallholder farms, the mill company and other investment-oriented farms are owned by businesspeople who are often highly involved in ministry activity, chamber of commerce, and business associations. Therefore, they can easily navigate the bureaucracy and even influence it. The farmers remarked that they are disproportionately excluded from this network and its resources. The farmers complained that the Ministry is helping bigger farms. One noted that,

It's not that the ministry doesn't provide services at all; it does but only to big farmers, like those that have 500 dunum and high production. The Ministry of Agriculture dedicates engineers to serve those farmers, whether in providing fertilizers, medications, supervision, and offering their labs and equipment if any suffer from a pest problem or anything, all for one farmer. But what about the rest of us? We want the small farmers to be the ones benefiting. The others have the means {the big farmers} (Interview, 2016, group interview with organic farmers).

In terms of rents, the farmers are excluded from this relational rent because they struggle to use governmental technical and bureaucratic support. The farmers argued that this exclusion is part of a larger trend in the government's disinvestment from rural areas to more profitable industries and regions.

Farmers tried to combat this exclusion by forming an organization, through which they could collectively petition for Ministry support. For example, the farmers went to the Ministry of Agriculture to ask for support and the ministry required that they register the Association. They recalled collecting and paying 300JDs for the registration, but then the application was rejected and the farmers forgot about it. One farmer told me,

The government, engineers, and Ministry of Agriculture should be the ones following-up with the farmers. For us here when the funding entity left, a gap was created, the farmer got lost; first the Association is not registered, and no one is there to support or to help in marketing his products (Interview, 2016, former organic farmer)

The development model created a commodity chain of oil from Jordan to Japan, but it did not facilitate long-term, efficient access to governmental resources or a strong, independent farmer's association.

One type of technological rent necessary for increased quality and quantities is improvement to the land. This type of rent functions alongside resource rent in terms of the land. If we speak solely about the resource rent, then the smallholder farmers would have an advantage because their land is in an area better suited for olive cultivation. However, an improvement such as irrigation is essential to producing large high-quality quantities because irrigation will overcome any rainfall deficiencies and having enough water is necessary for diminishing the alternating cycle of high and low yields. Although the smallholder farms are largely in rainfed areas, the rainfall is often not enough for optimal fruit yields. These highland areas are also usually more restricted in terms of ground water access. In contrast, large desert farms can sometimes more easily access water because, due to less population density, there are fewer restrictions on ground water access. Furthermore, the large investor farms have the capital to buy water and to build the irrigation infrastructure. This capital also pays for farm staff including engineers, managers who are often employed full-time to monitor the health of the farm year round and make adjustments.

Facilitated by the size of the farm and the full-time staff, the investment farms are able to cultivate olives at a much larger scale. Investment farmers often buy large, affordable plots of open land in the desert whereas family farmers largely inherited small plots of land that are adjacent to existing farms, limiting their opportunities for expansion. Desert producers are able to leverage their large scale of production in order

to access to governmental support, marketing networks, and milling technology. For example, AlShajarat Farms is twice the size of all of the remaining Jerash farmers' farms together. This size means that, although there is only one mill in the area that has an organic line, the amount of olives from this one farm makes it a worthwhile investment for the mill. Furthermore, large size of production (and the owner's access to excess capital) makes it worthwhile for the owner to invest in a storage facility. The farm has its own temperature-controlled storage building with large stainless steel tanks so that this year's and last year's olive oil could be stored. Because olive oil is so sensitive to heat, light, and oxygen, the stainless steel tanks are necessary for storing the organic oil. It prevents oxidation from occurring and maintains the acidity and peroxide level and the organoleptic qualities. And so, although alShajarah Farms is still reliant on a mill for pressing, they can pay the mill enough to make it worthwhile *and* take control of the storage and sale of their oil.

Many smallholder farmers claimed that the discontinued support from the Ministry of Agriculture impeded farmers' ability to continue producing organically. One farmer who left the project said, "And it was successful, producing organic and extra virgin olive oil; it was all successful. But follow-up was not maintained, it's not like in the West, where when they start a project, they go all the way; no, here we reached midway and stopped." The collaboration between the Japanese development agency and the Jordanian Ministry of Agriculture gave the farmers support through trainings and consultation with a network of experts who worked around the farmers' schedules. This level of involvement evaporated to a very palpable absence (see Figure 4). In other words, once the Japanese involvement stopped, so too did the Ministry of Agriculture's.

This shift is symptomatic of how the Ministry of Agriculture often works with international governments and organizations to fund projects. Once these projects finish, they must reallocate staff and resources to the next grant or project.¹⁸

In contrast to the smallholder farmers, the large investment farms have enduring relationships with the Ministry of Agriculture in addition to other important relational rents. The rents that these large farms capture are important because they can hold on to them regardless of the organic certification. It is this ability to produce at a large scale to reach distant consumers, and the consumers are similar in organic versus regular export gourmet. These producers' networks with large global trade and government also facilitate their ability to access markets and realize quality rents. They are highly integrated in business and bureaucratic networks, allowing them direct access to expert knowledge as well as influence new projects and policy planning. This access to relational rents also decreases the risk of failure if they abandon organic production. For example, one producer abandoned organic because he figured that he could actually produce a higher quality oil by using small amounts of chemicals if there is a severe issue with bugs or diseases. He already had a personal relationship with a Japanese buyer. The buyer also said that Japanese consumers were less concerned with organic than the taste quality and a good story. Therefore, the buyer, who does the packaging and marketing, was contemplating not even featuring the organic logo on his products. And thus, an investment farmer, with his network of buyers and bureaucrats, can still access networks to capitalize on the distinction quality rents, even without certification.

¹⁸ Similarly the development agencies move between projects and countries.

3.6 Conclusion

As illustrated by tracing the value capture within the organic olive oil commodity network, despite having ‘naturally organic’ farms, farmers are excluded from capturing rents because they cannot access bureaucratic networks, external markets, and the necessary technologies for processing and storing oil according to quality specifications. However, this has not prevented the state and private sector from pursuing organic certification as a strategy for development in rural areas. According to the farmers, it has not brought the revenue for which they were hoping, but according to some government officials, it is a success because a) Jordanian olive oil is on shelves in Japan, and b) it came from small family farms in Jordan. This debate over success and failure demonstrates the variety of desired outcomes and perspectives within Jordanian organic olive oil’s network of local and global institutions and economic and social networks. While the question of success cannot end in a definitive answer, we can, by identifying how exclusions occurs within this network, explore ways to make the certification schemes more equitable or more likely to assist small holder farmers.

This study found that organic certification shifts the commodity network in which the oil is not only sold, but in which the ideas of quality and proper production are concurrently produced. In other words, creating value is not about simply doing a good job of creating a better product. It also depends on the configuration of the commodity network, and in the case of a niche organic market, how to access the parts of the chain (marketing, packaging, sales) in which the increased value is realized into increased earnings through sale to distant consumers. For producers who were already producing for distant consumers through exports or hypermarkets, organic is simply another form of

distinction for their product. However, for the smallholder farmer's oil, it is a completely new chain, in which the small farmer is largely excluded.

The development model used in the Jersah project established a production network in which the farmers are reliant on other parties to capture the quality rents. The farmers participated in the organic project in order to improve earnings, potentially securing the future of their farm. However, farmers were positioned in the project as sources for a high-quality natural resource, and not as producers of the final oil product. This shift differs from how they previously sold their oil themselves. In their previous commodity network, farmers could have direct contact with consumers as they controlled the oil. Meanwhile in the organic commodity chain, they cannot access these consumers directly because the intermediary has the relational rent in the form of access to the consumer. Additionally, the farmers rely more on intermediaries because they lack technological rents such as proper storage for the new quality and quantity demands. In all, the farmers recognize the advantage of not having to do the marketing themselves; they just sell the fruit to the mill and take their pay. But ultimately, their exclusion from value capture diminishes their ability to increase their revenue in this model.

Many farmers, big and small, have struggled to justify keeping with organic production due to the direct and indirect costs. While they are hoping that it will increase revenue and benefit the environment, the exorbitant costs of the certificates, the expensive organic treatments, the increased exposure to environmental risks, and the reliance on distant consumers makes certification difficult to maintain. However, as one of the most water scarce countries in the world, Jordan could benefit greatly from finding an environmentally sustainable way to farm that adds a mark of distinction to their

products. Jordanian olive producers have difficulty competing on the global market due to the high price of production in comparison to other countries. In a place where production costs are already so high and average income is low, perhaps there is another way to ensure environmentally friendly production. As the Ministry of Agriculture discusses making their own certification body, the question then remains, if Jordan succeeds in making their own certification, how will it differ from other international third party certifications? In order to ensure the inclusion of small holder farmers and to make organic production less intensive, they would have to encourage production and sale within traditional, local commodity networks in which oil can be easily sold directly by smallholder farmers.

In regards to international organic production, this framework furthers our exploration of the contradictions between the idea of organic as an alternative food network and the ways in which organic pushes production toward intensification. By focusing on the shifts in the commodity network, constructions of quality, and exclusion from rents, I demonstrate that organic certification's push towards intensification when local access to organic consumers is limited occurs because of the shift in the commodity chain to distant consumers and the associated quality and quantity demands. Further work is needed to explore potential alternatives to certification that take into account existing local commodity network structures.

4. The Problem with Empowerment: Women's Rural Businesses in Jordan Abstract

In Jordan, many women's small food businesses have been supported in order to encourage sustainable rural development. Many of these businesses have become an integral part of most bazaars and festivals. For example, in the olive oil festival, women's organizations from all parts of the country participate. However, research on these women's projects, in Jordan and beyond, often frame these projects in terms of development and often evaluate them based on economic engagement and women's empowerment. This paper engages with critical development scholarship, conceptualizing development as an assemblage in order to focus on how women contingently engage with these networks and realize goals beyond the priorities of development agencies. While many development agencies still articulate the goal of focusing on women's entrepreneurial projects in terms of empowerment, this view often rests on the problematic devaluing of social reproductive labor. Instead, I argue that production for distant customers necessitates a shift in domestic labor and reproduction that extends their domestic labor into public spaces and, depending on organizational structure, allows for the revenue to be put back into their reproductive labor to varying degrees. Through an examination of women's engagement with development networks, production changes, and organizing strategies, I found that domestic and productive labor are intertwined and that modest business growth often facilitated women's reinvestment in social reproduction. These findings further our understanding of the role of development funding and projects in helping women attain their goals.

Keywords: social reproduction, rural development, gender, Jordan, empowerment

4.1 Introduction

“All natural, organic, homemade from Ajloun” was Salma’s refrain every Friday. The market was in an old section of Amman, a few narrow alleys that became full of vendors, tourists, and Ammani upper-to-middle class every Friday for Souq Jara. Salma’s table was set up between a young man painting landscapes on black velvet and an older woman selling small ceramic items. The table was full of different sized packages¹⁹ and bottles²⁰ of rural goods from Ajloun, an area an hour and a half from the market in Amman. The twelve-hour day was tiring and the profits varied, but without the market Salma’s women’s charitable organization had trouble paying the bills. This charity-business had become the center of Salma’s life.

This paper examines the different goals and structures of several women’s organizations. Salma’s organization is just one of many women’s businesses that have opened since the 1990s due to local and international development funds and programs focused on rural women as agents of rural development. These women’s businesses can be seen at nearly any outdoor market or festival in Jordan. While these businesses vary in product and organizational structure, most sell ‘home-(women)-made’ products. However the process of transitioning from domestic work to the formal economy is not as simple as earning money for previously unpaid labor. Instead, women must learn how to engage with and navigate a new network of customers, business consultants, and government agencies in order to shift production from house to market.

Despite long-established critiques of empowerment as a measurement for success in development (Cruikshank 1999; Mahmood 2005; McEwan and Bek 2006; Abu-

¹⁹ Packages included zaatar, various seeds, sumac, dukkah, sage, tea, and saffron.

²⁰ Bottles included olive oil, pomegranate syrup, and apple cider vinegar.

Lughod 2009), scholars and development workers continue to evaluate rural women's production through the lens of empowerment (Kabeer 2005; Herman 2012; Al-Dajani and Marlow 2013), entrepreneurialism (Bock 2004; Anthopoulos 2010; Al-Dajani and Marlow 2013), microfinance (Roy 2010; Torri and Martinez 2014; Žiaková and Verner 2015), or economic engagement (Dababneh 2016). However women's goals and strategies only partially fit within these projects and frameworks. While scholars have argued for evaluating these projects based on women's goals and perspectives instead of masculinist measures alone such as profit (Anthopoulos 2010), the alternative is rarely defined and is often used implicitly to stand in for *economic* empowerment or challenging gender norms. This emphasis on change as an indication of betterment or, at a base level, a translatable goal of the women in these projects risks reinforcing Euro/US-centric visions of positive development outcomes (Al-Dajani et al. 2015). Instead, this paper builds on work in critical development that conceptualizes development as an assemblage in order to emphasize the often momentary and relational ways in which women engage in development networks. This shift re-focuses our attention to women not as subjects and indicators of development, but as agents of economic and social action.

Within this framework, this paper asks, how do women's in rural spaces organize and engage with development networks to produce local traditional foods, largely for urban consumers? Drawing on ethnographic fieldwork with women's rural food businesses and organization in Jordan, this paper traces how women engage in NGO and development networks as they organize and transform their domestic labor into income. In order to foreground women's agency, I first explore the network of development that

women often utilize in order to grow their businesses. Then, I trace how, within these networks, women turn their domestic production into production for consumers. Third, I examine the different ways women organize strategically to build small businesses. I argue that production for distant customers necessitates a shift in domestic labor and reproduction that extends their domestic labor into public spaces and, depending on organizational structure, allows for the revenue to be put back into their reproductive labor to varying degrees. These findings demonstrate that domestic and productive labor are intertwined and that modest business growth facilitates women's reinvestment in social reproduction. However, the larger the organization became due to donors, the more effort had to be put into reproducing the organization itself. Through these findings, decision-makers can better address policy and development beyond economic engagement and empowerment.

4.2 The Extended Networks of Women's Rural Projects

Production of domestic goods and crafts through women's small businesses and organizations has been a popular development strategy in Jordan (Al-Dajani and Marlow 2013; Ward 2014; Žiaková and Verner 2015) as well as other rural spaces across the globe (Weeks 2009; Anthopoulou 2010; Nguyen, Frederick, and Nguyen 2014; Valencia-Fourcans and Hawkins 2016). There are several main trends in how this has been examined. Some of the cultural economy literature has addressed the power dynamics of indigenous production and commodification (Rankin 2001). Others have looked at ideas of entrepreneurialism and empowerment via this development strategy (Chitsike 2000; Bock 2004; Anthopoulou 2010; Roy 2010). And others have examined it in the framework of BBC and entrepreneurialism (Elyachar 2012; Sparke 2012; Blowfield and Dolan 2014). Even though many of these scholars are critiquing the frame of choice,

empowerment and entrepreneurialism continue to frame mainstream and many academic discussions of women's role in economic development. In contrast, from my empirical research, I found that women's engagements with each of these systems and ideas are often tenuous and temporary. Therefore, I adopt an assemblage approach in order to focus on women's efforts to engage with these development networks and to understand how they overlap yet exceed these frameworks. In this section, I first outline the assemblage approach, then commonly used frames of analysis for women's rural projects, and finally, alternatives to thinking through women's labor and motivations.

I trace women's engagement with development networks that offer financial support and technical assistance in the name of economic development and women's empowerment. By categorizing women as agents that utilize development networks instead of subjects of development projects, I highlight the momentary ways in which women engage in these networks through various business and organizational strategies, furthering our understanding of development as a more relationally contingent and nebulous (Ferguson 1994; Mitchell 2002; Li 2007a; Escobar 2011). Furthermore, this shifts our analysis from assessing development programs' impact to assessing how it serves and shapes women's interests as one strategy among others. For example, instead of evaluating the success of a development program and its effects on women, I examine women's strategies for avoiding loans or forming an organization in order to qualify for grants.

In this paper, I utilize the language of an assemblage such as used in Li (2007) to describe how development is an assemblage of practice. This orientation highlights the ways in which the development system is fluid and constructed through always shifting

practices and relations. My incorporation of thinking through extended networks and the materiality of these relationships is also informed by Katz's (2001b, 2001a) idea of a topography in which place is produced through multi-scalar relationships. Although the language of assemblage has been critiqued for its inability to account for hierarchical power (Escobar 2011), there is a large overlap with assemblage thinking and critical development scholarship's goal of unpacking development as a black-box (Ferguson 1994; Walker et al. 2008; Escobar 2011; Mosse 2013). For the purposes of this paper, I conceptualize development as a set of processes that function through contingent networks and institutions in order to advance particular economic, social and political goals as articulated, often between domestic and national decision-makers. Within this context of critical development studies, I utilize the language of assemblage in order to emphasize the ways in which women's small businesses are only contingently part of this network.

One common configuration of this development assemblage is the tri-sectoral development nexus between governments, development agencies, and the private sector. Donor agencies funnel their aid through existing NGO networks through these tri-sectoral cooperations (McEwan and Mawdsley 2012). In this tri-sectoral development nexus, bottom of the pyramid (BOP) development, in which the poorest populations are seen as potential investment opportunities, has also supported women's business projects. In discussions of the Global South in particular, conversation often revolves around micro-credit and bottom-dollar capitalism (Ahmad 2003; Roy 2010; Blowfield and Dolan 2014; Valencia-Fourcans and Hawkins 2016). In the context of these women's business projects, the networks that women engage in are the tri-sectoral cooperations that fund

and train women in these projects. In Jordan, this often means a distribution of microfinancing opportunities through these private, public, and governmental networks. Microfinancing became popular globally due to increasing consumer interest in ethical consumption and corporate accountability. And so, investing in the global poor became a way for businesses to become development agents (Blowfield and Dolan 2014). Simultaneously, people can take up parts of these networks and trainings and engage in their own way (Walker et al. 2008). And so while these networks may have set out to increase women's productive work and economic involvement, women are using these networks in unique ways. How women have done this in the case of olive oil production in Jordan is the topic of this article.

These development agencies and initiatives often support and encourage women's small to medium enterprises across the globe to rural market-led development (Shortall 2004; Woods 2005; Bock 2015). As a response to critiques regarding the absence of women in developments, the UN adopted gender mainstreaming in order to address gender issues in all seemingly gender-neutral programs and policies instead of having specialized 'gender' or women's programs (Cornwall, Harrison, and Whitehead 2006; Allwood 2013). However, governments and development agencies have taken on an integrationist approach, incorporating gender by often adding women to development projects or policy without promoting structural change (Allwood 2013; Bock 2015). Policymakers in Europe have implemented gender mainstreaming through support for women's employment, specifically entrepreneurial projects in rural areas (Bock 2004; Shortall 2015). Elyachar (2002) critiques how these policies shift the effects of neoliberal development and the roll back of state support in newly gendered ways. For example,

these policies are more likely to encourage men to participate in childcare than to encourage public investment in the care economy (Bedford 2008).

One way in which gender mainstreaming has manifested in development practice has been the support of entrepreneurial women. As a result, measurements of success are often in dollars and the percentage of women working. However, these entrepreneurial standards of success often privilege a particular masculine form of entrepreneurialism focused on expanding capital (Bock, 2004). Scholars examining women's projects have argued that, scholars should expand their analyses of women's projects' success based upon their intended goals instead (Bock 2004; Anthopoulos 2010; Markantoni and van Hoven 2012). Much of the work addressing the rise of women's entrepreneurial projects has been geographically located in Europe (Oughton, Wheelock, and Baines 2003; Bock 2004; Shortall 2004; Midgley 2006; Anthopoulos 2010; Markantoni and van Hoven 2012). Both the work in Europe and outside has largely focused on the importance of women's economic independence and empowerment (Chitsike 2000; Weeks 2009; Torri and Martinez 2014).

Despite critiques of empowerment frameworks (Cruikshank 1999; Mahmood 2005; McEwan and Bek 2006; Abu-Lughod 2009), empowerment remains a large focus on both the entrepreneurialism scholarship as well as development more broadly (Kabeer 2005; Al-Dajani and Marlow 2013; Alkire et al. 2013). Furthermore, in development practice, empowerment often becomes synonymous with economic empowerment. However, McEwan and Bek (2006) argue that empowerment should not be reduced to economic empowerment because it is through this process that empowerment depoliticizes development and rationalizes neoliberal aspects of development (Miraftab

2004). The danger of empowerment as a framework lies in the underlying assumption that power, rights, and desires are universal, an assumption that postcolonial scholarship has critiqued as a limitation of Western feminism (Spivak 1982; Ong 1988; Mohanty, Russo, and Torres 1991; Mohanty 2003)..

Discourses surrounding vague notions of rights can also hinder activism work in the global South. Scholars such as Ababneh (2016) have shown that women's rights discourses can be alienating and lead to few improvements while questions of labor garner mass participation of women from multiple classes. In other words, spurring women to question the meaning of gender and gender roles is an elusive goal. However, because labor rights is an immanent issue whose effects are felt across differently gendered bodies, facilitating women's involvement in political action regarding such rights was more successful in terms of the sheer number of female participants and their ability to affect government policy (Ababneh 2016). This finding supports Mohanty's (2003) claim that Third-World feminisms have long been concerned with the ways in which global capital affect their bodies. For this reason, Mohanty calls for a focus on the material effects of economic structures and labor rights on gendered bodies. In other words, this shifts the conversation away from vague ideas of empowerment and towards tracing the actual relationships and spaces through which women's labor and bodies are gendered.

Scholarship on social reproduction and feminist geography provides an alternative way to think about economic empowerment that challenges the ways in which work is conceptualized through a care/work binary. Mitchell, Marston and Katz (2004) (and advanced in Meehan and Strauss (2015)) sought to get us away from the false dichotomy

of reproductive and productive labor. However, development is still entrenched in this idea that one must, first and foremost, ‘get women in the workforce.’ Therefore, I argue that Katz’s (2001b) important call for “insisting on the necessity of social reproduction” still resonates. Social reproduction is useful because of “the ways in which it makes us see what those in power would have remain unseen” (Meehan and Strauss 2015, 17). In other words, the assumption that productivity lies solely in the labor force masks the value of women’s reproductive labor and its inseparability from the ability to have a workforce.

In summary, I offer a relational notion of development based on practice in order to support well-established critiques of empowerment. Furthermore, in order to move away from conceptualizing women as entrepreneurs, a term women seldom used in my interview data, this paper explores how women think about their work in terms of both economic benefits and social reproduction. By making this shift, I call attention to the ways in which women engage in development networks at the same time as their diverse activities in relation to their small businesses cannot be summarized as development or microfinance projects.

4.3 Accessing Development Networks in Jordan

In Jordan, women utilize the financial and technical assistance resources offered through development programs in order to fund their small businesses and organizations. Framing their engagement with development in this way emphasizes how development exists as an assemblage through practices (Moore 2005; Li 2007a). Within this framework, I highlight women’s contingent engagements with development networks that offer financial support and technical assistance in the name of economic development and women’s empowerment. In this section, I outline the ways in which

women's organizations have developed alongside development trends in Jordan, how women pursue funding, and how private-public partnerships try to support women's projects.

Women's organizations have developed alongside the development framework in Jordan. While scholars have examined the structures of NGOs and development in Jordan (Barghouti 1974; Honey and Kharmeh 1989; Talāl 2004; Harrigan, El-Said, and Wang 2006; Harmsen 2008) and women's businesses and organizations in Jordan (Al-Dajani and Marlow 2010, 2013; Al-Dajani et al. 2015), how these women's organizations fit within a broader development network has not been addressed. According to one interviewee, a governmental employee who has worked with women's organizations for ten years, women's organizations began appearing in Jordan in the late 90s as development funds became available; as word spread, the number reached into the hundreds in the Irbid region alone by the early 2000s.

The support for and proliferation of women's organizations in the Middle East and across the globe has been partially due to the predominate trend for development programs to pursue poverty relief through the economic empowerment of women (Rignall and Atia 2017). This current trend is part of a longer history of NGO growth in Jordan. After structural readjustment in Jordan, NGOs boomed, increasing by 67% between 1989 and 1994 (Harmsen 2008). This uptick coincides with global trends in Structural Readjustment Programs (SAPs) and the resulting reliance on NGO development and market led growth in Jordan (Harrigan, El-Said, and Wang 2006; Harrigan, Wang, and El-Said 2006; Mossallam 2015) and globally (Nagar et al. 2002; Roberts, Jones, and Fröhling 2005).. As market solutions to poverty relief are coupled

with an increasing push for addressing human rights issues from international donors (Harmsen 2008), women's small businesses become an attractive development strategy. In other words, although many women's organizations do not directly take development funds, the proliferation of the idea and the availability of funding and institutional support from the Jordanian government for such projects stems from recent economic and social restructuring.

As Harmsen (2008) argues, the involvement of foreign money affects the ways in which both national and international projects are prioritized in Jordan. This web of international and national funding sources is visible from fliers for events and Facebook pages. These logos of large companies and banks, international development and aid programs, embassies, and local (often royal) development funds show the footprint of the development agents at work in Jordan. Even when looking at a locally based entity such as a national development corporation, the line between international and national is blurred. For example, the Jordan Enterprise Development Corporation is a governmental organization largely funded by the European Union. This leads to projects that encourage market-led approaches²¹ to development such as supporting women's small businesses instead of increasing governmental agricultural subsidies, for example.

Women often utilize this development network in order to access funding. One source of funding for their projects is grants, which often reflect international funders' gendered and spatial conception of 'need' and are therefore specifically targeted to women and rural areas. Although the idea that these have been underserved communities is supported by my observations and conversations with people living in more rural areas

²¹ These projects often support trade interests of the funding countries.

of Jordan, women's small businesses as a solution to rural poverty has proliferated in contrast to other solutions in rural areas because of grant criteria that makes this an easy way to appeal to funders. For example, in several grants that I wrote with NGOs in Jordan, we tried to 'add women' to a previously existing idea in order to be more appealing to the grantor. Meanwhile, we also found ways to incorporate groups outside of Amman, not because that was the NGOs priority, but because this focus appealed to the funder. In other words, the projects are not necessarily tailored to the most urgent local needs, but to addressing these gendered and spatial perceptions of need from the perspective of national and international funders.

Another major access point to these pools of money was through microlending. Just as many NGOs add women to their projects to seek funds, individuals devise projects in order to seek funds. One interviewee who works with many women's organizations in Irbid as a consultant noted that,

Here in Irbid, in the 90s, there were five or six organizations. Then came the 2000s and maybe there were 100 of them. After that 250 organizations (laughter). Why? Because, for example, if you don't have an organization, I have one, and tell you to take from the Ministry of Planning 70000 and I did a project. Now before there were [loans] they'd give you without (anything). So people started taking money for organizations because of the money.

Women, seeking economic opportunities, create organizations to access money from the Ministry of Planning, the Women's Bank, and other private loans. The Ministry of Planning's loan program is just one example of the wider trend of microlending in Jordan. Although it is difficult to compile a full picture of the role of private capital in microlending, according to a 2012 market study of microcredit, there were nearly 250,000 clients served by five NGOs, three commercial companies and one bank in addition to governmental donor. Furthermore, 71% of all clients are women entrepreneurs

(Jordanian Ministry of Planning and International Cooperation 2012). Some of these microfunds are part of corporate social responsibility and bottom-billion capitalism projects. The companies and organizations get to check-off that they helped women in rural areas and encourage further investments.

However, on the individual scale for many of these women, these loans prove to be disastrous. While some women are able to obtain funds and then, after repayment, manage the project on their own, others became indebted to the funding agencies. For example, the interviewee working with women in Irbid also noted that the Microfund for Women, one of the biggest lenders to women's projects, was notorious for handing out loans that women were not capable of paying back. These women then can face arrest, which Wacqaunt (2012) identifies as a global trend that further penalizes those in poverty. Instead of relieving poverty, this puts further stress on the social assistance networks in Jordan. For example, the Zakat fund, the charity fund which is religiously obligatory to donate to and goes to assisting those in poverty, pays for these women to get out of jail instead of using that money for addressing other issues such as food scarcity. Due to widespread difficulty of paying back loans, some funders such as the Ministry of Planning have majorly restricted their lending habits.

Another method of combatting the failure of women's projects was the establishment of Irada, a governmental-private partnership through the Ministry of Planning. As an investor in development, the Ministry of Planning wants to distribute funds to small businesses that will succeed. Irada fulfills this need by advising business owners from the inception of their business plan in order to diminish this predatory and superfluous loan seeking and granting. Irada first conducts a feasibility study for the

business, determines how much money is needed, and helps identify places from which the owner can obtain funding. They also arrange consultation with experts and trainings for the business owners. While not all of the women worked directly with Irada, nearly everyone knew of their services and knew someone who used their services. For example, several of the women attended trainings on food quality that Irada hosted. Being able to attend trainings for free helps women gain essential business skills, especially for women who have never engaged in projects outside the home. Although various organizations and governmental initiatives running workshops across Jordan often form the workshop first and then find women to fill them (instead of being formed from participant's demands)²², many of my interviewees found them useful.

Part of the goal of Irada is to make women with domestic and farm work experience into employees and business owners. Women described trainings in different aspects of production, from production skills to marketing. One interviewee who produces labeneh²³ from her house said, “{Oh we had training in} food safety, pricing, marketing, marketing to tourist, making pickles and jams, mushrooms, dried tomatoes, how to preserve taste, job skills for rural women, development programs and how to build a women's project.” This strategy of creating small businesses based on traditionally domestic labor is a global phenomenon. Irada trains these women to think about their labor as something that needs to be calculated as a budget line and their production as, not providing nutrition for their family, but as appealing to a customer base. They need to be able to think strategically. Other private companies, NGOs, and

²² And it should be noted that women have and can request that Irada arrange consultation or trainings based on their specific need.

²³ Yogurt cheese

development programs such as USAID all run similar workshops, usually to help ensure that recipients of their funding have a sustainable business plan and the skills necessary for success.

In summary, women, although they are often the targets of development initiatives, tend to engage in these development networks temporarily. Even Irada, which emerged from a government-private sector partnership in order to help businesses access funding opportunities and market and has a large reach often encounters women for a only singular training. While one could consider their services to be technical assistance or business consulting, by framing them in terms of the larger networks of development, we can see how, although women may not take funds from development agencies, the development network facilitates the growth of women's organizations in tangible and abstract ways. They not only help organizations find funding, but they also help them become more 'professional.' The following section examines how women 'professionalize' their domestic labor with the help of these development networks and on their own.

4.4 Producing for Consumers

"We need to break down the wall between unpaid reproductive labor and paid productive work and recognize their interdependence" –Naila Kabeer, from Twitter

As I discussed earlier, development agencies' reports about the success of women's small businesses and socio-economic development still revolve around enhancing professionalization, creating empowered entrepreneurs, and increasing women's presence in all sectors of the economy. Such understandings of women's empowerment still focus on economic empowerment and exclude other productive endeavors (McEwan and Bek 2006). In these capital and production-focused paradigms, social reproduction is often

treated separately or ignored altogether (Mitchell, Marston, and Katz 2004; Bakker and Silvey 2008; Meehan and Strauss 2015). In this section, I trace the co-constitution of women's previously domestic, socially reproductive labor and their activities as small business owners. In this section, I trace how women use their small businesses to assert rural identities, innovate on previous traditions, and to shift their social relations and mobility. However, ultimately, these women frame their work in terms of how it allows them to provide for their children through education, among other things. This shifts the analysis of women's work from value in monetary terms to the impacts on their social relations. I found that women's involvement with small businesses shifted where and with whom their reproductive labor can take place.

The paradigm of the entrepreneur does not translate easily onto how Jordanian women discussed their work in the interviews in this case study. There are some similarities; like women in European contexts (Bock 2004; Anthopoulou 2010; Markantoni and van Hoven 2012), Jordanian women discussed balancing family and work and gaining confidence. However, women's anxieties and concerns were not bound in ideas of becoming a 'true' entrepreneur like in the European cases (Bock 2004). The interviewees in my case study rarely referred to themselves as entrepreneurs and usually referred to the business as 'work' or a 'project', words which do not necessarily have a capitalist, employment-based connotation. Instead, they focused on how the project supported a use of their time that furthered their own education as well as the education of their children. While some women talked about desires to expand their business, it was usually framed in terms of bettering their children instead of bettering the business.

Women framed their work and skills in terms of being a falaha (rural woman²⁴) more than being a businesswoman; they asserted a particular form of knowledge related to their rural identity²⁵. The Falaha identity is integral to many of these women's lives as well as to how they sell their food. Most interviewees remarked that they knew how to do this work because they are falaheen²⁶ (plural of falaha) from rural areas. The goods that they sell come from a culture of women working the land with their families and providing for their sustenance. As rural development occurs across the globe, rural women are often seen as the bearers of tradition and motherhood (Little and Panelli 2003).

Women's businesses facilitated a public encounter that asserted this knowledge-based identity. Both women and their customers expressed how the rural women have knowledge that urban dwellers lack. The rural women would remark that people from Amman do not even know about certain types of breads and grains that are seemingly part of universal knowledge in the rural areas. When discussing the demand in the urban markets for rural goods, the rural women often discuss serving urbanites who are far from home or have lost their connection with the land. They talk about the medicinal value of the herbs that you cannot find in the super markets of Amman. They boast about the value of a home-cooked meal or homemade goods. While they are using this imagery to gain value for their products in the local market, the identity cannot be collapsed into

²⁴ Tarawneh (2013) outlines other rural identities in Jordan. Falah was the most commonly mentioned term (to express a rural identity) in my interviews, but it should be noted that there is more nuance to the meaning of this word in relation to other identities that was not evident through my interviews.

²⁵ See Katz (2001b) for a description of how knowledge within social groups is a mode of social reproduction.

²⁶ Masculine plural of falah. Arabic speakers often use the masculine case to refer to groups of both men and women.

marketing. They are also asserting the value of their specialized knowledge, often in conversation with, usually formally educated, affluent urban consumers. Therefore, the products may not be new, but the articulation of value through encounters in urban market is new.

However, this valuing of traditional ways is often coupled with a drive to innovate or improve quality. While this could be dismissed as simply the commodification of their domestic labor, it is perhaps more salient to understand the conjunction of tradition and change as exemplary of how people work strategically within their economic contexts (Ferguson 2010). Innovation in food products is not new (eg. trying new techniques in the kitchen to ease labor or improve taste), but doing so in order to gain a competitive advantage (e.g. trying new techniques to make your product more attractive to consumers) is a new practice for rural women. As I observed during participant observation and interviews, some producers appeal to customers by simply ensuring a good taste, and others talk about how they have to remain creative and innovative by creating new techniques and flavors in order to remain competitive in the local market. Some women do so by incorporating herbs in non-traditional ways to their jams. They also discuss reviving medicinal uses of herbs and foods that even their generation has lost. They note that their innovations are not new, but actually mark a return to previous practices, and discuss how they have enjoyed re-learning these things. In other words, taking this labor into a new space—market spaces—creates new reasons for innovation, change, and even a return to older practices and knowledges. Because there are so many different women’s organizations making similar products, women often focus on a few items that they do really well, find ways to market themselves or innovate in new ways

(such as by adding unique spices to jams or add glitter to soap).

Similarly to the need to innovate, the women must also demonstrate quality in order to convey trustworthiness to their new consumers (Higgins, Dibden, and Cocklin 2008a). For example, many women focused on neat, well-designed packaging, safety certificates, and advertising. Although their marketing depended, to a degree, on a traditional rural ideal, the parameters of food safety and marketing changed the product. For example, the women might be producing jam with the same ingredients their grandmothers did, but their grandmothers never had to get a food safety certificate or print an expiration date on a beautifully packaged bottle of jam. In the urban markets and festivals, the packaging can be compensated for by performance. Several interviewees said that the best way to prove high quality is to get people to taste your product. Many women go to festivals in which they are one of several different women's businesses selling similar items. Having a clean, organized set up and allowing people to taste your product is the best way to ensure that people buy your product. Asserting value through markets occurs within this general shift of market-led development. For these women, it not only changes the production of these products. It also shifts the products, and often the women, into markets spaces outside of the home.

This shift from working in the home to outside is seen by some in Jordan as shameful. And so the urban, more distant markets are not only a way to access consumers who will pay higher prices, but also a way to escape the culture of shame, since practices regarding gender segregation in Amman are more varied and the women have more anonymity than in markets near their homes. Many women cited this "culture of shame," or *ithaqafa al-'aeb*, as the biggest challenge that they faced in the beginning of their

projects, whether they started the business alone or with other people. One person who works in a consulting company said, “The women [who start businesses] face all the problems like a man does—licensing, funding, and marketing—but they also have to overcome the culture of shame.” This culture of shame is not exclusive to Jordan; the same concept is used in rural Europe where women are shamed for investing time in their projects and away from their children (Markantoni and van Hoven 2012).

Women have several strategies for overcoming this culture of shame. For women who could not or chose not to go to markets, they would have other women take their products and sell them, often with their own name and sometimes with the name of the other woman. In other words, they did not have to worry about relatives who, despite the immediate family’s support, will still criticize them for working outside of the home. Within the household, women took up several strategies for overcoming their families’ concern about the shame. For some, they started with the business from the house, using their children’s labor. Once the business grew, as one business-owner said, “they liked the profits, changed their minds, and then they were with me.” This support is evident in the markets in which husbands can be seen working for their wives who are primarily dealing with customers. The fact that the femininely gendered work and products have value makes the women the sales interface, despite the culture of shame around women interacting with men.

For those who went to markets and actively went to trainings and worked with other women, they noted that this project substantially extended their social network, giving the women more confidence and new transferrable skills. Previously they would have mainly interacted with people from their community in a village of a few families.

However, through these projects they have learned how to talk with people from different communities and socio-economic classes in Jordan. They have also learned how to stand up for themselves and to speak confidently both to strangers and to their own relatives. For example, some training workshops taught women to assert that, islamically, they have a right to their earnings. Furthermore, the women's interactions with strangers in a professional setting gave women transferable skills to other work or projects.

In summary, these changes to women's domestic labor and their social relations do not fit into conceptualizations of entrepreneurship or empowerment. While it is tempting to cast women's mobility or expanded social network as social empowerment, we should be careful not to conflate our personal politics as academics with the goals and strategies of other women (Mahmood 2005). These women did not mention a desire to escape the work that is usually thought of as domestic labor. Instead, they talked of the ways in which they shifted the spatial and social contexts of this labor in order to further provide for their families and themselves. For example, the most prominent goal for women producers was to educate their children. Most interviewees joyfully told me how their son or daughter had studied engineering or medicine from the money that they raised through their small businesses. One father told me, "Can you imagine, from this sort of work, now our village has 3 doctors and 4 engineers." The changes that they are striving to accomplish are much more nuanced than becoming businesswomen or changing gender roles.

4.5 Women's Organizing Strategies

The ways in which women take the²⁷ domestic labor and turn it into income varies.

²⁷ I do not use 'their' because, for many of these women, the labor was not necessarily something that they personally did previously.

By focusing on the commodified domestic labor, this study does not confine their labor to terms of development. Instead, I trace the larger topologies (Katz 2001b; Rankin 2008) through which women play with the boundary of domestic work in economic production. Through this framing, I identify how particular strategies of organizing affect and constrain these women's efforts. By doing so, I shift the analysis from questions of empowerment to economic structures and fluctuating terms of engagement and governance. Many women in this study, at least at one point, were a part of larger organization of other women and businesses. In this section I outline different kinds of organizing and how the women used them in order to gain more social capital and funding.

The word *جمعية* (jam3aia) is used to describe organizations²⁸. The two main types of women's organizations that we found were *جمعية خيرية* (charitable organization) and *جمعية تعاونية* (cooperative organization). The difference between charitable and cooperative is in how they deal with profits. The charitable organization must either put the profits back into the organization or do some sort of project for the community. Women who ran charitable organizations did such things as provide used clothing for children, run a gym, provide wheelchairs for people in the community, offer classes on domestic abuse, and provide support services for women. They often struggle to balance the dual demands of providing things for the community and producing a profit through selling goods and grant writing. The need to provide services *and* sell goods often leads to additional

²⁸ In the businesses world, there are also organizations called *naqaba* and *itihad* (two forms of unions), but these are usually business associations in the sense of organizing around a particular field or industry (like engineering, farming, etc). They are typically masculine, with women's ones specifically mentioning women (for example, the association women engineers).

difficulty and limitations not seen in the cooperative model, because the cooperative organization can distribute profits amongst the members and investors as they see fit. How funds in the cooperative organizations are redistributed varies; some are more focused on generating profit and splitting it amongst the members, while others are more focused on every one having their own business and the organization functioning as a support mechanism.

One reason for organizing was to gain access to benefit from each other's social capital. Several women mentioned that organizing and producing goods together changed their social circle. This was more the case for organizations which had a larger reach such as Irbid than in a small village. However, even in the village, the women are interacting with people from their community in a new space for longer periods of time. Many interviewees working in these organizations remarked that without this project, they would not spend so much time outside of the home. This was particularly true for women's organizations that produced goods in a central location together. They would not have the very intimate relationship with these other women, working towards a greater goal, and engaging with networks outside of their community. Although women have a salary, in one instance the manager corrected us and said, "They aren't employees; they are shareholders." Although these projects certainly still have hierarchical aspects, the emphasis on cooperation and mutual benefits also pervades the way that women talked about their organizations.

The combination of the reputation of the organization and the new social network was effective in giving women a way to address pertinent needs in the rural areas. Many of the women see the organization as central to shifting gender norms. One cooperative

member said,

“But the presence of [women’s] organizations in rural societies is so necessary...
Not only in name and to bring funding, no—especially if they work, they will affect
change

“[Nadia:] Break traditional patterns?

“[Woman:] Ah, of course.”

If the organization prospers, then the women felt that it could invoke real change. For example, many of the women’s families were hesitant about them starting their own business outside of the house. By joining an organization run by someone with a good reputation in the community, their families were more willing to support them.

Opening markets is another goal that organizing facilitates by strengthening social networks. As for the organizations that do not produce the goods together, they primarily provide trainings, invitations to markets, and a network for support and coordination. Market spaces in malls and outdoor markets can be competitive, and having the organization will put women in contact with ministries and companies organizing these markets. This coordination also helped women to network amongst each other and create a social bond that decreased the amount of price-cutting. Several women identified price-cutting – in which someone will say “I’ll give it to you cheaper than them,” or “I’ll give you the same price plus a free item” --as one of their biggest challenges. Secondly, charitable organizations were also able to use their status as a charitable society as added value in markets, asking passersby to help the women in the village by buying their (high quality) products. However, because rural women are already seen as emblems of poverty, any of the women’s organizations, charitable or otherwise, can leverage the idea of ‘helping women’ when selling their products.

In addition to social capital as a financial resource, being registered as an

organization allowed women to apply for governmental support. Furthermore, even though individuals are able to apply for some other grants, it is more persuasive to apply as an organization. However, the access to larger amounts of money is not always beneficial. In the case of one organization, they were able to rehabilitate an old house and use it for preparation, storage, and presentation. The money came from the Norwegian embassy. However, they soon saw that the funding was not enough, even with their profits from production.

“The project was a simple idea—this production. How these projects take an organization. Producing pickles, jams--simple. But the funding was not enough. But we developed quickly and wanted to begin to welcome tourists. We began to give breakfasts and so we wanted to fix the place more. I mean, it brought us money, but not enough. Not enough for the rent of the house, not enough for that stuff. I mean, before awhile we said to them that we reach a dangerous stage. We are exceeding [the funding] because we need support and funding. It would be a disaster if we stayed like that, a disaster. Your effort alone is not enough for you. There were obligations, I mean, when the project is not complete. For example, I have the workshop, it is not suited for breakfast and lunch meals, and even though the necessities were complete, it was simple, the funding, I think twelve thousand. And it wasn't done by our hands. For we still need a lot, like fixing the garden, fixing the workshop, fixing the storage, we need it all... (interview, 2016, woman working in a funded women's organization)

As the project grows, even if it is from something simple, its needs are not fully met due to the funding situation. Because of this, the women become stuck and end up using money from their own pockets and incurring more risk. Although there are more members present to more widely distribute the risk, when the project grows quickly from outside funding sources, it often pushes the program into a dangerous position in which they do not have enough extra capital to handle swings in the market, risking the collapse of the project.

Another form of financial support was the founding of a women's organization on the basis of a private company. Instead of being an independently registered and existing

group of women seeking funds, a private company, with some governmental support, sought women to work together in order to eventually become an independent organization. The private company arranged all of the supplies and sales and the women learned how to produce the various jams and pickles. The goods were aimed towards high-end Ammani and international customers and were packaged in small containers with very professional labels. The group of women was trying to get registered as an organization because their funding under the company was set to expire. The women were confident that they would continue the same work, but the challenge would be securing a location and paying for it. The Ministry of Local Governments provided their current spacious location, but the women were not sure if the contract would be renewed. For them to continue their production in a similar space would be extravagantly costly. This is another example of how a large initial external investment causes the organization to grow quickly without a definite plan of how to continue after the initial support ends.

In summary, women's organizing methods shape their access and exposure to different opportunities and restrictions. Being registered allows for more governmental control (Harmsen 2008), but it also allows them to apply for more funding opportunities. Being in a group helps distribute the burden of finance and cultural pressure, but it also can increase costs and pressures. Funding in particular, when in large amounts puts women in a precarious position, and pushes the work to be more focused on seeking profits in order to sustain the group, unlike in organization or individual businesses, where women are focused on the survival of the business for the family.

4.6 Conclusion

Instead of answering a question about microfinance or the effectiveness of USAID policy, this paper focuses on how women's rural businesses involve numerous

strategies and networks, including development networks. An assemblage approach to these women's projects thus highlights their agency and the ways in which they engage with yet transcend models of development, microfinance, and empowerment. Through an examination of the development network, women's shifting labor, and their organizing strategies, I shift the focus to women's various strategies in order to push beyond evaluating whether or not women's entrepreneurial projects are effective at empowering women. I examine how women engage with tri-lateral development networks by employing their gender and rural identities into new production networks. This shift calls attention to the ways in which women engage with these networks in order to improve their reproductive labor by asserting their rural cultural identity, extending their social networks, and allowing their children to get an education.

By incorporating a broader examination of how women's businesses engage with development networks and organize in different ways, we see that small businesses face fewer pressures regarding rapid expansion. The external funding that the bigger organizations often obtain fuels a rapid expansion that becomes difficult to maintain long-term. Like in other studies, these women sought to gain extra income to help their families and they enjoyed the ways in which the work got them out of the house. However, the women did not frame their goals in terms of economic engagement. Instead, they focused on ways in which their work was valued more and the way in which they were able to provide for the education of their children.

These findings contribute to debates about the role of women in rural development by integrating the critique of the separation of social reproductive labor being domestic and productive labor being outside the home. By asserting that women's small businesses

are not a shift away from their reproductive labor, we draw attention to their goals, such as investing in their children and communities. This is an important understanding for thinking outside of women's businesses in terms of entrepreneurialism and empowerment so that women's strategies can be valued on their own, for the ways in which they reach beyond mere commodity production. Further research remains to be done on the intersections of these women's projects with lines of differences such as class, social status, and location. Although women are producing for the market, as long as social reproduction is not integrated into the formula, the benefits and challenges of these development programs cannot be assessed, and certainly not measured in terms of dollars or universal empowerment indices.

5. Conclusion

This project investigates how producers seek new values within the context of capacity building in the olive sector. For the engineers, bureaucrats, and gourmet producers, this means retraining your tongue in order to properly taste olive oil. It means learning how to produce that taste or to not produce bad tastes from tree, to fruit, to mill. Through this re-aestheticization, extra virginity becomes the scientifically true superior oil. For the smallholder farmer, the new value for extra virginity is located in a distant consumer. The required shifts in the commodity chain undermine their leverage with mills and restrict their selling options. For the rural women making food products for sale, their domestic labor becomes a new source of value as they produce goods for middle to upper class Ammanis. While these women often learned different entrepreneurial skills, the women talk more about the ways in which this work allows them to educate their children, build new social connections, and to preserve old domestic traditions.

Bringing these seemingly diverse types of value together provide us with a greater understanding of how organic certification is part of a larger context of modernization and capacity building in the Global South. The drive to reach export markets necessitates particular changes in order to meet international standards. These standards appear to be a scientific truth with no alternative. However, they shape the exclusions and inclusions of production in new ways as farmers have to balance quality and quantity or find new venues for sale. At the same time, producers find alternative ways to capture value; producers leave organic because of the restrictions and women use their identity as rural women to convey an 'organic' appeal. These shifts in production are important for understanding how crops, landscapes, and rural relations form within the context of the

global commodity chain and international development networks.

This emphasis on the wider network challenges the idea of organic as any sort of ‘alternative’ food network on a global scale. Instead we see the emergence of a Jordanian organic paradox in which development agencies endorse organic as a method for smallholder farmers to gain more value. However, the major shifts in production and consumer base decrease farmers’ autonomy in the commodity chain and diminish the incentive for farmers to continue with the project. While an analysis of organic certification alone could attribute this to the restrictions of third party certification overall, by examining the larger network we see that larger shifts in values are changing across the industry due to the drive to incorporate global trends in the industry as a whole. It is from this point that we can begin to think about alternatives to third party certification in Jordan.

The women’s organizations in Jordan have successfully leveled their rural identity in order to sell to gourmet consumers in Amman. Like Bowen and De Master (2011) argue, a diverse embrace of heritage and territory can help a wider diversity of producers capture value from their products. However, under the current orientation towards export-quality production, that type of diversity will not succeed. The value of heritage and territory across rural Jordan cannot be sold to the average Whole Foods customer. However, it can be sold in markets in Amman in which there is a mixture of tourists interested in ‘local flavor’ and urbanites with family connections across Jordan. As seen in the case of the smallholder farmers who left organic, however, perhaps the key is not to reach distant consumers in Amman. Perhaps the best way is to protect the smallholders who already have a commodity chain that works for them. These could be the basis of a

domestic organic certification that is more concerned with the ecological parameters than the gourmet sensibilities of distant consumers.

However, we must also be careful not to fall prey to the teleology of modern/traditional. Production for export is not any more ‘modern’ than the average Jordanian farmer who presses at Ajloun Modern Mill. Likewise, I do not want to suggest that technological development is bad and traditional production is good. However, each change and shift in production has a chain reaction that also shifts who is included and excluded, how value is captured, and the social relations of that production. Therefore, our study of commodities and capacity building should carefully trace the intertwined networks through which these changes take place.

While Jordan is suffering from strained resources due to neighboring instability, a dissertation on olive oil production seems silly. I did not solve a food shortage. I did not even find a way for farmers to market their oil. However, this project is only a little bit about olive oil. Olive oil is the lens for tracing how people cope under these trying times. How they try to find batches of money made available through development networks. How they try organic certification in order to maybe better their land and make some money—maybe even gaining their grown children’s interest in the farm. How the government and large investment farms try to encourage more economic activity in order to improve the health of the country. In the end this dissertation is about the messiness of trying to improve one’s conditions, whether on the scale of the farm, the company, the village, or the state. However, as these diverse actors come together, we must carefully consider the different ideas of value that span the social, the economic, the political, and even the spiritual.

5.1 Wider Contributions

First, this dissertation contributes to scholarship examining the role of standards as they relate to quality in market-led development (Daviron 2002; Gibbon and Ponte 2005; Daviron and Ponte 2013; Ouma 2015) by tracing the way in which notions of quality and value are reformulated. This approach incorporates the cultural into a political economic analysis in order to look beyond narrow conceptualizations of capitalism²⁹ (Hudson 2008; Jessop and Oosterlynck 2008) by focusing on the interplay between the material and cultural constructions of quality (Mansfield 2003b, 2003a) within and beyond organic production. By thinking about quality within the broader socio-material contexts of olive production, the cultural importance of olive oil as well as the social and environmental relations of previous production practices are brought to bear upon the universalizing sociotechnical narratives and tools of capacity building and quality standards.

Second, this dissertation answers a recent call for studies of global production networks to be attuned to the ways in which people are included and excluded from the network altogether (Bair et al. 2013). Bair et al. (2013) argue that, in order to understand local effects, more attention needs to be given to the conditions that lead to the formation of the commodity chain with its shifting borders of inclusion, exclusion, and dissolution over time. By extending my analysis beyond the organic production network and focusing on exclusions from determining quality and producing organic, I further our understanding of the ways in which alternative food networks function in the Global South (Bidwell, Murray, and Overton 2018). For example, the role of development

²⁹ Work such as Mitchell (2002) and Gibson-Graham (2006) have made similar arguments, but not necessarily with a specific reference to cultural political economy.

agencies and capacity building programs plays a larger role in shaping new standards and exclusions in this commodity network more so than lead firms. Furthermore, by focusing on the commodity network and its intersection with development networks, I highlight the ways in which gender is operationalized and projects such as women's small food businesses become part of capacity building efforts. Including these aspects of the network are important for understanding how changes in value and production practices extend beyond simply organic and export-oriented production.

Third, this dissertation contributes to scholarly efforts to understand the local particularities of development in the Middle East. Like work by Mitchell (2002) and Barnes (2014), I de-mystify the idea of development and the economy as coherent entities by instead tracing the discourses and materialities that create the “artifactual body [of the economy, for example]—a fabrication, yes, but as solid as other fabricated objects, and as incomplete” (Mitchell 2002, 301). The extension of this approach to the olive industry furthers our understanding of the everyday politics of agriculture and development. By tracing the shifting social relations and meanings around olive oil, an integral part of local agriculture and foodways, I examine how meaning, value, and production shift in relation to these development networks. There is not a singular development program or institution leading the capacity building efforts. Instead, the idea of development is produced through the intersecting assemblage of international governments, universities, local organizations, and producers. Meanwhile, people such as school children being trained to appreciate olive oil, women who participate in a workshop on food safety, and the farmer sitting through a workshop on organic farming are all, perhaps only momentary, participants and active agents in this assemblage.

5.2 Future Research

Following the Jordan work, my subsequent research will look at how agricultural development in the form of organic and fair trade olive oil production in Palestine and Jordan has been intimately yet differentially bound with colonialism from the British Mandate until today. Grounding state-making in the orchards will help us better understand how social and physical practices around crop cultivation and marketing change according to shifting regimes and settler colonialism. This focus will further our understanding of the political stakes in various rural development strategies. Building on previous fieldwork in Palestine, I will conduct further interviews with fair trade and organic olive oil companies and key actors in the industry. I will also conduct oral history interviews and archival work in order to gain historical context.

The results of the this next phase of my research on the historical trajectories of organic olive oil and state-making in Palestine and Jordan will be published in interdisciplinary journals such as the *International Journal of Middle East Studies* in addition to prominent Geography journals. I will also present my findings at major national and international conferences such as the Annual Meetings of the AAG and the Middle East Studies Association. Data from the work in Palestine and Jordan will also be the basis for a book proposal to Duke University Press's New Ecologies for the Twenty-First Century series, comparing the divergent development of olive oil cultivation between the two sides of the Jordan River. Although occupation and environment have shaped these differences, I expect to find that other factors such as differences in labor organizing, levels of state control, and international involvement also played key roles.

Appendix: Methodology

“ In this emerging world of subcontracting and allied forms, models of global standardisation are not good enough. We also need thick description of niches of trade, labour, and ecology—and their links with each other. This is an opportunity for the revitalisation of ethnography, not as servant to philosophy, but as a real contribution to our understanding of the world” (Tsing 2009, 363).

As Tsing (2009) argues, ethnography can facilitate a unique understanding how global processes work beyond the standard models and evaluations. For the olive oil commodity chain in Jordan, this means not just analyzing the implementation of organic certification or extra virgin standards. It means calling attention to the ways in which global production drives producers to buy the best bottles from Italy or to install the best milling line from Italy. It means having the connections with global experts who understand your vision of quality. This dissertation explores the ways in which expansive networks of universities, development agencies, private companies, governmental offices, farmers, and bureaucrats mix together in trying to put Jordanian olive oil on shelves for discerning consumers across the globe. This requires prolonged research because the ways producers tried to accomplish this varied from season to season and from place to place. The ability to trace this coming together within the context of rural space, the state, and development is ethnography’s asset. This appendix traces my positionality, the research design, and the strengths and challenges of implementation.

A.1 The Researcher

Building on Haraway and other feminist scholars, McDowell (1992) says that positionality means that "we must recognize and take account of our own position, as

well as that of our research participants, and write this into our research practice rather than continue to hanker after some idealized equality between us" (409). Scholars often discuss reflexivity as the solution to breaking down the god-trick of the independent researcher (Haraway 1990). This requires acknowledging how my own identities and behaviors shape my interactions and how I interpreted them. From this position, we need to admit that all research is partial and interpretive. In this section, I outline the ways in which my positionality as (non)expert, as an outsider, and as a woman shaped the research project.

The role of the academic researcher is fraught with contradictions and uncomfortable positionality. The biggest contradiction for me was the simultaneous sense of being and not being an expert. As a white, Western academic, I was read within the long history of foreign involvement in Jordan. Especially in postcolonial contexts, academic research has a history of serving colonial rule (Hudson 1977). I was not separate from this history; I had funding from US government-led initiatives. And so these ways of being read as an expert, whether as an academic or as a possible intelligence agent, made some people cautious to talk to me. I was read within this context of 'experts' whether they be government, development, or academic, who come, extract what they want, and leave with little benefit to the local people. I tried to counteract this by admitting that my research probably will not have any direct impact on them, trying to find out how I might use my research to highlight their concerns, trying to maintain relationships, and volunteering my labor when possible.

However, as I interviewed engineers, business owners, and farmers whose expertise in agriculture and development far exceeded my own, I repeatedly asked

myself, what is my contribution? I am not an expert in any of the things you might think from the project's keywords "development," "agriculture," or even "economics". I will not and cannot tell you best practices in any of these things. I am a problematic storyteller. My story is a half-truth. Told from my perspective as an outsider. However, I am an insider to Western consumerism. I am an insider to local Western discourses about food and agriculture. I am an insider to institutions such as universities, which are involved in development projects. In sum, my knowledge is partial. My main goal is to contribute to academic understandings of global flows of information, expertise, and capital. My aspiration is to elucidate how this affects rural livelihoods across the globe. In this way my project will never be complete. It is an impossible task. I will never be able to fully tell you the answer. But I can build tools and connect various conversations to help us check into how these networks work.

As a hybrid non/expert, I also need to acknowledge how other people read me. I am reluctant to rely heavily on the idea of insider/outsider, because these terms can freeze our identities and positionalities and frame 'the field' as a discrete space with cultural attributes (Katz 1994; Mullings 1999). However, in a place where family name often influences how you are treated, this was a clear example of being read as an 'outsider.' In situations where I needed access or needed respect, I was sometimes disadvantaged because I did not have the leverage of a family. However, it also allowed me to be read more neutrally than someone with a Jordanian family name. Furthermore, people were often cognizant of the difficulties of not having a family and were often very gracious to help me navigate bureaucracy and to invite me into their homes. Being read as an outsider also let me do things such as enter some spaces that are traditionally male-

dominated. Nevertheless, I tried to respect people's sensibilities and to sense if I was unwelcomed.

However, as Katz and Mullings argue, we should push the conversation of positionality beyond fixed identities. For example, how my knowledge was limited cannot be subsumed into positionality. Articulating how my knowledge was limited forces a recognition of what claims I can and cannot make³⁰. I, for example, do not have a background in agriculture, and so I did not always know the essential questions to ask. Furthermore, people might not expand upon particular topics because they figure that I do not know or care. I also lack embodied knowledge of rural life from childhood to adulthood. This gap makes me ignorant of many aspects of what structures life and change there. For this reason, it is important to reiterate that my account is based on how people discuss their lives with me and my interpretations of that information.

One way to overcome this is to find creative ways to engage in learning and conversation. I held an internship with the Center for Strategic Studies, in which I collaborated with academics on their research as well as presented my own findings and received feedback. I built connections with academics at other institutions such as the University of Yarmouk in order to collaborate in doing interviews and thinking through rural change. I also participated in local initiatives such as the Institute for Critical Thought in Amman, which runs seminars that bring together academics and non-academics in order to discuss social theory and its implications in Amman, Jordan, and the Middle East.

Finally, being a woman shaped my relation to the field. As mentioned earlier,

³⁰ It is paradoxical/impossible to fully identify that which you do not know, but I can identify my incomplete knowledge and large gaps.

being a foreign woman allowed me to transgress some boundaries. However, I was weary to do so in order to respect people's comfort levels and to garner respectability. However, as in the United States, I faced some sexual harassment. In addition to the occasional unprofessional follow-ups from men after interviews, I also contended with fear of physical harassment. On one occasion, despite being in the company of female family members, the father of the family cornered me and tried to kiss me. Luckily I avoided his advance and did not face any physical danger. However, that harassment triggered a fear that many female-read bodies contend with during fieldwork. As a researcher, you are often in a new place and need to go into spaces such as people's homes for interviews and for building relationships. There is no avoiding it. I found that working with a research assistant, which I will discuss in the following section, was one way to decrease the risk. Besides that, I do not have a direct solution. However, it is something that needs to be acknowledged because it shapes how I can conduct my research.

A.2 The Research Design

I was in Jordan from August 2015- December 2016 and again in May 2017- August 2017. In the completed four months (August-December 2015) of intensive language study at the Qasid Institute through the Critical Language Scholarship of the Fulbright US Student Program. During fieldwork, I maintained a residence in Amman and also maintained an apartment in the village of Anjara in Ajloun, Jordan from May 2016 to August 2016. In this section, I trace my research design involving ethnographic methods such as participant observation and semi-structured interviews, research assistant, and coding.

A.2.1 Participant Observation

Participant observation with the Jordan Olive Products Exporters Association

(JOPEA), with a women's charitable organization, and with organic producers, was a major component of my research design. This method is important to start with because of its usefulness in gaining an understanding of everyday life, building relationships, and understanding people's actions in comparison to what they say (Bogdewic 1999). I took detailed notes and typed them into a cohesive narrative at the end of each day (Bernard 2012).

With JOPEA, I maintained presence in their office several days a week during my research. My consistent presence gave me a better sense of the everyday workings within the office (see Mountz (2004) on institutional ethnographies). Through this collaboration, I attended weekly meetings with their partners in the government, universities, and private sectors and built relationships with people in these sectors. I participated in olive expos, training workshops, and press conferences. We wrote grants together, thinking through how to bridge JOPEA's interests with grantors' interests.

I also conducted participant observation with a women's charitable society in Anjara, Ajloun, Jordan. I taught English, sold goods at markets, helped process and bag food products, and helped with grant writing. Through this experience, I learned about the challenges of running a charitable organization that simultaneously sells goods and provides services to the community. I was also able to learn more about the differences in daily life between Amman and Ajloun. I learned about different rural food products that are difficult to find in the cities.

I also visited several organic farms. I was able to harvest olives several days on one family farm. On other family farms this was more difficult to arrange because hired male laborers were picking and it would not be appropriate for me to pick with them. I

went on two farm visits with a Japanese olive importer/exporter. I went on several visits to other organic farms through their lead engineer or owner. I also participated in an ‘international women’s group’ trip to an organic farm to pick olives and eat lunch. Each visit gave me an insight into the different ways in which farms are set up and managed.

A.2.2 Interviews

In total, I conducted 43 recorded interviews averaging an hour and a half in length with approximately 75 people, 6 unrecorded semi-structured interviews, and short unrecorded interviews with 6 olive mills in the Ajloun and Irbid areas. Interviewees include employees in the Ministry of Agriculture, organic farms and mills, small family farms, small mills, investment-level farms, employees in the Organization for the Sensory Evaluation of Food, universities, and women’s small businesses and organizations. Many interviewees fall into several of these categories. I asked organic producers why they began producing organic and how producing organic affected their farming. With ex-organic farmers I asked about the positive and negative aspects of organic farming and what they did after organic farming. I interviewed NGO and government employees in order to understand the support network for capacity building in the Jordanian olive oil industry. I also interviewed small family farmers and mill owners in rural areas of Ajloun and Irbid in order to see the broader context of olive oil farming in Jordan.

I used snowball sampling in order to find interviewees. I contacted all registered organic olive farms and mills in Jordan. I made connections with people through JOPEA, and then arranged interviews with people whom I met through this participant observation. Then, I asked all interviewees if there with other people with whom I could speak. If the interviewee was willing, interviews were recorded with a cell phone, and later transcribed in Arabic. Some transcripts were then translated into Arabic.

I hired research assistants for a majority of the Arabic language interviews, transcription, and translation. For interviews, I worked with two male and two female research assistants. All of them were residents of Amman. I checked in regularly with my assistants regarding their experiences of the interviews and the work more broadly (Turner 2010). The research assistant conducted the interviews entirely in Arabic. If I was not following a part of the interview, I would interject in Arabic and we would discuss in Arabic, with occasional use of English. Both the research assistant and I would ask questions; the balance of our roles was decided in situ depending on the rhythm of the interview. Having the research assistant minimized miscommunications and allowed for more in-depth questioning on nuances that I, as a non-native speaker, would have missed. I found having a research assistant immensely helpful for consulting about cultural context and the emerging patterns between interviews more broadly (Turner 2010).

Research assistants (including the four who conducted interviews and four other people) transcribed the Arabic recordings. Any identifying information was highlighted in the transcripts and deleted. I had one research assistant quality-check all transcripts and make sure that any names were erased from the transcripts. Several research assistants also translated the interviews with organic farmers and a few others into English. English transcripts were useful for searching for key terms because spoken Arabic does not have a standardized writing system³¹.

A.2.3 Coding

From these transcripts, field notes, and collected sources, I created qualitative

³¹ Modern Standard Arabic (MSA) is the default written form of Arabic. However, the pronunciation of letters in MSA often changes in colloquial dialogue. Therefore, sometimes people write colloquial Arabic as it is said or as it would be spelled in MSA. However, this often varies from word to word and not all colloquial words exist in MSA. In future studies, I would like to develop a way to better standardize transcription.

codes to analyze these notes using MaxQDA software (Crang and Cook 2007). After cleaning all of the transcripts, I loaded them into the qualitative analysis software. I used this software in order to begin coding by using in-vivo codes through word searches. I then read these sections and added any necessary codes in both English and Arabic. I was also able to look at word frequencies and associations. Through this process, I readjusted codes. The software allows you to then pull all excerpts with these codes in order to read and compare the text. If I was not certain of the meaning in an Arabic excerpt, I added a “translation” code and later consulted a native speaker. MaxQDA also allows for you to paraphrase sections of text, which I used to keep track of translations of key pieces of the transcripts.

A.2.4 Writing the Results

From this coding and analysis, I reviewed the literature and evaluated gaps to which my information can contribute. As I re-read texts that had informed my research design, I noticed that I saw new gaps and disjunctures. From here, writing was an iterative process of moving between writing, reading related scholarship, and visiting my data. Each piece was transformed through interactions and feedback from advisors, colleagues, presentations at the Center for Strategic Studies at the University of Jordan, the Dimensions of Political Ecology conference, and the Annual Meeting of the American Association of Geographers, and workshops such as the University of Kentucky, the Ohio State University, and Indiana University (KOI) Political Ecology Paper Workshop and the Environment and Society in the Middle East: A Collaborative Workshop at Middlebury College.

A.3 Reflecting on the Challenges

Of course the best-laid plans come with their complications and pitfalls. In this

section I outline several challenges of the study, how they shaped the research, and how I might improve upon them in the future.

One area of difficulty was arranging focus groups. I conducted three large group interviews. While these had similar benefits like focus groups in terms of elucidating how discourses are socially constructed and performed (Bosco and Herman 2010), they were not as structured. Prior to the group interviews, my research assistant and myself trained with a colleague who often runs focus groups. However, in each of the three large group interviews we had the challenge of people coming in and out due to their various schedules. This difficulty stemmed from the fact that the group was arranged through another person and, partially, that the participants knew each other. In the future, I will arrange with all of the participants myself in order to emphasize the structure of the focus group (set time and structure). Another method can be to have a group activity instead of an interview as another way to encourage conversation from all participants.

While my Arabic language skills improved vastly throughout the duration of the research, my non-fluency limited my project in several ways. My difficulty to understand conversations in large groups at times limited my ability to catch all of the details of a conversation. I would often ask for clarification from someone later, but this always meant that some details were left out. Similarly, despite efforts to coordinate before, during, and after interviews with the research assistant about strategies and goals, I sometimes found details in the transcript that I had missed in the interview and wished that we had followed up with it in the moment. Furthermore, not being able to do the transcripts myself meant that I did not review all of the sound files and relied on the interpretation of my research assistant in regards to tone and remembering body

language. In order to improve my language capacity, I maintained a regular Arabic tutoring schedule, which often incorporated asking about the context of words, phrases, and conversations from my research.

Prior to fieldwork, I had hoped to find ways to make the project more collaborative. I agree with the argument, based on postcolonial and feminist concerns of representation (Spivak 1982; Staeheli and Lawson 1994; Jazeel and McFarlane 2010), that researchers should be engaged in collective learning (Jazeel and McFarlane 2010). However, the concerns of my interviewees were often piecemeal. They needed help with a grant, help with GIS mapping, or help selling items. I discussed briefing a group of farmers about different way in which Geographical Indicators have worked in other parts of the world. However, they had done some research, and were mostly concerned with how to make it happen in their community, a problem that was not due to lack of knowledge.

This struggle to find common ground in my intellectual interests speaks to where my impact is and who my audience is. For this project, my impact is in English-language, Western academia. My questions are largely based on gaps in knowledge in the academy and the consumers of international organic olive oil; not Jordanian producers and farmers. As my research circulates and my experience develops, I will be more involved in conversations about these processes globally and my questions will become better informed in relation to local communities. I hope that this dissertation is just the first step in a life-long research project that engages these multiple scales and communities.

A.4 Conclusion

This appendix destabilizes the idea of authority and objectivity by frankly discussing the process and limitations of the research design and implementation. I originally set out to examine the ways in which people export their olive oil via organic

certification. However, through the research process, I quickly saw how export and domestic sales were coupled together in an effort to redefine tastes and best practices across both markets. Exporting was something that ebbed and flowed. Contracts came and went, strategies succeeded and failed. Within this context, I made connections with as many people as I could in order to better understand the interconnections around which the olive industry cohered. My position as a female non-native speaker was often awkward and made my access incomplete. However, through my relationships with several participants, research assistants, and local scholars, I often checked my insights and asked a million questions. This research process was a group effort and is, hopefully, the first edition of a long-term examination of the global political and economic connections of rural spaces in Jordan.

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Vita

EDUCATION

M.A. in Geography, August 2012, University of South Carolina, Columbia, SC

B.A. Anthropology and Geography (cum laude), May 2009, University of Mary Washington,
Fredericksburg, VA

Study Abroad: University of Nicosia 2008

PUBLICATIONS

Refereed Journal Articles

2018 Cook, Brittany. 2018. The Re-Aestheticization of Taste: Producing Extra Virgin Olive Oil in Jordan. *Geoforum* 92: 36-44.

2015 Barrineau, Brittany Cook. Decentring state categories: diaspora within a Palestinian geopolitical assemblage in Nicosia, Cyprus. *Space and Polity* 19(3): 244-255.

2013 Crampton, Jeremy W., Jay Bowen, Daniel Cockayne, Brittany Cook, Malene Jacobson, Eric Nost, Lindsay Shade and Laura Sharp. Whose Geography? Which Publics?. *Dialogues in Human Geography* 3 (1): 73-76.

Book Reviews

2013 Cook, Brittany. Review of *The Ashgate Research Companion to Critical Geopolitics*, edited by Klaus Dodds, Merje Kuus, and Joanne Sharp. In *Tijdschrift Voor Economische En Sociale Geografie* 104(5): 633-634.

HONORS AND AWARDS

2017-2018 Department of Geography Research Fellowship, University of Kentucky.

2017 Graduate School Travel Award, University of Kentucky, \$400.

2016-2017 Evelyn L. Pruitt National Fellowship for Dissertation Research, Society of Women Geographers, \$9,915.

2016 CAORC Fellowship, American Center of Oriental Research, \$15,915.

2016 Graduate Student Incentive Program, University of Kentucky, \$610.50.

2015-2016 Fulbright US Student Award and Critical Language Scholarship, Jordan, \$31,100.

2015 Graduate Student Incentive Program, University of Kentucky, \$1,500.

2015 Barnhart-Withington Research Award, University of Kentucky, \$1,105.

2014 Graduate School Travel Award, University of Kentucky, \$400.

2013 Barnhart-Withington Research Award, University of Kentucky, \$1,395.

2013 Graduate School Travel Award, University of Kentucky, \$400.

2012-2017 University of Kentucky Graduate Assistantship.

2012 Foreign Language and Area Studies (FLAS) Fellowship, University of

- 2011 Wisconsin-Madison, \$7,000.
Walker Institute Ceny Walker Graduate Research Fellowship, University of South Carolina, \$1,000.
- 2011 Matching grant, Department of Geography, University of South Carolina, \$1,500.
- 2010-2012 University of South Carolina Graduate Assistantship.

TEACHING EXPERIENCE

Primary Instructor, University of Kentucky

Human Geography, GEO 172 (Spring 2017)
Geography of the Middle East, GEO/AAS 328 (Spring 2014 and Fall 2014)

Teaching Assistant, University of Kentucky

Digital Mapping (lab sections), GEO 109 (Spring 2015)
Lands and People of the Non-Western World, GEO 160 (Spring 2013)
Global and Environmental Issues (discussion sections), GEO 162 (Fall 2012)

Teaching Assistant, University of South Carolina

Lands and Peoples of the World, GEO 121 (Spring 2011 and Fall 2011)
Introduction to Geography, GEO 103 (Fall 2010 and Spring 2012)

RELATED NON-ACADEMIC WORK EXPERIENCE

- 2014-2016 AP Human Geography Exam Reader
Educational Testing Services, Cincinnati, OH
- 2013 Community Mapping Specialist
Grassroots Jerusalem (AlQuds), Jerusalem, Israel/Palestine
- 2009-2010 GIS Specialist
Fort Lee Environmental Management Office, Fort Lee, VA
- 2009-2010 GIS Intern
Student Conservation Association, Petersburg National Battlefield,
Petersburg, VA